

Revision of the genus *Trypeticus* Marseul (Coleoptera: Histeridae)

P. Kanaar

Kanaar, P. Revision of the genus *Trypeticus* Marseul (Coleoptera: Histeridae).

Zool. Verh. 342, 25.iv.2003: 1-318, figs 1-454.— ISSN 0024-0672, ISBN 90-73239-85-0.

P. Kanaar, Jan van Ruusbroecklaan 31, 2343 JM Oegstgeest, The Netherlands (e-mail: misterhister@hetnet.nl).

Key words: Coleoptera; Histeridae; Trypanaeinae; *Trypeticus*; new species; Oriental region; New Guinea; Australia; Japan; key.

The genus *Trypeticus* Marseul, 1864 is revised and figured. A key to the species is given. Redescriptions of the hitherto described species are presented. The number of species in this genus has been brought up to 100, of which 72 species are described as new: *T. adebratti* (Sabah, Brunei), *T. alticola* (Indonesia: Irian Jaya), *T. angustifrons* (Indonesia: Irian Jaya?), *T. arriagadai* (Philippines), *T. aukei* (W. Malaysia, Sabah), *T. bertiae* (India), *T. boukei* (Sabah), *T. brevis* (Sabah), *T. capillatus* (Sabah), *T. carinifrons* (Sabah), *T. carinipygus* (Sabah), *T. caterinoi* (India: Assam), *T. clarus* (Sabah), *T. convexicollis* (Sabah), *T. coomani* (Vietnam, Thailand?), *T. danielssoni* (Sabah, Perak), *T. degallieri* (Papua New Guinea), *T. deoudei* (Perak, Sabah?), *T. foveicollis* (Sabah, "Borneo"), *T. gibberosus* (Sabah), *T. gomyi* (Sabah), *T. gracilis* (Indonesia: Irian Jaya), *T. gratus* (Indonesia: Irian Jaya), *T. hamatipygus* (Sabah), *T. hielkemaorum* (Philippines), *T. hinei* (Papua New Guinea?), *T. houseae* (Sabah), *T. huijbregtsi* (Philippines, Indonesia: Sulawesi), *T. immanis* (Sarawak), *T. jaegeri* (Sabah), *T. jelmeri* (Indonesia: Java), *T. jorisi* (Sabah), *T. kalshoveni* (Indonesia: Java; Sabah), *T. kapleri* (Sabah), *T. kirtoni* (W. Malaysia), *T. lackneri* (Indonesia: Sumatra; Malaysia: Malaya), *T. latilabris* (Sabah), *T. latirostrum* (Thailand), *T. latisternum* (Sabah), *T. loebli* (W. Malaysia), *T. mazuri* (Indonesia: Sumatra), *T. merkli* (Sabah), *T. minutissimus* (Sabah), *T. mirandus* (Indonesia: Lombok), *T. monteithi* (Australia: N. Queensland), *T. nasicus* (Indonesia: Irian Jaya), *T. nepalensis* (Nepal), *T. nitens* (Papua New Guinea, Indonesia: Irian Jaya), *T. parobeliscus* (Papua New Guinea), *T. parrilloi* (Sabah), *T. pedersenii* (Indonesia: Java, Sumatra), *T. penatii* (Laos), *T. penicillicauda* (Sabah), *T. poggii* (Papua New Guinea), *T. pooti* (Indonesia: Irian Jaya), *T. protractus* (Philippines: Mindanao), *T. rectangulus* (Papua New Guinea, Indonesia: Irian Jaya), *T. riedeli* (Indonesia: Irian Jaya), *T. rombauti* (Sabah), *T. rostricauda* (Sabah, Perak, Indonesia: N-Sumatra), *T. sanneae* (Sabah), *T. schawalleri* (Sabah, Sarawak), *T. smetanai* (Nepal), *T. subobeliscus* (Indonesia: Java, Sumatra?), *T. sulcisternum* (Indonesia: Irian Jaya), *T. therondi* (Vietnam), *T. trigonifrons* (Indonesia: Sulawesi), *T. tuberculnotum* (Sabah), *T. uhligi* (Sabah), *T. valens* (Indonesia: Irian Jaya), *T. vanasseni* (Sabah), *T. viennai* (Sabah). Lectotypes of the following species are designated: *T. albertisii* (Gestro), *T. andaiensis* (Gestro), *T. beesoni* Desbordes, *T. bombacis* (Lewis), *T. canalifrons* Bickhardt, *T. cinctipygus* (Marseul), *T. crassus* Schmidt, *T. dohertyi* (Lewis), *T. fagi* (Lewis), *T. gestroi* (Marseul), *T. gilolous* (Marseul), *T. grouvellei* (Marseul), *T. helleri* Bickhardt, *T. incilis* Lewis, *T. indicus* Lewis, *T. kalemantanus* (Marseul), *T. longicollis* Heller, *T. meridianus* Lewis, *T. minutulus* Lewis, *T. mustelinus* Lewis, *T. nemorivagus* Lewis, *T. obeliscus* Lewis, *T. planisternus* Lewis, *T. praedaceus* Lewis, *T. sauteri* Bickhardt, *T. silvicola* Schmidt, *T. tabaciglicens* (Marseul), *T. terebellus* (Marseul), *T. veda* (Lewis), *T. venator* (Lewis). The following new synonymies are reported: *T. meridianus* Lewis, 1899 = *T. incilis* Lewis, 1897; *T. mustelinus* Lewis, 1897 = *T. silvicola* Schmidt, 1897; *T. namdaphaicus* Pal & Biswas, 1985 = *T. beesoni* Desbordes, 1922; *T. praedaceus* Lewis, 1892 = *T. cinctipygus* (Marseul, 1864); *T. rhinocerus* Lewis, 1893 = *T. albertisii* (Gestro, 1875); *T. terebellus* (Marseul, 1864) = *T. gilolous* (Marseul, 1864).

Contents

Introduction	4
Distribution	5

Systematic position	6
Ecology and collecting methods	9
Sexual dimorphism and the problems involved	9
Morphological features, terminology and methods	12
Depositories and abbreviations	13
Survey of the species groups	14
Key	18
Systematics	43
Species accounts (in alphabetical order)	44
Other material examined	258
Discussion	261
Conclusions	262
Acknowledgements	263
References	263
Figures	265
Register	317
Register of host trees	318

Introduction

“L'étude de ces insectes est laborieuse à cause de leur dimorphisme sexuel.”

A. de Cooman, 1939

The genus *Trypeticus* was recognized by Marseul (1864) as a division of the Neotropical genus *Trypanaeus* Eschscholtz, 1829 to include some new species from the Indo-malayan Archipelago with a differently shaped mesosternum. The way in which he did so was rather remarkable and has led to much confusion about its taxonomical status. He wrote: “Ce groupe, que je ne considère que comme une division, pourrait bien former un nouveau genre qu'on appellerait *Trypeticus* (Τρυπητιχοζ, *qui peut percer*).” [“This group that I merely take for a division, might form a new genus that could be named *Trypeticus* (Τρυπητιχοζ, *that can pierce*).”]. In 1879, when describing *T. gestroi*, he used the name *Trypeticus* as a subgenus name. His former opinion that *Trypeticus* was only a division within the genus *Trypanaeus* did not prevent him from using the former name without further comment as the genus name in describing some new species in 1883. It was Bickhardt (1916) who gave *Trypeticus* a solid basis as separate genus by pointing out the essential differences with *Trypanaeus*.

Most species of *Trypeticus* exhibit a marked sexual dimorphism. In some species the males and females even have been described as separate species, and it could be expected that some of the hitherto published species represent the other sexes of one species. The Nationaal Natuurhistorisch Museum at Leiden has a small amount of *Trypeticus* material, collected between 1920 and 1930 on Java and Sumatra by the forestry-entomologist L.G.E. Kalshoven. When I started the study of the Histeridae I made an attempt to identify this material, but comparison with the collection Lewis in London showed me that many of my identifications were not correct and that obviously several undescribed species were present in this material. As a revision or identification keys of this genus never have been published before a revision was

taken up. Many descriptions of the hitherto published species are either too concise or have been written in non-English languages. Therefore, redescriptions and illustrations are also presented to augment the accessibility of this genus for future students.

Distribution

On the basis of the presently available material the genus *Trypeticus* is represented in the following areas: the Indian subcontinent, Nepal, Sri Lanka, Indo-China, Malayan peninsula, the entire Indo-Malayan Archipelago including the Philippines, New Guinea, Northern Queensland, Taiwan, Southeast China (Fujian) and Japan (northern to Hokkaido). Due to their hidden mode of life the specimens of this genus are not easily collected by conventional methods. Therefore, there are large gaps within the above-mentioned distribution area, from which no specimens have been recorded. I have no doubt that they will also occur within these areas, at least in the forested parts. In my opinion the presence of this genus can also be expected outside the presently known distribution area in Bhutan, Southern China (Yunnan, Guangxi, Guangdong) and Northern Australia (Arnhemland).

The species in the genus *Trypeticus* are probably oligophagous, if not monophagous (Lewis, 1884). Their distribution depends on the presence of their xylophagous prey species. These, in turn, are as a rule also oligophagous or monophagous. So in an indirect way the presence of a given species of *Trypeticus* will be related to the presence of the host trees of their preys.

Notwithstanding the limited and fragmented present-day knowledge of the distribution of the genus *Trypeticus* an attempt has been made to delineate some patterns in the distribution of the genus. For that purpose the species were arranged according to region and screened for twenty-one characters. The species groups C.II., D.I. and D.II. could not be taken into further account. These very small species, characterised by a faintly developed sexual dimorphism, ciliation of the pygidia in both sexes, absence of a frontal transversal ridge in the females, ciliation of the frons in the females and usually also in the males, constitute a very distinct division within the genus. With a few exceptions all specimens in this group have been collected in one locality by the careful collecting activities of Mr Adebratt in Sabah. Therefore, little can be said about the distribution patterns of this group. Also comparison of the characters of the slender to very slender species of Group C.I. did not result in observations that could throw light on patterns of their distribution.

The "*T. tabaciglicens*-group" (B.II.) is a group with distinct common characters. It includes the two very common species *T. tabaciglicens* Marseul and *T. silvicola* Schmidt, both with a vast distribution. The distribution area of the latter extends from Indo-China over the Malayan peninsula, Sumatra, Java to Lombok, with some additional doubtful records outside this area. The distribution area of *T. tabaciglicens* extends from Indo-China over the Malayan peninsula, Nias, Sumatra, Borneo to North Sulawesi. Though these species are frequently collected within these areas they have never been collected east of Sulawesi. Also the other representatives of this group, though less in number and collecting localities, are only known from areas west and north of Sulawesi. This group seems to have extended and diversified from the continent in eastern direction over the Indo-Malayan archipelago, but not to have surpassed the line of Wallace.

The species exclusive the forementioned groups cannot be divided in rather well-delimited sections. The males exhibit a great measure of resemblance, apart from a more or less thick-set bodyform. However, both long and short species do occur in all regions. Therefore, the females are more suited to detect possible patterns of distribution or patterns of diversification. A distinctly developed sexual dimorphism may be interpreted as a more advanced stage in evolutionary development. It can only be assessed if both sexes of a species are known. However, its presence can reasonably be assumed when the male is not known but the female exhibits marked sexual characters like pronotal tubercles or marked female elements on the face. Sexual dimorphism and female characters were therefore used to notice possible distributional patterns. Consequently, the species of which only the male is known could not be taken into consideration. The evaluation of these criteria resulted in the following observations:

1. Species with faint or modest sexual dimorphism, rather common in nearly all regions, are barely present in New Guinea. The only exception is *T. cinctipygus* Marseul, at the same time the only species that has been found at both sides of the line of Wallace.
2. In the species that occur west of the line of Wallace bosses or tubercles on the pronotum of the females, apart from a possible anterior median ridge, are very rare. Usually it concerns median tubercles, that can be interpreted as anterior median ridges that have lost (partially or entirely) their anterior part. This view is illustrated in *T. crassus* Schmidt: the median tubercle on the female pronotum is situated behind an anterior median ridge, but sometimes a very faint connecting ridge is visible between. The females of the species east of the line of Wallace, on the contrary, have relatively often paramedian pronotal tubercles or bosses.
3. Distinct ciliation of the pygidium of both females and males is more common in the species from New Guinea and Australia as compared with the species west of Wallace's line.
4. Distinct longitudinal ridges of the female face (apart from oblique lateral ridges) has not yet been encountered in species from New Guinea and Australia. Moreover a distinct transversal frontal ridge is rather often absent in these females, whereas the females of the species west of Wallace's line have nearly all a distinct transversal ridge.
5. Relatively many species from New Guinea have very short or obsolete lateral metasternal striae as compared with the species west of Wallace's line.

From these observations the preliminary conclusion may be drawn that the *Trypeticus* populations at either side of the line of Wallace exhibit distinctive, though not exclusive differences. Probably they have undergone a separate diversification early in their evolution.

Systematic position

At first glance there seems to be a great similarity between the Neotropical genus *Trypanaeus* and the Indo-malayan genus *Trypeticus*. Both have a cylindrical body form, peculiar tibiae with very long tarsi (figs 2-4, 6-8), the clypeus is more or less prolonged into a snout (rostrum) and they often exhibit a strong sexual dimorphism. A more

thorough investigation reveals some differences that induced Bickhardt (1913) to place the genus *Trypeticus*, together with two African genera, in a separate subfamily Trypeticinae. The antennal flagellum in these genera consists of six segments of more or less subconical form (fig. 1). In the resting position the antennal flagelli are laid down through deep incisions in the anterior prosternal margin. In the Neotropical Trypanaeinae, on the contrary, the antennal flagellum consists of seven segments that are progressively and strongly dilated triangularly towards the antennal club (fig. 5). In the resting position the antennal flagelli - according to Bickhardt - are not laid down through deep incisions in the prosternal margin; at most there are faint notches in the anterior prosternal margin.

The Trypeticinae *sensu* Bickhardt can deflect the head and retract it into the prothorax; when the head is in the resting position the underside of the mandibles are accommodated against the anterior prosternal margin. In species possessing a long elevated rostral tip the underside of this tip is in a same plane as the prosternal carinal disc when the head is in the resting position. Bickhardt (1916) states that the Trypanaeinae have the head porrect, not retractible into the prothorax, but this is not quite correct. Also the Trypanaeinae can deflect the head and retract it for the greater part into the prothorax.

In a recent phylogenetic analysis of the Histeroidea, mainly on the basis of dissected material, Slipinski & Mazur (1999) did not found arguments for a separate subfamily status of the group Oriental and African genera, and therefore they dropped the subfamily Trypeticinae into the synonymy of Trypanaeinae. In the Trypanaeinae the prosternal process is abbreviated posteriorly, not attaining the hind margin of the procoxae. Contrary to all other Histeridae the Trypanaeinae *sensu* Slipinski & Mazur have at the apex of their hind tibiae a prolonged inner corner, forming a flap or process without apical spines. On the basis of their analysis they also incorporated the South American genus *Trypolister* Bickhardt, 1916 into this subfamily; hitherto this genus was placed within the subfamily Abraeinae MacLeay, 1819, tribus Teretriini Bickhardt, 1914. They did so because, according to these authors, *Trypolister* has also the inner prolongation of the metatibial apex without spines. However, after examination of specimens in my collection of the only species in this genus, *Trypolister capucinus* Bickhardt, 1916, I could not confirm the presence of a similar inner prolongation of the metatibial apex as present in the other genera of the subfamily. Also two other phylogenetic important characters militate against the transfer of the genus *Trypolister* to the subfamily Trypanaeinae. The mandibular apex of the species in the subfamily Trypanaeinae is split, forming a double tooth, and the protibiae have no distinct apical spines. In the genus *Trypolister*, on the contrary, the apex of the mandibles is not split and the protibiae have a distinct spine on their apical margin, close to the insertion of the protarsus. So I see no reasons to transfer that genus to the Trypanaeinae.

However, only few species in each genus were examined in the above-mentioned study and representants of some other genera of the Trypanaeinae were not included, so the phylogeny within the subfamily needs further analysis. In the next key the similarities and differences that are presently available for the separation of the genera are given, based on material that is present in my collection. More fundamental characters that can be revealed only by dissection have not been used in the construction of the key.

Key to the genera of the subfamily Trypanaeinae

- 1. Distal segments of antennal flagellum progressively widened and transverse towards club (fig. 5) 2
 - Distal segments of antennal flagellum not distinctly widened towards club, about subconical (fig. 1) 4
- 2. Posterior margin of prosternal keel not, or barely emarginate; mesosternum truncate or slightly rounded anteriorly, only little protruding anteriorly between procoxae; body form rather thick-set *Coptotrophis* Lewis
 - Posterior margin of prosternal keel deeply and angulately incised, receiving the bluntly pointed anterior extremity of mesosternum, the latter distinctly protruding anteriorly between procoxae; body form elongate 3
- 3. Deep metasternal median sulcus only exceptionally continued onto the mesosternum, never continued onto prosternum *Trypanaeus* Eschscholtz
 - Pro-, meso- and metasternum traversed by a deep uninterrupted median sulcus *Xylonaeus* Lewis
- 4. Mesosternum abruptly narrowed anteriorly and distinctly protruding anteriorly between procoxae; procoxae delimited posteriorly by distinct lateral mesosternal processes, sides of mesosternum behind these processes more or less parallel *Trypeticus* Marseul
 - Mesosternum arcuately narrowed anteriorly, without distinct lateral processes behind procoxae, barely protruding anteriorly between the procoxae 5
- 5. Head strongly convex, almost globular, without distinct rostrum; apical part of pygidium convex *Trypobius* Schmidt
 - Head not globularly convex, with a more or less distinct flat or concave rostrum; apical part of pygidium distinctly concave *Pygocoelis* Lewis

The phylogenetic value of the characters used in this key needs further analysis. Some characters, e. g., the almost globular head of *Trypobius*, the distinctly concave apical part of the pygidium of *Pygocoelis* and the deep sulciform median metasternal suture of *Trypanaeus* can also be observed in some *Trypeticus* species. The abruptly narrowed mesosternum, protruding anteriorly between the procoxae, is unique for the genus *Trypeticus*. It is the only histerid genus in which this peculiar phenomenon is observed. In *Trypanaeus* and *Xylonaeus* the mesosternum protrudes also for some distance between the procoxae, but the sides of the mesosternum are arcuate, the mesosternum progressively narrowing anteriorly and penetrating into the deep incision of the prosternal hind margin. In *Trypeticus* the posterior margin of the prosternum is transverse or at most slightly emarginate. In the few specimens in which the prothorax has got loose from the remainder of the body it could be observed that the narrowed anterior part of the mesosternum is still longer by a pointed anterior prolongation, that in the intact animal penetrates for a rather great distance into the prosternal carina. Under strong illumination this anterior projection is visible through the thin ventral chitin wall of the prosternal keel of small specimens. This phenomenon may give the false impression that the base of the prosternal carina is deeply and angulately incised.

Some *Trypeticus* species have a striking similarity in habitus with *Teretrius* species. In the latter genus the antennae are inserted in a deep emargination of the frontal bor-

der at some distance from the eyes; in *Trypeticus* the antennae are inserted immediately before the eyes in a socket that is open anteriorly, thus enabling the antennal scapes to move anteriorly and to be laid alongside the rostrum (cf. fig. 29). The forelegs have also a different shape: long and slender with subequal teeth on the outer side and a very long tarsus in *Trypeticus* (fig. 2), short and more or less triangular in *Teretrius*, its distal tooth as a rule largest and usually bifid, and with a tarsus of normal length.

Ecology and collecting methods

The members of the genus *Trypeticus* live in the burrows of bark beetles and other wood-boring insects, where they prey upon the larvae and sometimes also upon the adults (Bickhardt, 1913, 1916). Lewis (1884) observed that *T. fagi* preyed upon species of the genus *Platypus* Herbst, 1793 and that it was useless to seek for the former on trees not infested by the latter, of which the individuals go 15 or 20 cm into the trees and are followed by *T. fagi*. The latter cannot turn round in the bore-holes, but can move backwards or forwards in the narrow galleries with almost equal facility. It can be caught when traversing the distance between two holes, a method that needs a great amount of patience from the side of the collector. In Papua New Guinea H. Roberts found *Trypeticus* specimens in the burrows of *Ambrosia* beetles in various trees. Sometimes stray specimens can be beaten from branches, etcetera. A very good method to collect *Trypeticus* specimens is to make use of flight interception traps. With these traps Mr S. Adebratt has caught a great number of specimens within relative short periods of sampling in Sabah (East Malaysia). For the greater part this material consisted of very small species that are easily overlooked when using other collecting methods or are unapproachable when they are predacious on the small bark beetles living in the thin branches of the canopy. On the contrary only two *Trypeticus* specimens were obtained with the UV-light trap used by Mr Adebratt at the same time. In fact the use of flight interception traps during the last decades has considerably increased the number and diversity of the specimens in the collections.

Sexual dimorphism and the problems involved

Like in the Neotropical Trypanaeinae most species of *Trypeticus* exhibit a marked sexual dimorphism. In the Neotropical Trypanaeinae there is a simple way to distinguish the two sexes. The females have a dome-shaped fimbriate pygidium, the males have a more or less acuminate glabrous pygidium. Therefore, Bickhardt (1916) could construct separate keys for males and females for these genera. Unfortunately such a simple rule of thumb for the separation of the sexes is not available in the genus *Trypeticus*. As a consequence both males and females had to be keyed out separately in the key to the species presented hereafter, resulting in an inconvenient long key.

Though the authors make mention of males and females nowhere in the descriptions or discussions is referred to an examination of the genitalia in order to attribute properly the different characters to the males viz. females. It is evident that pronotal ridges or tubercles have been interpreted as male characters by most authors, just like ciliation of the pygidium. The doubt that arose after the publication of Sharp & Muir's pioneering work on the male genitalia of beetles (1912) induced Lewis to send speci-

mens of *Trypanaeus thoracicus* (Fabricius) and *Trypeticus fagi* (Lewis) for dissection to Sharp and to Muir. Both investigators reported that the sexes hitherto had been reversed by describers. Muir's note and sketch of the male genitalia of these insects have been published integrally by Lewis (1912).

In the planning of this revision it was decided to make a systematic examination of the genitalia. This plan had to be given up because of unforeseen difficulties. The pygidium of the species in the genus *Trypeticus* has along its apex a broad inward stand-up border that leaves only a narrow opening when the pygidium is lifted up and that impairs a proper manipulation of the extraction-hooklet (cf. fig. 417). Moreover the genitalia in this genus are very weakly chitinized, resulting in severe damage and fragmentation of the genitalia when attempting to withdraw them, leaving barely recognizable structures. The same difficulties are encountered in studying the genitalia of the Neotropical Trypanaeinae (Y. Gomy, personal communication). To prevent damage of the rare material a systematic dissection for the study of the genitalia was therefore abandoned, and the examination of the genitalia was limited to the specimens with already extruded genitalia. But also in these cases the little chitinized membranous parts did not give much additional information. Nevertheless, in several specimens with extruded genitalia structures were seen that I have interpreted as a seminal duct bearing a faintly chitinized aedeagus at the end, in accordance with Muir's sketch (Lewis, 1912).

On account of these observations I have made some conclusions about male and female characters. They can be listed as follows:

1. Like in the Neotropical Trypanaeinae peculiar pronotal configurations in one of the two sexes are female characters.
2. The pronotum of the female is often longer than that of the male.
3. The marginal stria of the prosternal keel is often complete in the male, wanting or obsolete along the anterior margin in the female.
4. In many species the punctation of the male is coarser than that of the female.
5. A fimbriate pygidium in only one of the sexes is a female character.
6. Peculiar structures at the pygidial apex (elongations, thorns, etc.) are male characters.

Using these criteria I separated the available material in males and females. However, in many species I do not have hard proofs of the validity of this choice, especially when only one of the two sexes was available, so the attribution to sex may be wrong in certain species.

By the strong sexual dimorphism the pairing of males and females of one species is another problem. Even when two individuals of superficial similarity has been taken at a same occasion or in the same trap there is no proof that they represent the two sexes of one species. It is absolutely necessary to find additional characters to pair them. Only specimens caught in copula give a hundred percent certainty. Unfortunately such ideal material, properly labeled and kept together, was not available. A relative certainty is obtained when a series has been caught on a same tree, or under bark of a same tree. From the study of a number of such series I have concluded that the following characters are nearly always the same in the two sexes of one species:

1. The general body form, with the exception of the anterior part of the pronotum.
2. The size and shape of the elytra.
3. The configuration of the mesosternum.

4. The general shape of the prosternal carina (apart from the striation).
5. The course, strength and relative length of the metasternal lateral striae (apart from some individual variability of the length).
6. The configuration of the median suture of the metasternum (apart from a faint metasternal fovea in one of the two sexes in a few species).
7. The presence or absence of distinct lateral striae on the first abdominal segment.
8. The character and distribution pattern of the punctation, though the intensity of the punctation may exhibit some individual variability.
9. The body size. Though there is some individual variability in size, the females as a mean being a little larger than the males (often as a consequence of the longer pronotum), extreme differences in size between males and females (like for instance in the genus *Paratropus* Gerstaecker) do not occur.

On account of these characters males and females of one species have been matched. It cannot be excluded, however, that in a few instances specimens of two different, but very close species have been matched, especially when they have been caught in small numbers at different occasions.

For the pairing of males and females and for the separation of species it is also important to know the variability within a species. Many authors, for instance, have stressed the presence or absence of anterolateral pygidial foveae to distinguish their species from others, but this character is subject to considerable variability. The study of series has learnt me which characters are subject to intraspecific variability. They can be listed as follows:

1. Anterolateral pygidial foveae can vary considerably in depth and extension.
2. Anterior median pronotal ridges are sometimes ill-developed in some female specimens.
3. The length of the antescutellar median pronotal stria (if present) is rather variable.
4. The intensity of punctation (apart from sexual differences) varies a little.
5. The shape of the lateral mesosternal striae can vary a little, being slightly more sinuous in some specimens than in others.
6. The length of the lateral metasternal striae varies a little.
7. The colour can vary considerably, some specimens being much lighter than others, probably by immaturity.
8. The number of teeth on the protibia may vary by the presence or absence of an additional small proximal tooth, sometimes present only at one side in a single specimen.

It would be expected that a longer pronotum in the female would be accompanied by a longer prosternum. This is not the case. The pro- and mesosternum have about the same shape in both males and females, also when the female pronotum is considerably longer. Neither does the longer female pronotum protrude more anteriorly with respect to the prosternum than in the male. In lateral view it can be seen that the longer female pronotum extends more posteriorly with respect to the mesosternum than that of the male. This phenomenon is not at the expense of the elytral length. The elytra have about the same shape in both males and females. The longer female pronotum is compensated by a longer female metasternum. Besides the length of the metasternal lateral striae, though subject to some individual variation, remains about the same in both sexes. The longer metasternum in females with a longer pronotum is a general

rule, and therefore it is not mentioned every time in the relevant descriptions.

Generally the female has more distinctive characters with respect to closely related species than the male, so preferably females have been chosen as holotypes or lectotypes.

Morphological features, terminology and methods

As in the genus *Trypeticus* dorsal elytral striae (with their aberrant terminology in Histeridae) are wanting it is not necessary to give a detailed survey of the terminology used. It is essentially the same as used in general coleopterology. The clypeus and frons are connected without a visible suture and the former is more or less prolonged into a snout (rostrum). In most species the tip of the rostrum (apex) protrudes more or less beyond the labrum, thus concealing the latter in frontal view. In most species there is at the level of the eyes a distinct transition between the convex posterior part of the head to the flat or concave anterior part of the head, often in the shape of a transverse keel. For the sake of convenience the part behind this transition is called "vertex", and the part before it "frons", though in true anatomical sense this may be incorrect. The part of the head before the antennal insertions is called "rostrum". For frons and rostrum together the word "face" is used.

The pronotum has an anterior emargination, into which the head can be deflected and retracted. In my revision of the genus *Paratropus* Gerstaecker, 1867 (Kanaar, 1997) the angle between this anterior emargination and the curved antero-lateral margin of the pronotum has been named "anterolateral pronotal angle". As in several *Trypeticus* species the pronotum has a more or less rectangular outline in front this terminology would be confusing. In the present revision the angle between the anterior emargination for the head and the anterior margin of the pronotum aside it is therefore called "anterior pronotal angle" and the name "anterolateral pronotal angle" is reserved for the angle between the anterior and lateral margins in those species with more or less rectangular pronotal outline. When the emargination for the head has a vertical position or even inclines forward the anterior angles are not visible in dorsal view; the anterior outline of the pronotum seems then to be rounded. The lateral edges of the pronotum are more or less emarginate in the posterior half, thus increasing the freedom of movement of the middle legs (fig. 319). When the emargination is deep and the pronotum is not too convex in transversal direction this emargination is visible in dorsal view, the outline of the pronotum showing a sudden dilatation just at the anterior end of this lateral emargination (fig. 318).

Besides of the pygidium and propygidium also a part of the abdominal tergite before the propygidium is not covered by the elytra. When this segment protrudes very much beyond the elytral tips it can be observed that they have a shallow curved sulcus at either side, with a yellowish velvety bottom. The propygidium itself has often an oblique stria at either side. This stria is also present in many Neotropical Trypanaeinae. In species where this stria is wanting often an oblique depression or an impunctate band can be observed at the same place where in other species the oblique stria is present. As this oblique "stria" is continued into the posterior border it may be in fact a suture between two chitinous plates, these plates being fused in some species. Whatever it may be, in the descriptions the term "oblique lateral stria" is used.

The prosternal carina has a more or less rectangular disc and very steep, almost vertical sides. In most species striae are present on the prosternal carinal disc. On the

steep sides of the carina often lateral prosternal striae are present, in the rear beginning along the procoxae, and more or less obliquely ascending anteriorly. These striae have usually the form of a sulcus, open anteroventrally and ridgelike delimited at the lateral side. A proper inspection of these striae is often obstructed by the forelegs. In some species the lateral prosternal striae are distinct and well visible in ventral view.

For the drawings preferably specimens with a protruded pygidium have been selected. The drawings were made by means of an Olympus drawing attachment BH-DA, mounted on a binocular transmitted light microscope Olympus type CH, the specimens being illuminated from above by means of a glass fibre illuminator. Punctuation and ciliation is shown only at the left side of the drawing (sometimes in part), at the other side an attempt has been made to indicate depressions and elevations. For the sake of clarity interstitial microsculpture has been omitted from the drawings. The reproduction of punctures is always an arbitrary matter, as they are not sharply delimited. In directly reflected light they seem to have a diameter "a" (fig. 9), in not directly reflected light diameter "b"; in the figures has been strived after the reproduction of diameter "b". The head is shown when seen from a direction about perpendicular to the face ("frontal view"). As the antennae are usually strongly turned downwards and backwards the antennal flagelli and clubs have been omitted from the drawings of the head. The antennal scapes, if not lost, are shown in the figures. Often they are provided with a number of thick hairs (= bristly setae). In some species there are many hairs, in others only few, but the exact number and situation could not always be figured appropriately, either because the scapes were turned strongly down, or because the structures were so small that a good visualization was not possible. So conclusions about the number of hairs cannot be made on account of the drawings.

Often the head is retracted into the prothorax till the level of the eyes; therefore, the anterior pronotal margin is also shown in the figures of the head. When the head is retracted in an oblique way the eyes are exposed in a different measure; accordingly they seem to be asymmetrical in the drawings.

Measurements were made with the aid of an ocular micrometer. As a rule they have been rounded off to decimals; only for very small species sizes are given with two decimals. Length has been measured from the anterior pronotal margin in the median line to an imaginary line through the tips of the elytra, as is the use in describing Histeridae; the head and the pygidia can be stretched out or be deflected, which would be of considerable influence on length measurements.

The examined material is recorded by country and, if mention is made of the date of capture, chronologically, though specimens with the same data as the holotype or lectotype are mentioned immediately after these. All information on the labels concerning locality, date, collecting methods, ecology, collector, etc. has been listed, though the sequence of these data may be changed in order to mention first the higher categories (province, island, district, etc.).

Depositories and abbreviations

This study has been based on material preserved in the collections of the following Museums and willingly put at my disposal. Codes for the institutes according to Arnett c.s. (1986).

- BMNH = Natural History Museum, London (formerly: British Museum (Natural History)).
- DEIC = Deutsches Entomologisches Institut, Eberswalde.
- FMNH = Field Museum (Natural History), Chicago.
- FRIM = Forest Research Institute Malaysia, Kepong, Kuala Lumpur.
- HNHM = Termés Zettudományi, Múzeum Allatára, Budapest.
- MCSN = Museo Civico di Storia Naturale "Giacomo Doria", Genova.
- MHNG = Muséum d'Histoire Naturelle, Genève.
- MNHN = Muséum National d'Histoire Naturelle, Paris.
- MZLU = Zoologiska Institutionen, Systematiska avdelningen, Lund.
- NHMW = Naturhistorisches Museum, Wien.
- NZSI = National Zoological Collection, Zoological Survey of India, Calcutta.
- QMBA = Queensland Museum, Brisbane.
- RMNH = Nationaal Natuurhistorisch Museum, Leiden (formerly: Rijksmuseum van Natuurlijke Historie)
- USNM = National Museum of Natural History, Smithsonian Institute, Washington.
- SMNS = Staatliches Museum für Naturkunde, Stuttgart.
- SMTD = Staatliches Museum für Tierkunde, Dresden.
- ZMAN = Zoologisch Museum, University of Amsterdam.
- ZMAS = Zoological Museum, Academy of Science, St. Petersburg.
- ZMHB = Museum für Naturkunde der Humboldt-Universität, Zoologisches Museum, Berlin.
- ZMUC = Zoologisk Museum, University of Copenhagen.
- CHAT = Private Histeridae collection A. Tishechkin, Baton Rouge.
- CHFP = Private Histeridae collection F. Penati, Morbegno.
- CHND = Private Histeridae collection N. Dégallier, Montpellier.
- CHOK = Private Histeridae collection O. Kapler, Prague.
- CHPK = Private Histeridae collection P. Kanaar, Oegstgeest (legated to RMNH).
- CHPV = Private Histeridae collection P. Vienna, Venice.
- CHRP = Private Histeridae collection R. Peschel, Chemnitz.
- CHSM = Private Histeridae collection S. Mazur, Warsaw.
- CHTL = Private Histeridae collection T. Lackner, Amsterdam.
- CHTY = Private Histeridae collection T. Yélamos, Barcelona.
- CHYG = Private Histeridae collection Y. Gomy, Nevers.

PE-length = Distance from the anterior pronotal margin in the median line to an imaginary line through the tips of the elytra.

Survey of the species groups

In the following key related species can be keyed out at great distances. Also males and females can appear at great distances, due to the strong sexual dimorphism. Therefore, this survey of the groups is given. As the boundaries between these groups cannot be sharply drawn the attribution of certain species to one group or another is rather arbitrary.

A. Thick-set species.

A.I. Large, very thick-set species, pronotum and elytra very short.

A.I.1. Females with a transverse keel between frons and vertex.

A.I.1.a. Pygidium of female not ciliate, at most with very short, barely visible bristles.

T. immanis spec. nov.*T. crassus* Schmidt*T. beesoni* Desbordes*T. pedersenii* spec. nov.

A.I.1.b. Pygidium of female ciliate.

T. rectangulus spec. nov.*T. helleri* Bickhardt

A.I.2. Females without transverse keel between frons and vertex (pygidium not ciliate).

T. albertisii (Gestro)*T. gilolous* (Marseul)*T. incilis* Lewis

A.II. Large, very thick-set species, pronotum short, elytra not very short.

A.II.1. Females with a transverse keel between frons and vertex.

A.II.1.a. Pygidium of female not ciliate, at most with very short, barely visible bristles.

T. rostripygus Bickhardt*T. nemorivagus* Lewis*T. huijbregtsi* spec. nov.*T. kapleri* spec. nov.*T. kirtoni* spec. nov.*T. trigonifrons* spec. nov.*T. mazuri* spec. nov.

A.II.2. Females unknown.

T. poggii spec. nov.*T. alticola* spec. nov.

A.III. Medium-sized, very thick-set species, pronotum and elytra short or rather short.

A.III.1. Females with a transverse keel between frons and vertex.

A.III.1.a. Pygidium of female not ciliate, at most with very short, barely visible bristles.

T. planisternus Lewis*T. mirandus* spec. nov.*T. latirostrum* spec. nov.*T. kalemantanus* (Marseul)*T. rostricauda* spec. nov.*T. kalshoveni* spec. nov.*T. clarus* spec. nov.*T. tuberculnotum* spec. nov.*T. vanasseni* spec. nov.*T. foveicollis* spec. nov.

A.III.1.b. Pygidium of female ciliate.

T. uhligi spec. nov.*T. hielkemaorum* spec. nov.*T. nitens* spec. nov.*T. carinifrons* spec. nov.*T. danielssoni* spec. nov.

A.III.2. Females without transverse keel between frons and vertex, pygidium at most with very short bristles.

T. capillatus spec. nov.*T. gomyi* spec. nov.

A.III.3. Females unknown.

T. frontalis Schmidt*T. valens* spec. nov.*T. therondi* spec. nov.*T. caterinoi* spec. nov.*T. merkli* spec. nov.*T. convexicollis* spec. nov.*T. penatii* spec. nov.*T. lackneri* spec. nov.

B. Less thick-set, not very slender species.

B.I. Large and medium-sized species, if pronotum very coarsely punctate than median metasternal suture not sulcate.

B.I.1. Females with a transverse keel between frons and vertex.

B.I.1.a. Pygidium of female not ciliate, at most with very short, barely visible bristles.

T. sulcisternum spec. nov.*T. rombauti* spec. nov.

B.I.1.b. Pygidium of female ciliate.

T. dohertyi Lewis*T. cinctipygus* Marseul*T. indicus* Lewis*T. fagi* (Lewis)*T. sauteri* Bickhardt*T. canalifrons* Bickhardt*T. veda* Lewis*T. riedeli* spec. nov.*T. protractus* spec. nov.*T. andaiensis* (Gestro)*T. monteithi* spec. nov.*T. bertiae* spec. nov.*T. venator* (Lewis)*T. ferrarii* (Gestro)*T. nepalensis* spec. nov.*T. adebratti* spec. nov.

B.I.2. Females without transverse keel between frons and vertex, pygidium ciliate.

T. nasicus spec. nov.

T. gestroi (Marseul)

B.I.3. Females unknown.

T. smetanai spec. nov.

T. pooti spec. nov.

T. hinei spec. nov.

T. degallieri spec. nov.

T. houseae spec. nov.

B.II. Medium-sized, not very slender species, pronotum coarsely punctate, especially so in the posterior third in the male; median metasternal suture sulcate, lateral metasternal striae long; pygidium of females ciliate.

B.II.1. Females with a transverse keel between frons and vertex.

T. silvicola Schmidt

T. arriagadai spec. nov.

T. coomani spec. nov.

T. bombacis Lewis

T. longicollis Heller

T. schawalleri spec. nov.

B.II.2. Females without distinct transverse keel between frons and vertex.

T. tabacigliscens (Marseul)

C. Slender to very slender, medium-sized and small species. Pygidium of the females (and often also of the males) ciliate.

C.I. Females with a transverse keel between frons and vertex.

T. aukei spec. nov.

T. angustifrons spec. nov.

T. jaegeri spec. nov.

T. parrilloi spec. nov.

T. obeliscus Lewis

T. parobeliscus spec. nov.

T. subobeliscus spec. nov.

T. gracilis spec. nov.

T. gratus spec. nov.

T. minutulus Lewis

C.II. Females without transverse keel between frons and vertex, frons sometimes ciliate.

T. jelmeri spec. nov.

T. boukei spec. nov.

T. sanneae spec. nov.

D. Small, not very slender species, pygidium of both sexes ciliate, frons of the females (and often also of the males) ciliate, not separated from the vertex by a transverse keel.

D.I. Species not thick-set.

T. minutissimus spec. nov.

T. latilabris spec. nov.

T. hamatipygus spec. nov.

T. carinipygus spec. nov.

T. loebli spec. nov.

D.II. Species thick-set.

T. gibberosus spec. nov.*T. deoudei* spec. nov.*T. jorisi* spec. nov.*T. viennai* spec. nov.*T. penicillicauda* spec. nov.*T. brevis* spec. nov.*T. latisternum* spec. nov.**Key**

General remarks.— As far as possible unambiguously assessable characters have been used for the construction of this key. When characters of the head should be assessed in frontal view the face should be viewed from a direction perpendicular to its plane. If the interpretation of an offered character may give rise to doubt the species has been keyed out twice. Characters of the propygidium have been avoided as much as possible, as they are often ill-visible by the protruded alae of specimens that have been caught in flight interception traps. When a series is available for identification it is advised to identify the females first, as the males of many species are very similar and difficult to identify without associated females or material for comparison. As probably many species are still unknown and of others only one of the sexes is known, identifications should be checked with the help of the (re-)descriptions and the figures.

Because the great sexual dimorphism both males and females had to be keyed out separately, resulting in a very long key. To facilitate its use it has been subdivided in sections, each including a group with a combination of discriminative characters.

Key to the sections

1. Frons with a median tubercle, with an elevated or strongly elevated median boss, at its lateral sides flanked by deep frontal foveae, or with one or more complete longitudinal ridges apart from possible lateral ridges immediately alongside eyes and antennal insertions, the longitudinal ridges originating behind from a transverse ridge separating frons and vertex and in front ending at or close to the rostral apex **Section A**. See couplet 12
- Frons otherwise; oblique lateral ridges, if present, close to the eyes, space between eye and oblique lateral ridge at most slightly concave just behind the antennal insertion 2
2. Pronotal disc, apart from a possible anterior median ridge or boss just behind the anterior pronotal margin, with one or more distinct tubercles at a rather great distance from the anterior margin (between just before the pronotal half and about the anterior pronotal fourth), or with a distinct median impression at a rather great distance from the anterior margin, flanked by paramedian bosses that in lateral direction are not distinctly delimited with respect to the pronotal surface. **Section B**. See couplet 22
(Remark.— A distinct median tubercle may indistinctly be connected with an anterior median ridge before it)

- Pronotal disc at most with an anterior median ridge just behind the anterior pronotal margin, at its posterior end usually more distinctly elevated, or where appropriate one or more bosses or elongate tubercles immediately behind or at a short distance from the anterior pronotal margin, without additional sculptural peculiarities at a rather great distance from the anterior margin 3
(Remark.— Sometimes an anterior median ridge may be more or less obsolete in its anterior part, its posterior part simulating a faint elongate tubercle at a short distance from the anterior margin)
- 3. Frons and vertex separated by a distinct, usually smooth, more or less sharp transverse ridge, running from eye to eye, well-delimited at its posterior side by a transversal impression, the ridge either straight, slightly bisinuous, slightly angulate anteriorly or faintly arcuate posteriorly, ridge sometimes little elevated or indistinctly tuberculate; if the transversal impression behind the ridge rather indistinct than pronotum with a distinct anterior median ridge 4
- Frons and vertex not separated by a distinct, more or less sharp transverse ridge; if transition between a strongly concave frons and a convex vertex rather sharp, than not accompanied by a transversal impression behind it and the transition more arcuate posteriorly, not running from eye to eye 5
- 4. Rostral tip more or less acuminate or triangular, more or less turned upwards, protruding anteriorly, overhanging the rostral margin along the labrum; when seen from below the overhanging tip is about triangular though the oblique sides may be slightly rounded or faintly sinuous; its apical angle may vary from very obtuse to rather acute, though the tip is always somewhat rounded off
..... **Section C.** See couplet 30
- Overhanging apex (if present) broadly rounded, trapezoid or broadly emarginate when seen from below, if rather triangular than tip finely bifid by a small notch **Section D.** See couplet 49
- 5. Rostral tip either strongly asymmetrically bifid, or acuminate or triangular, more or less turned upwards, protruding anteriorly, overhanging the rostral margin along the labrum; when seen from below the overhanging tip is about triangular though the oblique sides may be slightly rounded or faintly sinuous; its apical angle may vary from very obtuse to rather acute, though the tip is always somewhat rounded off **Section E.** See couplet 87
- Overhanging apex (if present) broadly rounded, trapezoid or broadly emarginate when seen from below, if rather triangular than tip finely bifid by a small notch .. 6
- 6. Punctures on the posterior pronotal third or fourth, apart from a possible narrow band of larger punctures along the posterior margin, at most inconspicuously more closely set, or inconspicuously larger, than the punctures just before the pronotal middle, or the punctures on the posterior pronotal third about as large as the punctures on the anterior pronotal third, the punctures between these areas smaller 7
- Punctures on the posterior pronotal third or fourth either much more closely set than just before the pronotal middle, or coarse to very coarse, cribrous, the larger punctures with a distinctly greater diameter than the punctures just before the anterior pronotal middle **Section K.** See couplet 186
- 7. Small to very small species, PE-length less than 2.3 mm ... **Section F.** See couplet 93
- Species larger, PE-length about 2.4 mm or more 8

8. Prosternal carinal disc not margined along the anterior edge by a stria or elevated rim, at most with a very faint, ill-delimited anterior median impression **Section G.** See couplet 130
- Prosternal carinal disc margined along the anterior edge by a stria or elevated rim (this rim sometimes very fine) or prosternal carinal disc with a distinct anterior median impression, well-delimited at its anterior side 10
10. Pronotum in dorsal view short, along the median line at most about 1.2 times longer than wide 11
- Pronotum in dorsal view longer, more than 1.2 times longer than wide **Section J.** See couplet 173
11. Marginal pronotal striae complete, ending in front near the anterior pronotal angles (the striae sometimes rather indistinct in the anterolateral curvatures) **Section H.** See couplet 137
- Marginal pronotal striae abbreviated in front or widely interrupted anterolaterally **Section I.** See couplet 155

Key to the species

Section A

(Discriminative characters on face)

12. Frons with a median tubercle, a little behind the level of the antennal insertions (fig. 66), posteriorly connected with the arcuate gradual transition between frons and vertex by a very faint median ridge *T. frontalis* Schmidt ♂
- Frons otherwise (cf. figs 50, 101, 107, 162, 218) 13
13. Frons with an elevated or strongly elevated median boss, at its posterior side integrated with a transverse ridge separating frons and vertex, at its lateral sides flanked by deep frontal foveae, open anteriorly, and at its anterior side either prolonged by a strong median ridge or by two paramedian ridges enclosing a median fovea, these ridges ending in front on the elevated rostral tip 14
- Frons otherwise (cf. figs 50, 107, 120, 162) 16
14. Median boss prolonged by a very strong median ridge, ending in front on the obtuse, slightly elevated, slightly bilobate rostral tip (fig. 104); frontal boss strongly elevated, face in lateral view strongly sinuous *T. mirandus* spec. nov. ♀
- Median boss prolonged anteriorly by paramedian ridges, enclosing an elongate median fovea 15
15. Median frontal boss little elevated, face in lateral view moderately sinuous; median fovea on rostrum deep, at the sides delimited by distinct narrow ridges (fig. 218); sides of pronotum in dorsal view very gradually curved anteriorly towards the anterior angles (fig. 215); prosternal disc with carinal striae at the sides *T. canalifrons* Bickhardt ♀
- Median frontal boss strongly elevated, face in lateral view very strongly sinuous; median fovea on rostrum shallower, at the sides rather indistinctly delimited by very blunt broad ridges (fig. 101); sides of pronotum in dorsal view more strongly rounded anteriorly towards the anterior angles (fig. 99); prosternal disc without carinal striae at the sides (fig. 100), though it is conceivable that in some speci-

- mens rudimentary carinal striae may be present on the posterior part of the prosternal carinal disc *T. planisternus* Lewis ♀
16. Face with oblique, slightly sinuous longitudinal ridges at some distance medially from the eyes, the part of the frons between oblique ridge and eye distinctly concave (fig. 50); pronotum with a separate median tubercle in the anterior pronotal fifth, without distinct anterior median ridge before it (fig. 48); prosternal carinal striae wanting (fig. 49), though it is conceivable that in some specimens rudimentary carinal striae may be present on the posterior part of the prosternal carinal disc *T. mazuri* spec. nov. ♀
- Face with a median ridge, or with paramedian ridges, parallel or nearly so (figs 50, 107, 120, 133, 162, 303) 17
17. Face traversed by a little elevated median ridge, finely canaliculate on its superior side, posteriorly originating from the transverse ridge separating frons and vertex, in front connected with the elevated border along the rostral apex; rostrum very wide and a little dilated anteriorly (fig. 107) *T. latirostrum* spec. nov. ♀
- Face traversed by longitudinal, nearly parallel paramedian ridges; these ridges separating a lateral concavity from a median concavity that reaches from the transverse ridge till the rostral tip or nearly so (the longitudinal ridges sometimes finer anteriorly or ill-delimited at their lateral side on the rostrum) (figs 120, 133, 162, 303) 18
18. Longitudinal ridges convergent near the rostral tip and here ill-delimited at their lateral side (fig. 120); pronotum with four large foveae (fig. 118) *T. foveicollis* spec. nov. ♀
- Longitudinal ridges not convergent near the rostral tip, well-delimited at their lateral side (figs 133, 162, 303); pronotum otherwise 19
19. Longitudinal ridges very fine and very close together, situated on a common faint longitudinal median ridge, in front connected with an elevated border along the anterior rostral margin, the rostrum very wide and a little dilated anteriorly (fig. 107) *T. latirostrum* spec. nov. ♀
- Longitudinal ridges separated by a distinct complete or nearly complete longitudinal concavity (figs 133, 162, 303) 20
20. Rather slender small species (PE-length about 2.2 mm); longitudinal ridges finer on the rostrum, the median concavity shallower in front (fig. 303); pronotum with a dull area with dense microsculpture behind the anterior emargination for the head (fig. 300) *T. adebratti* spec. nov. ♀
- Species larger, thick-set; pronotum without dull anterior area (figs 131, 159) 21
21. Pronotum with an anterior median boss, in dorsal view a little protruding from the anterior pronotal margin (fig. 159); prosternal carinal disc more elongate (fig. 160) *T. carinifrons* spec. nov. ♀
- Pronotum with a slight median impression behind the anterior emargination for the head, without anterior boss (fig. 131); prosternal carinal disc very wide and short (fig. 132) *T. clarus* spec. nov. ♀

Section B

(Discriminative characters on pronotal disc)

22. Pronotal disc with a median tubercle at a rather great distance from the anterior

- margin, either solitary or accompanied by an anterior median ridge just behind the anterior pronotal margin (figs 11, 21, 127) 23
- Pronotal disc with paramedian tubercles or bosses, either or not accompanied by an anterior median ridge or an anterior elongate tubercle, without a median tubercle at a rather great distance from the anterior margin (figs 16, 44, 55, 139, 238, 247) 25
23. Median tubercle situated behind a distinct anterior median ridge just behind the anterior emargination (fig. 21), this ridge sometimes indistinctly continued posteriorly and more or less connected with the tubercle; oblique lateral ridges on the rostrum ending anteriorly in a distinct knob (fig. 24) *T. crassus* Schmidt ♀
- Median tubercle situated behind a very indistinct anterior median ridge, or anterior median ridge entirely wanting (figs 11, 127); rostrum otherwise 24
24. Pronotal tubercle situated in a median depressed area, at either side delimited by a faint oblique boss (fig. 11); lateral ridges on the rostrum connected in front by an elevated rim along the apical margin (fig. 14) *T. immanis* spec. nov. ♀
- Median tubercle not situated in a depressed area (fig. 127); lateral ridges on the rostrum fading away near the apex, not connected along the anterior margin by an elevated rim (fig. 130) *T. tuberculinotum* spec. nov. ♀
25. Pronotum with distinct paramedian tubercles (figs 16, 44, 55) 26
- Pronotum with paramedian bosses, separated by a distinct median impression, the bosses at their lateral sides not- or ill-delimited with respect to the pronotal surface (figs 139, 247, 238; exceptionally rather well-delimited) 28
26. Rostral apex in frontal view rounded anteriorly (fig. 47); pronotal disc behind the anterior emargination with a very dull, about triangular area (fig. 44), in which a very faint median ridge is visible in its posterior part *T. helleri* Bickhardt ♀
- Rostral apex obtusely or acutely acuminate, turned upwards (figs 19, 58); pronotum with a distinct median ridge or elongate tubercle just behind the anterior emargination 27
27. Rostral tip rather acutely acuminate, protruding anteriorly (fig. 19); pronotal outline in dorsal view nearly rectangular in front (fig. 16), marginal stria interrupted near the anterolateral angle *T. albertisii* (Gestro) ♀
- Rostral tip obtusely acuminate, not protruding anteriorly, its anterior side strongly concave and just visible in frontal view (fig. 58); pronotal outline in dorsal view less rectangular in front (fig. 55), the marginal stria not interrupted anterolaterally *T. gilolous* (Marseul) ♀
28. Pronotal disc with a large area with distinct interstitial microsculpture behind the anterior emargination, without distinct anterior median ridge (fig. 139); upper side with a faint bluish metallic hue, very shiny *T. nitens* spec. nov. ♀
- Pronotal disc with a distinct anterior median ridge or elongate tubercle behind the anterior emargination, interstices alongside without distinct microsculpture 29
29. Rostral tip acuminate (fig. 251); prosternal carinal disc with an elevated rim along the anterior margin (fig. 249) *T. nasicus* spec. nov. ♀
- Rostral tip not acuminate (fig. 241); prosternal carinal disc without an elevated rim along the anterior margin *T. doherlyi* Lewis ♀

Section C

(Transverse frontal ridge, rostrum acuminate or triangular)

30. Very small, very slender species, PE-length less than 1.9 mm 31
 – Larger, not very slender species, PE-length at least 2.1 mm 33
31. Rostral apex barely elevated, short, with rather sharp tip (fig. 354); prosternal carinal disc wider (fig. 353), lateral metasternal striae shorter (fig. 353)
 *T. jaegeri* spec. nov. ♀
 – Rostral tip strongly elevated (figs 351, 359); prosternal carinal disc narrower, metasternal lateral striae long though fine (figs 348, 357) 32
32. Rostral tip rather blunt (fig. 351); pronotum narrower (fig. 347)
 *T. minutulus* Lewis ♀ var.
 – Rostral tip rather sharp (fig. 359), pronotum wider (fig. 356)
 *T. jelmeri* spec. nov. ♀
33. Pronotum with a strong anterior elongate median tubercle that in dorsal view protrudes from the anterior emargination for the head (fig. 92), the anterior emargination in dorsal view distinctly bisinuous; anterolateral parts of pronotum angulate (fig. 92); rostral apex obtusely triangular (fig. 95) *T. kirtoni* spec. nov. ♀
 – Pronotum at most with a very faintly protruding anterior median ridge or tubercle, barely influencing the pronotal outline in dorsal view (cf. fig. 147) 34
34. Rather slender species, pronotum in dorsal view about 1.5 times longer than wide or longer 35
 – More thick-set species, pronotum in dorsal view at most 1.4 times longer than wide 41
35. Rostrum with a deep median fovea, sharply delimited at the sides and posteriorly (fig. 210) *T. bertiae* spec. nov. ♀
 – Rostrum at most with a faint longitudinal impression, not sharply delimited posteriorly (cf. figs 262, 283, 327) 36
36. Pronotum in posterior half with very coarse and double punctation (fig. 324); underside densely and rather coarsely punctate (fig. 325); lateral mesosternal striae deep and wide, sulcate, sinuously divergent anteriorly (fig. 325)
 *T. schawalleri* spec. nov. ♀
 – Punctation finer, especially so at the underside; lateral mesosternal striae less sinuous and less divergent anteriorly (figs 253, 260, 281, 306, 340) 37
37. Anterior pronotal angles in dorsal view slightly protruding, with a deep, well-delimited fovea, the pronotal outline just laterally from the anterior angles in dorsal view slightly concave (fig. 258); rostral tip rather sharp, strongly turned up (fig. 262) *T. coomani* spec. nov. ♀
 – Anterior pronotal angles at most with a shallow fovea, not sharply delimited posteriorly, pronotal outline otherwise (figs 280, 305, 338, 352); rostral tip rather obtuse 38
38. Lateral ridges on the rostrum distinct, almost parallel, closely together (fig. 342)
 *T. angustifrons* spec. nov. ♀
 – Lateral ridges on the rostrum, if distinct, convergent anteriorly, not closely together (figs 254, 283, 308) 39
39. Face long (fig. 308); lateral ridges on the rostrum distinct, ending close to the apex, the latter shortly triangular and strongly turned up (fig. 308)

- *T. silvicola* Schmidt ♀
- Face shorter, lateral ridges on the rostrum indistinct, fading away anteriorly (figs 254, 283, 284) 40
 - 40. Rostrum with a shallow longitudinal median impression, that may be obsolete or may be flanked by very faint ridges, fading away posteriorly on the frons (figs 283, 284); median metasternal suture very fine in its posterior two-thirds, usually with a distinct elongate fovea just behind the meso-metasternal suture, widest in front *T. ferrarii* (Gestro) ♀
 - Rostrum without shallow median impression (fig. 254); metasternal median suture sulcate over nearly its entire length (fig. 253) *T. riedeli* spec. nov. ♀
 - 41. Rostrum with a deep longitudinal median fovea just behind the tip, the fovea not sharply delimited posteriorly (fig. 29); pronotum with a very distinct and wide anterior median ridge (fig. 26) *T. beesoni* Desbordes ♀
 - Rostrum concave or not, sometimes with an ill-delimited impression along the median line, but without distinct longitudinal median fovea behind the tip (cf. figs 42, 98, 125, 167, 213, 236) 42
 - 42. Transverse keel between frons and vertex and lateral ridges of the face constituting together an almost perfect isosceles triangle (fig. 42), the face within this triangle slightly concave; pronotum with a distinct dull area behind the anterior emargination, caused by dense interstitial microsculpture (fig. 40) *T. trigonifrons* spec. nov. ♀
 - Lateral ridges of the face, if present, sinuous and fading away near the rostral apex (cf. figs 125, 167, 213, 236) 43
 - 43. Pronotum with a dull area behind the anterior emargination, caused by dense interstitial microsculpture; anterolateral sides of pronotum in dorsal view very gradually curved towards anterior angles (fig. 199); lateral mesosternal striae distinctly convergent anteriorly (fig. 200) *T. veda* (Lewis) ♀
 - Pronotum without dull area, at most with some interstitial microsculpture along the anterior emargination but still shiny; anterolateral sides more abruptly rounded towards anterior angles (cf. figs 96, 122, 211); if lateral mesosternal striae slightly convergent anteriorly than median metasternal suture very widely and deeply sulcate 44
 - 44. Median metasternal suture deeply and widely sulcate, lateral metasternal striae short (fig. 212) *T. sulcisternum* spec. nov. ♀
 - Median metasternal suture at most canaliform, lateral metasternal striae longer (figs 97, 123, 165, 220, 234) 45
 - 45. Prosternal carinal striae entirely wanting or rather obsolete, narrow and more or less fragmented, present only in posterior half of carinal disc 46
 - Prosternal carinal striae distinct, well-impressed, at least present in posterior half of carinal disc 47
 - 46. Outline of pronotum in dorsal view laterally from the anterior angles rather oblique (fig. 96); rostral apex rather sharply acuminate, face over its entire length along the median line slightly impressed in transversal direction (fig. 98), interstices shiny; transverse keel between frons and vertex very fine, partly indistinct *T. kapleri* spec. nov. ♀
 - Outline of pronotum in dorsal view laterally from the anterior angles rather transverse (fig. 122); rostral apex very bluntly acuminate (fig. 125), face concave in both

- longitudinal and transversal directions, interstices dull by dense microsculpture; transverse keel between frons and vertex distinct *T. kalshoveni* spec. nov. ♀
47. Pronotum with a more or less distinct anterior median ridge (fig. 233); apical half of pygidium with short hairs *T. sauteri* Bickhardt ♀
- Pronotum without distinct anterior median ridge (figs 165, 220); pygidium at most with barely visible minute bristles 48
48. Transverse ridge between frons and vertex very fine, slightly arcuate; punctures on frons with a distinct erect hair (best visible in oblique direction, fig. 167) *T. capillatus* spec. nov. ♀
- Transverse ridge between frons and vertex distinct, straight; punctures on frons without erect hair (fig. 221) *T. rombauti* spec. nov. ♀

Section D

(Transverse frontal ridge, rostral tip not acuminate or triangular)

49. Anterolateral parts of pronotum prolonged into long rounded lobes, in dorsal view strongly protruding with regard to the anterior angles (fig. 255), the latter barely indicated (fig. 257) *T. protractus* spec. nov. ♀
- Anterolateral parts of pronotum otherwise 50
50. Anterolateral pronotal angles very sharp and a little protruding with respect to the anterior angles, the former in dorsal view accentuated by a minute “hooklet” (fig. 36) *T. rectangulus* spec. nov. ♀
- Anterolateral pronotal angles otherwise (cf. figs 69, 151, 223, 258, 347) 51
52. Pronotum with a strong anterior elongate median tubercle that in dorsal view distinctly protrudes from the anterior emargination for the head, the latter in dorsal view distinctly bisinuous (fig. 223), anterolateral parts of pronotum in dorsal view broadly rounded (fig. 223); lateral mesosternal striae wide and sulcate, continuous with the lateral metasternal striae, the latter sinuous and very wide anteriorly (fig. 224) *T. andaiensis* (Gestro) ♀
- Pronotum at most with a very faintly protruding anterior median ridge or tubercle, barely influencing the pronotal outline in dorsal view (cf. fig. 147) 53
53. Anterior pronotal angles with a very deep, well-delimited fovea that attains the anterolateral angle (fig. 267); at the medial side this fovea is delimited by an almost vertical elongate lump; medially from the posterior end of this lump the anterior pronotal margin has another, but smaller deep fovea at some distance from the anterior angle; in dorsal view the foveae produce an emargination of the pronotal outline, and consequently the vertical lumps are prominent in dorsal view (fig. 267); rostral apex strongly turned up, very finely bifid (fig. 270) *T. monteithi* spec. nov. ♀
- Anterior pronotal configuration otherwise (cf. figs 69, 151, 258, 347, 376) 54
54. Rostral tip very asymmetrically bifid, the left lobe much larger than the right lobe (fig. 337), the latter sometimes obsolete *T. tabaciglicens* (Marseul) ♀
- Rostral tip otherwise (cf. figs 72, 149, 154, 295, 332), if slightly asymmetrically bilobate than pronotal disc not coarsely punctate in its posterior part 55
55. Rostral apex in frontal view finely bifid, either by a small but distinct median emargination (figs 154, 316, 379), or because the turned-up apical lobes are sepa-

- rated by a distinct median impression 56
- Rostral apex in frontal view at most broadly and slightly emarginate, not bifid, or rather triangular with two small tubercles on the tip (cf figs 295, 311, 345, 350) ... 58
56. Pronotum without anterior median ridge (fig. 376); rostrum traversed by a median sulcus, flanked by faint ridges that in front start from the paramedian rostral projections and that posteriorly fade away on the frons before the transverse keel separating frons and vertex (fig. 379); small, slender species *T. gratus* spec. nov. ♀
- Pronotum with anterior median ridge, face otherwise (figs 154, 316) 57
57. Rostral apex distinctly turned up, its median emargination narrow (fig. 154), frons and rostrum distinctly concave; pronotal median ridge also distinct anteriorly, not situated in a distinct dull area (fig. 151) *T. hielkemaorum* spec. nov. ♀
- Rostral apex barely turned up, median emargination wide (fig. 316); frons and rostrum slightly concave; pronotal median ridge indistinct anteriorly (fig. 313), situated in a triangular dull area, caused by dense interstitial microsculpture
..... *T. bombacis* (Lewis) ♀
58. Rostral apex in frontal view broadly truncate, margined by a very thick rim, this rim continuous with, and as thick as the lateral rims on the rostrum (fig. 72); frons strongly and roundedly concave; large, very thick-set species
..... *T. rostripygus* Bickhardt ♀
- Rostrum otherwise (cf. figs 146, 295, 311, 345, 350), if rostral apex margined by a very fine rim than not truncate, but rounded 59
59. Rather thick-set species, pronotum in dorsal view along the median line at most about 1.2 times longer than wide 60
- More elongate to slender species, pronotum in dorsal view along the median line more than 1.2 times longer than wide 66
60. Oblique lateral ridges on the rostrum fading away and ending near the rostral tip (figs 79, 112, 125) 61
- Oblique lateral ridges on the rostrum continued along the rostral apex as a fine rim, this rim sometimes indistinctly tuberculate (figs 117, 146, 149, 231) 63
61. Lateral margin of the lateral mesosternal striae continued along procoxae and connected anteriorly as an elevated margin bordering central part of interprocoxal mesosternal disc (fig. 110); frons with a longitudinal median fovea (fig. 112) (N.B. In variety B the position of the frontal fovea and the course of the mesosternal striae are slightly different from those of the depicted specimen; see the chapter “species accounts”) *T. kalemantanus* (Marseul) ♀
- Lateral margin of the lateral mesosternal striae not continued and connected anteriorly, anterior mesosternal impression not sharply delimited 62
62. Rostral apex strongly turned up, rather narrowly parabolic in outline (fig. 125); pronotum without anterior median ridge (fig. 122) *T. kalshoveni* spec. nov. ♀
- Rostral apex barely turned up, broadly rounded (fig. 79, 80); pronotum with an anterior median ridge that may be rather faint, more distinct at its posterior end (figs 74, 75) *T. nemorioagus* Lewis ♀
63. Punctuation of meso- and metasternum distinct, double; pronotum with an anterior median ridge (figs 147, 228), if this ridge rather indistinct than situated within a dull area, caused by dense interstitial microsculpture 64
- Punctuation of meso- and metasternum very fine and sparse; pronotum without distinct anterior median ridge, shiny (figs 114, 143) 65

64. Less densely punctate; prosternal carinal striae either wanting or some rudiments present in the posterior half (fig. 229), exceptionally striae longer; anterior median pronotal ridge rather indistinct anteriorly, situated within a dull area, caused by dense interstitial microsculpture (fig. 228) *T. fagi* (Lewis) ♀
- Densely punctate; prosternal carinal striae well-developed, at least at the sides (fig. 148); anterior median pronotal ridge short but distinct, also anteriorly (fig. 147), not situated within a distinctly dull area *T. uhligi* spec. nov. ♀
65. Pronotum shorter (fig. 114); frons and rostrum together concave (fig. 117); interprocoxal mesosternal impression deep, well-delimited at the lateral sides (fig. 115) *T. rostricauda* spec. nov. ♀
- Pronotum longer (fig. 143); frons convex in the middle just before the transverse ridge, only concave at the sides and before this median convexity (fig. 146); interprocoxal mesosternal impression shallow, ill-delimited (fig. 144) *T. vanasseni* spec. nov. ♀
66. Lateral margin of the lateral mesosternal striae continued along the procoxae and connected anteriorly as a distinct elevated margin along the deep anterior mesosternal impression (fig. 84); frons with a longitudinal median fovea (figs 86, 87); pronotum with distinct anterior median ridge (figs 82, 83) *T. huijbregtsi* spec. nov. ♀
- Interprocoxal mesosternal part sometimes with a distinct impression, but either ill-delimited or sharply delimited at its anterolateral sides, but posterolaterally not continuous with the lateral sides of the mesosternal lateral striae (cf. figs 32, 229, 330) 67
67. Interprocoxal mesosternal part with a distinct transverse, about rectangular impression, well-delimited at its anterior and anterolateral sides (fig. 32); pronotum with an anterior parabolic dull area, caused by dense interstitial microsculpture, in which an indistinct longitudinal boss is visible, more distinct at its posterior end (fig. 30) *T. pedersenii* spec. nov. ♀
- Interprocoxal mesosternal part without such transverse impression (cf. figs 229, 330) 68
68. Slender or very slender species, pronotum in dorsal view more than 1.6 times longer than wide; pygidium ciliate 69
- Less slender species, pronotum in dorsal view less than 1.6 times longer than wide; pygidium either ciliate or not 77
69. Pronotum with a faint anterior median ridge (figs 275, 329, 370) 70
- Pronotum without anterior median ridge (cf. figs 292, 343, 365) 72
70. Sinuous lateral ridges on face continuous with an elevated, indistinctly tuberculate rim along rostral apex (fig. 278); pronotum shorter, in dorsal view nearly 1.7 times longer than wide (fig. 275) *T. venator* (Lewis) ♀
- Rostrum without complete rim along apex (figs 332, 374). Pronotum longer, in dorsal view about 1.8 times longer than wide or longer 71
71. Lateral ridges of the face ending anteriorly in a transverse, rather indistinct paramedian apical tubercle (fig. 374); rostrum without median sulcus; smaller species, PE-length about 2.2 mm *T. parobeliscus* spec. nov. ♀
- Lateral ridges of face fading away near the rostral apex, the latter indistinctly bituberculate; rostrum with a shallow median sulcus, flanked by indistinct longitudinal ridges, fading away posteriorly (fig. 332); larger species, PE-length

- about 2.6 mm *T. aukei* spec. nov. ♀
72. Lateral metasternal striae obsolete (fig. 382); lateral mesosternal striae narrow, indistinct posteriorly (fig. 382) *T. gracilis* spec. nov. ♀
- Lateral metasternal striae present though sometimes fine, at least attaining the anterior metasternal fourth (cf. figs 293, 348, 362); lateral mesosternal striae distinct (cf. figs 293, 344, 367) 73
73. Larger species, PE-length more than 3.0 mm (fig. 292) ... *T. nepalensis* spec. nov. ♀
- Smaller species, PE-length at most 2.5 mm 74
74. Anterior pronotal angles with a deep, elongate fovea, in almost vertical position at the side of anterior emargination (fig. 343); metasternal median suture rather sulcate, especially in anterior half (fig. 344) *T. parrilloi* spec. nov. ♀
- Anterior pronotal angles at most with a small fovea in the angle itself (figs 347, 360, 365); metasternal median suture at most canaliform 75
75. Rostrum in frontal view very obtusely acuminate (fig. 350) or rather acuminate (fig. 351) anteriorly; face in lateral view straight over nearly its entire length, only raised near rostral tip *T. minutulus* Lewis ♀
- Rostrum in frontal view broadly truncate anteriorly (figs 364, 369); face in lateral view slightly concave over its entire length or sinuous 76
76. Face in lateral view slightly concave over its entire length; pronotum longer (fig. 365); prosternal carinal disc narrower (fig. 367), mesosternum distinctly impressed anteriorly *T. subobeliscus* spec. nov. ♀
- Face in lateral view sinuous; pronotum shorter (fig. 360); prosternal carinal disc wider (fig. 362); mesosternum barely impressed anteriorly *T. obeliscus* Lewis ♀
77. Rostral apex distinctly turned up over some distance from the apical margin, the tip indistinctly bifid by a minute notch or slightly emarginate and bituberculate (figs 154, 194, 262, 308); median metasternal suture sulcate 78
- Rostral apex at most with an elevated apical margin only or face in lateral view very faintly concave over its entire length (cf. figs 146, 231, 322); median metasternal suture either sulcate or not 81
78. Anterolateral parts of pronotum in dorsal view evenly rounded towards the anterior angles (fig. 151); anterior median pronotal ridge distinct, also in its anterior part *T. hielkemaorum* spec. nov. ♀
- Anterior pronotal angles in dorsal view slightly protruding, the pronotal outline just laterally from the anterior angles faintly concave in dorsal view (sometimes less distinctly so than shown in fig. 258); anterior median pronotal ridge less distinct, especially so anteriorly 79
79. Protruding rostral apex trapezoid when seen from below, with slightly emarginate bituberculate apical margin (fig. 194); fovea in anterior pronotal angle shallow, ill-delimited (fig. 191) *T. indicus* Lewis ♀
- Rostral apex rather triangular with finely bituberculate tip (figs 262, 308); fovea in anterior pronotal angles more distinct (figs 258, 305) 80
80. Pronotum narrower, anterior pronotal angle in dorsal view more protruding (fig. 258), with deep, well-delimited fovea; punctures on posterior pronotal third at most inconspicuously larger than the punctures before the pronotal middle *T. coomani* spec. nov. ♀ var.
- Pronotum wider, anterior pronotal angle in dorsal view less protruding, the pronotal outline just laterally from this angle more transverse (fig. 305), with

- rather ill-delimited, shallower fovea; primary punctures on posterior pronotal third distinctly larger than the punctures before the pronotal middle
 *T. silvicola* Schmidt ♀ var.
81. Prosternal carinal striae either wanting or some rudiments present in the posterior half, exceptionally carinal striae longer (fig. 229); anterior median pronotal ridge situated within a dull area, caused by dense interstitial microsculpture (fig. 228) *T. fagi* (Lewis) ♀
- Prosternal carinal striae well-impressed at the sides, at least in the posterior half (cf. figs 144, 310); if dull anterior pronotal area present than with an ill-delimited faint boss at its posterior end 82
82. Protruding rostral apex when seen from below broadly or rather narrowly rounded (figs 138, 146, 283, 322) 83
- Protruding rostral apex when seen from below more or less rectangular, trapezoid or widely emarginate (figs 186, 311) 86
83. Lateral ridges on the rostrum connected anteriorly by a fine elevated marginal rim along the rostral apex, this rim sometimes indistinctly tuberculate (figs 146, 322) 84
- Lateral ridges on the rostrum fading away near the rostral apex, not connected anteriorly by an elevated rim along the rostral apex (figs 138, 283) 85
84. Pronotum in dorsal view shorter (fig. 143); face finely punctulate, lateral ridges and apical rostral marginal rim evenly curved (fig. 146) *T. vanasseni* spec. nov. ♀
- Pronotum in dorsal view longer (figs 318, 319); lateral ridges of the face sinuous, apical marginal rim more transverse, finely tuberculate (fig. 322); face distinctly punctate *T. longicollis* Heller ♀
85. Pronotum with dull anterior area, caused by dense interstitial microsculpture, in which an ill-delimited boss is present at its posterior end (fig. 135); prosternal carinal disc with distinct anterior impression, mesosternal carinal disc with a distinct elongate median impression in the anterior half (fig. 136)
 *T. danielssoni* spec. nov. ♀
- Pronotum without dull anterior area (fig. 280); prosternal carinal disc without anterior impression, mesosternum with faint anterior impression (fig. 281); rostral apex rather elevated in the median line, behind this median elevation rostrum usually with a faint longitudinal impression (fig. 283), sometimes flanked by faint ridges, fading away posteriorly on the frons (fig. 284) *T. ferrarii* (Gestro) ♀
86. Rostrum narrower, the lateral ridges on the rostrum convergent anteriorly (fig. 186); pronotum more densely and less coarsely punctate (fig. 183), elytra longer; lateral mesosternal striae about parallel (fig. 184) *T. cinctipygus* (Marseul) ♀
- Rostrum rather wide, the lateral ridges on the rostrum rather parallel, only near the apex curved inwards (fig. 311); pronotum less densely and more coarsely punctate, elytra shorter (fig. 309); lateral mesosternal striae strongly sinuous and strongly divergent anteriorly (fig. 310) *T. arriagadai* spec. nov. ♀

Section E

(No transverse frontal ridge, rostrum strongly asymmetrically bifid,
 acuminate or triangular)

87. Rostral tip very asymmetrically bifid, the left lobe much larger than the right lobe

- (fig. 337), the latter sometimes obsolete *T. tabaciglisens* (Marseul) ♀
- Rostral tip acuminate or triangular (cf. figs 167, 246, 404) 88
 - 88. Large to medium-sized species, PE-length at least about 2.3 mm 89
 - Small species, PE-length less than 2.0 mm 92
 - 89. Punctures on the frons with an erect hair (best visible in oblique direction, fig. 167) *T. capillatus* spec. nov. ♀
 - Punctures on the frons without hair 90
 - 90. Prosternal carinal disc not margined along the sides by an elevated rim or a distinct carinal stria (fig. 97); frons and rostrum together concave in transversal direction (fig. 98) *T. kapleri* spec. nov. ♀
 - Prosternal carinal disc at least margined along the sides by an elevated rim or distinct carinal stria (figs 176, 244); frons more or less concave in both longitudinal and transversal directions (figs 178, 246) 91
 - 91. Anterior pronotal angles with a large and deep fovea (fig. 243); prosternal carinal disc not margined along its anterior edge *T. gestroi* (Marseul) ♀
 - Anterior pronotal angles without fovea (fig. 174); prosternal carinal disc margined along its anterior edge by an elevated rim before a distinct transversal impression (fig. 176) *T. gomyi* spec. nov. ♀
 - 92. Pronotum longer (fig. 356); prosternal carinal disc narrow, lateral metasternal striae very long *T. jelmeri* spec. nov. ♀
 - Pronotum shorter (fig. 401); prosternal carinal disc wider, slightly divergent anteriorly, lateral metasternal striae short (fig. 402) ... *T. carinipygus* spec. nov. ♀

Section F

(No transverse frontal ridge, rostrum not acuminate, very small species)

- 93. Frons very concave, mainly in longitudinal direction; frons and posterior part of rostrum with a shallow elongate smooth impression along the median line (fig. 302), interstices outside this median impression with a very fine microsculpture; pronotum long, very densely punctate, punctation of elytra much finer and sparser (fig. 299) *T. adebratti* spec. nov. ♂
- Frons and rostrum otherwise (cf. figs 368, 389, 393, 425); if frons rather dull by microsculpture than not strongly concave in longitudinal direction 94
- 94. Slender or very slender species, pronotum in dorsal view at least about 1.5 times longer than wide (cf. fig. 355) 95
- Less slender to short species, pronotum in dorsal view at most 1.4 times longer than wide (cf. fig. 390) 101
- 95. Lateral metasternal striae obsolete, lateral mesosternal striae indistinct (figs 387, 392, 397) 96
- Lateral metasternal striae present, though sometimes fine; lateral mesosternal striae distinct, though sometimes narrow (figs 348, 357, 372) 99
- 96. Larger species, PE-length at least 1.8 mm; prosternal carinal disc wider (fig. 387), barely concave in transversal direction; median metasternal suture finely canaliform; frons less concave (fig. 389) *T. sanneae* spec. nov. ♀
- Smaller species, PE-length at most 1.6 mm; prosternal carinal disc narrower, more or less concave in transversal direction (figs 392, 397); median metasternal suture very fine 97

97. Frons less concave (fig. 393); less elongate species (fig. 391) *T. minutissimus* spec. nov. ♂
 – Frons more concave (figs 398, 399); more elongate species (figs 395, 396) 98
98. Pronotum shorter, less tapering anteriorly (fig. 396); apical half of pygidium rather flat *T. boukei* spec. nov. ♂
 – Pronotum longer, more tapering anteriorly (fig. 395); apical half of pygidium strongly concave *T. boukei* spec. nov. ♀
99. Pronotum in lateral view distinctly convex behind anterior margin; prosternal carinal disc not margined along its anterior edge (fig. 372); lateral metasternal striae shorter, about attaining the metasternal middle *T. parobeliscus* spec. nov. ♂
 – Pronotum in lateral view only little convex behind anterior margin; prosternal carinal disc finely margined along its anterior edge; lateral metasternal striae longer, about attaining the posterior metasternal fourth or fifth 100
100. Elytra wider, along the suture shorter than pronotum (fig. 355); median metasternal suture sulcate (fig. 357) *T. jelmeri* spec. nov. ♂
 – Elytra narrower, along the suture about as long as pronotum (fig. 346); median metasternal suture in part finely canaliform (fig. 348) *T. minutulus* Lewis ♂
101. Rostral apex strongly turned up, very bluntly acuminate (fig 404); lateral metasternal striae very short or obsolete *T. carinipygus* spec. nov. ♀
 – Rostrum otherwise (cf. figs 368, 426, 430) 102
102. Apex of pygidium with hooklet, well visible in lateral view (figs 417, 421) 103
 – Apex of pygidium without hooklet (cf. fig. 437) 104
103. Pronotum with hunch, well visible in lateral view (fig. 423); prosternal carina and mesosternum wider (fig. 424) *T. gibberosus* spec. nov. ♂
 – Pronotum without hunch; prosternal carina and mesosternum narrower (fig. 418) *T. hamatipygus* spec. nov. ♂
104. Apical half of pygidium with fine median ridge (fig. 400), its superior side finely dentate, best visible in oblique lateral view (this ridge a little masked by pygidial ciliation); very small species *T. carinipygus* spec. nov. ♂
 – Pygidium without median ridge (cf. fig. 437) 105
105. Pronotum with a hump just before the middle, less distinct than shown in fig. 423, but well visible in lateral view; mesosternum densely punctate (fig. 424) *T. gibberosus* spec. nov. ♀
 – Pronotum without hump, mesosternum less densely punctate (cf. figs 297, 434) 106
106. Lateral metasternal striae obsolete, lateral mesosternal striae very indistinct (figs 387, 392) 107
 – Lateral metasternal striae at least present for a short distance along mesocoxae (cf. figs 297, 407, 434); if very short than lateral mesosternal striae present, though sometimes narrow 109
107. Prosternal carinal disc and mesosternum wider (fig. 387), PE-length at least 1.6 mm *T. sanneae* spec. nov. ♂
 – Prosternal carinal disc and mesosternum narrower (fig. 392); PE-length at most 1.5 mm 108
108. Face shorter, frons narrower (fig. 393) *T. minutissimus* spec. nov. ♂
 – Face longer, frons wider (fig. 394) *T. minutissimus* spec. nov. ♀
109. Face rather long, along the antennal insertions with a distinct ridge, continued

- along sides of rostrum as a fine ridge that may be rather obsolete anteriorly, in front ending in an apical tubercle (figs 298, 363, 368); punctures on frons without hair 110
- Face shorter (cf. figs 430, 440, 449), if indistinct apical tubercles are present than punctures on frons with a hair 112
110. Anterolateral pronotal outline in dorsal view more abruptly rounded towards anterior angles (fig. 366); punctuation of elytra much finer than that of pronotum; prosternal carinal disc narrower, punctuation on posterior metasternal half much finer than on mesosternum, almost obsolete *T. subobeliscus* spec. nov. ♂ ?
- Anterolateral pronotal outline in dorsal view more broadly rounded towards anterior angles (figs 296, 361); prosternal carinal disc wider (fig. 297) 111
111. Punctuation of pronotum rather homogeneous, punctures only inconspicuously diminishing in size on anterior of pronotum half (fig. 296); elytral punctuation only slightly finer than that of pronotum; punctuation on posterior metasternal half only slightly finer than that of mesosternum (fig. 297) *T. houseae* spec. nov. ♂
- Punctuation of pronotum not homogeneous, punctures on pronotal middle sparser and finer than punctures on posterior and anterior pronotal thirds (fig. 361); elytral punctuation (with exception of punctures along anterior margin and suture) distinctly finer than that of posterior pronotal third; punctuation on posterior metasternal half very fine, almost obsolete, much finer than the fine and sparse punctuation of the mesosternum *T. obeliscus* Lewis ♂ ?
112. Sides of prosternal carina distinctly divergent anteriorly (cf. figs 429, 434) 113
- Sides of prosternal carina parallel or inconspicuously divergent anteriorly (cf. figs 407, 412, 418) 125
113. Punctures on frons, when seen at a magnification of 80× without erect hair (though very minute bristles cannot be excluded) 114
- Larger punctures on frons with an erect hair, at least near the eyes, visible when seen at a magnification of 80× 118
114. Frons rather convex, punctures small (fig. 445); pygidium (and possibly also the posterior half of the propygidium) very densely covered with long yellowish-white hairs, the pygidial surface between the hairs invisible (fig. 442) *T. penicillicauda* spec. nov. ♂
- Frons concave (figs 430, 435, 440, 453), pygidium less densely fimbriate, the pygidial surface between the hairs visible, shiny 115
115. Prosternal carinal disc very strongly divergent anteriorly (figs 439, 452) 116
- Prosternal carinal disc moderately divergent anteriorly (figs 429, 434) 117
116. Pronotum in dorsal view nearly as long as wide (fig. 437); prosternal carinal disc very densely punctate (fig. 439) *T. brevis* spec. nov. ♂
- Pronotum in dorsal view slightly longer than wide (fig. 450); prosternal carinal disc less densely punctate, larger punctures mixed with small punctures (fig. 452) *T. latisternum* spec. nov. ♂
117. Frons strongly concave, interstices between punctures shiny (fig. 435); pronotum in dorsal view a little shorter (fig. 432) *T. jorisi* spec. nov. ♂
- Frons slightly concave, interstices between punctures rather dull by microsculpture (fig. 430); pronotum in dorsal view a little longer (fig. 428) *T. deoudei* spec. nov. ♂

118. Pronotum flattened off anteriorly, with a faint transversal impression just behind anterior emargination (fig. 433); prosternal carinal disc slightly convex in transversal direction *T. jorisi* spec. nov. ♀
- If pronotum flattened off anteriorly than without transversal impression along the anterior emargination and prosternal carinal disc concave in transversal direction (fig. 429) 119
119. Pygidium before the apex slightly convex; prosternal carinal disc rather narrow posteriorly (fig. 444) *T. penicillicauda* spec. nov. ♀
- Pygidium before the apex distinctly concave (figs 427, 437, 450) 120
120. Prosternal carinal disc less strongly divergent anteriorly, at most slightly concave in transversal direction (figs 418, 429) 121
- Prosternal carinal disc strongly divergent anteriorly, distinctly concave in transversal direction 122
121. Prosternal carinal disc rather wide, slightly concave in transversal direction (fig. 429); pronotum a little wider (fig. 427); lateral mesosternal striae distinct though narrow (fig. 429); larger species, PE-length about 2.2 mm ... *T. deoudei* spec. nov. ♀
- Prosternal carinal disc narrow, not concave in transversal direction (fig. 418); pronotum a little narrower (fig. 416); lateral mesosternal striae rather obsolete (fig. 418); smaller species, PE-length less than 1.6 mm *T. hamatipygus* spec. nov. ♀
122. Pronotum in dorsal view shorter, about as long as wide or shorter (figs 437, 438); prosternal carinal disc very densely punctate (fig. 439) 123
- Pronotum in dorsal view longer, slightly longer than wide (figs 450, 451); prosternal carinal disc less densely punctate, larger punctures mixed with small punctures 124
123. Pronotum in dorsal view a little shorter than wide (fig. 437); frons more concave (fig. 440), hairs on frons very short, ill-visible, mainly along the transition to the vertex *T. brevis* spec. nov. ♂
- Pronotum in dorsal view about as long as wide (fig. 438); frons less concave (fig. 441), hairs on frons rather long, present on entire frons *T. brevis* spec. nov. ♀
124. Frons more concave, with fine punctation, hairs on frons very short, ill-visible (fig. 453) *T. latisternum* spec. nov. ♂
- Frons less concave, distinctly punctate, hairs on frons rather long, present on entire frons (fig. 454) *T. latisternum* spec. nov. ♀
125. Rostrum finely margined, at least at the sides (figs 420, 449) 126
- Rostrum not finely margined at the sides (figs 408, 409, 413, 414) 127
126. Lateral mesosternal striae rather obsolete (fig. 418); prosternal carinal disc narrow, sides faintly divergent anteriorly (fig. 418); smaller species, PE-length less than 1.6 mm *T. hamatipygus* spec. nov. ♀
- Lateral mesosternal striae distinct though narrow (fig. 448); prosternal carinal disc wide, rectangular (fig. 448); larger species, PE-length about 2.0 mm *T. viennai* spec. nov. ♂
127. Larger species, PE-length 1.9-2.1 mm; prosternal carinal disc wider (fig. 412), lateral mesosternal striae curved inwards anteriorly, narrower posteriorly (fig. 412); underside more finely punctate 128
- Smaller species, PE-length at most 1.6 mm; prosternal carinal disc narrower, mesosternal lateral striae more parallel, distinct (fig. 407); underside, especially

- mesosternum, more distinctly punctate 129
128. Pronotum shorter (fig. 411); frons more concave, with small points, hairs on frons very short, ill-visible (fig. 413) *T. latilabris* spec. nov. ♂
- Pronotum longer (fig. 410); frons less concave, more distinctly punctate, hairs on frons rather long (fig. 414) *T. latilabris* spec. nov. ♀
129. Frons slightly more concave, hairs on frons shorter (fig. 408); pygidium less densely fimbriate *T. loebli* spec. nov. ♂
- Frons slightly less concave, hairs on frons longer (fig. 409); pygidium more densely fimbriate *T. loebli* spec. nov. ♀

Section G

(No transverse frontal ridge, rostrum not acuminate, larger species,
carinal disc not margined along anterior edge)

130. Prosternal carinal disc either without lateral rims or carinal striae, or with shorter or longer lateral rims in posterior part only (fig. 229), at their inner side either or not accompanied by an indistinct carinal stria; anterior impression of disc moderate, rather ill-delimited anteriorly; known from Japan *T. fagi* (Lewis) ♂
- Lateral rims of prosternal carinal disc present along entire lateral sides, though sometimes narrow, at their inner side accompanied by a carinal stria that may be indistinct (cf. figs 52, 156, 200) 131
131. Anterior pronotal angles distinctly foveate (figs 155, 242) 132
- Anterior pronotal angles at most with an indistinct, ill-delimited impression (figs 51, 198, 263, 271, 339) 133
132. Foveae in anterior pronotal angles large; pronotum in dorsal view about 1.4 times longer than wide (fig. 242); pronotal punctation rather coarse, especially so in the posterior half *T. gestroi* (Marseul) ♂
- Foveae in anterior pronotal angles small; pronotum in dorsal view about 1.1 times longer than wide (fig. 155), pronotum only along the posterior margin with rather coarse punctures, elsewhere with fine punctation *T. valens* spec. nov. ♂
133. Very large, thick-set species, PE-length more than 3.5 mm; prosternal carinal disc wide (fig. 52), lateral metasternal striae rather short (fig. 52) *T. poggii* spec. nov. ♂
- Less thick-set, smaller species, PE-length less than 3.5 mm; prosternal carinal disc narrower, lateral metasternal striae longer (figs 200, 264, 272) 134
134. Pronotum in dorsal view along the median line at least nearly 1.3 times longer than wide; marginal pronotal striae nearly attaining the anterior pronotal angles (figs 271, 339) 135
- Pronotum in dorsal view along the median line less than 1.2 times longer than wide; marginal pronotal striae abbreviated anteriorly (figs 198, 263) 136
135. Pronotum in dorsal view along the median line nearly 1.3 times longer than wide (fig. 271); lateral metasternal striae very long, attaining the posterior metasternal fifth, curved inwards posteriorly (fig. 272) *T. hinei* spec. nov. ♂
- Pronotum in dorsal view along the median line about 1.5 times longer than wide (fig. 339); lateral metasternal striae straight, rather short, about attaining the anterior metasternal fourth *T. angustifrons* spec. nov. ♂?

136. Lateral sides of pronotum in dorsal view very evenly and widely curved towards the anterior angles (fig. 198); prosternal carinal disc wider, indistinctly impressed in front (fig. 200); lateral mesosternal striae distinct, convergent anteriorly (fig. 200); lateral metasternal striae slightly sinuous (fig. 200) *T. veda* (Lewis) ♂
- Lateral sides of pronotum in dorsal view less widely curved towards the anterior angles (fig. 263); prosternal carinal disc narrower, rather distinctly impressed in front (fig. 264); lateral mesosternal striae fine, narrow, parallel (fig. 264); lateral metasternal striae widely and evenly arcuate inwards (fig. 264) *T. smetanai* spec. nov. ♂

Section H

(No transverse frontal ridge, rostrum not acuminate, larger species,
carinal disc margined along anterior edge, pronotum short,
marginal pronotal stria not interrupted or abbreviated)

137. Prosternal carinal disc either without lateral rims or carinal striae, or with shorter or longer lateral rims in the posterior part only (fig. 229), at their inner side either or not accompanied by an indistinct carinal stria; anterior impression of the disc moderate, rather ill-delimited anteriorly; known from Japan *T. fagi* (Lewis) ♂
- Lateral rims of the prosternal carinal disc continuous with a distinct rim along the anterior margin, or at least present along the entire lateral sides (cf. figs 52, 84); known from SE Asia and New Guinea 138
138. Prosternal carinal disc not margined along anterior margin by a distinct rim that is continuous with the lateral rims (fig. 52); only in the middle a fine transverse impression is visible (always?); prosternal carinal disc slightly concave in transversal direction; underside sparsely and very finely punctate .. *T. poggii* spec. nov. ♂
- Lateral rims of the prosternal carinal disc continuous with a distinct, though sometimes narrow rim along the anterior margin (cf. figs 84, 89) 139
139. Pronotum with a large and deep parabolic median impression just behind the anterior emargination, delimited at either side by a distinct anterior boss between median impression and slightly impressed anterior angles (fig. 59); in this median impression a faint median ridge is present, that may be obsolete; punctures in median impression shallow and ill-delimited *T. incilis* Lewis ♀
- Pronotum otherwise (cf. figs 31, 60, 126, 232) 140
140. Pronotum with a shallow, ill-delimited crescent impression just behind anterior emargination, in dorsal view slightly emarginating the anterior pronotal outline (fig. 60); punctures in this impression very closely set *T. incilis* Lewis ♂
- Pronotum without such anterior crescent impression (cf. figs 31, 126, 232) 141
141. Interprocoxal mesosternal part with a distinct, well-delimited impression, the posterolateral delimitations of impression continued along procoxae and continuous with lateral margins of lateral mesosternal striae (the sulciform lateral mesosternal striae themselves not continued along procoxae (fig. 84) *T. huijbregtsi* spec. nov. ♂
- Interprocoxal mesosternal impression, if present, not continued along the procoxae, not continuous with the lateral margins of the lateral mesosternal striae (cf. figs 32, 45, 89) 142

142. Interprocoxal mesosternal part with a distinct transverse, about rectangular impression, well-delimited at its anterior and anterolateral sides (fig. 32); punctuation of upper side fine and dense (fig. 31); thick-set, rather large species, PE-length about 3.5 mm *T. pedersenii* spec. nov. ♂
- Interprocoxal impression, if present, not transverse, more arcuately delimited anteriorly (cf. figs 45, 89, 180) 143
143. Large and thick-set species (fig. 15), PE-length at least 4.5 mm; punctuation fine, on pronotal disc double, sparser and a little finer than on elytra *T. albertisii* (Gestro) ♂
- Smaller species, PE-length less than 4.0 mm 144
144. Posterolateral angles of propygidium and the abdominal tergite before the propygidium distinctly standing out and broadly rounded in dorsal view (fig. 158), the lateral sides of these segments sinuous (especially those of the propygidium), distinctly convex in their posterior half; frons with a deep and rounded concavity (fig. 161) *T. carinifrons* spec. nov. ♂
- Posterolateral angles of propygidium and the abdominal tergite before the propygidium not standing out, or a little standing out but not broadly rounded in dorsal view, and the lateral sides of these segments nearly straight (cf. figs 54, 126, 232) 145
145. Lateral mesosternal striae narrow, diminishing in width posteriorly, not quite attaining the meso-metasternal suture (fig. 89); lateral metasternal striae short, strongly divergent posteriorly, composed of aligned confluent punctures (always?) (fig. 89) *T. alticola* spec. nov. ♂
- Lateral mesosternal striae, though narrow, at most slightly diminishing in width posteriorly, about attaining the meso-metasternal suture; lateral metasternal striae more or less sinuous, longer (cf. figs 45, 56, 180) 146
146. Sides of pronotum in dorsal view from about the pronotal middle anteriorly very gradually curved towards the anterior pronotal angles, slightly more progressively so in front (fig. 126) *T. tuberculinotum* spec. nov. ♂
- Sides of pronotum in dorsal view more abruptly rounded towards the anterior angles, at most in the anterior pronotal fourth (cf. figs 43, 73, 232) 147
147. Lateral sides of pronotum in dorsal view rather abruptly rounded inwards in front and thence over some distance almost straight and oblique towards the anterior angles (figs 43, 228) 148
- Lateral sides of pronotum in dorsal view either broadly rounded inwards in front towards anterior angles, or rather abruptly rounded inwards but outline laterally from anterior angles curved, not straight and oblique (cf. figs 54, 73, 91, 179) 149
148. Lateral sides of pronotum in dorsal view behind the anterolateral curvatures almost parallel or faintly divergent anteriorly (fig. 232); prosternal carinal disc narrower (fig. 234), meso- and metasternum not depressed along the median line, lateral metasternal striae rather long (fig. 234) *T. sauteri* Bickhardt ♂
- Lateral sides of pronotum in dorsal view behind anterolateral curvatures faintly convergent anteriorly (fig. 43); prosternal carinal disc wider (fig. 45), pro-, meso- and metasternum depressed along median line, lateral metasternal striae short (fig. 45) *T. helleri* Bickhardt ♂
149. Frons faintly impressed, almost flat (fig. 77, 78), dull by dense microsculpture of interstices; punctuation of meso- and metasternum rather dense, the larger punc-

- tures mixed with very small punctures (fig. 76) *T. nemorivagus* Lewis ♂
- Frons more distinctly impressed (cf. figs 166, 173) 150
150. Pronotum in dorsal view shorter, median length at most about 1.1 times its width (cf. figs 51, 179) 151
- Pronotum in dorsal view longer, median length about 1.2 times its width or nearly so (figs 91, 163) 154
151. Prosternal carinal disc short and wide (fig. 56); posterior part of rostrum at the sides delimited by very fine oblique ridges (fig. 57); lateral metasternal striae rather short, punctuation of underside more distinct and denser (fig. 56), first sternite with distinct lateral striae *T. gilolous* (Marseul) ♂
- Prosternal carinal disc longer (figs 27, 172, 180); posterior parts of rostrum more bluntly rounded off at the sides, lateral metasternal striae longer, punctuation of underside less distinct and scantier; first sternite at most with short traits of lateral striae 152
152. Mesosternum between procoxae only faintly impressed in its most anterior part (fig. 27); impression of prosternal carinal disc limited to most anterior part (fig. 27) *T. beesoni* Desbordes ♂
- Mesosternum between procoxae more distinctly and more extensively impressed (figs 172, 180); impression of prosternal carinal disc extending posteriorly along median line (figs. 172, 180) 153
153. Frons distinctly concave (fig. 173); lateral rims of prosternal carinal disc very narrow and fine; mesosternum shorter, with double punctuation (fig. 172), punctuation of metasternum about equal to that of mesosternum; pronotum with vague foveae at some distance behind the anterior angles (fig. 171; always?) *T. caterinoi* spec. nov. ♂
- Frons slightly concave (fig. 181); lateral rims of prosternal carinal disc distinct; mesosternum longer, without double punctuation (fig. 180), punctuation of metasternum, especially posteriorly, finer than that of mesosternum; pronotum without vague foveae *T. merkli* spec. nov. ♂
154. Frons and rostrum wider, the former most deeply impressed posteriorly (fig. 94); prosternal carinal disc with a faint anterior impression; meso- and metasternum sparsely and finely punctate (fig. 93); punctures on metasternum not distinctly diminishing in size posteriorly *T. kirtoni* spec. nov. ♂
- Frons and rostrum narrower, the former more widely impressed, its deepest part in middle, rostrum before this impression slightly elevated along the median line (fig. 166); prosternal carinal disc with a large and distinct anterior impression; meso- and metasternum more densely and more distinctly punctate (fig. 165); punctures on metasternum distinctly diminishing in size posteriorly *T. capillatus* spec. nov. ♂

Section I

(No transverse frontal ridge, rostrum not acuminate, larger species,
carinal disc margined along anterior edge, pronotum short,
marginal pronotal stria abbreviated or interrupted)

155. Pygidium with a distinct apical spatular prolongation, concave at its superior

- side (figs 68, 113) 156
- Pygidium without distinct apical prolongation (cf. figs 108, 150) 157
156. Larger (PE-length more than 3.5 mm), less densely punctate; pronotum in dorsal view about 1.1 times longer than wide (fig. 67); spatular prolongation of pygidial apex rounded posteriorly, distinctly turned up (fig. 68); mesosternum wider, less impressed (fig. 70) *T. rostripygus* Bickhardt ♂
- Smaller (PE-length less than 3.5 mm), more densely punctate; pronotum in dorsal view about as long as wide (fig. 113); spatular prolongation of pygidial apex rather truncate posteriorly, little turned up (fig. 113); mesosternum narrower, more impressed (fig. 115) *T. rostricauda* spec. nov. ♂
157. Pronotum in dorsal view rather rectangular, with a fine anterolateral hooklet (fig. 35); lateral mesosternal striae very indistinct, lateral metasternal striae obsolete (fig. 37) *T. rectangularus* spec. nov. ♂
- Lateral sides of pronotum in dorsal view more or less broadly rounded anteriorly towards the anterior angles; lateral mesosternal and metasternal striae distinct 158
158. Mesosternum with a distinct, well-delimited impression between procoxae, the posterolateral delimitations of this impression continued along procoxae (though sometimes rather indistinctly so) and continuous with lateral margins of lateral mesosternal striae (the sulciform lateral mesosternal striae themselves not continued along procoxae) (cf. figs 12, 22), or the lateral mesosternal striae arcuately connected anteriorly without distinct anterior mesosternal impression (fig. 110) 159
- Mesosternum otherwise, if distinctly impressed between the procoxae than the impression not sharply delimited posterolaterally, nor extending along the procoxae, its lateral margins not continuous with the outer margins of the lateral mesosternal striae (cf. fig. 136) 163
159. Outer margins of the lateral mesosternal striae arcuately connected anteriorly by an elevated rim, interprocoxal mesosternal disc within this rim not distinctly impressed (fig. 110) *T. kalemantanus* (Marseul) form A ♂
- Outer margins of the lateral mesosternal striae more sinuously following the procoxae, interprocoxal mesosternal disc within the marginal rim more or less impressed 160
160. Punctuation of meso- and metasternum very coarse and dense, double (fig. 204); metasternal median suture distinctly sulcate, with the exception of the posterior end *T. lackneri* spec. nov. ♂
- Punctuation of mesosternum and especially that of metasternum less coarse and dense, metasternal median suture at most finely canaliform 161
161. Body form less thick-set, pronotum slightly longer than wide (fig. 108)
..... *T. kalemantanus* (Marseul) form B ♂
- Thick-set species, pronotum in dorsal view along the median line about as long as wide or shorter 162
162. Very thick and large species, PE-length about 4.8 mm, elytra wider (fig. 10); anterolateral sides of pronotum in dorsal view more broadly rounded towards anterior angles (fig. 10); pronotum with a large, ill-delimited impressed area behind the anterior emargination with dense double punctuation
..... *T. immanis* spec. nov. ♂

- Slightly smaller and narrower species, PE-length 3.8-4.1(4.6) mm; anterolateral sides of pronotum in dorsal view more abruptly rounded and thence oblique towards anterior angles (fig. 20); pronotum usually with a short transverse impression just behind the anterior emargination, barely more densely punctate than pronotum immediately behind it, this part of pronotum convex
..... *T. crassus* Schmidt ♂
- 163. Marginal rim along the anterior edge of the prosternal carinal disc very indistinct (figs 123, 264) 164
- Marginal rim along the anterior edge of the prosternal disc distinct, complete (cf. figs 176, 188) 165
- 164. Lateral mesosternal striae fine, narrow (fig. 264); lateral metasternal striae widely and evenly arcuate inwards (fig. 264) *T. smetanai* spec. nov. ♂
- Lateral mesosternal striae distinct, sulcate (fig 123); lateral metasternal striae oblique, straight (fig 123) *T. kalshoveni* spec. nov. ♂
- 165. Prosternal carinal disc wide and rather short, only little longer than wide (figs 144, 152, 188, 196) 166
- Prosternal carinal disc longer, narrower rectangular (cf. figs 76, 136, 281) 169
- 166. Pronotum in lateral view very convex in the anterior third, meeting the anterior margin in an angle of about 80°; course of the lateral mesosternal striae about parallel (fig. 188); marginal pronotal striae only shortly interrupted (fig. 187)
..... *T. convexicollis* spec. nov. ♂
- Pronotum in lateral view not very convex in the anterior third, in lateral view moderately and a little progressively convex towards the anterior margin, meeting the latter in a much more oblique direction 167
- 167. Anterior pronotal angles not impressed, without appendix of the marginal pronotal stria (fig.142); lateral metasternal striae slightly sinuous, divergent posteriorly (fig. 144) *T. vanasseni* spec. nov. ♂
- Anterior pronotal angles slightly impressed, with a more or less distinct appendix of the marginal pronotal stria (figs. 150, 195) 168
- 168. Frons very faintly impressed, almost flat (fig. 197); pronotal outline in dorsal view more abruptly rounded anterolaterally (fig. 195) *T. penatii* spec. nov. ♂
- Frons distinctly impressed (fig. 153); pronotal outline in dorsal view more broadly rounded anterolaterally (fig. 150) *T. hielkemaorum* spec. nov. ♂
- 169. Interruption of the marginal pronotal striae made up of a discontinuity: the posterior part ends in the anterolateral curvature, and at about the same spot the anterior part retakes its course more closely to the margin, ending in the impressed anterior pronotal angle (fig. 73); species larger (PE-length 3.3-3.7 mm), punctuation of metasternum denser, double, rather coarse (fig. 76)
..... *T. nemorivagus* Lewis var. ♂
- Marginal pronotal striae abbreviated anteriorly, anterior pronotal angles at most indistinctly impressed; species smaller (PE-length less than 3.2 mm); if punctuation of metasternum rather dense than mesosternum with a distinct and very long median impression (fig. 136) 170
- 170. Meso- and metasternum very densely punctate, punctures of unequal size but not mixed with minute punctures (fig. 136); mesosternum with deep median impression, extending posteriorly, lateral mesosternal striae convergent anteriorly or

- rather arcuate (fig. 136) *T. danielssoni* spec. nov. ♂
- Punctuation of meso- and metasternum rather sparse; mesosternum with faint anterior impression; lateral mesosternal striae about parallel, only curved inwards at their anterior end (figs 169, 176, 281) 171
171. Pronotum in dorsal view longer (fig. 279); course of lateral metasternal striae almost parallel (fig. 281) *T. ferrarii* (Gestro) ♂
- Pronotum short (figs. 168, 175); lateral metasternal striae divergent posteriorly 172
172. Frons and rostrum wider (fig. 170); prosternal carinal disc not impressed along the median line in the anterior twothirds (fig. 169); larger punctures on meso- and metasternum mixed with rather indistinct minute punctures (fig. 169) *T. therondi* spec. nov. ♂
- Frons and rostrum narrower (fig. 177); prosternal carinal disc impressed along the median line in the anterior twothirds, progressively so anteriorly (fig. 176); punctures on meso- and metasternum of unequal size, but not mixed with minute punctures (fig. 176) *T. gomysi* spec. nov. ♂

Section J

(No transverse frontal ridge, rostrum not acuminate, larger species, carinal disc margined along anterior edge, pronotum rather long or very long)

173. Lateral metasternal striae obsolete, composed of some aligned punctures (fig. 249); lateral mesosternal striae abbreviated posteriorly (fig. 249); prosternal carinal disc distinctly concave in transversal direction *T. nasicus* spec. nov. ♂
- Lateral metasternal striae present, though sometimes fine (cf. figs 281, 286) ... 174
174. Lateral mesosternal striae narrow, abbreviated posteriorly (fig. 286); lateral metasternal striae fine, rather short (fig. 286); sides of pronotum in dorsal view very gradually and evenly curved inwards anteriorly towards anterior pronotal angles (fig. 285) *T. degallieri* spec. nov. ♂
- Lateral mesosternal striae distinct though sometimes narrow, more or less sulcate, their posterior end attaining the meso-metasternal suture or nearly so (cf. figs 281, 289) 175
175. Lateral mesosternal striae wide and sulcate, continuous with lateral metasternal striae, the latter sinuous and very wide anteriorly (fig. 224) *T. andaiensis* (Gestro) ♂
- Lateral mesosternal striae not continuous with lateral metasternal striae, the latter at least separated from the former by an intervening space behind the meso-metasternal suture (this intervening space sometimes narrow) (cf. figs 184, 216) 176
176. Larger species, PE-length more than 3.1 mm 177
- Medium-sized or rather small species, PE-length at most 3.1 mm 178
177. Sides of pronotum in dorsal view rather abruptly curved inwards in front, thence oblique and straight towards anterior pronotal angles (fig. 237); rostrum margined at the sides by a fine ridge (fig. 240) *T. dohertyi* (Lewis) ♂
- Sides of pronotum in dorsal view very widely and evenly curved towards anterior pronotal angles (fig. 214); rostrum without fine lateral ridge (fig. 217) *T. canalifrons* Bickhardt ♂

178. Marginal pronotal striae complete, ending in front near anterior pronotal angles (the striae sometimes rather indistinct in the anterolateral curvatures) 179
- Marginal pronotal striae abbreviated in front or widely interrupted anterolaterally 183
179. Lateral sides of prosternal carinal disc distinctly divergent anteriorly (fig. 293); posterior half of pygidium strongly concave, punctures without hairs (fig. 291) ...
..... *T. nepalensis* spec. nov. ♂
- Lateral sides of prosternal carinal disc not distinctly divergent anteriorly; posterior half of pygidium at most moderately concave, punctures on pygidium with a hair (though sometimes very short and ill-visible) 180
180. Pygidium usually with a distinct impression along apex and sides (fig. 182), this impression sometimes indistinct or obsolete; marginal pronotal stria very indistinct in the anterolateral curvature; punctures on pygidium with a short yellow hair *T. cincitpygus* (Marseul) ♂
- Posterior part of pygidium convex; marginal pronotal stria distinctly continued along anterolateral curvature (figs 266, 274, 288) 181
181. Lateral ridges along antennal insertions and at the lateral sides of the rostrum fine but distinct, at their inner side accompanied by a shallow groove, ridges fading away on the rostrum near the apex (fig. 269); pygidium with distinct, rather long yellow hairs (fig. 266) *T. monteithi* spec. nov. ♂
- Lateral ridges along antennal insertions and at the lateral sides of the rostrum blunt and indistinct, on the rostrum not accompanied by a groove; hairs on pygidium very short, ill-visible 182
182. Prosternal carinal disc narrower, with distinct deep punctures (fig. 276); frons and posterior part of rostrum concave in both directions (fig. 277); meso- and metasternum with double punctation (fig. 276) *T. venator* (Lewis) ♂
- Prosternal carinal disc wider, with indistinct shallow punctures (fig. 289); frons and rostrum only concave in transversal direction (fig. 290); punctures on meso- and metasternum of unequal size, but not mixed with very small punctures (fig. 289) *T. pooti* spec. nov. ♂
183. Rostrum margined at the sides by a fine but sharp ridge, fading away anteriorly (figs 185, 193); mesosternum with a more or less distinct elongate anterior median impression; metasternum more densely punctate, median suture narrowly sulcate; lateral striae on first sternite present, apical part of pygidium flat or impressed along the apical margin 184
- Posterior part of rostrum at most margined by blunt ridges; mesosternum with a faint, mainly crosswise anterior impression; metasternum rather sparsely punctate, median suture canaliform or very fine, lateral striae of first sternite obsolete, apical part of pygidium slightly convex (cf. fig. 279) 185
184. Elytra more densely punctate; anterior median impression of mesosternum usually more distinct (fig. 184); punctures on metasternum of strongly unequal size; pygidium (fig. 182) usually with a distinct impression along the apex and the sides (this impression sometimes indistinct or obsolete)
..... *T. cincitpygus* (Marseul) ♂
- Elytra less densely punctate; anterior median impression of mesosternum less distinct (fig. 192); punctures on metasternum of slightly unequal size; apical part

- of pygidium rather flattened off *T. indicus* Lewis ♂
185. Pronotum with an appendix of marginal striae near anterior angles (fig. 207); punctures on middle of pronotal disc strongly unequal in size, the larger punctures here distinctly larger than the punctures just in front of posterior pronotal margin; punctuation of elytral disc only little finer than punctuation just in front of posterior pronotal margin *T. bertiae* spec. nov. ♂ ?
- Pronotum without appendix of marginal striae near anterior angles (fig. 279); punctures on middle of pronotal disc slightly unequal in size, the punctuation here not distinctly different from that just before posterior margin; punctuation of elytral disc distinctly finer than punctuation just before the posterior pronotal margin *T. ferrarii* (Gestro) ♂

Section K

(No transverse frontal ridge, rostrum not acuminate,
posterior pronotal third very coarsely punctate)

186. Punctures on pronotum before the posterior margin much more closely set and only slightly larger than punctures on anterior half of pronotum, not strongly different in size (fig. 328); punctuation of mesosternum and most anterior part of metasternum fine, punctuation of metasternum elsewhere very fine, almost obsolete (fig. 330) *T. aukei* spec. nov. ♂
- Punctuation on posterior third of pronotum (with the possible exception of a band of punctures along median line) coarse to very coarse, cribose, the larger punctures with a distinctly greater diameter than the punctures at or just before the pronotal middle 187
187. Very slender species, median length of pronotum at least 1.5 times its wide; punctuation of metasternum very fine, lateral metasternal striae fine, at most attaining the anterior metasternal third 188
- Less slender species, pronotum at most 1.4 times longer than wide; meso- and metasternum with distinct punctuation, though sometimes rather sparse; lateral metasternal striae distinct, longer, usually surpassing metasternal middle (the males in this section are very similar and difficult to identify without associated females or material for comparison) 189
188. Pronotum in dorsal view about 1.7 times longer than wide (fig. 375); punctures on posterior third of pronotum along median line not very coarse, punctures laterally from this median area larger, not very different in size (fig. 375); lateral metasternal striae about attaining the anterior metasternal third (fig. 377)
..... *T. gratus* spec. nov. ♂
- Pronotum in dorsal view about 1.55 times longer than wide, punctures on posterior pronotal third laterally from a narrow impunctate median band very coarse and strongly different in size (fig. 381); lateral metasternal striae reduced to a short trait (fig. 382) *T. gracilis* spec. nov. ♂
189. Frons and rostrum together mainly concave in transversal direction (fig. 315); apical tubercles of rostrum distinct *T. bombacis* (Lewis) ♂
- Frons concave in both longitudinal and lateral directions, with a more or less distinct separate impression on the anterior part of the rostrum (cf. figs 261, 326) 190

190. Punctuation very strong, also on elytra and inferior side (figs 325, 335); punctuation on the posterior third of the pronotum very coarse, punctures here almost mutually in touch (figs 323, 333) 191
- Punctuation less dense, punctures on the posterior part of the pronotum not almost in touch, though interspaces may be narrow 192
191. Frons moderately concave, lateral ridges along antennal insertions rather sinuous and fine, continued on sides of the rostrum as very fine ridges, fading away near rostral apex (fig. 326); pronotum slightly narrower (fig. 323), its anterior third in lateral view more convex *T. schawalleri* spec. nov. ♂
- Frons more distinctly concave, lateral ridges along antennal insertions rather angulate behind insertions (fig. 336), continued as a distinct ridge onto the rostrum and rather abruptly ending about halfway the rostrum (fig. 336); pronotum slightly wider (fig. 333), its anterior third in lateral view less convex *T. tabaciglescens* (Marseul) ♂
192. Punctures on posterior third of pronotum of unequal size, but size of smaller punctures only exceptionally half that of larger punctures, majority of smaller punctures larger 193
- Size of the smaller punctures on posterior third pronotum at most half that of larger punctures, majority of secondary punctures smaller 194
193. Face narrower, lateral ridges on sides of rostrum fine, fading away near rostral apex (fig. 321); pronotum a little more elongate (fig. 317), marginal pronotal stria not interrupted anterolaterally (always?) *T. longicollis* Heller ♂
- Face wider, lateral ridges on rostrum distinct in posterior half, rather abruptly ending about halfway rostrum (fig. 261); pronotum a little less elongate, marginal pronotal stria interrupted anterolaterally (fig. 259) *T. coomani* spec. nov. ♂
194. Pronotum slightly narrower, coarse punctures on posterior third of pronotum mixed with very small punctures (fig. 304), rather abrupt transition between very coarsely punctate posterior area with less coarsely punctate pronotal area before it *T. silvicola* Schmidt ♂
- Pronotum slightly wider, secondary punctures in posterior third of pronotum not very small (fig. 190), very gradual transition between the coarsely punctate posterior area with less coarsely punctate pronotal disc before it *T. indicus* Lewis ♂

Systematics

Genus *Trypeticus* Marseul, 1864

Type species: *Trypanaeus (Trypeticus) gilolous* Marseul, 1864. Designated by Bickhardt, 1916: 53.

Diagnosis.— Cylindrical, shiny, punctate, humeral calus smooth. Head retractable into the thorax till the level of the eyes, in this resting position mandibles accommodated against the anterior edge of prosternal carina and antennae laid down through deep incisions in anterior prosternal edge. Frons and clypeus fused without visible suture, usually more or less prolonged into a rostrum. Labrum transverse, setose, in frontal view often hidden by the rostral tip. Mandibles short and wide, moving in a plane parallel with the frons, the pointed tip with a fine slit parallel with the upper

face of the mandible, producing a finely bifid apex. Antennae inserted immediately before the eyes, usually in a socket in the frontal edge, open anteriorly. Antennal scape bent, strongly thickened distally, setose. Antennal flagellum consisting of six more or less subconical segments, the first segment much longer than the subsequent segments. Antennal club flattened dorso-ventrally with very oblique sutures, the distal segments facing upwards and pubescent, the proximal segments facing downwards, shiny and punctulate. Eyes large, strongly convex, at the underside delimited by a groove for the accommodation of the antennal scape in the resting position. Pronotum with marginal striae at the sides, that may be abbreviated anteriorly or be interrupted; posterolateral pronotal angles rounded. Scutellum small, triangular. Elytra without striae, but for a marginal epipleural stria, that may be abbreviated, interrupted, obsolete or entirely wanting; elytral apices rounded, forming a rather shallow sutural angle. Abdominal tergite in front of the propygidium usually more or less protruding beyond the elytral apices. Propygidium and pygidium more or less deflected, the former transverse and hexagonal, the latter triangular with rounded tip or parabolic in outline, rarely shaped otherwise. Prosternum with deep incisions in the anterior margin for the accommodation of the antennal flagelli, with shallow, ill-delimited fossae for the accommodation of the antennal clubs, and a more or less broad carina with steep sides, truncate or slightly emarginate behind, in front truncate, slightly emarginate or slightly rounded. Mesosternum abruptly narrowed in front, protruding between the procoxae, behind this narrowed part provided with lateral extensions behind the procoxae. Mesosternum usually with distinct lateral striae, rarely these striae indistinct or obsolete. Metasternum usually with lateral striae, rarely lateral striae obsolete or entirely wanting. Median suture often partly or entirely canaliform or deeply sulciform impressed. Pro- and mesotibiae barely widened with five or six strong subequal teeth on the outer margin and usually with an additional bent apical tooth (figs 2, 3), metatibiae slightly widened posteriorly with an inner apical procession without spines and with few small teeth on the outer margin near the distal end (fig. 4). Tarsi very long and slender, consisting of five segments, the distal segment very long, bearing two bent nails. Genitalia ill-chitinized. The larvae and pupae of members of this genus are unknown.

Species accounts (in alphabetical order)

Trypeticus adebratti spec. nov.
(figs 299-303)

Material.— **Malaysia:** Holotype, ♀ (MZLU), alae protruded, distal segment of right mesotarsus missing, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang/Mendolong, T5/R/20.iii.1989/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/adebratti* sp. n./P. Kanaar des. 2000”; 1 ♂ (CHPK), same locality, trap code and collector, but 2.iii.1989 (paratype); 1 ♂ (MZLU), idem, but trap code T4/R and 14.iii.1989 (paratype). **Brunei:** 1 ♂, 2 ♀ (BMNH), Kuala Belalong FSC, 16.vi.1991, 260 m, ground FIT, Dipterocarp forest, N. Mawdsley (paratypes).

Male.— Length (without head and abdominal tergites) 2.05 mm, width 0.80 mm, height 0.72 mm. Cylindrical, shiny, piceous black, abdominal segments, underside, antennae and legs rufous.

Head.— Face in lateral view very faintly concave with slightly elevated rostral tip. Rostrum in frontal view rounded-truncate anteriorly (fig. 302), apical margin with two paramedian tubercles. Frons and rostrum together distinctly concave, the concavity divided in two areas by paramedian bosses just behind the level of the antennal insertions. An additional shallow and ill-delimited median groove passes along frons and posterior half of the rostrum. Rostrum and frons sparsely and finely punctate, interstices outside the median groove with a dense linear microsculpture, causing a dull-shiny appearance. Transition between frons and vertex slightly arcuate, rather sharp. Vertex more closely and distinctly punctate than frons, interstices with linear microsculpture.

Pronotum.— About 1.3 times longer than wide (fig. 299), strongly convex in transversal direction, in profile almost straight in the posterior half, thence progressively convex towards anterior margin. Marginal striae fine, turned upwards at their posterior end, in front ending in the not impressed anterior angles. Punctuation very dense, punctures deep, of moderate, slightly unequal size, mixed with very small punctures in the anterior pronotal third. An indistinct and narrow median band in the posterior half is impunctate. Interspaces smooth.

Elytra.— Along the suture shorter than pronotum (fig. 299), apices rounded. Strongly convex in transversal direction, in profile slightly convex over nearly its entire length, thence strongly convex towards apices. Elytra less densely and less coarsely punctate than pronotum, punctures near suture slightly more closely set. A very narrow band along the suture is impunctate. Interspaces with indistinct microsculpture, especially at the sides and near the apices. Epipleura with some punctulation, interstices with linear microsculpture. An indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly impressed along the anterior margin, densely punctate, interstices with some microsculpture. Oblique lateral striae present.

Pygidium.— Triangular in outline with rounded tip, concave, mainly in longitudinal direction, about punctate as propygidium, punctures without hairs.

Prosternum.— Carina faintly convex in lateral view, mainly anteriorly. Disc with parallel sides (fig. 301), margined by a narrow elevated rim at the sides and in front. The rims at the lateral sides are accompanied by an indistinct carinal stria, the anterior rim by an ill-delimited distinct impression. Carinal disc with distinct, rather dense double punctation, interspaces with indistinct microsculpture.

Mesosternum.— Barely impressed between the procoxae. Lateral striae distinct, sulciform, well-delimited, almost parallel, ending behind the procoxae (fig. 301). Mesosternal disc with rather dense double punctation, primary punctures elongate; interspaces smooth. Meso-metasternal suture fine, strongly angulate backward.

Metasternum.— Lateral striae fine, slightly divergent posteriorly (fig. 301), nearly reaching the anterior metasternal third. Metasternal disc in anterior third about punctate as mesosternum, punctures diminishing in size posteriorly. A narrow band along the distinctly canaliform median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc finely and rather densely punctate, lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of hindtibiae with a row of spines and three small teeth in distal half.

The female differs from the male as follows:

Head.— Face in profile evenly concave over its entire length. Rostrum in frontal

view narrowly rounded anteriorly (fig. 303). Frons and vertex separated by a distinct and narrow transverse ridge. From this transverse ridge two fine paramedian ridges run anteriorly. These ridges slightly less distinct on rostrum, but still reaching the slightly raised anterior margin, ending in a very indistinct tubercle. These ridges enclose a distinct median concavity, deeper on frons, gradually shallower on rostrum. Fine lateral ridges run from the transversal ridge along the eyes and the sides of the rostrum towards the rostral apical margin. Between each paramedian and lateral ridge frons and rostrum are also concave, but a little less deeply so than along the median line. Frons and rostrum sparsely and finely punctate. Interspaces with fine microsculpture, especially in the lateral concavities, causing a dull-shiny appearance. Vertex behind the transverse ridge narrowly depressed; vertex rather densely punctate, interstices with dense linear microsculpture.

Pronotum.— Amply 1.5 times longer than wide (fig. 300), sides faintly tapering anteriorly, in profile slightly convex over nearly its entire length, sloping down anteriorly towards the anterior margin. In this anterior sloping part a sharply delimited area (indicated by a dotted line in the figure) has a dense interstitial microsculpture, producing a rather dull appearance. In this dull area a very faint and ill-delimited median elevation is present. Elytral punctation finer than in the male. A short antescutellar stria is present.

Pygidium.— Outline more broadly rounded at the apex, disc faintly convex with a shallow impression in the anterior half, punctures near the apex with a very short yellow hair.

Prosternum.— Carinal disc without rim and impression along the anterior margin. Carinal striae distinct, nearly reaching the anterior margin.

Meso- and metasternum.— Punctation finer.

First sternite.— Punctation much finer.

Variation.— PE-length of holotype: 2.23 mm, width: 0.80 mm, height: 0.73 mm; PE-length other males: 2.02 and 2.13 mm, other females: 2.13 and 2.20 mm. Most specimens have a more fully developed piceous black colour, also at the underside. The indistinct impunctate median band on the pronotum is sometimes wanting.

Etymology.— This nice species is dedicated to Mr S. Adebratt, who has considerably increased the number of known species by his collecting activities in Sabah.

Trypeticus albertisii (Gestro, 1875)
(figs 15-19)

Trypanaeus albertisii Gestro, 1875: 994-995.

Trypeticus albertisii; Lewis, 1905: 7.

Trypeticus rhinocerus Lewis, 1893: 426-427. **New synonym.**

Material.— **Indonesia:** Lectotype, ♂ (MCSN), rather crushed, prothorax loose from remainder of the body, many tarsal segments missing, [white label with black frame, printed and hand-written:] “Nuova Guinea/Andai. Ag. 1872/L.M. d’Albertis”; [white label with red frame, printed in red:] “TYPUS”; [white label, printed:] “Museo Civico/di Genova”; [white discoloured cardboard with black frame, hand-written:] “Albertisii/Gestro”; [red label, printed and hand-written:] “TYPUS/*Trypanaeus*(*Trypeticus*)/albertisii/Gestro, 1876”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypanaeus*(*Trypeticus*)/albertisii/ Gestro, 1875/P. Kanaar des. 1999” (present designation); 1 ♀ (BMNH), Andai, Doherty, 1893 (holotype by inference of *T. rhinocerus* Lewis, 1893); 1 ♀ (SMNS), Irian Jaya, Fak-

fak, 2 km E. of airport, 16/18.vii.1996, Schüle & Stüben. **Papua New Guinea**: 1 ♂ (MCSN), Fly River, 1876-1877, L.M. d'Albentis.

Male.— Length (without head and abdominal tergites) 4.7 mm, width 2.5 mm, height 2.1 mm. Thick-set cylindrical, shiny, piceous brown-black, antennae, legs and abdominal tergites rufous.

Head.— Face in profile slightly sinuous (almost straight) with elevated tip in the anterior part, at the level of the eyes strongly convex. Apical margin of rostrum with two paramedian tubercles (fig. 18). Frons moderately concave, mainly in transversal direction along the median line, with an additional faint median impression on the rostrum. A short and fine oblique ridge runs from each eye anteromedially, at its posterior end accompanied by a very shallow impression at its inner side. Frons and rostrum with fine double punctation, interstices with a very dense and fine linear microsculpture at the sides and on the rostrum. Transition between frons and vertex arcuate, rather gradual. Vertex (as far as visible) punctate as frons.

Pronotum.— As long as wide with slightly sinuous sides (fig. 15), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile convex over its entire length, more strongly so in front, anterior emargination for the head shallow. A very faint indication of a fovea is present at either side, at about the anterior third. Marginal striae distinct, strongly curved inwards at their posterior end, in front ending just beyond the barely impressed anterior angles. Pronotal disc not densely covered with a fine double punctation, punctures behind the anterior emargination closely set. Interspaces smooth. Neither a distinct impunctate median band nor a median stria is present.

Elytra.— Along the suture shorter than pronotum (fig. 15) with rounded apices, depressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile convex over its entire length. Elytra a little more distinctly and a little more densely punctate than pronotum, with less secondary punctures. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura with a fine linear microsculpture. Marginal striae fine, broadly interrupted before the middle.

Propygidium.— Slightly impressed along the anterior margin, more distinctly so towards sides, with oblique lateral striae. Punctation double, rather dense, primary punctures a little larger than on elytra, interstices with some indistinct microsculpture.

Pygidium.— Broadly rounded in outline, convex, with a faint impression near the anterolateral angles, and very finely margined along the apex. Punctation double, slightly denser than on propygidium, towards apex finer, punctures without hairs. Interspaces with some indistinct microsculpture.

Prosternum.— Carina broad, sides very faintly convergent anteriorly (fig. 17), convex in lateral view. Carinal disc margined at the sides and in front by an elevated rim, accompanied at the inner side by a sulciform carinal stria. Carinal disc with a faint median impression and a distinct fine double punctation, interspaces with linear microsculpture.

Mesosternum.— Between procoxae faintly impressed. Lateral striae broad and sulciform, ill-delimited at their inner side, curved inwards, progressively so anteriorly and ending behind the procoxae (fig. 17). Mesosternal disc finely punctate, interspaces with indistinct linear microsculpture, shiny. Meso-metasternal suture fine, slightly sinuous, angulate backwards.

Metasternum.— Slightly convex in lateral view, its anterior part in a blunt angle with the mesosternum. Median suture canaliform. Lateral striae short, distinct, slightly divergent posteriorly (fig. 17), at a rather great distance from the meso-metasternal suture. Metasternal disc about equally punctate as mesosternum, punctures a little elongate. A band along the median suture is impunctate. Interspaces with indistinct microsculpture near the lateral striae, elsewhere smooth.

First visible sternite.— Punctuation of disc double, slightly denser than on metasternum. Interstices with indistinct linear microsculpture along the posterior margin. Oblique lateral striae indistinct, short and interrupted, composed of confluent punctures.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with some distinct small teeth on the distal fourth.

The female differs from the male as follows:

Punctuation slightly finer than in the male, colour black.

Head.— Face in profile almost straight in posterior half, thence progressively bent upwards towards apex. Rostral tip rather bluntly pointed, obliquely directed upwards, well protruding beyond the anterior margin along the labrum (fig. 19), underside of the tip almost flat. Transition between frons and vertex rather sharp, nearly transverse, smooth. Frons and rostrum delimited at either side by a fine, slightly sinuous ridge, in front ending on the pointed tip, close to its extremity. At their inner sides these ridges are accompanied by a very shallow groove, ill-delimited at the inner sides. Between the lateral side of the ridges and the broadly rounded lateral margins of the rostrum the latter is rather concave. Rostrum traversed by a median groove that widens posteriorly into a deep elongate frontal fovea. Outside this median fovea the frons is also a little concave. Frons and rostrum with rather dense fine double punctuation, the secondary punctures less visible by fine linear interstitial microsculpture. Vertex with a small median fovea. Punctuation on the transition between frons and vertex double, fine, interstices smooth, posteriorly from the median fovea punctuation distinctly coarser and more closely set, with some interstitial microsculpture.

Pronotum.— Nearly 1.1 times longer than wide (fig. 16), sides in dorsal view slightly sinuous, in front rather abruptly rounded inwards and thence faintly convex towards anterior angles. Pronotum moderately convex in transversal direction, in profile convex in the posterior two-thirds, thence rather straightly sloping down towards anterior margin. A rather short median ridge is present a little behind the anterior emargination, most distinct at the posterior end. Behind this ridge the pronotum is slightly depressed, the depression more distinct posteriorly and accompanied by two distinct paramedian tubercles. Starting from the anterior angles faint oblique impressions run posteromedially. A narrow, bi-arcuate band along the anterior emargination (indicated by a dotted line in the figure) is dull by dense microsculpture. Posteromedially from each anterolateral angle a small shallow fovea is present (always?). Marginal striae interrupted behind the anterolateral angles. A very shallow fovea is present before the scutellum. From this fovea a median stria runs anteriorly, reaching the level of the paramedian tubercles.

Pygidium.— Very similar to that of the male, but the anterolateral impressions slightly more distinct, punctures without hairs.

Prosternum.— Carina in lateral view slightly less convex. Contrary to the situation

in the females of most species there is an anterior stria, almost continuous with the carinal stria at the left side, abbreviated and discontinuous with the carinal stria at the right side in the specimen from Fakfak (probably an individual aberration).

Metasternum.— Lateral striae more prolonged anteriorly than those in the figure of the male, rather parallel, at their posterior end slightly divergent posteriorly.

First sternite.— Oblique lateral striae more distinct.

Variation.— In the holotype of *T. rhinocerus* Lewis the pronotal outline in dorsal view between the anterolateral and anterior angles is more oblique, less rounded than in the depicted specimen from Fakfak, the prosternal carinal disc is not margined along the anterior margin and the lateral metasternal striae are less divergent at their posterior end.

Remarks.— PE-length lectotype 4.6 mm, holotype of *T. rhinocerus* 4.9 mm, other female 4.8 mm. The male type specimen is rather damaged. For the drawings and the description the specimen from the Fly-river has been used. In the lectotype the pygidium has distinct anterolateral foveae and the oblique lateral striae on the first abdominal sternite are distinct. The female was described by Lewis as *T. rhinocerus*, though he thought that is was a male. He already mentioned the probable close relationship with *T. albertisii*, but he believed that his species could not be the same. As all older authors he had problems to imagine that such quite different insects ever could belong to a same species.

Trypeticus alticola spec. nov.

(figs 88-90)

Material.— **Indonesia:** Holotype, ♂ (SMNS), two segments of right mesotarsus missing, [white label, printed:] "♂"; [blue label, printed:] "IRIAN-JAYA: Wamena/Melanggama Pass/1900-2500 m 14.ix.1990 /leg. A. Riedel"; [red label, printed:] "HOLOTYPUS/*Trypeticus/alticola* sp. n./P. Kanaar des. 2000"; 1 ♂ (SMNS), Irian Jaya, Baliem Distr., Ilugwa, 1900-2500 m, 14.ix.1990, A. Riedel (paratype).

Male.— Length (without head and abdominal tergites) 4.1 mm, width 1.8 mm, height 1.6 mm. Rather thick-set cylindrical, shiny, piceous black with faint bronze and bluish metallic hue, antennae and legs rufous.

Head.— Face in profile almost straight from the slightly elevated apex towards the anterior third of the moderately convex eyes, thence convex towards the neck. Rostrum in frontal view broadly rounded anteriorly, slightly emarginate in the middle, with two small paramedian tubercles (fig. 90). Frons and rostrum bordered at the lateral sides by a fine, slightly sinuous ridge, at the inner side accompanied by a narrow and shallow groove, ill-delimited at the inner side. These ridges indistinctly connected along the apical margin by a faint narrow rim; outside these ridges the lateral parts of the rostrum slope steeply down towards the lateral rostral margin. Frons and posterior part of rostrum distinctly concave, apex behind the apical rim with a faint additional impression. Frons and rostrum with sparse small punctures, interstices with dense linear microsculpture. Transition between frons and vertex arcuate, rather sharp in the middle, at the sides very blunt. Vertex a little more densely punctate than frons, interstices with linear microsculpture.

Pronotum.— About 1.1 times longer than wide (fig. 88) with nearly parallel sides, in front rounded towards the anterior angles, moderately convex in transversal direc-

tion, in profile nearly straight and a little sloping down anteriorly in the posterior half, thence convex to the anterior margin. Marginal striae distinct, curved upward at their posterior end, in front ending in the barely impressed anterior angles. Pronotal disc not very densely punctate, punctures distinct, of moderate and slightly unequal size, a little irregularly dispersed, punctures along the anterior margin more closely set, mixed with small punctures. Interspaces here with indistinct microsculpture, elsewhere smooth. A narrow, ill-delimited impunctate median band is present in the posterior three-fourths, without distinct median stria.

Elytra.— Along the suture as long as pronotum (fig. 88) with faintly rounded apices, distinctly impressed near scutellum and anterior margin, moderately convex in transversal direction, in profile nearly straight in anterior third, thence faintly convex, more distinctly so towards apex, punctures along the base as large as on pronotum, elsewhere smaller. A narrow band along the suture is impunctate. Interspaces near the suture with very fine indistinct microsculpture. Epipleura with a fine linear microsculpture. Marginal stria broad and shallow in posterior half, fine and rather indistinct in anterior half, interrupted in the middle.

Propygidium.— Faintly impressed at the sides, with oblique lateral striae. Punctuation distinct, double, interstices with indistinct linear microsculpture.

Pygidium.— Broadly rounded in outline, slightly convex with a shallow impression in the anterolateral angles. Punctuation as propygidium, primary punctures in the apical half with a rather long yellowish hair. Interstices with indistinct linear microsculpture.

Prosternum.— Carina slightly convex in lateral view, disc broad with nearly parallel sides (fig. 89), margined at the sides and in front by a narrow elevated rim, accompanied at the inner side by a narrow, shallow sulciform stria, rather ill-delimited at the inner side. Carinal disc with a distinct longitudinal median impression and a double punctuation, the primary punctures rather small, the secondary punctures ill-visible by linear microsculpture of the interspaces.

Mesosternum.— Between procoxae distinctly impressed. Lateral striae slightly divergent anteriorly, rather broad and sulciform, slightly bent inwards in front and ending behind the procoxae, narrowing posteriorly and abbreviated a little before the meso-metasternal suture (fig. 89). Mesosternal disc not very densely punctate, punctuation double, distinct, primary punctures a little elongate, smaller posteriorly. Interspaces with some indistinct microsculpture. Meso-metasternal suture fine, strongly angulate backwards, adjacent parts of mesosternum and especially of metasternum depressed.

Metasternum.— Median suture distinctly canaliform, less so posteriorly. Lateral striae short, divergent posteriorly (fig. 89), rather indistinctly carved and mainly made up of confluent punctures. Metasternal disc about punctate as posterior part of mesosternum. A band along the median suture is impunctate. Interspaces with some indistinct microsculpture.

First visible sternite.— Disc with faint elongate median impression, slightly more densely punctate than metasternum, especially posteriorly. Interstices with indistinct linear microsculpture. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five larger teeth on the outer margin and an additional small apical tooth. Outer margins of hindtibiae with spines and with a few small teeth on the distal fourth.

The female is unknown.

Variation.— PE-length paratype: 4.0 mm, its lateral mesosternal striae narrower, more abbreviated posteriorly, the lateral metasternal striae obsolete.

Remarks.— The paratype has several irregular pits on pronotum, elytra and metasternum, obviously caused by crippling. The possibility has been considered that this species is in fact the male of *T. nitens* spec. nov., but there are too many essential differences.

Etymology.— The name refers to the high central mountains of Irian Jaya where the specimens have been found.

Trypeticus andaiensis (Gestro, 1875)
(figs 222-226)

Trypanaeus andaiensis Gestro, 1875: 995-996.

Trypeticus andaiensis; Lewis, 1905: 7.

Material.— **Indonesia**: Lectotype, ♂ (MCSN), missing left antennal club with most segments of flagellum and several tarsal segments, [white label with black frame, printed and hand-written:] “Nuova Guinea/Andai. Ag. 72/L.M. d’Albertis”; [white label with red frame, printed in red:] “TYPUS”; [white discoloured cardboard with black frame, hand-written:] “*andaiensis*/Gestro”; [red label, printed and hand-written:] “TYPUS/*Trypanaeus*(*Trypeticus*)/*andaiensis*/Gestro, 1876”; [white label, printed:] “Museo Civico/di Genova”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypanaeus*(*Trypeticus*)/*andaiensis*/Gestro, 1875/P. Kanaar des. 1999” (present designation). 1 ♀ (MNHN), Irian Jaya, Baie de Geelvink, 1878, Raffray & Maindron; 1 ♀ (SMNS), Irian Jaya, Manokwari, Ransiki, Mayuby, 300 m, 26-30.ix.1990, A. Riedel. **Papua New Guinea**: 2 ♂♂, 2 ♀♀ (FMNH, CHPK), Stony Logging area nr. Bulolo, ex Forest Res. stat. Bulolo, 2300 ft, in burrows of *Ambrosia* beetles in *Xanthophyllum*, 10.vi.1978, H. Roberts.

Male.— Length (without head and abdominal tergites) 2.6 mm, width 1.1 mm, height 1.0 mm. Cylindrical, shiny, castaneous brown, legs and antennae lighter brown.

Head.— Face in profile straight in anterior part with slightly elevated tip, halfway the eyes strongly convex towards vertex and neck. Rostral tip in frontal view faintly emarginate, with two distinct paramedian tubercles (fig. 225). Frons and rostrum deeply concave, anterolaterally delimited by a fine and narrow oblique ridge, running from the eyes towards the paramedian tubercles. At their inner side each oblique ridge is accompanied by a very shallow narrow groove, fading away close to the tip. At the lateral sides of the oblique ridges the rostrum slopes steeply down towards its lateral margins. Frons and rostrum with fine double punctation, interstices with fine microsculpture, shiny. Transition between frons and vertex very gradual, slightly arcuate. Vertex with a small median fovea, punctation more distinct than on frons.

Pronotum.— Nearly 1.3 times longer than wide (fig. 222), sides in dorsal view nearly parallel, slightly widening in front, thence broadly rounded inwards towards anterior angles. Pronotum strongly convex in transversal direction, in profile faintly convex in the posterior half, thence moderately convex towards anterior margin. Marginal striae distinct, strongly turned upwards at their posterior end, at a rather great distance from the lateral margin in the anterior half, ending just beyond the faintly impressed anterior angles. Pronotal disc rather densely punctate with rather coarse punctures of slightly unequal size, punctures behind the anterior emargination more closely set and mixed with small punctures. Interstices smooth. No dis-

tinct impunctate median band or median stria.

Elytra.— Along the suture slightly shorter than pronotum (fig. 222), impressed near scutellum, strongly convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation along the base about equal to that of pronotum, elsewhere a little finer and sparser, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate, with linear microsculpture. Marginal epipleural stria well visible in the posterior half, very fine and abbreviated in the anterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present. Punctation rather dense and coarse, punctures smaller posteriorly, interstices smooth.

Pygidium.— Broadly parabolic in outline, convex, punctures rather coarse, of unequal size, without hairs, along the margin smaller.

Prosternum.— Carina convex in lateral view, progressively so anteriorly. Carinal disc broad, sides nearly parallel (fig. 224), margined at the sides and in front by a narrow elevated rim, at the lateral sides accompanied by a distinct sulciform carinal stria, slightly bent inwards at their posterior end. Disc with rather sparse double punctation. Interspaces smooth. Lateral prosternal striae well visible in ventral view (not shown in the figure).

Mesosternum.— Lateral striae broad, deep sulciform, very faintly convergent anteriorly, in front bent inwards and ending near the procoxae (fig. 224). Mesosternal disc with a rather sparse double punctation, the primary punctures elongate. Meso-metasternal suture fine, angulate backwards. Interspaces smooth.

Metasternum.— Lateral striae distinct, divergent posteriorly, in front widening and sulciform, without interruption continuous with the lateral mesosternal striae, curved inwards posteriorly and nearly reaching the posterior metasternal third (fig. 224). Disc about punctate as mesosternum. Median suture distinctly sulciform. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Punctation distinct, punctures of unequal size, interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae rather short and broad, outer margin with hairs and with some distinct small teeth on the distal third.

The female differs from the male as follows:

Punctation slightly finer and sparser than in the male.

Head.— Face in profile straight with slightly elevated tip, the latter rounded-truncate in frontal view (fig. 226). Frons and vertex separated by a smooth transverse ridge, sharply delimited behind, ill-delimited towards frons. Frons and rostrum delimited at the sides by a narrow oblique ridge, continuous with the transverse ridge behind, mutually connected along the anterior margin by an apical ridge, that is indistinctly and very finely tuberculate. At their inner side the oblique lateral ridges are accompanied by a deep, well-delimited groove, shallower at its posterior end, broad medially from the eyes, narrowing towards apex and connected along the apical rim. At the lateral sides of the oblique ridges the rostrum slopes steeply down towards its lateral margin. Face between the lateral grooves almost flat with a very faint impression along

the median line in the posterior half. Frons and rostrum with scarce small punctures, interstices with dense microsculpture, giving a dull appearance, with the exception of the transverse ridge and the lateral grooves. Vertex with a distinct transversal impression behind the transverse ridge and a small median fovea at a rather great distance from the transverse ridge (not visible in the depicted specimen). Punctuation more distinct and more closely set than on frons, interstices with dense microsculpture.

Pronotum.— Nearly 1.7 times longer than wide (fig. 223). Anterior margin distinctly protruded in the median line by the presence of a distinct elongate tubercle, highest in its posterior half when seen in profile. At either side of the tubercle the pronotum is faintly impressed and dull by interstitial microsculpture. These impressed areas are separated postero-laterally from the large and deep impressions of the anterior pronotal angles by an oblique, slightly curved blunt ridge, fading away postero-medially, punctures in the dull areas very fine, behind the tubercle and the oblique ridges very large, closely set and shallow. Punctuation on the pronotal disc a little finer and sparser than in the male; an indistinct impunctate median band with a rather long antescutellar stria is present in the posterior half.

Pygidium.— More broadly rounded at the apex, more densely punctate, punctures of unequal size, the larger punctures in the apical half with a long yellow hair (fig. 223).

Prosternum.— Carina almost straight in profile, carinal disc not margined or impressed in front, carinal striae distinct, abbreviated anteriorly.

Variation.— PE-length lectotype 2.6 mm, other males nearly 2.8 mm, females: 2.8–3.0 mm. In most specimens (also in the lectotype) the colour is piceous black, antennae and legs rufous. In some specimens the lateral metasternal striae are a little shorter and less curved inwards posteriorly. In the two males from Bulolo the anterior pronotal angles are a little less acute and more impressed than in the lectotype. In the female specimen of MNHN the oblique pronotal ridges behind the anterior emargination for the head are shorter and less distinct.

Trypeticus angustifrons spec. nov.
(figs 338–342)

Material.— **Indonesia, Irian Jaya** (?): Holotype, ♀ (MCSN), [white label, printed:] “♀”; [white discoloured label with cadre, printed:] “N. GUINEA MER./WAIGUNINA/Giugno 1890/L. LORIA”; [light brown label, printed:] “Museo Civ./Genova”; [white label, hand-written and printed:] “n. sp. I think/det. G. Lewis”; [red label, printed:] “HOLOTYPUS/*Trypeticus/angustifrons* sp. n./P. Kanaar des. 2000”; **Papua New Guinea**: 2 ♂♂ (MCSN, BMNH), N. Guinea S. E., Moroka, 1300 m, 8.xi.1893, Loria (with doubt).

Female.— Length (without head and abdominal tergites) 2.4 mm, width 0.8 mm, height 0.7 mm. Rather slender cylindrical, shiny, reddish brown with darker parts.

Head.— Vertex and frons separated by a distinct smooth, slightly bisinuous transverse ridge, well-delimited at its posterior side, ill-delimited to the frons. Face in profile almost straight, rostral apex slightly turned up, the apex in frontal view bluntly acuminate and strongly overhanging the labrum (fig. 342), its underside triangular with broadly rounded tip, rather convex anteriorly, slightly concave near the base. Frons and rostrum delimited at the sides by a distinct sinuous ridge, continuous with the transverse ridge behind, in front continuous with the sides of the rostral tip; on the

rostrum the ridges are rather close together and have a nearly parallel course. At the medial side each ridge is accompanied by a distinct sulcus, wider on the frons. At the lateral sides of the ridges the rostrum slopes steeply down to its edge, these sides a little concave. Frons and rostrum traversed by an ill-delimited median groove, wider on the frons. Frons and rostrum with rather scarce small punctures, interstices with fine microsculpture, rather dull, with the exception of the lateral grooves and the transverse ridge. Vertex with a distinct crosswise impression behind the transverse ridge, a small median fovea, small punctures and dense interstitial microsculpture.

Pronotum.— About 1.8 times longer than wide, convex in transversal direction, in profile almost straight in the posterior two-thirds, thence slightly convex and sloping down towards anterior margin. Pronotum in dorsal view with slightly sinuous sides, broader and slightly tapering in front; sides abruptly rounded inwards in front and thence oblique towards the anterior angles (fig. 338). Disc not very densely punctate, punctures moderate, of slightly unequal size, punctures near the anterior margin more closely set, slightly elongate, flaccid and indistinctly confluent. No distinct anterior median ridge. Interspaces smooth but for some indistinct microsculpture on the sloping area just behind the anterior emargination. Marginal striae distinct, curved upward at their posterior end, in front ending in the slightly and obliquely impressed anterior angles. A long antescutellar median stria is present, without a distinct impunctate median band.

Elytra.— Along the suture much shorter than pronotum (fig. 338), slightly impressed near scutellum and along anterior margins, strongly convex in transversal direction, in profile nearly straight and slightly raising in the anterior half, thence progressively convex towards apex. Elytral punctation inconspicuously finer than that of pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture and a fine marginal epipleural stria in the posterior half.

Propygidium.— Slightly impressed along anterior margin, more distinctly so towards the sides. Oblique lateral striae present, fine. Punctuation distinct, dense, punctures of unequal size, mixed with very small punctures along the posterior margin. Interstices smooth.

Pygidium.— Broadly rounded in outline, convex, slightly impressed along the base. Punctuation distinct, double, larger punctures in the apical half with a rather long yellowish-white hair.

Prosternum.— Carina in lateral view almost straight. Carinal disc with nearly parallel sides, slightly divergent in front, rather broad and short (fig. 340), margined at the sides by a distinct carinal stria, slightly abbreviated in front. Carinal disc very faintly impressed along the median line in the posterior half, with rather scarce double punctuation, the primary punctures slightly elongate; interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly crosswise impressed anteriorly. Lateral striae deep, sulciform, well-delimited, narrower posteriorly, slightly divergent anteriorly, slightly curved inward in front and ending behind the procoxae (fig. 340). Mesosternal disc with elongate punctures, mixed with small punctures. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, nearly reaching the metasternal half (fig. 340). Disc in front about equally punctate as mesosternum, punctures smaller posteriorly. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly sulciform, wider and deeper in the anterior third, slightly encroaching upon the mesosternum.

First visible sternite.— About equally punctate as posterior part of metasternum, punctures along the posterior margin more closely set. Interstices smooth. Oblique lateral striae present, distinct and long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The supposed male differs from the female as follows:

Head.— Face slightly bisinuous in profile. Rostrum in frontal view broadly and slightly emarginate anteriorly, indistinctly bifid by the presence of two apical tubercles separated by a deep median impression (fig. 341). Frons and rostrum together distinctly concave, mainly in transversal direction. The concavity is subdivided into a large frontal and a smaller rostral part and is delimited at the sides by rather blunt sinuous ridges, running from the eyes to the tubercles on the rostrum. Near the antennal insertions the ridges are rather indistinct. The ridges are not accompanied by a sulcus at their inner side. At the outer side of the ridges the rostrum is rather convex towards its lateral edges. Frons and rostrum with small punctures, interstices with linear microsculpture, shiny. Transition between frons and vertex arcuate and rather sharp. Vertex with a small median fovea, more densely and more distinctly punctate than frons, interstices with linear microsculpture.

Pronotum.— About 1.5 times longer than wide (fig. 339), in dorsal view anterolaterally more gradually rounded towards the anterior angles, in profile not sloping down but convex towards the anterior margin. No antescutellar stria.

Elytra.— Slightly finer punctate than in the female.

Pygidium.— Slightly longer than in the female, apex broadly rounded, hairs in the punctures shorter.

Prosternum.— Carinal disc slightly narrower than in the female. No stria along the anterior margin.

Mesosternum.— Slightly narrower than in the female, lateral striae a little narrower, parallel.

Metasternum.— Lateral striae finer and shorter than in the female, punctuation finer.

Variation.— PE-length males: 2.4 mm. In one male the median metasternal suture is a little more sulcate.

Remarks.— The pro- and mesosternum of the males are a little narrower than in the female holotype, the lateral metasternal striae are shorter and finer, and the punctuation of the underside is distinctly finer than in the female. Usually the punctuation of the male is more distinct than that of the female. As the matching of these specimens is doubtful the males have not been given paratype status.

Etymology.— The name refers to the small distance between the lateral ridges of the face of the female, especially on the rostrum.

Trypeticus arriagadai spec. nov.
(figs 309-311)

Material.— **Philippines:** Holotype ♀ (MNHN), left protarsus missing, [white label, printed:] “♀”; [white label, printed:] “Philippine/Is.”; [white label, printed:] “donated by/H.E. Andrewes”; [white label, hand-written:] “254”; [yellow label, printed:] “MUSÉUM PARIS/1952/COLL. R. OBERTHUR”; [red label, printed:] “HOLOTYPUS/*Trypeticus/arriagadai* sp. n./P. Kanaar des. 2001”; 1 ♀ (MNHN), same data as holotype, but “255” (paratype); 1 ♀ (ZMHB), Mindanao, Imigan, (locality illegible), v.1915 (paratype).

Female.— Length (without head and abdominal tergites) 2.7 mm, width 1.1 mm, height 0.9 mm. Cylindrical, shiny, piceous brown, antennae and legs rufous.

Head.— Face in lateral view slightly bisinuous, with distinctly raised rostral apical margin. Rostrum in frontal view broadly rounded-truncate, very faintly emarginate (fig. 311). Vertex and frons separated by a rather blunt, slightly tuberculate transverse ridge, slightly arcuate posteriorly, well-delimited behind, less so to the frons. Frons and rostrum delimited at the sides by a distinct sinuous ridge, continuous with the transverse ridge behind, rather parallel on the rostrum, in front rather abruptly curved inwards and continuous with the elevated apical margin of the rostrum, that has two faint paramedian transverse tubercles. At the medial side the lateral ridges are accompanied by a distinct sulcus, wider behind the antennal insertions; at the lateral sides the rostrum slopes steeply down to its edge. Frons rather crosswise concave behind the level of the antennal insertions, rostrum in its anterior part concave, both concavities connected by a faint impression along the median line. Frons and rostrum rather densely punctate, punctures small, of unequal size. Interstices with indistinct microsculpture, shiny. Vertex with a broad transversal depression behind the ridge and a small median fovea; punctuation as on frons, interstices with linear microsculpture.

Pronotum.— About 1.3 times longer than wide, a little wider before the pronotal middle (fig. 309), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile nearly straight in posterior three-fourths, thence abruptly convex and sloping down towards anterior margin. Marginal striae distinct, barely curved upward at their posterior end, in front indistinct and ending at some distance from the anterior angles; short appendices of the marginal striae constitute the anterior delimitations of small, but distinct foveae in the anterior angles. Behind the anterior emargination for the head a faint median ridge is present. Punctuation not very dense, distinct, punctures of strongly unequal size, punctuation before the posterior margin distinctly coarser than more anteriorly on the pronotal disc, punctures along the anterior margin and near the anterior angles smaller and more closely set. A fine antescutellar median stria is present, without distinct impunctate median band.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 309), slightly impressed near scutellum and anterior margins, moderately convex in transversal direction, in profile slightly convex in the anterior two-thirds, thence progressively convex towards apex. Elytral punctuation finer than that of pronotum, punctures of unequal size, near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture. A marginal epipleural stria is present in the posterior half.

Propygidium.— Concave in longitudinal direction, densely punctate, punctures of

unequal size, in the posterolateral angles with a hair; interstices with indistinct microsculpture. Oblique lateral striae wanting.

Pygidium.— Broadly rounded in outline, concave, with faint impressions near the anterolateral angles. Punctuation as on propygidium, along lateral sides and apex finer, punctures in the apical half with a yellowish hair. Interstices with indistinct microsculpture.

Prosternum.— Carina slightly convex in lateral view, progressively so anteriorly. Carinal disc rather broad (fig. 310), margined at either side by a distinct carinal stria, slightly abbreviated in front. Carinal disc rather sparsely punctate, punctures small and of unequal size. Interspaces with indistinct linear microsculpture, shiny. Lateral prosternal striae distinct, well-visible in ventral view (not shown in the figure).

Mesosternum.— Distinctly impressed between the procoxae. Lateral striae distinct, broad and sulciform, well-delimited at both sides, sinuous and divergent anteriorly, in front ending near the procoxae (fig. 310). Mesosternal disc with rather sparse punctuation, the punctures elongate and of unequal size. Interspaces smooth. Mesometasternal suture fine, mainly indicated by an impression between meso- and metasternum, slightly arcuate backwards.

Metasternum.— Lateral striae distinct, in front sulciform, divergent posteriorly, well attaining the metasternal middle (fig. 310). Median suture sulciform, slightly encroaching upon the mesosternum. Anterior part of metasternum more distinctly punctate than mesosternum, punctures smaller posteriorly along the median suture, punctures on the posterolateral parts rather coarse. Interspaces smooth.

First visible sternite.— Faintly impressed along the median line, rather sparsely punctate, punctures of unequal size, smaller and more closely set along the posterior margin. Interstices smooth. Oblique lateral striae present, though fragmented.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The male is unknown.

Variation.— PE-length other females: 2.9 and 3.0 mm. In both paratypes the lateral striae of the first abdominal sternite are well-developed. The specimen from Imugan is more coarsely punctate, in the other paratype the lateral mesosternal striae are a little less sinuous and a little less divergent anteriorly.

Etymology.— This species is dedicated to Mr Gerardo Arriagada (Santiago), in appreciation of our long-standing co-operation.

Trypeticus aukei spec. nov.
(figs 328-332)

Material.— **Malaysia:** Holotype, ♀ (MHNG), genitalia partly protruded, three segments of left protarsus and left mesotarsus missing, [white label, printed:] “♀”; [white label, printed:] “W. Malaysia: Pahang/Cameron Highlands/trail 5, 1600 m, 28.iii.1993/Löbl & Calame, #22”; [red label, printed:] “HOLOTYPE/*Trypeticus/aukei* sp. n./P. Kanaar des. 2000”; 1 ♂ (MHNG), same data as holotype (paratype); 3 ♂♂ (MNHG, CHPK, CHSM), Sabah, Mt. Kinabalu Nat. Pk., HQ Liwagu Riv. Trail, 1500-1550 m, 27.iv.1987, A. Smetana (paratypes); 1 ♂ (SMNS), idem, but 1495 m and 12.viii.1988, (paratype); 2 ♂♂ (MHNG), Sabah, Mt. Kinabalu 1750 m, 27.iv.1987, Burckhardt, Löbl (paratypes).

Male.— Length (without head and abdominal tergites) 2.5 mm, width 0.8 mm,

height 0.8 mm. Slender cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face bisinuous in lateral view. Rostrum in dorsal view broadly truncate-emarginate anteriorly, apex with two small, rather distant tubercles (fig. 331). Frons and posterior part of rostrum margined by a fine, slightly sinuous lateral ridge, fading away on the rostrum. Frons and rostrum distinctly concave, concavity subdivided in a frontal and a rostral part. Frons and rostrum with a rather sparse fine double punctation, interspaces with indistinct linear microsculpture, shiny. Transition between frons and vertex slightly arcuate, rather sharp in the middle. Vertex with a small median fovea, more distinctly punctate than frons, interstices with dense microsculpture.

Pronotum.— About 1.5 times longer than wide (fig. 328), in dorsal view a little wider in the anterior half, strongly convex in transversal direction, in profile slightly bisinuous by a broad but faint depression of the pronotum a little before the posterior margin. Punctation coarse and dense in a broad band along the posterior margin and near the anterior angles, a little finer and scantier elsewhere, the punctures of slightly unequal size. Interspaces smooth. No median stria or distinct impunctate median band. Marginal striae distinct, bent inwards behind, rather distant from the lateral margin in the anterior half, ending at some distance from the impressed anterior angles.

Elytra.— Along the suture slightly shorter than pronotum (fig. 328) with rounded apices, strongly convex in transversal direction, in profile nearly straight and ascending posteriorly in the anterior third, thence slightly convex, progressively so towards apex. Elytra distinctly finer and more sparsely punctate than pronotum, punctures along base larger, near suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture, marginal epipleural striae indistinct and shallow in posterior half, elsewhere obsolete.

Propygidium.— Slightly impressed along the anterior margin, distinctly, not densely punctate, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Rather long, triangular in outline with rounded tip, impressed along the anterior margin, convex in transversal direction, finely punctate, punctures near the apex with a very short, barely visible bristle. Interstices smooth.

Prosternum.— Carina faintly convex in lateral view, disc with slightly concave sides (fig. 330), margined by a narrow elevated rim at the sides and in front, at the sides accompanied by a carinal stria, ill-delimited at their inner side. Carinal disc not densely punctate, punctures fine, slightly elongate, interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly, mainly crosswise impressed between the procoxae. Lateral striae broad and sulciform, slightly sinuous, ending behind the procoxae (fig. 330). Mesosternal disc not densely punctate, punctures distinct, rather small, slightly elongate, of unequal size, interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Median suture distinctly canaliform, wider and deeper in front and at some distance before its posterior end. Lateral striae distinct, slightly divergent posteriorly, about reaching the anterior metasternal two-fifths (fig. 330). Metasternal disc with sparse, very small elongate punctures, diminishing in size posteriorly. A band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc rather densely punctate along the posterior border, scarcely punctate in front. Oblique lateral striae distinct and long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae with spines and with some distinct small distal teeth on the outer margin.

The female differs from the male as follows:

PE-length female holotype: 2.6 mm.

Head.— Face in lateral view straight in posterior half, in anterior half progressively concave towards the elevated apex, the latter with two indistinct tubercles, between these tubercles with a shallow median emargination in frontal view (fig. 332), tip at the underside concave in transversal direction. Frons and vertex separated by a distinct, slightly arcuate transverse ridge from eye to eye, well-delimited at its posterior side, less so to the frons. Frons and posterior part of rostrum margined by a distinct lateral ridge, continuous with the transverse ridge behind, oblique and fading away on the rostrum. At the inner side the lateral ridges are accompanied by a distinct sulcus. Frons and lateral sides of rostrum faintly impressed, with an additional, rather distinct median impression on the rostrum, at the sides delimited by faint blunt longitudinal ridges, these fading away posteriorly, in front ending at the indistinct apical tubercles. Behind the apex the rostrum is slightly more impressed. Frons and rostrum with fine punctures, ill-visible by a dense interstitial microsculpture, producing a rather dull appearance, with the exception of the transverse ridge and the lateral grooves. Vertex with a distinct crosswise impression behind the transverse ridge, a small median fovea and small punctures, ill-visible by dense microsculpture.

Pronotum.— Nearly 1.8 times longer than wide, in dorsal view broader in the anterior half (fig. 329). Anterolateral angles rather sharp, anterior margin between anterolateral and impressed anterior angles concave in dorsal view. The pronotum flattens slightly down anteriorly towards the anterior emargination, with very faint paramedian impressions, which causes a very vague median elongate ridge, most distinct at its posterior end; punctures along the base coarse and closely set, but smaller than in the male, punctures in the anterior fourth large, elongate and a little rugosely confluent, especially towards the sides, punctures elsewhere on the disc smaller than in the male. An indistinct antescutellar median stria is present within a narrow impunctate band.

Pygidium.— Broadly parabolic in outline, shorter than in the male, convex with a transversal impression along the base, punctures with a rather long pale-yellow hair.

Prosternum.— Almost straight in lateral view. Carina less impressed and not margined in front, carinal striae ending a little behind the anterior margin.

Metasternum.— Lateral striae much shorter.

Variation.— PE-length males from Sabah: (2.1) 2.5-2.8 mm. In these specimens the lateral ridge on the face is a little less distinct, on the rostrum shorter. The punctuation of the pronotum before the hindmargin is less coarse, that of the elytra on the contrary more distinct; also the punctuation of mesosternum and most anterior part of metasternum is a little more distinct. The pygidium is a little shorter, the apex more broadly rounded, less convex in transversal direction and faintly impressed near the apex. The prosternal carinal disc is more deeply impressed anteriorly. The median metasternal suture is more distinctly canaliform. In one specimen the lateral metasternal striae are a little longer. In some specimens a distinct longitudinal impression of the first sternite is present. One of the specimens is distinctly smaller than the other males. In spite of these differences I believe that they are conspecific. The differences may be

due to the isolation of the populations, inducing the development of a local race. Unfortunately females of Sabah are not available to confirm my supposition.

Eymology.— This species is dedicated to Mr Auke J. Hielkema, to whom I am indebted for many nice Histeridae in my private collection.

Trypeticus beelsoni Desbordes, 1922
(figs 25-29)

Trypeticus beelsoni Desbordes, 1922: 8.

Trypeticus namdaphaicus Pal & Biswas, 1985: 130-132. **New synonym.**

Material.— **India:** Lectotype, ♀ (MNHN), some tarsal segments missing, right antennal club and flagellum loose, glued apart, [pointed cardboard, hand-written:] “♂”; [white label, printed and hand-written:] “Nambor Res./Sibsagar, Assam/30.iv.1921./C.F.C. Beeson”; [white label, hand-written:] “Unknown/Timber”; [white label, hand-written:] “82”; [white label, hand-written and printed:] “Tr. Beelsoni/ n. sp. ♂/H. Desbordes det. 21”; [white label, printed:] “MUSÉUM PARIS/1933/Coll. DESBORDES”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/beelsoni* ♀/Desbordes 1922/P. Kanaar des.1999” (present designation); 2 ♂♂ (MNHN, BMNH), same locality labels as lectotype (paralectotypes, present designation); 1 ♂ (CHSM), Meghalaya, Khasi Hills, 700 m, Nougphoh, 5.xi.1978, Besuchet-Löbl; 2 ♀♀ (NZSI), Namdapha, Zero camp, 8.iv.1981, S. Biswas (paratypes of *T. namdaphaicus* Pal & Biswas).

Male.— Length (without head and abdominal tergites) 3.5 mm, width 1.7 mm, height 1.4 mm. Thick-set cylindrical, shiny, castaneous, antennae and legs rufous.

Head.— Face very faintly convex in profile with elevated rostral tip. Rostrum broadly rounded-truncate in front, tip with two small paramedian tubercles (fig. 28). Frons moderately concave, rostrum with an additional impression, these concavities delimited at the sides by a very faint and blunt ridge. Outside this ridge the rostrum slopes down towards the lateral edges. Frons and rostrum with rather sparse small punctures, at the sides with dense microsculpture. Transition between frons and vertex arcuate and gradual. Vertex more distinctly and densely punctate than frons, with fine interstitial microsculpture.

Pronotum.— Slightly longer than wide with nearly parallel sides in dorsal view (fig. 25), broadly rounded in front towards the anterior angles, moderately convex in transversal direction, in profile faintly convex, progressively so towards anterior margin. Marginal striae distinct, slightly turned upwards at their posterior end, at a rather great distance from the edge in the anterior half, a little indistinct in the anterolateral curvature, ending in the barely impressed anterior angles. Pronotal disc not densely covered with moderate punctures of unequal size, a little irregularly dispersed, mixed with very small punctures in the anterior half, the punctures more closely set along the anterior emargination for the head. Interspaces smooth. An indistinct narrow impunctate median band is present in the posterior half, without antescutellar stria.

Elytra.— Along the suture shorter than pronotum (fig. 25), slightly impressed near the scutellum, moderately convex in transversal direction, in profile slightly convex in the anterior half, thence more convex towards apex. Elytral punctation about equal to that of pronotum, punctures of slightly unequal size and a little irregularly dispersed, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture; an

indistinct marginal epipleural stria is present in the posterior third.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides, with an oblique lateral stria at either side. Punctuation double, punctures smaller towards posterior margin and sides, interstices smooth.

Pygidium.— Triangular with rounded apex, faintly convex, slightly impressed near the anterolateral angles. Punctuation as on propygidium, along margins finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad and rather short, sides parallel (fig. 27), in lateral view faintly convex, margined at the lateral sides and in front by an elevated rim, at the lateral sides accompanied by a distinct carinal stria, in front passing into a distinct transversal impression behind the anterior rim. Carinal disc with rather sparse moderate punctures, mixed with very small punctures. Interspaces with fine linear microsculpture. Lateral prosternal striae fine, visible in ventral view (not shown in the figure).

Mesosternum.— Faintly impressed between the procoxae. Lateral striae distinct, broad and sulciform, ill-delimited at the inner side, parallel, curved inwards in front, ending behind the procoxae (fig. 27). Mesosternal disc with rather sparse moderate punctures, mixed with very small punctures. Interspaces smooth but for some indistinct microsculpture near the lateral grooves. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae rather fine, slightly sulciform in front, divergent posteriorly, well reaching the metasternal half (fig. 27). Disc about equally punctate as mesosternum, punctures slightly elongate. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture finely canaliform, with the exception of its posterior end.

First visible sternite.— Punctuation double, rather dense. Interstices with linear microsculpture along posterior margin. Oblique lateral striae indicated by vague impressions.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a smooth, rather ill-delimited transverse ridge. Face almost straight in lateral view with strongly elevated rostral apex, the latter triangular with rounded tip, slightly concave at the underside and hanging over the anterior margin (fig. 29). Frons and rostrum delimited at the sides by a distinct ridge, continuous with the transverse ridge behind, and fading away on the rostrum at some distance from the elevated tip. At the medial side the ridge is accompanied by a shallow sulcus, broader near the eyes, at the lateral side the rostrum slopes steeply down to its edge. Frons moderately concave, rostrum behind the elevated tip with a strong elongate median impression. Frons and rostrum with small punctures. Interstices with dense and fine microsculpture, causing a rather dull appearance, with the exception of the lateral grooves and the anterior impression. Vertex with a small median fovea, small punctures and dense interstitial microsculpture.

Pronotum.— Slightly wider in anterior half, 1.25 times longer than wide (fig. 26). Disc a little scantier and more irregularly punctate than in the male, primary punc-

tures larger in the anterior third halfway midline and sides. In an ill-delimited area behind the anterior emargination there is some indistinct interstitial microsculpture, interspaces elsewhere smooth. Behind the anterior emargination for the head the pronotum has a strong and broad median ridge, highest near its posterior end; at either side of this ridge the pronotum is distinctly impressed, with an additional impression of the anterior angles. A fine antescutellar median stria is present.

Elytra.— A little finer punctate than in the male.

Pygidium.— More convex, apex more broadly rounded.

Prosternum.— Carinal disc not margined by a rim, without an impression in front; carinal striae abbreviated in the anterior third.

Metasternum.— A little finer punctate than in the male.

Variation.— PE-length of lectotype 4.0 mm, width 1.8 mm, PE-length of male paralectotype from BMNH: 3.6 mm, PE-length of other females 3.8 and 4.0 mm. The punctuation in the specimens from Namdapha is a little finer, they are piceous black and the lateral metasternal striae are a little less divergent posteriorly. The male specimen from Meghalaya has a PE-length of 3.4 mm, and has a slightly narrower body form. The first sternite has short traits of lateral striae.

Remarks.— Like all older authors Desbordes has misinterpreted the sexes. Probably he was not aware of Lewis' publication (1912) of the observations of Sharp & Muir.

Trypeticus bertiae spec. nov.
(figs 206-210)

Material.— **India:** Holotype, ♀ (MNHN), left antennal club with some segments of flagellum and left protibia missing, [white label, printed:] “♀”; [white label, printed and hand-written:] “Nambor Res./Sibsagar, Assam./30.iv.1921/C.F.C. Beeson”; [white label, hand-written:] “Unknown/Timber”; [white label, hand-written:] “87”; [white label, hand-written and printed:] “? *canali-/frons* Bic./H. Desbordes det. 22”; [discoloured white label, printed:] “MUSEUM PARIS/1933/Coll. DESBORDES”; [red label, printed:] HOLOTYPUS/*Trypeticus/bertiae* sp. n./P. Kanaar des. 2000”; 1 ♀ (MNHN), same data as holotype, but “86” (paratype); 1 ♀ (MHNG), W. Bengal, Darjeeling dist., Teesta 250 m, 10.x.1978, Besuchet, Löbl (paratype); 2 ♂♂ (CHSM), Utar Pradesh, Gangani 1250m, 13-20.vi.1981, M. Brancucci (with some doubt). **Burma:** 1 ♂ (BMNH), Bilumyo R. F., My tkyina Dn., U. Burma H. G. C. (with some doubt). **Laos:** 1 ♂, 1 ♀ (CHFP, CHPK), Hua Phan prov., Phu Loei N. P., Ban Sakok, 20°10' N. 103°12' E, 23-26.v.2001, D. Hauck (with some doubt).

Female.— Length (without head and abdominal tergites) 3.4 mm, width 1.2 mm, height 1.1 mm. Rather slender cylindrical, shiny, piceous brown, antennae and legs rufous.

Head.— Face in lateral view strongly concave, the rostral tip distinctly turned upwards, the latter in frontal view rather sharply pointed with blunt tip, barely concave at the underside and well protruding over the anterior rostral margin (fig. 210). Vertex and frons separated by a smooth transverse ridge, sharply delimited behind, ill-delimited to the frons. Frons and posterior part of rostrum delimited at the sides by a sinuous ridge, sharply delimited at the inner side, less so at the outer side, continuous with the transverse ridge behind and fading away on the rostrum. At the medial side the ridge is accompanied by a distinct sulcus, broad and deep posteriorly, narrowing anteriorly and fading away on the rostrum. Central part of frons slightly concave. From this concavity a rather ill-delimited distinct elongate median impression runs

anteriorly, ending at a short distance from the rostral tip. Frons and rostrum with rather sparse, slightly elongate small punctures. Interstices with fine microsculpture, producing a rather dull appearance. Vertex with a distinct and broad crosswise impression behind the transversal ridge, and another impression more posteriorly. Punctuation more distinct than on frons, interstices with dense microsculpture.

Pronotum.— Nearly 1.6 times longer than wide, in dorsal view with nearly parallel sides (fig. 206), broadly rounded in front towards the anterior angles, convex in transversal direction, in profile faintly convex, more distinctly so anteriorly and sloping down towards the anterior margin. Behind the anterior emargination for the head an ill-delimited, little elevated smooth median ridge is present, most distinct near its posterior end. At either side of this ridge the pronotum is faintly impressed. Marginal striae fine, turned upwards at their posterior end, at a rather great distance from the edge in the anterior half and ending just behind the anterior curvature, with a short appendix near the anterior angles, delimiting in front the distinct and large impressions of the anterior angles. Pronotal disc not densely punctate, punctures distinct, of unequal size, rather irregularly dispersed, mixed with very small punctures in the anterior half. Along the anterior emargination and in the anterior angles the punctures are larger, flaccid and more closely set, slightly elongate behind the anterior emargination. Interspaces smooth. A narrow impunctate median band is present in the posterior two-thirds, with a fine antescutellar median stria.

Elytra.— Along the suture much shorter than pronotum (fig. 206), slightly impressed near the scutellum and along the anterior margin, convex in transversal direction, in profile almost straight in the anterior two-thirds, thence progressively convex towards apex. Elytral punctuation a little finer than that of pronotum, punctures of slightly unequal size, punctures near the suture and near the apices smaller and more closely set. A narrow band along the suture and apical margins is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture; a shallow marginal epipleural stria is present in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides, with an oblique lateral stria at either side. Punctuation as on elytra, interstices with indistinct linear microsculpture.

Pygidium.— Parabolic in outline, convex, slightly impressed along the anterior margin, more distinctly so near the anterolateral angles. Punctuation as on propygidium, along margins finer, punctures with very short, barely visible yellow bristles. Interstices with indistinct linear microsculpture.

Prosternum.— Carina in lateral view very faintly convex (almost straight). Carinal disc broad and short, lateral margins very bluntly rounded, curved outwards anteriorly (fig. 208). Carinal striae distinct, narrow, abbreviated in front. Carinal disc not impressed, with rather sparse, slightly elongate small punctures. Interspaces with fine linear microsculpture.

Mesosternum.— Intercoxal part slightly impressed. Lateral striae distinct, broad and sulciform, slightly sinuous, ending behind the procoxae (fig. 208). Mesosternal disc with moderate elongate punctures of slightly unequal size, mixed with indistinct small punctures. Interspaces smooth but for some indistinct microsculpture on the intercoxal part. Meso-metasternal suture indistinct, mainly indicated by a depression, angulate backwards.

Metasternum.— Lateral striae distinct, slightly divergent posteriorly, about reaching the metasternal half (fig. 208). Disc finer punctate than mesosternum, primary punctures elongate. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture sulciform, with the exception of the posterior end.

First visible sternite.— Crosswise impressed between the metacoxae, rather densely punctate, punctures of unequal size. Interstices with linear microsculpture along posterior margin. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The presumed male differs from the female as follows:

Head.— Face in profile slightly sinuous with slightly elevated rostral tip, more convex over the eyes. Rostrum in frontal view broadly rounded-truncate, with two very small apical tubercles. Frons distinctly concave, the concavity delimited anterolaterally by rather blunt, distinct sinuous ridges along the antennal insertions, in front abruptly ending on the rostrum (fig. 209). A separate impression is present on the rostrum, connected with the frontal concavity by a depression along the median line between the anterior ends of the sinuous ridges along the antennal insertions. Frons and rostrum with sparse, very small punctures, interstices with indistinct linear microsculpture, shiny. Transition between frons and vertex arcuate, gradual. Vertex with a median fovea, more distinctly punctate than frons, interstices with dense microsculpture.

Pronotum.— About 1.3 times longer than wide, in dorsal view with nearly parallel sides, broadly rounded in front towards the anterior angles (fig. 207). In profile convex in front, without anterior median ridge, paramedian impressions or elongate punctures. Anterior angles slightly impressed. Punctuation about equal to that of female, but punctures less irregularly dispersed. No antescutellar stria.

Pygidium.— More triangular in outline, punctures without bristles.

Prosternum.— Carina in profile slightly more convex anteriorly. Disc margined at the sides and in front by a narrow elevated rim, accompanied at the sides by a carinal stria, in front by a distinct, ill-delimited transverse impression.

Mesosternum.— Lateral striae less sinuous, about parallel.

Metasternum.— Median suture finely canaliform.

Variation.— PE-length other females: 3.2-3.4 mm, males: 2.9-3.0 mm. In the female from Darjeeling the median sulcus on the rostrum is a little broader and deeper, more distinctly delimited, the carinal striae are shorter, a little convergent anteriorly, the median suture is less deeply sulciform. The male from Burma has more distinctly punctate elytra. Also in the female from Laos the median sulcus on the rostrum is deeper and distinctly delimited, more extending posteriorly on the frons. The male from Laos has a distinctly canaliform median metasternal suture.

Remarks.— The mesosternal striae are not sinuous, and the metasternal median suture is not sulciform in the males. Nevertheless, I am rather sure that I have correctly matched the sexes. The course of the mesosternal striae is a little less sinuous in one female specimen, and the configuration of the metasternal suture in the female from Darjeeling is intermediate between that of the holotype and that of the males. As the specimens have been captured in rather distant areas the differences may be due to

the development of local races. As some doubt remains, the males have not been given paratype status. The specimens from Laos were sent for identification after the return of the type material and have not been given type status.

Etymology.— The name is given in honour of Miss Nicole Berti (Museum of Paris), in appreciation of the many years of kind co-operation.

Trypeticus bombacis (Lewis, 1885)
(figs 312-316)

Tryponaeus bombacis Lewis, 1885: 470.

Trypeticus bombacis; Schmidt, 1893: 238.

Material.— **Sri Lanka:** Lectotype ♂ (BMNH), three mesotarsal segments lost, left hind-leg loose, glued apart, [round white label with red margin, printed:] "Type"; [white cardboard, hand-written:] "Kitulgala/(*Bombax*)/G. L. 20.ii.82"; [white label, printed:] "George Lewis Coll./B.M.1926-369."; [white cardboard, hand-written:] "*T. Bombacis*/Lewis/Type"; [red label, printed and hand-written:] "LECTO-TYPUS/*Tryponaeus/bombacis*/Lewis, 1885 ♂/P. Kanaar des. 2000" (present designation); [white label, hand-written and printed:] "To genus/*Trypeticus*/det. P. Kanaar 2000"; 1 ♂ (BMNH), Ceylon, Perad[eniya], 20.ii.1982, Lewis (paralectotype, present designation); 1 ♀ (BMNH), He.[illegible]atgoda, from dead stem of *Hevea brasiliensis*, Ceylon; 1 ♂ (BMNH), Matale, Ceylon, 1891, E. Simon; 1 ♀ (MNHN), Millawitiya Est., Sabargamuwa, 31.vii.1956, E. Judenko; 1 ♂, 1 ♀ (MNHN), idem, but 12.ii.1957; 1 ♂ (MZLU), Sabaragamuwa, Prov. Deerwood, Kuruwita, 6 mls NNW Ratnapura, 18-20.ii.1962, under bark of logs, Brinck, Andersson, Cederholm; 1 ♂ (USNM), Gal. Dist., Kanneliya, 22-24.v.1975, S.L. Wood & F.L. Petty; 1 ♂ (MNHN), Kal. Dist., Morapitiya, 250 m, 23.v.1975, collected from log, S.L. Wood; 4 ♂♂, 3 ♀♀ (MNHN, CHPK), Kal. Dist., Morapitiya, 250 m, 27.v.1975, Misc. hosts, S.L. Wood.

Male.— Length (without head and abdominal tergites) 2.4 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face straight in profile, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded anteriorly, slightly impressed along the median line, tip with two conical paramedian tubercles (fig. 315). Frons with posterior part of rostrum distinctly concave, especially in transversal direction, concavity along eyes and antennal insertions sharply and ridgelike delimited. Sides of the rostrum sloping down towards the lateral margin. Frons and rostrum with small punctures, interstices with indistinct linear microsculpture, shiny. Transition between frons and vertex arcuate and gradual. Vertex with a small median fovea and small punctures, interstices with distinct linear microsculpture.

Pronotum.— About 1.3 times longer than wide, with parallel sides in dorsal view (fig. 312), in front broadly rounded and convergent towards the anterior angles, convex in transversal direction, in profile almost straight in the posterior half, thence progressively convex towards anterior margin. Marginal striae distinct, turned upwards at their posterior end, ending at a rather great distance from the slightly impressed anterior angles. Pronotal disc with rather coarse and dense punctation, the punctures of unequal size, along the anterior margin more closely set and smaller. Interspaces with some very indistinct linear microsculpture, shiny. No impunctate median band or antescutellar median stria.

Elytra.— Along the suture slightly shorter than pronotum (fig. 312), slightly impressed near scutellum and anterior margin, convex in transversal direction, in profile

faintly convex, more strongly so towards apex. Elytral punctation slightly finer than on pronotum, punctures of unequal size, near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctate with distinct linear microsculpture and a fine marginal epipleural stria in the posterior half.

Propygidium.— Distinctly impressed along anterior margin, without oblique lateral striae. Punctation distinct, rather dense, punctures of unequal size, interstices with indistinct linear microsculpture.

Pygidium.— Triangular with broadly rounded apex, concave in profile, slightly impressed in the anterolateral angles. Punctation and microsculpture as on propygidium, punctures without hairs, smaller along the margins.

Prosternum.— Carina in lateral view faintly convex, progressively so towards anterior margin. Carinal disc with parallel sides, rather broad (fig. 314), margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a distinct narrow sulciform carinal stria. On the sides of the carina the lateral prosternal striae are just visible in ventral view, widening anteriorly and ascending (not shown in the figure). Carinal disc distinctly impressed behind the anterior rim and with distinct punctures. Interspaces with linear microsculpture.

Mesosternum.— Faintly impressed in front. Lateral striae deep, broad, sulciform, well-delimited, slightly curved outward, slightly sinuous in front, ending behind the procoxae (fig. 314). Mesosternal disc with elongate punctures of unequal size. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae distinct, sulciform, divergent posteriorly, slightly curved inwards in the posterior part, well reaching the posterior metasternal third (fig. 314). Disc about equally punctate as mesosternum. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly sulciform.

First visible sternite.— About equally punctate as metasternum, punctures along posterior margin smaller, interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a transverse smooth ridge, rather ill-delimited in front. Face almost straight in lateral view, only very faintly turned upward near rostral apex, the latter finely but distinctly bifid in frontal view (fig. 316). Frons and rostrum delimited at the sides by a distinct ridge, continuous with the transverse ridge behind, in front ending at some distance from the apical lobes of the rostrum. At the medial side each ridge is accompanied by a shallow groove, rather broad near the eyes and the antennal insertions, narrower and fading away towards the rostral tip. At the lateral sides of the ridges the rostrum slopes steeply down to its edge. Frons and posterior part of rostrum moderately concave, rostrum with an additional triangular median impression behind the anterior margin. Frons and rostrum with small punctures. Interspaces with dense and fine microsculpture, causing a rather dull appearance, with the exception of the lateral grooves. Vertex with a transversal impression behind the transverse ridge, a small median fovea behind this impression, small punctures and dense interstitial microsculpture.

Pronotum.— Amply 1.4 times longer than wide, slightly wider in anterior half

(fig. 313). Disc a little less coarsely and less densely punctate than in the male. Behind the anterior emargination for the head the pronotum has a faint median ridge, more distinct and smooth near its posterior end; at either side of this ridge the pronotum is slightly impressed. In an ill-delimited triangular area (indicated by a dotted line in the figure) a dense interstitial microsculpture is present, giving a dull appearance; interspaces elsewhere smooth. The anterior angles are much more distinctly impressed than in the male. A fine and fragmented antescutellar median stria is present, without distinct impunctate median band.

Pygidium.— Very faintly convex, slightly impressed along the sides, tip more broadly rounded, the punctures near the apex with a short yellow hair.

Prosternum.— Carina in profile nearly straight, disc not margined along the anterior margin, without an impression in front; carinal striae slightly abbreviated in front.

Variation.— PE-length lectotype: 2.3 mm. PE-length males: 2.3-2.5 mm, females 2.4-2.6 mm. The length of the lateral metasternal striae is rather variable. Also the intensity of the punctation varies a little. In some specimens the oblique lateral striae of the propygidium are indicated as smooth, slightly elevated oblique bands. In some specimens the oblique lateral striae on the first sternite are fragmented or even obsolete. In some females the dull area along the anterior median pronotal ridge is very reduced or almost wanting.

Remarks.— In the original description Lewis makes mention of two specimens, one from Peradeniya on a *Ficus*, and one from Kitulgal on a *Bombax*. The locality name of the former has been written only in part and the name label, written by Lewis, has not the addition "type". Therefore, the specimen from Kitulgal has been chosen as lectotype. Lewis believed that his specimens were females; in fact they are males. Records from other countries outside Sri Lanka are based on misidentifications.

Trypeticus boukei spec. nov.
(figs 395-399)

Material.— **Malaysia:** Holotype, ♂ (MZLU), genitalia partly protruded, [white label, printed:] "♂"; [white label, printed:] "Malaysia: Sabang, Sipitang, /Mendolong, T4/R/3.v.1988/leg. S. Adebratt"; [red label, printed:] "HOLOTYPUS/*Trypeticus/boukei* sp. n./P. Kanaar des. 2000"; 1 ♂. 1 ♀ (CHPK), same locality date and collector, but various trap codes (paratypes); 1 ♀ (MZLU), idem, but 25.iv.1988 (paratype); 1 ♂ (CHPK), idem, but 1.v.1988 (paratype); 1 ♂, 1 ♀ (MZLU), idem, but 4.v.1988 (paratypes); 1 ♀ (CHPK), idem, but 6.v.1988 (paratype); 2 ♂♂, 3 ♀♀ (MZLU, CHPK), idem, but 11.v.1988 (paratypes); 1 ♂, 2 ♀♀ (MZLU, CHPK), idem, but 13.v.1988 (paratypes); 1 ♀ (MZLU), idem, but 2.iii.1989 (paratype); 1 ♀ (MZLU), idem, but 8.iii.1989 (paratype); 1 ♂, 1 ♀ (MZLU), idem, but 14.iii.1989 (paratypes); 1 ♀ (MZLU), idem, but 31.iii.1989 (paratype); 1 ♀ (CHSM), Sabah, Mt. Kinabalu Nat. Pk, HQ, 1500 m, 30.iv-8.v.1987, interception trap, A. Smetana (with some doubt).

Male.— Length (without head and abdominal tergites) 1.48 mm, width 0.46 mm, height 0.43 mm. Elongate cylindrical, shiny, ferruginous with darker parts on elytra, pronotum and along sutures.

Head.— Face in profile concave with strongly elevated rostral apex. Rostrum in frontal view rather short, rounded-truncate anteriorly with elevated apical margin, that has an indistinct knob at either side (fig. 398). Rostrum strongly and crosswise impressed before the level of the antennal insertions, and at either side margined by a distinct sinuous lateral stria, indistinctly continued posteriorly along the slightly ele-

vated rims bordering the antennal insertions, in front indistinctly connected along the apical marginal rim. Anterior part of rostrum rather convex. Frons with a rather deep longitudinal median impression and with shallower arcuate lateral impressions. Frons and rostrum finely and rather sparsely punctate, more densely punctate along the eyes. Interspaces smooth. Transition between frons and vertex rather gradual, arcuate, with erect short hairs in the punctures on the lateral sides. Vertex more distinctly and densely punctate than frons.

Pronotum.— Nearly 1.7 times longer than wide (fig. 396), in dorsal view slightly tapering anteriorly, strongly convex in transversal direction, slightly convex in profile, running down to the anterior margin, that is bisinuous in dorsal view with downward bent anterior angles. Marginal striae distinct, curved upward over the rounded posterolateral pronotal angles, in the anterior third leaving the strongly sinuous pronotal edge, slightly bent upward and more impressed, ending at some distance from the anterior angles. Disc rather sparsely and finely punctate, the punctures slightly elongate. A narrow median band is impunctate, with an indistinct antescutellar stria. Interspaces smooth.

Elytra.— Along the suture nearly as long as pronotum (fig. 396), apices rounded, strongly convex in transversal direction, in profile slightly convex over nearly its entire length, thence abruptly and strongly convex near the apices. Disc slightly impressed behind the base, slightly finer and sparser punctate than pronotum. A narrow band along the suture with fine longitudinal strigillation is impunctate, punctures along this band more closely set, distinctly elongate, with indistinct striae between; interspaces elsewhere smooth. Epipleura impunctate with linear microsculpture. No distinct marginal epipleural stria.

Propygidium.— Short, finely punctate, some punctures along posterior margin larger, with a rather long yellow hair. Oblique lateral striae wanting.

Pygidium.— Broadly rounded in outline (fig. 396), disc faintly crosswise impressed before the middle. Punctuation distinct, double, not very dense, the larger punctures with a long yellow hair. Interspaces smooth.

Prosternum.— Carina in lateral view almost straight, sides in ventral view slightly divergent in front, margined by a narrow elevated rim at the sides, without a distinct carinal stria, in front margined with a very indistinct anterior rim (fig. 397). Base slightly emarginate. Carinal disc concave in transversal direction, sparsely punctate, interspaces with linear microsculpture.

Mesosternum.— Slightly bent downward with respect to the metasternum. Lateral striae shallow, partially obsolete (fig. 397). Mesosternal disc not densely punctate, punctures elongate, interspaces smooth. Meso-metasternal suture fine, feebly bisinuous.

Metasternum.— Median suture fine, in posterior third finely canaliform. Lateral striae obsolete (fig. 397). Metasternal disc less densely and more finely punctate than mesosternum. A narrow band along the median suture is impunctate, with indistinct microsculpture, punctures along this impunctate band more closely set, with indistinct longitudinal striae between; interspaces elsewhere smooth.

First visible sternite.— Disc punctate as metasternum. Lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae short and wide, without distinct teeth on the outer margin.

The female differs from the male as follows:

Punctuation finer.

Head.— Face in profile slightly bisinuous, rostral apex not elevated. Rostrum in frontal view rounded truncate anteriorly (fig. 399), apical margin slightly elevated, indistinctly tuberculate, highest in the middle. Rostrum margined at the sides by a strongly sinuous elevated rim, continued posteriorly along the antennal insertions, in front merging with the apical marginal rim. At the inner side the lateral rims are accompanied by a distinct impression. Rostrum and frons with a common deep longitudinal median concavity, deepest on frons, with oblique extensions on the posterior part of the rostrum. Punctuation rather sparse and fine, on the rostrum with fine interstitial microsculpture, punctures on the convex transition between frons and vertex larger, with an erect hair.

Pronotum.— Longer and more tapering anteriorly (fig. 395). Marginal striae ending at a greater distance from the anterior angles. Antescutellar stria more distinct.

Pygidium.— Distinctly impressed along the lateral margins and especially along the apical margin, the latter therefore accentuated as a sharp rim. Punctuation double, larger punctures with a long hair.

Prosternum.— Carinal disc less transversely concave, lateral rims less distinct, fine apical rim wanting.

Variation.— PE-length males: 1.44-1.57 mm, females: 1.40-1.56 [1.82] mm. The colour varies: Most specimens are not yet fully coloured, some specimens are darker. The punctuation is also slightly variable. The indistinct lateral mesosternal striae are sometimes almost obsolete. In a few specimens the lateral metasternal striae are indicated by a short trait behind the mesocoxae.

Remarks.— The female specimen from Kinabalu National Park (coll. CHSM) is much larger than the others (PE-length 1.82 mm) and has a more tapering, relatively shorter pronotum. Therefore, it has not been given paratype status.

Etymology.— This species is named after my grandson Bouke Kanaar, in appreciation of his vivid interest in my insect collection.

Trypeticus brevis spec. nov.
(figs 437-441)

Material.— **Malaysia:** Holotype, ♂ (MZLU), left antennal club with some segments of flagellum missing, [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang,/Mendolong, T1A/W4/8.xii.1987/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus brevis* sp. n./P. Kanaar des. 2000”; 1 ♂, 1 ♀ (MZLU, CHPK), idem, but 22.xii.1987 (paratypes); 1 ♂ (CHPK), idem, but 28.iv.1988 (paratype); 1 ♀ (CHPK), idem, but 4.v.1988 (paratype); 1 ♂ (MZLU), idem, but 6.v.1988 (paratype); 1 ♀ (MZLU), idem, but 2.iii.1989 (paratype); 1 ♂ (MZLU), idem, but 14.iii.1989 (paratype); 2 ♂♂, 1 ♀ (MZLU, CHPK), idem, but 31.iii.1989 (paratypes).

Male.— Length (without head and abdominal tergites) 1.8 mm, width 0.9 mm, height 0.8 mm. Thick-set cylindrical, shiny, reddish brown with darker sutures.

Head.— Face in lateral view very faintly sinuous in the posterior two-thirds, convex in the anterior third. Rostrum broad, short, convex, in frontal view broadly truncate anteriorly (fig. 440). Frons distinctly concave, mainly crosswise, the transition of the concavity towards the vertex arcuate and rather blunt, with elevations along the antennal

insertions. Frons and vertex densely punctate, the punctures of unequal size, in the posterior part of the frons with some very short hairs. Interspaces with a dense linear microsculpture. Vertex with an oblique impression at either side behind the arcuate transition between frons and vertex, interstices with less distinct microsculpture.

Pronotum.— Nearly as long as wide (fig. 437), strongly convex in transversal direction, in profile moderately convex, slightly flattening down anteriorly, anterior angles strongly bent downward, not visible in dorsal view. Disc not very closely punctate, punctures moderate, of slightly unequal size; a narrow median band in the posterior half is impunctate, with a small and shallow antescutellar fovea, but without an antescutellar stria. Interspaces smooth. Marginal striae fine, slightly curved inward over the posterolateral angles, in front ending at a rather great distance from the anterior angles.

Elytra.— Along the anterior margin slightly impressed. Along the suture slightly longer than pronotum (fig. 437) with rounded apices, strongly convex in transversal direction, convex in longitudinal direction, progressively so towards apex, punctures along the anterior margin coarse, punctures elsewhere slightly larger than on pronotum; a very narrow band along the slightly elevated suture is impunctate. Interspaces smooth. Epipleura impunctate with fine linear microsculpture and a distinct marginal epipleural stria in the posterior half.

Pygidium.— Short, slightly concave in longitudinal direction, with small punctures, at the sides and along the posterior margin with a minute hair. No oblique lateral striae.

Pygidium.— Broadly rounded in outline when seen perpendicularly to the pygidial plane, strongly concave, especially in longitudinal direction, the margin elevated and narrow, rimlike, its highest parts posterolaterally (fig. 437). Between these highest parts the pygidial rim is lower, causing a rather truncate aspect in dorsal view. Pygidium not very densely punctate, punctures rather small, with a short pale yellow hair. Interspaces with indistinct microsculpture.

Prosternum.— Carina in lateral view rather convex, only just behind the anterior margin a little concave. Disc broad (fig. 439), strongly divergent anteriorly, margined by a narrow elevated rim in front and at the sides. Base slightly emarginate. Carinal disc slightly concave, densely punctate, the punctures flaccid and of unequal size. Interspaces with linear microsculpture.

Mesosternum.— Slightly impressed anteriorly. Lateral striae sulciform, from the base slightly convergent and widening anteriorly, thence curved inward along the procoxae (fig. 439). Mesosternal disc not densely punctate with deep punctures of unequal size, interspaces smooth. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Lateral striae slightly curved in front, almost parallel posteriorly, nearly reaching the metasternal half (fig. 439). Metasternal disc about equally punctate as mesosternum; a smooth band along the finely canaliform median stria is impunctate. Interspaces smooth.

First visible sternite.— Indistinct short oblique lateral striae medially from the metacoxae present. Disc punctate as metasternum.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with spines and two small distal teeth on the outer margin.

The female differs from the male as follows:

Head.— Frons and posterior part of rostrum slightly concave, at the lateral sides margined by a faint sinuous ridge along the antennal insertions and the posterior part of the rostral sides, at their inner sides accompanied by an ill-delimited sulcus (fig. 441). Hairs on the frons much longer, gradually diminishing in length anteriorly; before the level of the antennal insertions the punctures without hairs.

Pronotum.— Barely longer than in the male (fig. 438), about equally punctate. An indistinct antescutellar stria is present.

Pygidium.— Margin less distinctly elevated.

Prosternum.— Lateral and anterior marginal rim less distinct, ill-delimited at the inner side.

Variation.— PE-length males: 1.8-1.95 mm, females: 1.9 and 2.0 mm. In one female the colour is piceous brown-black. Probably the reddish colour of the other specimens is due to immaturity. The lateral mesosternal striae vary a little in length and depth; in some specimens they are a little abbreviated posteriorly. The short lateral striae of the first sternite are sometimes obsolete.

Etymology.— The name refers to the thick and very short body form.

Trypeticus canalifrons Bickhardt, 1913
(figs 214-218)

Trypeticus canalifrons Bickhardt, 1913: 167-168.

Material.— **Taiwan:** Lectotype, ♀ (ZMHB), [white label, printed:] “7.vi.”; [white label, printed:] “Kosempo/Formosa/H. Sauter 1912”; [red label, hand-written:] “Type”; [white label, printed:] “*Trypeticus/canalifrons* Bickh./ex Coll. Bickhardt”; [white label, printed:] “Zool. Mus./ Berlin”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/canalifrons*/Bickhardt 1913/P. Kanaar des. 1998” (present designation); 2 ♂♂ (ZMHB, DEIC), same data as lectotype (paralectotypes, present designation); 1 ♀ (DEIC), Taihorin, Formosa, 7.viii.1911, H. Sauter (paralectotype, present designation); 1 ♂ (DEIC), Fuhosho, Formosa, 7.ix.(without year), H. Sauter (paralectotype, present designation); 1 ♂ (SMTD), Fuhosho, 1909, H. Sauter; 1 ♀ (ZMHB), Kosempo, ii.1910, H. Sauter (paralectotype, present designation); 1 ♀ (ZMHB), Kosempo, 22.v.1912, H. Sauter (paralectotype, present designation); 1 ♂ (CHSM), without locality and date, G. Minet.

Male.— Length (without head and abdominal tergites) 3.5 mm, width 1.5 mm, height 1.4 mm. Thick-set cylindrical, piceous black, shiny, antennae and legs rufous.

Head.— Face in lateral view before the eyes almost straight with slightly elevated tip, at the level of the eyes slightly convex. Rostrum in frontal view with rounded apex, apical margin with two very small, little elevated paramedian tubercles (fig. 217). Frons moderately impressed; in this impression there is a very slight elevation along the median line visible in tangential light. Near the eyes additional faint impressions. Rostrum almost flat in the middle, at the sides slightly convex in transversal direction. Frons and rostrum with sparse small punctures, and a dense linear interstitial microsculpture, causing a rather dull appearance. Transition between frons and vertex arcuate, rather gradual. Vertex with small punctures, interstices with linear microsculpture.

Pronotum.— About 1.3 times longer than wide (fig. 214) with nearly parallel sides, broadly rounded in front towards anterior pronotal angles, moderately convex in transversal direction, in profile slightly convex in the posterior two-thirds, thence stronger convex towards the anterior margin. Pronotal disc with moderate double punctation, not very dense, the primary punctures of unequal size and rather irregu-

larly dispersed, punctures along the anterior margin smaller and more closely set. Interspaces smooth. An impunctate median band without stria is present in the posterior two-thirds. Marginal striae distinct, turned upwards at their posterior end, rather distant from the margin in the anterior half, in front ending in the barely impressed anterior pronotal angles.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 214) with rounded apices, moderately convex in transversal direction, in profile slightly convex in the anterior two-thirds, thence progressively convex towards apex. Elytra slightly finer punctate than pronotum, punctation double, larger punctures irregularly scattered, near suture more closely set, punctures along anterior margin larger. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture and some punctules, and with a marginal epipleural stria, obsolete in front.

Propygidium.— Slightly concave in longitudinal direction, distinctly, not densely punctate, interstices smooth. Oblique lateral striae present.

Pygidium.— Broadly parabolic in outline, slightly convex in longitudinal direction, more distinctly so in transversal direction, with large anterolateral impressions. Disc punctate as propygidium, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad with nearly parallel sides (fig. 216), slightly convex in lateral view. Carinal disc margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a distinct carinal stria and in front by a distinct transversal impression, ill-delimited at its posterior side. Lateral prosternal striae visible in ventral view (not shown in the figure). Carinal disc rather densely punctate, punctures distinct, interspaces with linear microsculpture.

Mesosternum.— Between the procoxae distinctly impressed. Lateral striae rather broad and sulciform, almost parallel, in front curved inwards and ending behind the procoxae (fig. 216). Mesosternal disc rather densely punctate with distinct, slightly elongate punctures, mixed with small punctures. Interspaces smooth, but for some linear microsculpture around the anterior impression. Meso-metasternal suture fine, strongly angulate backward.

Metasternum.— Median suture canaliform, with the exception of its posterior end. Lateral striae distinct, divergent posteriorly, nearly reaching the metasternal half (fig. 216). Metasternal disc with elongate punctures, slightly smaller than those on mesosternum, mixed with very small punctures. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc about equally punctate as metasternum. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Frons and vertex separated by a strong bisinuous ridge, sharply delimited at its posterior side, less so towards the frons (fig. 218). In lateral view the face is sinuous, with strongly, rather angulately elevated tip. Frons and posterior part of rostrum delimited at the sides by a strong, slightly curved lateral ridge, fading away on the rostrum. Rostrum and anterior part of frons traversed by two strong paramedian keels, separated by a deep median longitudinal impression, gradually shall-

lower at its posterior end. In front these paramedian keels end indistinctly in faint tubercles on the elevated margin of the narrowly truncate rostral tip. Posteriorly the keels widen and are continuous with an elevated median frontal boss just before the transverse keel. Between the paramedian keels and the lateral ridges the frons and posterior part of the rostrum are strongly concave. Frons and rostrum with rather sparse small punctures, interstices with fine microsculpture. Vertex with a distinct transversal impression behind the transverse ridge and a small median fovea. Punctuation more distinct than on frons, interstices with dense microsculpture.

Pronotum.— About 1.4 times longer than wide (fig. 215), with parallel sides, broadly rounded in front towards the anterior pronotal angles, that are more distinctly impressed than in the male. Superior side in anterior one-fourth flattened down towards anterior margin, with a parabolic area (indicated by a dotted line in the figure) with very fine microsculpture, causing an opaque lustre. In the rear end of this area a faint elongate elevation is present, punctures in the opaque flattened area more elongate and smaller than on the disc, punctuation elsewhere as in the male. A fine antescutellar median stria is present within the impunctate band.

Pygidium.— Broadly rounded in outline, more convex than in the male, without distinct anterolateral foveae. Larger punctures in the apical half with a short pale yellow hair.

Prosternum.— Carina almost straight in lateral view. Carinal striae ending a little behind the anterior margin. Disc without anterior impression.

Variation.— PE-length lectotype 3.8 mm, males 3.3-3.6 mm, females 3.6-3.8 mm, the lateral striae on the first sternite are sometimes obsolete. In one of the females there is a small anterior median impression on the prosternal carinal disc. The short elongate pronotal ridge in the dull area is more distinct in other females. The anterolateral impression of the pygidium is rather obsolete in some males.

Remarks.— Like all older authors Bickhardt interpreted the specimens with carinate pronotum as males, but in fact they are the females. Though he described first the “female” (in fact the male) I have designated the female in the collection Bickhardt as the lectotype, as the name of this species refers to the rostrum of the female. The male specimen from Fushosho, 1909 (SMTD) has a green label, obviously hand-written by Bickhardt, with the text “*Trypeticus sauteri* Bickh.”; therefore it has not been given paralectotype status.

Trypeticus capillatus spec. nov.
(figs 163-167)

Material.— **Malaysia:** Holotype, ♀ (MZLU), genitalia a little protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang./Mendolong, T5/R/8.iii.1989/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus capillatus* sp. n./P. Kanaar des. 2000”; 1 ♂ (MZLU), same data as holotype (paratype).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.3 mm, height 1.1 mm. Rather thick-set cylindrical, shiny, reddish brown, pronotum and sutures darker.

Head.— Face in profile with slightly turned-up, slightly convex rostrum, frons in profile almost straight. Rostrum slightly convex in longitudinal direction, more distinctly

so in transversal direction, in frontal view broadly rounded anteriorly, apex with two small paramedian tubercles (fig. 166). Frons rather strongly concave with an extension of the concavity to the sides of the rostrum. Frons and rostrum with small punctures, interstices with linear microsculpture. Transition between frons and vertex arcuate, rather sharp, smooth. Vertex (as far as visible) punctate with interstitial microsculpture.

Pronotum.— Amply 1.1 times longer than wide, in dorsal view with nearly parallel sides (fig. 163), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile slightly convex, more strongly so towards anterior margin. Marginal striae fine, rather distant from the edge in the anterior half, ending at the not impressed anterior angles. Pronotal disc not very densely covered with moderate punctures of unequal size, rather irregularly dispersed, mixed with indistinct very small punctures; punctures behind the anterior emargination for the head smaller and more closely set. Interspaces smooth. Indications of an impunctate median band with indistinct rudiments of a median stria are present in the central part.

Elytra.— Along the suture a little shorter than pronotum (fig. 163), distinctly impressed near scutellum, moderately convex in transversal direction, in profile slightly concave behind scutellum, thence convex, progressively so towards apex. Elytral punctation along the base equal to that of pronotum, elsewhere finer, punctures near the suture more closely set, slightly elongate. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate with linear microsculpture. Marginal epipleural stria fine, interrupted in the middle.

Propygidium.— Slightly impressed along the anterior margin, punctate, punctures of unequal size, interstices smooth. Oblique lateral striae present, distinct

Pygidium.— Slightly convex, rather parabolic in outline, with a small fovea a little medially from the anterolateral angles. Punctation as on propygidium, along sides and apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina nearly straight in lateral view. Carinal disc broad and rather short (fig. 165), margined at the sides and in front by a narrow elevated rim, the lateral rims accompanied by an indistinct carinal stria, ill-delimited at their inner side. Carinal disc with a distinct and large anterior impression, and with large shallow punctures of unequal size. Interspaces with an indistinct linear microsculpture.

Mesosternum.— Distinctly impressed between the procoxae. Lateral striae distinct, sulciform, rather narrow, parallel, slightly curved inwards in front, ending behind the procoxae (fig. 165). Mesosternal disc rather densely punctate, punctures a little elongate and of unequal size, interspaces smooth. Meso-metasternal suture fine, barely visible, angulate backwards.

Metasternum.— Lateral striae rather fine, sinuous, about reaching the metasternal middle (fig. 165). Metasternal disc in anterior third about equally punctate as mesosternum, punctures progressively smaller posteriorly. Interspaces smooth. Median suture finely canaliform.

First visible sternite.— Distinctly and rather densely punctate, along the posterior margin punctures more closely set, mixed with very small punctures. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin and an additional apical tooth. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a slightly arcuate smooth transverse ridge, indistinctly tuberculate in the middle, the ridge little elevated. Face sinuous in lateral view with marked concavity behind the distinctly upward bent rostral apex. Rostrum bluntly pointed (fig. 167), convex in transversal direction at the upperside, tip almost flat at its underside. Frons and posterior part of rostrum rather strongly concave. Along the antennal insertions short and blunt oblique elevations are present. Frons and rostrum with distinct punctures, larger and with a distinct pale-yellow erect hair behind the line connecting the antennal insertions, the hairs on the frons rather long. Interstices with dense linear microsculpture. Vertex with a shallow impression behind the transverse ridge and (as far as visible) with setigerous punctures and dense interstitial microsculpture.

Pronotum.— Nearly 1.2 times longer than wide, more abruptly curved inward in front (fig. 164). Disc more sparsely punctate than in the male, punctures towards sides more closely set. Behind the anterior emargination for the head the punctures are smaller, more closely set, with indistinct linear interstitial microsculpture. Interstices elsewhere smooth. The indistinct impunctate median band is slightly depressed in the middle, and has a long antescutellar stria.

Pygidium.— Foveae less distinct, punctures also without hairs.

Prosternum.— Anterior impression of carinal disc shallower and smaller, limited to a transverse area along the anterior ridge.

Remarks.— PE-length female holotype: 2.7 mm. Like in the male, the prosternal carinal disc of the female has a narrow elevated ridge along the anterior margin. This is rather uncommon in the genus *Trypeticus*.

Etymology.— The name refers to the rather long hairs on the frons of the female.

Trypeticus carinifrons spec. nov.
(figs 158-162)

Material.— **Malaysia:** Holotype, ♀ (MZLU), four segments of right mesotarsus missing, alae protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang,/Mendolong, T5/R/13.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/carinifrons* sp. n./P. Kanaar des. 2000”; 1 ♀ (CHPK), idem, but T4/R and 28.iv.1988 (paratype); 1 ♂ (MZLU), idem, but 10.iii.1989 (paratype).

Female.— Length (without head and abdominal tergites) 3.2 mm, width 1.4 mm, height 1.3 mm. Cylindrical, shiny, colour reddish brown with darker sutures.

Head.— Face in profile very faintly sinuous (nearly straight). Rostrum in frontal view rounded anteriorly (fig. 162). Frons and vertex separated by a distinct, smooth, bisinuous transversal ridge, well-delimited at the posterior side. From the anterior side of this ridge two distinct longitudinal paramedian ridges originate, very faintly divergent anteriorly, ending in front on the rostral apex. Between these ridges frons and rostrum are strongly concave in transversal direction. At the sides frons and rostrum are delimited by a slightly curved lateral ridge, sharply delimited at their inner side, originating from the transversal ridge posteriorly, slightly narrowing on the rostrum and ending on the rostral apex. Between the paramedian ridge and the lateral ridge frons and rostrum are deeply concave, mainly in transversal direction. Between

the lateral ridge and the eye the frons is faintly impressed, on the rostrum the outer side of the lateral ridge slopes steeply down to the lateral rostral margin. Frons and rostrum sparsely and minutely punctate, interspaces smooth and shiny. Vertex with a broad crosswise impression behind the transversal ridge and a small median fovea behind this impression. Vertex distinctly punctate, interstices in the transversal impression with dense microsculpture, elsewhere smooth.

Pronotum.— About 1.1 times longer than wide (fig. 159), sides in dorsal view faintly curved near the base, then almost parallel till the anterior pronotal third, thence very broadly rounded towards the downwards directed anterior angles. Pronotum convex in transversal direction, in profile faintly convex over its entire length, slightly flattened off anteriorly. The anterior pronotal margin has a slight triangular median protuberance, being the anterior end of a rudimentary median ridge, caused by a faint impression of the pronotum at either side of this protuberance. Punctuation not very dense, punctures rather small, of slightly unequal size, without distinct impunctate median band. Behind the non-impressed anterior angles and along the anterior emargination the punctures are more closely set, and especially in the paramedian parts, a little elongate and rugosely confluent. Interspaces smooth. Marginal striae rather fine, close to the edge, barely bent upwards at their posterior end, shortly interrupted in the anterior curvature, ending in the anterior pronotal angles. An indistinct short antescutellar stria is present.

Elytra.— Along the suture a little shorter than pronotum with rounded apices, convex in transversal direction, in profile almost straight in the anterior half, thence progressively convex towards apex. Elytra about equally punctate as pronotum, punctures near suture and anterior margin slightly more closely set and a little larger. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, interstices with linear microsculpture. Marginal striae in the posterior half shallow and broad, wanting in anterior half.

Propygidium.— Distinctly impressed along the anterior margin, more distinctly so towards the sides. Punctuation distinct, rather dense. Interstices with dense microsculpture. Oblique lateral striae wanting, though a very fine oblique lateral ridge is present instead.

Pygidium.— Broadly parabolic in outline, faintly convex, especially along the margins, with large and shallow impressions near the anterolateral angles. Punctuation dense, double, larger punctures with a short yellow bristle. Interstices with dense microsculpture, giving a dull appearance.

Prosternum.— Carina rectangular with nearly parallel sides, faintly convex in lateral view. Carinal disc very faintly impressed along the median line, margined at the sides by a distinct carinal stria, a little abbreviated in front. Punctuation distinct, rather sparse, double. Interspaces with distinct linear microsculpture.

Mesosternum.— Between and behind the procoxae distinctly impressed, behind the procoxae mainly crosswise. Lateral striae rather broad and sulciform, well-delimited, nearly parallel, curved outwards posteriorly (fig. 160). Mesosternal disc with a distinct double punctuation, the primary punctures slightly elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae fine, slightly bisinuous and divergent posteriorly (fig. 160), ending just beyond the metasternal middle. Metasternal disc about equally

punctate as mesosternum, the punctures less elongate posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture finely canaliform but for its posterior end, locally slightly widening.

First visible sternite.— Disc about punctate as posterior part of metasternum, punctures smaller posteriorly, oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of hindtibiae with a row of spines and some small teeth in distal half.

The male differs from the female as follows:

Punctuation, especially that of the upper side, more distinct.

Head.— Face slightly bisinuuous in profile with slightly elevated tip. Rostrum in frontal view rounded-truncate anteriorly (fig. 161) with two paramedian tubercles. Before these tubercles the apex is convex towards the anterior margin along the labrum. Frons and posterior part of rostrum with a large and deep, nearly circular fovea with sharply delimited borders at the sides and posteriorly, the border in front rather gradual towards a faint median impression of the rostrum. Frons and rostrum with rather sparse small punctures, mixed with very small punctures, interstices smooth. Vertex with a small median fovea and a more dense and more distinct double punctation, interstices smooth.

Pronotum.— About as long as wide (fig. 158), without the anterior faint ridge and without the rugose elongate punctation behind the anterior emargination. Marginal striae not interrupted, no antescutellar stria.

Propygidium.— Interstices without distinct microsculpture. Posterolateral angles standing out (fig. 158), like those of the segment before the propygidium.

Pygidium.— Triangular with broadly rounded tip, rather flat with distinct anterolateral foveae and a shallow impression following the lateral and apical margins, punctures without bristles, along the margins smaller.

Prosternum.— Carina faintly convex in lateral view, margined by a narrow elevated rim at the sides and in front, at the sides accompanied by a narrow sulciform carinal stria, ill-delimited at the inner side (fig. 160). Behind the anterior ridge the carinal disc has a large, rather deep median impression, deepest and broadest in front. Carinal disc with distinct double punctation, the secondary punctures ill-visible by linear interstitial microsculpture.

Variation.— PE-length male: 3.2 mm, other female: 3.1 mm. In the females the lateral metasternal striae are a little more bisinuuous than in figure 160, their posterior end more curved and taking a more lateral course. In the female paratype the mesosternum seems to be a little wider, because the lateral mesosternal striae are a little divergent posteriorly.

Remarks.— In the female holotype the prothorax is a little luxated with respect to the posterior part of the body. In the male the pro- and mesosternum are a little separated (fig. 160); therefore the anterior angulate projection is partly visible. Normally this projection is entirely covered by the ventral lamina of the prosternal carina.

Etymology.— The name refers to the strong paramedian ridges on frons and rostrum in the female.

Trypeticus carinipygus spec. nov.
(figs 400-404)

Material.— **Malaysia:** Holotype ♂ (MZLU), [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabang, Sipitang, /Mendolong, T4/R/3.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus carinipygus* sp. n./P. Kanaar des. 2000”; 1 ♂ (CHPK), idem, but T6/R (paratype); 1 ♀ (MZLU), idem, but 4.v.1988 and T6/R (paratype); 1 ♂, 2 ♀♀ (MZLU, CHPK), idem but 6.v.1988 and T6/R c.q. T4/R (paratypes); ! ♂ (MZLU), idem, but 2.iii.1989 and T1B/W4 (paratype).

Male.— Length (without head and abdominal tergites) 1.6 mm, width 0.6 mm, height 0.6 mm. Cylindrical, shiny, piceous brown-black, abdominal tergites, under-side and legs reddish brown.

Head.— Antennal scape distinctly setose. Face in lateral view slightly convex with slightly elevated apical margin of rostrum, posteriorly strongly convex towards vertex. Rostrum in frontal view rather short (fig. 403), rounded anteriorly, the slightly elevated apical margin with a rather distinct median knob and some indistinct additional knobs. Rostrum slightly concave along the median line, its anterior part slightly bent up, with additional faint impressions along the lateral sides. Frons convex with a very faint impression along the median line and with distinct arcuate impressions behind the antennal insertions, medially from the eyes. Frons and rostrum with rather densely set moderate punctures, that have a rather long erect hair; interstices smooth and shiny. Transition between frons and vertex very gradual.

Pronotum.— About 1.1 times longer than wide (fig. 400), in dorsal view with parallel sides, in front broadly rounded towards anterior angles, that are sharp, strongly bent downwards and a little inwards. Pronotum strongly convex in transversal direction, in profile faintly convex in the posterior half, in the anterior half progressively convex and thence sloping down towards anterior margin. Anterior emargination for the head deep. Disc rather sparsely punctate with deeply impressed, rather small punctures of slightly unequal size. Along the anterior emargination the punctures are smaller and more closely set. A narrow impunctate median band with a short, fine antescutellar stria is present. Interspaces smooth. Marginal striae fine, curved upward over the rounded posterolateral angles, progressively leaving the pronotal margin and ending rather abruptly at about the anterior pronotal third at some distance from the margin.

Elytra.— Along the suture about 1.1 times longer than pronotum (fig. 400), apices rounded, convex in transversal direction, in profile convex, progressively so towards apex, punctate as pronotum, punctures along the base rather coarse and more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture and an indistinct marginal epipleural stria in the posterior half.

Propygidium.— Densely punctate, the punctures along the posterior border bearing yellowish hairs. Interstices with indistinct microsculpture. Oblique lateral striae wanting.

Pygidium.— Broadly rounded in outline, slightly concave, especially towards apex, with a fine median ridge in the posterior half, ending a little before the rounded apex (fig. 400); the ridge has two small teeth on its superior margin, one denticle at its posterior end, the other near the anterior end and less distinct. Pygidium rather densely punctate, the punctures with a rather long yellowish hair.

Prosternum.— Carina slightly convex in lateral view, sides of disc slightly divergent

anteriorly (fig. 402), margined at the sides by a narrow elevated rim. At the medial side of the rims a narrow and shallow carinal stria is present, at their posterior end indistinctly connected by an ill-delimited impression along the posterior border. Carinal disc with punctures of unequal size, interspaces with indistinct linear microsculpture.

Mesosternum.— Interprocoxal part rather narrow and convex, behind this convexity crosswise impressed. Lateral striae almost parallel, narrow sulciform, slightly curved inward anteriorly and ending behind the procoxae (fig. 402). Mesosternal disc not densely punctate with moderate, slightly elongate punctures of unequal size, interspaces smooth. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Median suture finely canaliform. Lateral striae fine, short, in front curved, thence nearly parallel (fig. 402), punctures on metasternal disc slightly smaller than on mesosternum, punctures a little elongate; a very narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Short oblique lateral striae present. Disc about punctate as metasternum.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with hairs on the outer margin and some small teeth in the distal third.

The female differs from the male as follows:

Punctuation a little finer than in the male.

Head.— Apex of rostrum more strongly bent up, with a distinct blunt triangular tip. Frons and rostrum elevated along the antennal insertions, concave along the median line (fig. 404). Deep curved impressions as in the male are present postero-medially from the antennal insertions, punctures on vertex and rostrum finer setose, only near the eyes hairs longer.

Pronotum.— Nearly 1.3 times as long as wide (fig. 401).

Pygidium.— Broadly rounded in outline, rather flat with lateral depressions, hairs shorter, median carina wanting.

Variation.— PE-length males: 1.57-1.62 mm, females: 1.57-1.64 mm. The intensity of the punctuation and the length of the lateral metasternal stria vary a little, sometimes the latter are obsolete. Also the length of the lateral striae of the first sternite is a little variable. The median pygidial carina is in some males less distinct than in the holotype, with less distinct denticles.

Remarks.— The presence of setigerous punctures on the rostrum is rather remarkable. In most species with ciliate punctures on the head they are restricted to the frons and sometimes also the vertex. The prosternal carina of the male is not margined along the anterior side and is similar to that of the female; this phenomenon is also rather exceptional.

Etymology.— The name refers to the median carina on the pygidium of the male.

Trypeticus caterinoi spec. nov.
(figs 171-173)

Material.— **India:** Holotype, ♂ (MNHN), [white label, printed:] “♂”; [white label, printed:] “U. Dihing./Lakhimpur, Assam./C.F.C. Beeson./21.v.21.”; [white label, printed:] “Ex. *Artocarpus/Lakoocha*.”; [white label, hand-written:] “257”; [yellow label, printed:] MUSÉUM PARIS/1952/Coll. R. OBERTHUR”; [red label, printed:] “HOLOTYPUS/*Trypeticus/caterinoi* sp. n./P. Kanaar des. 2001”; 1 ♂ (MNHN), same data as holotype, but “258” (paratype).

Male.— Length (without head and abdominal tergites) 3.0 mm, width 1.4 mm, height 1.3 mm. Rather thick-set cylindrical, shiny, piceous brown, antennae, legs, abdominal segments and lateral parts of metasternum rufous.

Head.— Face faintly sinuous in profile with slightly elevated rostral apex. Rostrum in frontal view broadly rounded-truncate anteriorly, with two paramedian tubercles (fig. 173). Frons and rostrum moderately concave, with rather sparse fine punctation, interstices with indistinct microsculpture, shiny. Transition between frons and vertex slightly arcuate, rather gradual. Vertex with a small median fovea, more distinctly and densely punctate than frons, interstices with linear microsculpture.

Pronotum.— A little longer than wide, in dorsal view with slightly sinuous sides (fig. 171), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile convex over its entire length, more strongly so in front. Marginal striae rather fine, curved upwards behind, in front ending in the anterior angles, these with a faint impression; behind the latter an additional faint impression is present on the pronotal disc, extending posteriorly and outwards. Pronotal disc not very densely punctate, punctures distinct, of unequal size, mixed with very small punctures, punctures along the anterior margin a little more closely set. Interspaces smooth. A narrow impunctate median band without antescutellar stria is present in the posterior half.

Elytra.— Along the median suture a little shorter than pronotum (fig. 171) with rounded apices, distinctly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile convex over its entire length, progressively so towards apex. Elytra with a band of coarse punctures along the anterior margin, elsewhere about equally punctate as pronotum, but with less small punctures intermixed. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with a fine linear microsculpture. Marginal epipleural striae obsolete.

Propygidium.— Faintly impressed, especially towards the sides, with distinct oblique lateral striae. Punctation double, rather fine, interstices smooth.

Pygidium.— Triangular with broadly rounded apex, disc almost flat, at the anterolateral sides with a large impression. Punctation as propygidium, along lateral sides and apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina almost straight in lateral view. Carinal disc broad with slightly sinuous sides (fig. 172), margined at the sides and in front by an elevated rim, at the sides accompanied by an indistinct, ill-delimited carinal stria. Carinal disc impressed along the median line, progressively so in front, and with ill-delimited rather shallow punctures of unequal size, interspaces with linear microsculpture.

Mesosternum.— Between procoxae distinctly impressed, with slight additional transversal impressions in front and before the hindmargin. Lateral striae rather narrow and sulciform, faintly convergent anteriorly and ill-delimited at the inner side, in front slightly curved inwards and ending behind the procoxae (fig. 172). The outer sides of the lateral striae seem to be continued along the procoxae and to be connected by the sharp delimitation of the anterior impression. Mesosternal disc with distinct double punctation, the primary punctures slightly elongate. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Median suture finely canaliform. Lateral striae rather fine, divergent posteriorly (fig. 172), slightly curved inwards posteriorly, about reaching the metasternal middle. Metasternal disc about equally punctate as mesosternum, the

larger punctures a little smaller and less elongate posteriorly. A band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc slightly more densely punctate than meso- and metasternum, punctuation double. Interstices along the posterior margin with linear microsculpture, elsewhere smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with some very small distal teeth.

The female is unknown.

Variation.— PE-length of holotype: 2.9 mm.

Remark.— The left elytron of the figured paratype is a little dislocated. Therefore, the outline is asymmetrical in the figure.

Etymology.— This species is dedicated to the young histeridologist Mr Michael S. Caterino (Santa Barbara), in appreciation or our co-operation.

Trypeticus cinctipygus (Marseul, 1864)
(figs 182-186)

Trypanaeus (*Trypeticus*) *cinctipygus* Marseul, 1864: 284.

Trypanaeus cinctipygus; Gemminger & Harold, 1868: 793.

Trypeticus cinctipygus; Lewis, 1905: 7.

Trypeticus praedaceus Lewis, 1892: 352-353. **New synonym.**

Trypeticus separandum Schmidt, in litt.

Trypeticus triangulus Lewis, in litt.

Material.— **Malaysia:** Lectotype, ♂ (MNHN), left protarsus missing, [round yellow label, hand-written, partly illegible:] "*Trypanaeus/cinctipygus*/Saraw./Wall 64"; [round white label, hand-written:] "Sar."; [white label, printed:] "MUSEUM PARIS/COLL. DE MARSEUL/2842-90"; [white label, printed in red:] "TYPE"; [red label, printed and hand-written:] "LECTOTYPUS/*Trypanaeus*/(*Trypeticus*)/*cinctipygus*/Marseul 1864/P. Kanaar des. 1999" (present designation); 1 ♀ (BMNH), lectotype of *Trypeticus praedaceus* Lewis, posterior part of metasternum slightly crippled, [white label, printed:] "♀"; [white round label with red margin, printed:] "Type"; [white label, hand-written:] "Perak/L C"; [white label, hand-written:] "Doherty"; [white label, printed:] "George Lewis Coll./B.M.1926-369"; [white label, hand-written:] "*Trypeticus/praedaceus*/Type ♂ Lewis"; [red label, printed and hand-written:] "LECTOTYPUS/*Trypeticus/praedaceus*/Lewis, 1892/P. Kanaar des. 2001 (present designation); [white label, hand-written and printed:] "Synonymous/with/*T. cinctipygus*/(Mars.)/det. P. Kanaar 2001"; 2 ♂♂, (BMNH), Perak, Doherty (paralectotypes of *T. praedaceus* Lewis); 1 ♀ (BMNH), "Borneo"; 1 ♀ (BMNH), Quop, W. Sarawak, iii.1914, G.E. Bryant; 1 ♂ (ZMAS), Kepong, under bark of fallen tree, 5.ix.1932, F.G. Browne; 1 ♂ (MNHN), Malacca, Perak, Doherty; 1 ♂ (CHPK), Sg. Kenong, 5.ix.1932, beneath bark of fallen tree, F.G. Browne; 2 ♀♀ (ZMAS), Rawang, 16.v.1933, in *Gonostylus* sp., C.O. Flemmich; 1 ♂ (ZMAS), Rotan Sunggal E.A., 4.viii.1933, F.G. Browne; 1 ♂ (ZMAS), Sel. Kepong, 1.xii.1934, in borer galleries *Enclospermum malaccanae*, F.G. Browne; 1 ♀ (ZMAS), Sel. Kepong, 30.v.1935, ex borer galleries in *Boschia griffithii*, F.G. Browne; 1 ♀ (ZMAS), Selanger F.M.S., The Gap 2500', 21.xi.1936, M.L. Webber; 1 ♂ (MNHN), Sarawak, Gn. Mulu NP, 4th division, v-viii.1978, under bark of fallen trees, P.H. Hammond, J.E. Marshall; 10 ♂♂, 9 ♀♀ (CHFP, CHRP, CHPK), W. Sabah, Crocker Range E, W of Apin Apin, ii.2000, M. Snizak. **Philippines:** 2 ♂♂ (ZMHB), Palawan; 2 ♂♂, 1 ♀ (FMNH), Luzon, Imugan, Ballou coll.; 1 ♂ (ZMHB), Luzon, Imugan, 7.vi.1917, collector's name illegible; 1 ♀ (NHMW), Palawan Pr., Busuanga Isl., 5 km NW Coron, Mabentangen For. Res., 1-7.ii.1999, H. Zettel (with doubt). **Indonesia:** 4 ♂♂, 3 ♀♀ (BMNH), Sumatra; 3 ♂♂, 1 ♀ (BMNH), types of *T. triangulus* Lewis in litt.; 1 ♂, 1 ♀ (ZMHB), Sumatra, Palembang; 2 ♀♀ (ZMHB, MCSN), Mentawai, Si Oban, iv-viii.1894, Modigliani; 1 ♂, 1 ♀ (MCSN), Mentawai, Sipora, Sereinu, v-vi.1894, Modigliani (types of *T. separandum* Schmidt in litt.); 1 ♂, 1 ♀ (MNHN), Sumatra, Rég. de Benkoelen, Moeara Tenam, 1935,

Mme. M.E. Walsh; 4 ♂♂, (MHNG, CHSM), Sumatra, Aceh-selatan, Babahrot 100 m, vii-viii.1983, J. Klapperich; 2 ♂♂ (NHMW), N-Sumatra, Sibolangit, 25.ii.1990, Schillhammer; 1 ♂ (RMNH), Java, Mount Gedé, Japos, 800m, 1.i.1933, on dead Tjaringin, L.G.E. Kalshoven; 1 ♀ (BMNH), Nias I., 1892, J.W. Thomas. **Papua New Guinea:** 1 ♀ (BMNH), Latep, 12.v.1976, on *Cryptocarya*, H. Roberts. **India:** 1 ♀ (BMNH), Andamans, Røepstorff.

Male.— Length (without head and abdominal tergites) 3.0 mm, width 1.3 mm, height 1.2 mm. Cylindrical, shiny, castaneous, antennae, legs and abdominal sternites rufous.

Head.— Face in profile before the eyes almost straight, with a shallow dip just behind the slightly elevated rostral tip, at the level of the eyes convex. Rostrum in frontal view broadly rounded-truncate anteriorly, apical margin with two tubercles (fig. 185), apex slightly depressed between and behind these tubercles. Frons and posterior part of rostrum moderately and broadly concave, this concavity at either side medially from the eye and antennal insertion sharply delimited by a moderate oblique ridge that fades away anteriorly at the side of the rostrum behind the apical tubercles. The ridges are accompanied by an indistinct sulcus at their inner sides. Frons and rostrum with distinct punctures, interstices with indistinct linear microsculpture. Transition between frons and vertex arcuate and rather gradual, the latter punctate as frons.

Pronotum.— About 1.2 times longer than wide (fig. 182), in dorsal view with nearly parallel sides, broadly rounded in front towards anterior pronotal angles, strongly convex in transversal direction, in profile slightly convex, progressively so towards anterior margin. Marginal striae distinct, slightly curved inward behind, slightly more distant from the margin in front, ending at a rather great distance from the non-impressed anterior angles. Pronotal disc rather densely covered with coarse deep punctures of unequal size, punctures along the anterior margin very closely set and smaller. Interspaces smooth. No impunctate median band or antescutellar median stria.

Elytra.— Along the suture nearly as long as pronotum (fig. 182) with rounded apices, strongly convex in transversal direction, in profile slightly convex, increasingly so towards apex. Elytra slightly finer punctate than pronotum with more smaller punctures between, punctures near suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctate, interstices with fine linear microsculpture. Marginal epipleural stria distinct in posterior half, obsolete in front.

Propygidium.— Slightly concave in longitudinal direction, especially in front. Oblique lateral striae wanting. Punctuation rather dense and coarse, punctures of unequal size, interstices smooth.

Pygidium.— Triangular with broadly rounded apex, concave in longitudinal direction, distinctly impressed along sides and apex (fig. 182). Punctuation as propygidium, finer along the apical margin, punctures with a short yellow hair. Interstices smooth.

Prosternum.— Carina broad with nearly parallel sides (fig. 184), in lateral view slightly convex. Carinal disc margined at the sides by an elevated rim, at the inner side accompanied by a shallow carinal stria that is slightly abbreviated in front. Carinal disc impressed along the median line in the anterior half, especially so in front, where the impression is sharply delimited by an apical marginal ridge. Disc with distinct punctures of unequal size, interspaces with indistinct fine linear microsculpture.

Mesosternum.— Between procoxae with distinct longitudinal impression, fading away posteriorly. Lateral striae broad and deep sulciform, about parallel, ending

behind the procoxae (fig. 184). Mesosternal disc not very densely punctate with distinct elongate punctures of unequal size. Interspaces smooth. Meso-metasternal suture indistinct, mainly indicated by a depression between meso- and metasternum, slightly angulate backwards.

Metasternum.— Median suture distinct, deep canaliform, almost reaching the posterior metasternal margin. Lateral striae distinct, divergent posteriorly (fig. 184), about reaching the metasternal middle. Metasternal disc about equally punctate as mesosternum, punctures smaller posteriorly. A rather broad band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc about equally punctate as posterior part of metasternum, punctures smaller and more closely set along posterior margin. Oblique lateral striae distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae rather broad, the outer margins with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Face in profile almost straight with slightly elevated rostral tip. Frons and vertex separated by a distinct smooth transverse ridge, well-delimited behind, ill-delimited to the frons. Frons and rostrum bordered at the lateral sides by a distinctly elevated sinuous ridge (fig. 186), at the inner side delimited by a shallow smooth groove. These ridges fade away close to the rostral apical margin, that is slightly elevated and has two faint transverse tubercles. The apical margin is slightly depressed in the middle. Frons broadly and moderately concave. Frons and rostrum with distinct small punctures, interstices with very fine dense microsculpture, causing a dull appearance. Vertex with a deep and broad transversal impression behind the transverse ridge, distinct punctures of unequal size and a median fovea, interstices with dense microsculpture.

Pronotum.— About 1.3 times longer than wide, sides in dorsal view faintly sinuous, in front broadly rounded and thence oblique, barely concave, towards anterior angles, that are distinctly impressed and margined in front (fig. 183). A faint median ridge is present behind the emargination for the head. Disc about equally punctate as in the male; behind the emargination for the head the punctures are elongate and very closely set, but interstices without distinct microsculpture. A distinct antescutellar median stria is present.

Pygidium.— Slightly convex in both directions, the punctures with short hairs.

Prosternum.— Almost straight in lateral view. Carinal striae ending shortly behind the anterior margin. Carinal disc without impression, not margined in front.

Variation.— PE-length lectotype 2.8 mm, males 2.5-3.0 mm, females (2.5-) 3.0-3.2 mm. The intensity of the punctation, especially that of the underside, varies a little. The specimen from Java is less densely punctate. The mesosternal striae are a little more divergent anteriorly in some specimens. The anterior mesosternal impression is rather shallow in some specimens. The length of the lateral metasternal striae and the length of the carinal striae of the females is a little variable. The depth and width of the metasternal median suture is also rather variable. The impression of the pygidium in the males exhibits a great variability: In some males the impression along the lateral and apical margins is broken up into an apical and two anterolateral impressions, in other males the impression is almost obsolete. This is in accordance with the general

observation that pygidial impressions are subject to considerable variability. The anterior pronotal ridge of the females is less distinct in some specimens. The female from Nias has a more transversely truncate outline of the pronotum laterally from the anterior angles. The female from the Philippines (leg. H. Zettel) that has been attributed with doubt to this species is much smaller than the other females (PE-length 2.5 mm) and has a coarser pronotal punctation.

Remarks.— This species is very close to *T. indicus* Lewis. Especially the males are very similar. The differences are listed in the key. The female was hitherto unknown. In the specimens from West Malaysia the unequal punctation of pronotum and elytra is mixed with very small punctures. In the original description of *T. praedaceus* no holotype has been designated. As Lewis described the female first (though he thought it was a male) the female specimen with the label "Type" has been designated lectotype. One male specimen is also labeled as "type", whereas the other male has a label "co-type". According to the description the abbreviation "L C" stands for "lower country".

Two specimens from Mentawai in the Museum of Genova have a label: "*Trypeticus separandum* sp. n. J. Schmidt"; four others from Sumatra in the Museum of London have a label "*Trypeticus triangulus* Type (c.q. Co-type) G. Lewis"; these "species" have never been published by these authors.

Trypeticus clarus spec. nov.
(figs 131-133)

Material.— **Malaysia:** Holotype, ♀ (MHNG), right protarsus, three segments of left mesotarsus and right metatibia with tarsus missing, [white label, printed:] "♀"; [white label, printed:] "BORNEO: Sabah/Mt. Kinabalu N.P./Headquarters/1558m 29.iv.87"; [white label, printed:] "D.E. Bright/Collector"; [white label, hand-written and printed:] "*Trypeticus*/sp. 2/det. S. Mazur"; [red label, printed:] "HOLOTYPUS/*Trypeticus/clarus* sp. n./P. Kanaar des. 2000".

Female.— Length (without head and abdominal tergites) 2.8 mm, width 1.2 mm, height 1.1 mm. Rather thick-set cylindrical, shiny, reddish brown, head, pronotum (with the exception of the anterior margin) and sutures darker.

Head.— Face in profile almost straight. Rostrum in frontal view truncate anteriorly, faintly emarginate in the middle (fig. 133). Frons and vertex separated by a smooth transversal ridge, well-delimited at the posterior side, less so towards frons. Frons and rostrum delimited at the sides by a distinct oblique ridge, indistinctly continuous with the transverse ridge posteriorly, in front with an indistinct tubercle near the apical rostral margin; both tubercles are connected by an indistinct marginal rim, this rim distinctly depressed in the middle. At the lateral side of the oblique lateral ridges the rostrum slopes steeply down towards its margin. Within the transversal, lateral and apical ridges frons and rostrum together are deeply concave in transversal direction, and less so in longitudinal direction. This common concavity is traversed by two distinct paramedian ridges, parallel, at their posterior end fading away and indistinctly connected with the transversal ridge; in front the paramedian ridges do not quite reach the apical marginal rim. Frons and rostrum with small punctures, interstices smooth and shiny. Vertex with a shallow and broad transverse depression behind the transverse ridge, a small median fovea behind this depression and distinct punctures. Interstices in the transverse depression with dense linear microsculpture, elsewhere smooth.

Pronotum.— About 1.2 times longer than wide (fig. 131), sides in dorsal view faintly sinuous, in front broadly rounded towards the anterior angles. Pronotum moderately convex in transversal direction, in profile faintly convex in the posterior two-thirds, thence more convex and finally sloping down towards the anterior margin. In this sloping area the pronotum has a slight median impression; another slight median impression is present at about the pronotal middle. Marginal striae rather fine, strongly bent upwards at their posterior end, in front leaving the sinuous pronotal edge and ending at the anterior curvature; short appendices are present near the anterior angles, where they constitute the anterior demarcation of large and distinct impressions in the anterior pronotal angles. Punctuation not very dense, punctures distinct, of unequal size and rather irregularly dispersed, mixed with very small punctures in the anterior third. A narrow and ill-delimited smooth median band is present, wider in the median fovea halfway, and ending at the anterior end of this fovea; in this impunctate band a short, indistinct median stria is present before the scutellum; punctures along the anterior margin shallower, more closely set and a little rugosely confluent, interspaces in the anterior impression with indistinct linear microsculpture, elsewhere smooth.

Elytra.— Along the suture shorter than pronotum (fig. 131) with rounded apices, convex in transversal direction, the median suture raised behind the distinct periscutellar impression; in profile elytra slightly concave behind scutellum, thence convex, progressively so near the apex. Elytra finer punctate than pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture. Marginal epipleural stria in the posterior half indicated by an ill-delimited, very shallow and broad impression, elsewhere wanting.

Propygidium.— Impressed along the anterior margin. Punctuation distinct, rather dense, interstices with linear microsculpture. Oblique lateral striae present.

Pygidium.— Parabolic in outline, convex, with faint anterolateral impressions. Punctuation dense, punctures shallow and large, without hairs, mixed with very small punctures; punctures along the margins smaller.

Prosternum.— Carina in lateral view nearly straight. Carinal disc broad and short, with nearly parallel sides, in front a little divergent (fig. 132), disc not impressed, with narrow carinal striae, slightly convergent anteriorly, abbreviated before the middle, and with double punctuation, the primary punctures large and shallow, ill-delimited, the secondary punctures ill-visible by linear interstitial microsculpture.

Mesosternum.— Between the procoxae broadly and rather deeply impressed, this impression rather sharply delimited in front and at the sides. Lateral striae rather broad and sulciform, ill-delimited at the inner side, slightly arcuate (fig. 132), their outer margin indistinctly continued by the demarcation of the intercoxal impression. Mesosternal disc with distinct elongate punctures, mixed with a few very small punctures. Interspaces smooth. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Lateral striae fine, in front slightly curved inwards and sulciform, slightly divergent posteriorly (fig. 132), not quite reaching the metasternal middle. Metasternal disc finer punctate than mesosternum, the punctures elongate, of unequal size. Interstices smooth. A narrow band along the median suture is impunctate. Median suture finely canaliform, indistinct near its posterior end.

First visible sternite.— Disc finely punctate, punctures a little elongate, mixed with very small punctures. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with a row of hairs and some indistinct small distal teeth.

The male is unknown.

Remarks.— The light colour may be due to immaturity. The left elytron has a dent near the apex, obviously by mutilation.

Etymology.— The name has been inspired by the name of the collector.

Trypeticus convexicollis spec. nov.

(figs 187-189)

Material.— **Malaysia:** Holotype ♂ (MZLU), genitalia partly protruded, [white label, printed:] “♂”; [white label, printed:] “Malaysia, SABAH/Sipitang, Mendolong/Leg. S. Adebratt” [reverse side, hand-written:] 3.xii.1987”; [blue label, printed:] “35/50”; [white label, hand-written in red:] “2316”; [white label, hand-written and printed:] “*Trypeticus*/sp. 3/det. S. Mazur”; [red label, printed:] “HOLO-TYPUS/*Trypeticus/convexicollis* sp. n./P. Kanaar des. 2000”; 1 ♂ (CHPK), same locality and collector, but 30.xi.1987 and other trap code (paratype); 1 ♂ (MZLU), idem, but 4.v.1988 (paratype); 1 ♂ (CHFP) Sabah, Mt. Kinabalu, S., 28.v.1999, M. Snizek (with doubt).

Male.— Length (without head and abdominal tergites) 3.1 mm, width 1.4 mm, height 1.2 mm. Rather thick-set cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in profile almost straight in the anterior half, convex in the posterior half with a distinct angle behind the vertex towards the neck. Rostral tip in frontal view rounded-truncate anteriorly with two small paramedian tubercles (fig. 189). Frons and posterior part of rostrum slightly concave, mainly in transversal direction. Concavity not sharply delimited at the sides, transition of the median concavity of the rostrum towards the convex sides of the rostrum very gradual. Apical margin slightly elevated; before the tubercles the rostrum falls steeply down towards its anterior margin along the labrum. Frons and rostrum with rather scarce small punctures, interstices with fine microsculpture, very dense at the sides. Transition between frons and vertex arcuate, very gradual. Vertex with an indistinct median fovea and more densely punctate than frons, interstices with fine microsculpture.

Pronotum.— About 1.1 times longer than wide (fig. 187), in dorsal view with almost parallel sides, in front broadly rounded towards anterior angles. Pronotum strongly convex in transversal direction, in profile very faintly sinuous in the posterior two-thirds, thence very strongly convex towards anterior margin, meeting the emargination for the head in an angle of about 80°. Marginal striae fine, turned upwards at their posterior end, interrupted in the anterior curvature, thence finely continued towards the anterior angles. Very faint oblique impressions are present behind the latter. Pronotal disc not densely punctate, punctures moderate, of unequal size, irregularly dispersed, mixed with very small punctures along the sides and the posterior margin; punctures along the anterior margin more closely set and smaller. Interstices smooth. A short, very indistinct median antescutellar stria is present, without distinct impunctate median band.

Elytra.— Along the suture shorter than pronotum (fig. 187), distinctly impressed near scutellum and along anterior margin, strongly convex in transversal direction, in profile moderately convex, more distinctly so near apex. Elytral punctation finer than

that of pronotum, but for some coarser punctures near scutellum and along the anterior margin; punctures near suture slightly more closely set, punctures near apex smaller. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria indistinct in posterior half, wanting in anterior half.

Propygidium.— Faintly impressed along anterior margin. Oblique lateral striae present. Punctuation rather dense, punctures of unequal size. Interstices with indistinct linear microsculpture.

Pygidium.— Rather triangular in outline with rounded tip, faintly convex, with a faint impression near the tip. Punctuation as on propygidium, punctures along the lateral and apical margins finer. Interstices with indistinct linear microsculpture.

Prosternum.— Carina in lateral view faintly convex, increasingly so towards anterior margin. Carinal disc broad with about parallel sides (fig. 188), margined at the sides by a narrow elevated rim, accompanied at the inner side by a well-delimited sulciform carinal stria, slightly abbreviated in front. Along the anterior margin another rim is present, with a deep transversal impression behind it. Carinal disc in front faintly impressed along the median line, with rather sparse punctures of moderate size, interspaces almost smooth.

Mesosternum.— Impressed between the procoxae. Lateral striae rather broad, sulciform, nearly parallel (fig. 188). Mesosternal disc with elongate punctures of unequal size, mixed with few very small punctures, interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, about reaching the metasternal middle (fig. 188). Disc about punctate as mesosternum, with less distinct very small punctures; punctures smaller posteriorly. A narrow band along the fine, partly canaliform median suture is impunctate. Interspaces smooth.

First visible sternite.— Punctuation fine and dense, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with some hairs and with some small teeth on the distal third. The female is unknown.

Variation.— PE-length of the other male paratypes: 2.9 mm. The colour of the paratypes is lighter, probably they are not yet fully coloured. In one paratype the carinal striae are shorter and shallower. In the other paratype the lateral metasternal striae are a little longer. The small secondary punctures on meso- and metasternum are almost obsolete in the paratypes. The male specimen from Mt. Kinabalu has been attributed with doubt to this species. It is smaller (PE-length 2.6 mm), has a slightly wider body form and the punctuation is coarser. Therefore, it has not been given paratype status.

Etymology.— The name refers to the very convex anterior part of the pronotum.

Remarks.— It could be that this species is the male of *T. foveicollis* spec. nov. Both have some characters in common. The differences that militate against a matching of these species are discussed after the description of *T. foveicollis*. The species is also close to *T. kalshoveni* spec. nov.

Trypeticus coomani spec. nov.
(figs 258-262)

Material.— **Vietnam:** Holotype, ♀ (MNHN), three segments of right mesotarsus missing, [white label, printed:] “♀”; [discoloured white label, printed:] “Hoa Binh/Tonkin/de Cooman”; [discoloured white label, hand-written:] “98 bis”; [pale-yellow label, printed:] “MUSÉUM PARIS/COLL. J. THEROND”; [red label, printed:] “HOLOTYPUS/*Trypeticus/coomani* sp. n./P. Kanaar des. 2000”; 4 ♂♂ (MNHN, CHPK), same data as holotype, but hand-written number “99” in some of them (paratypes); fragments of 1 ♀ (MNHN), idem.

Female.— Length (without head and abdominal tergites) 2.6 mm, width 0.9 mm, height 0.8 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in lateral view for the greater part almost straight, only rostral apex strongly elevated. Vertex and frons separated by a smooth, slightly arcuate transverse ridge, well-delimited at its posterior side, less so to the frons. Rostral apex in frontal view triangular, strongly turned-up, rather sharply pointed with slightly rounded tip, at the underside slightly impressed, distinctly protruding over the anterior margin along the labrum (fig. 262). Frons and rostrum delimited at the sides by a distinct oblique ridge, continuous with the transverse ridge posteriorly, and fading away on the rostrum near the elevated tip. At the medial side the ridge is accompanied by a distinct, well-delimited sulcus; at the lateral side of the ridge the rostrum slopes concavely down to its edge. Frons rather flat posteriorly; the anterior part of the frons and the rostrum are traversed by a slight median impression, widening anteriorly, and ending on the elevated tip. Frons and rostrum rather densely punctate, punctures of unequal size, elongate. Interstices with dense and fine microsculpture, causing a rather dull appearance, with the exception of the transverse ridge, the lateral grooves and the anterior median impression. Vertex with a distinct and broad transversal impression behind the transverse ridge, a small median fovea, distinct punctation and interstitial microsculpture.

Pronotum.— About 1.5 times longer than wide, in dorsal view slightly wider and tapering in anterior half (fig. 258), sides in front abruptly curved inward and thence concave towards the anterior angles that are well-visible in dorsal view. Pronotum strongly convex in transversal direction, in profile almost straight in its posterior half, thence gradually and progressively convex towards anterior margin. Behind the anterior emargination for the head the pronotum has a faint smooth median ridge; at either side of this ridge the pronotum is slightly impressed. Marginal striae rather fine, barely curved upwards over the posterolateral pronotal angles behind, at a rather great distance from the edge in the anterior half, ending at some distance from the deeply impressed anterior angles. Disc rather densely punctate, punctures distinct, of moderate, slightly unequal size. Behind the anterior margin the punctures are very closely set. Interspaces smooth. A fine and fragmented antescutellar median stria is present, without distinct impunctate median band.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 258), slightly impressed near scutellum and anterior margin, strongly convex in transversal direction, in profile faintly convex over nearly its entire length, only near the apex strongly convex. Elytral punctation barely finer than on pronotum, punctures of unequal size, along the suture more closely set and smaller. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate with distinct linear

microsculpture and a shallow marginal epipleural stria in the posterior half.

Pygidium.— Distinctly impressed along anterior margin, without oblique lateral striae. Punctuation distinct, rather dense, punctures in the posterolateral angles with a short hair, interstices with indistinct linear microsculpture.

Pygidium.— Broadly parabolic in outline, convex, slightly impressed in the anterolateral angles. Punctuation and microsculpture as on propygidium, punctures in the apical half with a rather long yellow hair.

Prosternum.— Carina in lateral view faintly convex. Carinal disc with slightly divergent sides, rather broad (fig. 260), with two distinct, narrow, parallel carinal striae, slightly abbreviated in front. On the sides of the carina sulciform lateral prosternal striae are visible in ventral view (not shown in the figure). Carinal disc slightly impressed along the median line, with rather sparse double punctuation, the primary punctures a little elongate. Interspaces with linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae deep, rather narrow and sulciform, well-delimited, faintly divergent anteriorly, ending behind the procoxae (fig. 260). Mesosternal disc with elongate punctures of unequal size, mixed with very small punctures. Interspaces smooth. Meso-metasternal suture fine, depressed, strongly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, slightly curved inwards posteriorly, nearly reaching the posterior metasternal third (fig. 260). Disc about equally punctate as mesosternum. A band along the distinctly sulciform median suture is impunctate. Interspaces smooth.

First visible sternite.— Between the metacoxae impressed along the median line, densely punctate, punctures elongate, along posterior margin smaller, less elongate, more closely set. Interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The male differs from the female as follows:

Head.— Face in profile strongly convex along the eyes, thence faintly concave anteriorly till a little beyond the antennal insertions, than strongly convex, because the anterior part of the rostrum is abruptly and strongly bent ventrally, and than again concave behind the slightly elevated tip. Rostrum in frontal view broadly rounded-truncate anteriorly, apical margin slightly impressed near the median line, with two paramedian tubercles (fig. 261). Frons distinctly concave, with a separate distinct concavity of the anterior part of the rostrum. Concavity along eyes and antennal insertions sharply and ridgelike delimited, the ridge rather abruptly ending in front where the deflexion of the rostrum begins. Sides of the rostrum sloping down towards the lateral margin. Frons and rostrum with small punctures, interstices with indistinct linear microsculpture, shiny. Transition between frons and vertex arcuate and gradual. Vertex with a small median fovea and small punctures, interstices with distinct linear microsculpture.

Pronotum.— Nearly 1.3 times longer than wide, in dorsal view with rather parallel sides (fig. 259), in front broadly rounded and thence rather oblique towards the distinctly impressed anterior angles, strongly convex in transversal direction, in profile almost straight in the posterior half, thence slightly convex towards anterior margin. Pronotal disc much coarser punctate than in the female, especially in the posterior half,

the punctures of unequal size, along the anterior margin very closely set and smaller. Interspaces smooth. No impunctate median band or antescutellar median stria.

Elytra.— More coarsely punctate than in the female, especially along the base and suture.

Pygidium.— Triangular in outline with rounded tip, almost straight in lateral view, faintly convex in transversal direction, faintly impressed at the tip, without distinct anterolateral impressions. Punctuation and interstitial microsculpture as in female, the punctures near the apex with a very short hair.

Prosternum.— Carinal disc margined at the sides and along the anterior margin with a narrow elevated rim, at the sides accompanied by a distinct carinal stria. Disc more distinctly impressed along the median line and with a well-delimited transversal impression (almost a stria) behind the anterior rim.

Meso- and metasternum.— More distinctly punctate than in the female.

Variation.— PE-length males 2.4-2.5 mm. The length of the lateral metasternal striae is a little variable. In one male the prosternal carinal disc is very indistinctly margined along the anterior edge.

Remarks.— Like in most species that belong to the *tabaciglicens*-group the taxonomy around this species is severely complicated by the presence of specimens that on the one hand are unmistakable very close to the nominate form, on the other exhibit distinct differences that cannot be attributed to mere individual variability. Obviously there are many local races, subspecies or even very closely related separate species within the *tabaciglicens*-group. Rather than to create a separate taxonomical status for these specimens, with the risk of creating new synonymies, I prefer to mention them as doubtful varieties of the present species. In my turn, like A. de Cooman (see below), I leave the solution of this puzzle in the hands of a younger histeridologist who will be more skilful in phylogenetical analysis than I am.

Variation A.— Larger, body-form broader, pronotum with double punctuation; in the male the frons broader, in the female the margin of the pronotum just laterally from the anterior angles less concave in dorsal view, the rostrum with an anterior distinct depression in longitudinal direction (like in the male):

Material.— **Vietnam:** 1 ♂ (ZMAS), mts. SW Kun-Tshau, 200-400 m, 12-14.i.1962, O. Kabakov; 1 ♀ (ZMAS), 50 km NE Thai-nguen, 19.xii.1962, O. Kabakov; 1 ♂, 1 ♀ (ZMAS), idem, but 3.iii.1963; 1 ♀ (CHAT), 40 km NE Thai-nguien, 6.iii.1963, O. Kabakov.

Variation B.— Slightly larger and body-form slightly broader than in the nominate form, punctuation of pronotum double:

Material.— **Thailand:** 1 ♂ (CHOK), Fang, 330 m, 19°55'N 99°12'E, 25.v.1991, D. Král.

Etymology.— This species is dedicated to Albert de Cooman (1880-1967), the Flemish missionary who has contributed so much to the knowledge of the Histeridae of Indo-China, and who wrote (1939): "Peu documenté sur les espèces déjà décrites et mal outillé, j'ai confié mes *Trypeticus* à un jeune qui, j'espère, en publiera tôt ou tard meilleure étude que celle que je pourrais faire" ["Little documented about the already described species and badly equipped, I have entrusted my *Trypeticus* to a youngster

who, I hope so, will sooner or later publish a better study about them than I could achieve"]. Though at the age of 77 I am not quite "jeune" I trust that I don't have betrayed his confidence.

Trypeticus crassus Schmidt, 1892
(figs 20-24)

Trypeticus crassus Schmidt, 1892: 28-29.

Trypeticus bifoveolatus Lewis, 1893: 427. Synonymized by Lewis, 1911: 77.

Material.— **Indonesia:** Lectotype, ♂ (ZMHB), [white label, hand-written:] "♀"; [white label, printed:] "N. O. Sumatra/Tebing tinggi/Dr. Schultheiss"; [red label, printed:] "Type"; [white label, printed:] "coll. J. Schmidt"; [white label with black and yellow margin, hand-written:] "crassus/Schm."; [white label, printed:] "Zool. Mus./Berlin"; [red label, printed and hand-written:] "LECTOTYPUS/*Trypeticus/crassus* Schmidt ♂/1892/P. Kanaar des. 1998" (present designation); 2 ♂♂ (RMNH, CHPK), Sumatra, Manindjoer, xi.1930, L.G.E. Kalshoven; 2 ♂♂ (BMNH, ZMHB), Sumatra; 1 ♀ (BMNH), Sumatra, 1897, Donckier; 2 ♀♀ (ZMBH, BMNH), Sumatra, Palembang; 1 ♂, 1 ♀ (MNHN), Sumatra, rég. de Benkoelen, Moeara Tenam, 1935, Mme M.E. Walsh; 1 ♂ (CHSM), Sumatra, Aceh-selatan, Babahrot, 100 m, vii-viii.1983, J. Klapperich; 7 ♂♂, 3 ♀♀ (MHNG, SMNS, CHSM), Sumatra, Aceh, Mt Leuser NP, 300-500 m, Ketambe, 23-30.xi.1989, Löbl, Agosti, Burckhardt; 1 ♂, 2 ♀♀ (NHMW, CHPK), N. Sumatra, Sibolangit, 25.ii.1990, Schillhammer. **Malaysia:** 1 ♂ (ZMBH), Perak, Stauding,[er]; 1 ♂ (MNHN), Malacca, India; 1 ♀ (ZMAS), Sg. Kalang Reserve, C. II. Fallen tree, vi.1928, M.L. Webber, Forest Dept.; 1 ♂ (ZMAS), Rotan Junggal F.R., unidentified [tree], 14.iii.1933, F.G. Browne, Forest Dept.; 1 ♂ (ZMAS), Semangkok F. R., unidentified [tree], 2000', 7.iv.1933, F.G. Browne, Forest Dept.; 1 ♀ (ZMAS), Chendero..., 22.ii.1935, ex galleries of *Platypus westwoodi* in *Lauraceae* spec., F.G. Browne, Forest Dept.; 1 ♂ (ZMAS), Perak Parit F.R., 12.iii.1935, ex galleries of *Platypus westwoodi* in *Palaguium* [?] spec., F.G. Browne, Forest Dept.; 1 ♂ (ZMAS), Selangor Sg Buloh F. R., 31.viii.1935, ex galleries of *Platypus westwoodi*, F.G. Browne; 1 ♂, 2 ♀♀ (ZMAS, CHPK), Selangor F. M. S., Ihe Gap, 2500', 2.xi.1936, M.L. Webber, For. Dept.; 1 ♀ (ZMAS), idem, but 21.xii.1936; 1 ♀ (CHSM), Selangor, Kuala Lumpur, 1950, Army Scrub Typhus Unit; 1 ♂, 2 ♀♀ (BMNH), Sarawak, Bintulu, vii.1959, F.G.B.; 1 ♂ (BMNH), Sarawak, Bintulu, vii.1959, F. G. B. 6357; 1 ♂ (CHND), Kampung Pasir, 11.viii.1974, G. Minet; 1 ♂ (CHND), Kampung Pasir, 7.viii.1975, G. Minet; 1 ♀ (CHND), Tanah Rata, 20.viii.1982; 1 ♂ (BMNH), Sar.[awak], Wallace (without date); 1 ♂ (NHMW), Sabah, 60 km E Kota Kinabalu, Crocker Mts., Gg Emas, 16-27.iv.1993, Strba & Jenis; 2 ♂♂, 1 ♀ (CHFP), W. Malaysia, Pahang, Banjaran Bnom Mts., 20 km S of Kampung Ulu Dong, 1500-1900 m, 17-23.iv.1997, P. Cechovsky; 53 ♂♂, 12 ♀♀ (CHFP, CHRP, CHPK), W. Sabah, Crocker Range E, W of Apin Apin, ii.2000, M. Snizek; 6 ♂♂, 3 ♀♀ (CHTL), Pahang Distr., Cameron Highlands, Kampung Kuala Boh env., 4°27'N, 101°34'E, 850-1050 m, 26.iii/3.iv.2001, R. Hergovits.

Male.— Length (without head and abdominal tergites) 3.9 mm, width 2.1 mm, height 1.7 mm. Thick-set cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face slightly sinuous in profile, with faintly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, faintly emarginate in the middle, apical margin with two paramedian tubercles (fig. 23), depressed between these tubercles. Frons and posterior part of rostrum concave, mainly in transversal direction, sides of the rostrum with a faint additional impression, thus producing a faint median elevation of the rostrum. Frons and rostrum with sparse small punctures, interstices with a dense and fine microsculpture. Transition between frons and vertex little arcuate, rather sharp.

Pronotum.— About as long as wide (fig. 20), in dorsal view a little widened in anterior half, narrowing and rounded in front and thence oblique towards anterior angles, moderately convex in transversal direction, in profile convex over its entire length, more

strongly so in front, with a transversal impression just behind the shallow anterior emargination for the head. Marginal striae fine, curved inward at their posterior end, at some distance from the margin in the anterior half, interrupted at the anterolateral angles, thence continued towards the barely impressed anterior angles. Pronotal disc not very densely covered with rather small primary punctures of slightly unequal size, slightly irregularly dispersed, mixed with small secondary punctures, punctures along the anterior margin more closely set. Interspaces smooth. An impunctate median band is present in the posterior two-thirds, without a distinct median stria.

Elytra.— Along the suture nearly as long as pronotum (fig. 20) with rounded apices, slightly depressed near scutellum and anterior margin, moderately convex in transversal direction with slightly raised suture, in profile faintly convex in anterior two-thirds, thence progressively convex towards apex. Elytra about punctate as pronotum, punctures coarser along the base. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate with a fine linear interstitial microsculpture. Marginal stria fine, indistinct in the middle.

Propygidium.— Almost straight in longitudinal direction, with an oblique stria at the sides, medially from these striae slightly and broadly impressed. Punctuation double, interstices with indistinct linear microsculpture.

Pygidium.— Broadly parabolic in outline, slightly convex with a large fovea in the anterolateral angles. Punctuation as propygidium, punctures without hairs. Interstices with indistinct microsculpture.

Prosternum.— Carina broad, sides almost parallel (fig. 22), very faintly convex in lateral view. Carinal disc margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a carinal stria, ill-delimited at their inner side. Carinal disc with a broad transversal impression behind the anterior rim, and moderate distinct punctures, interspaces with indistinct linear microsculpture.

Mesosternum.— Sides a little divergent anteriorly, between procoxae distinctly impressed; in front and at the sides this impression is sharply delimited, its boundary continuous with the outer margin of the rather broad and sulciform lateral striae, that are faintly sinuous, almost parallel and ill-delimited at their inner side, ending behind the procoxae (fig. 22). Mesosternal disc not very densely punctate with distinct, slightly elongate punctures. Interspaces with indistinct linear microsculpture. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Median suture fine. Lateral striae strongly divergent posteriorly (fig. 22), short, situated rather laterally behind the mesocoxae, not quite reaching the anterior metasternal fourth. Metasternal disc finer punctate than mesosternum, especially posteriorly. A broad band along the median suture is impunctate. Interspaces smooth near the median line, at the sides with indistinct linear microsculpture.

First visible sternite.— Disc more distinctly punctate than metasternum, with primary punctures of unequal size and small secondary punctures between, punctures smaller and more closely set posteriorly. Interstices with indistinct linear microsculpture. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with a few distinct teeth on the distal fourth.

The female differs from the male as follows:

Head.— Face almost straight in profile. Apex of rostrum in frontal view slightly emarginate, at either side with a distinct tubercle. Vertex and frons separated by a sharp bisinuous ridge, well-delimited at its posterior side, less so towards the frons. Frons and rostrum bordered at the lateral sides by a fine but distinct oblique elevated ridge (fig. 24), continuous with the transverse ridge at their posterior end, in front ending at the apical tubercles. Outside these ridges the lateral parts of the rostrum slope down towards the lateral rostral margin. At their inner sides the lateral ridges are sharply delimited, but not accompanied by a groove. Frons faintly concave in both directions, with an extension of the concavity in anterolateral direction. Rostrum with a distinct median impression, progressively deeper towards the apical margin. Frons and rostrum with rather sparse small punctures, interstices rather dull by a very fine microsculpture. Vertex with a distinct transverse impression behind the transverse keel, rather densely punctate with small punctures, interstices with indistinct microsculpture.

Pronotum.— About 1.1 times longer than wide, obliquely truncate between anterior and slightly rounded anterolateral angles (fig. 21). Superior side in anterior third sloping down towards anterior margin, with a distinct elongate median ridge in front, highest near its posterior end, and with an additional slightly elongate tubercle behind it, indistinctly connected with the anterior ridge. At either side of the pronotum a shallow reniform fovea is present at about the anterior pronotal third, deepest in their posterior half. Anteromedially from these foveae the pronotum is faintly and obliquely impressed. Disc a little more sparsely punctate than in the male; near the anterior angles the punctures are more closely set, behind the anterior emargination for the head the punctures are elongate and rather indistinct by a dense microsculpture, rather ill-delimited posteriorly. A distinct antescutellar median stria is present, in front reaching the elongate tubercle.

Pygidium.— Anterolateral foveae as a rule shallower and smaller than in the male, punctures without hairs.

Prosternum.— Carina almost straight in lateral view, not margined or impressed in front, the carinal striae ending a little behind the anterior margin.

Variation.— PE-length lectotype 3.8 mm, males 3.8-4.1 (4.6) mm, females 3.9-4.2 mm. The lectotype is reddish-brown and obviously a not yet fully coloured freshly eclosed specimen. The pygidial foveae vary considerably in extent and depth, both in males and females. The lateral metasternal striae vary in length and strength, sometimes they are almost obsolete. In some specimens a short trait of a lateral stria is visible on the first abdominal sternite, often only at one side. The anterior impression of the mesosternum is sometimes rather shallow, and in that case its boundary does not seem to be continuous with the outer side of the lateral mesosternal striae posteromedially from the procoxae. The transverse impression behind the emargination for the head is indistinct or wanting in some males, and also the anterior impression of the prosternal carinal disc is less distinct in some males. Rarely faint pronotal foveae are also visible in a male specimen, at the site where they are present in the females; these foveae on the female pronotum vary in extent and depth, and are sometimes obsolete. The anterior median pronotal ridge is rather ill-developed in some females, in others it is strong and more or less connected with the median tubercle behind it by a lower posterior continuation, especially in the specimens of West Malaysia.

Remarks.— One male from Sumatra (PE-length 4.6 mm) is much larger than all

other available males and exceeds greatly the range of the PE-length of the others. It has the size of *T. albertisii*. Yet there is no reason to suppose that it is something else than an extremely large specimen of *T. crassus*.

Trypeticus danielssoni spec. nov.
(figs 134-138)

Trypeticus peninsularis Schmidt, in litt.

Material.— **Malaysia:** Holotype, ♀ (MZLU), genitalia protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang./Mendolong, T2A/W4/22.xii.1987/leg. S. Adebratt”; [pale orange label, printed:] “14/00”; [red label, printed:] “HOLOTYPUS/*Trypeticus/danielssoni* sp. n./P. Kanaar des. 2000”; 1 ♂ (CHSM), same locality and collector, but other trap-code and 8.xii.1987 (paratype); 1 ♀ (MZLU), idem, but 12.xii.1987 (paratype); 2 ♀♀ (MZLU, CHPK), idem, but 11.v.1988 (paratypes); 1 ♂ (CHPK), idem, but 13.v.1988 (paratype); 1 ♂, 1 ♀ (MZLU), idem, but 8.iii.1989 (paratypes); 1 ♂ (MZLU), idem, but 14.iii.1989 (paratype); 1 ♀ (CHPK), idem, but 20.iii.1989 (paratype); 2 ♂♂ (MZLU), idem, but 31.iii.1989 (paratypes); 1 ♂ (ZMHB), Perak, without date, Stauding[er] (paratype). **Indonesia:** 1 ♂ (MHNG), Sumatra, Aceh-Selatan, Babahrot, 100 m, vii-viii.1983 (with doubt).

Male.— Length (without head and abdominal tergites) 2.6 mm, width 1.2 mm, height 1.0 mm. Rather thick-set cylindrical, shiny, reddish brown with darker sutures.

Head.— Face faintly sinuous in profile, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded anteriorly, with two small paramedian tubercles a little behind the convex anterior margin (fig. 137). Frons and posterior part of rostrum moderately concave, at the sides delimited by a fine sinuous ridge along the antennal insertions that fades away on the rostrum. Frons and rostrum with distinct small punctures, interstices smooth. Transition between frons and vertex arcuate and gradual. Vertex a little more densely punctate than frons, interstices smooth.

Pronotum.— Amply 1.1 times longer than wide with nearly parallel sides (fig. 134), broadly rounded in front towards anterior angles, strongly convex in transversal direction, in profile slightly convex, more strongly so towards anterior margin. Marginal striae distinct, ending at a rather great distance from the barely impressed anterior angles. Pronotal disc with a rather dense and coarse double punctation, punctures behind the anterior emargination for the head smaller and more closely set. Interspaces smooth. No impunctate median band or median stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 134), slightly impressed along anterior border, strongly convex in transversal direction, in profile slightly convex over nearly its entire length, at the apex strongly convex. Elytral punctation a little finer than on pronotum, punctures near the suture a little more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture. Marginal epipleural stria fine, partly obsolete.

Pygidium.— Slightly concave in longitudinal direction with a shallow fovea at the sides, punctate, punctures of unequal size, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Slightly convex in transversal direction, almost straight in longitudinal direction, triangular with broadly rounded apex, very faintly impressed a little medially from the anterolateral angles. Punctation as on pygidium, along sides

and apex finer, larger punctures with a very short, barely visible yellow bristle. Interstices smooth.

Prosternum.— Carina slightly convex in lateral view, carinal disc broad, sides very faintly divergent anteriorly (fig. 136), margined at the sides and in front by a narrow elevated rim, at the sides accompanied by an indistinct carinal stria, ill-delimited at the inner side. Carinal disc with a distinct median impression in the anterior half, and distinct small punctures, rather closely set and a little confused by faint longitudinal rugosity. Interspaces smooth.

Mesosternum.— Distinctly impressed along the median line in the anterior half. Lateral striae distinct, broad, sulciform, slightly curved, ending near the procoxae, and indistinctly continued along the latter by the lateral delimitation of the anterior impression (fig. 136). Mesosternal disc rather densely punctate, punctures elongate, a little confused by faint longitudinal rugosity, interspaces smooth. Meso-metasternal suture almost invisible, mainly indicated by a dark-coloured impression between meso- and metasternum, angulate backwards.

Metasternum.— Lateral striae distinct, in front sulciform, divergent posteriorly, nearly reaching the metasternal middle (fig. 136). Metasternum slightly coarser punctate than mesosternum. Interspaces smooth. Median suture distinctly canaliform, broader in front.

First visible sternite.— A little finer punctate than metasternum, with a faint longitudinal median impression. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a rather sharp but little elevated transverse ridge. Face very faintly concave in lateral view. Rostrum in frontal view rounded anteriorly (fig. 138). Frons and rostrum delimited at the sides by a distinct ridge, continuous with the transverse ridge posteriorly, in front faintly connected along the slightly raised anterior margin, here depressed in the middle between two indistinct tubercles. At the medial side the lateral ridge is accompanied by a shallow sulcus, at the lateral side the rostrum slopes steeply down to its edge. Frons and posterior part of rostrum slightly concave, with extensions of the concavity on the lateral sides of the rostrum. Frons and rostrum with small punctures. Interstices with dense and fine microsculpture, causing a dull appearance, with the exception of the lateral grooves and the transverse ridge. Vertex with a transversal depression behind the transverse ridge, a small median fovea, small punctures and dense interstitial microsculpture.

Pronotum.— Nearly 1.3 times longer than wide, slightly widening in the anterior half (fig. 135). Disc about equally punctate as in the male. Behind the anterior emargination for the head there is a dark-brown parabolic area (indicated by a dotted line in the figure) with dense and very fine interstitial microsculpture, causing a dull appearance. In this area the small punctures are ill-visible. At the rear end of the area a faint longitudinal tubercle is visible. Anterior angles more distinctly impressed than in the male, with appendices of the marginal striae. An indistinct antescutellar median stria is present in the posterior half.

Pygidium.— Slightly convex in both directions, foveae more distinct, the larger punctures with a short yellow hair.

Prosternum.— Not margined along the anterior edge, the carinal striae a little abbreviated behind the anterior margin. The median impression, though distinct, is situated at some distance behind the anterior margin, its anterior delimitation not sharp.

Meso- and metasternum.— Slightly finer punctate than in the male.

Variation.— PE-length of holotype: 2.8 mm; PE-length males: 2.5-3.1, females: 2.7-2.9. The length of the lateral metasternal striae varies a little. The faint median impression of the first sternite is sometimes obsolete; in some specimens a faint impression on the first sternite along the metacoxae suggests the presence of an indistinct lateral stria. The specimen from Perak is a little smaller than those of Sabah, the pronotum is a little less coarsely punctate.

Remarks.— The specimen from Perak (ZMHB) has a label "*peninsularis* Schm.", but Schmidt has never published the species under this name. The specimen that has been attributed with doubt to this species has a much coarser punctation of the elytra, the impressions of the prosternal carinal and mesosternal discs are much fainter, the lateral metasternal stria is much finer, and the first sternite has oblique lateral striae. Therefore, it has not been given paratype status.

Etymology.— This species is dedicated to Mr Roy Danielsson, Museum of Zoology of the Lund University, in appreciation of his full co-operation.

Trypeticus degallieri spec. nov.
(figs 285-287)

Material.— **Papua New Guinea:** Holotype ♂ (MHNG), four segments of left mesotarsus missing, [white label, printed:] "♂"; [white label, printed and hand-written:] "PAPUA N. GUINEA/Onerunka ix.75/nr Kainantu/W.G. Ullrich"; [white label, hand-written and printed:] "*Trypeticus*/sp./det. S. Mazur"; [red label, printed:] "HOLOTYPUS/*Trypeticus/degallieri* sp. n./P. Kanaar des. 2001".

Male.— Length (without head and abdominal tergites) 2.8 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, piceous black, elytra, parts of underside, legs and antennae rufous.

Head.— Face in profile faintly sinuous in anterior part, with slightly elevated rostral tip, halfway the eyes strongly convex towards vertex and neck. Rostrum in frontal view rounded-truncate anteriorly, with two paramedian tubercles (fig. 287). Frons moderately concave, rostrum behind the tubercles slightly concave. A very fine oblique ridge is present at the sides, running from the eyes to the rostrum and fading away at some distance from the paramedian tubercles. At their inner side each oblique ridge is accompanied by a very shallow, ill-delimited groove, broader near the eyes. At the lateral sides of the oblique ridges the rostrum is convex and sloping down towards its lateral margins. Frons and rostrum with small punctures of unequal size, interstices with fine microsculpture, shiny. Transition between frons and vertex arcuate, rather gradual. Vertex with a small median fovea, punctures a little more distinct than on frons. Interstices with fine microsculpture.

Pronotum.— Amply 1.3 times longer than wide (fig. 285), sides in dorsal view nearly parallel in the posterior two-thirds, in front very gradually rounded towards anterior angles. Pronotum strongly convex in transversal direction, in profile faintly

sinuous in the posterior half, thence convex towards anterior margin. Marginal striae distinct, turned upwards at their posterior end, at a rather great distance from the lateral margin in the anterior half, ending in the not impressed anterior angles. Pronotal disc rather densely punctate, punctures rather coarse, of subequal size, punctures along the anterior emargination smaller. Interstices smooth. No distinct impunctate median band or median stria.

Elytra.— Along the suture slightly shorter than pronotum (fig. 285), slightly impressed near scutellum, strongly convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation along the base about equal to that of pronotum, elsewhere a little finer and sparser, punctures near the suture mixed with some very small punctures. A narrow band along the slightly elevated suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate, with linear microsculpture. A shallow marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly impressed along anterior margin. Oblique lateral striae present, fine. Punctation distinct, not very dense, punctures smaller posteriorly, interstices smooth.

Pygidium.— Triangular in outline with broadly rounded apex, convex, at either side slightly impressed along the anterior margin, punctures rather coarse, of unequal size, the larger punctures with a rather long yellowish-white hair.

Prosternum.— Carina very slightly convex in lateral view. Carinal disc rather narrow with nearly parallel sides (fig. 286), margined at the sides and in front by a narrow elevated rim, at the inner side accompanied by a narrow carinal stria, ill-delimited at the inner side. Also along the posterior margin a fine margination is present. Disc slightly impressed along the median line, with rather sparse double punctation. Interspaces with indistinct linear microsculpture.

Mesosternum.— Lateral striae reduced to a short but distinct trait at either side (fig. 286). Mesosternal disc slightly impressed between the procoxae, with a sparse double punctation, the primary punctures a little elongate and of unequal size. Mesometasternal suture very fine, strongly angulate backwards. Interspaces smooth.

Metasternum.— Lateral striae very fine, slightly curved inwards and divergent posteriorly, nearly reaching the anterior metasternal third (fig. 286). Disc about punctate as mesosternum. Median suture distinctly sulciform. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— In the anterior half with a faint median impression. Punctation rather dense, interstices smooth. Oblique lateral striae present, rather long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some distinct small teeth on the distal third.

The female is unknown.

Etymology.— This species is dedicated to my friend and well-known histeridologist Nicolas Dégallier (Montpellier), in appreciation of our long-standing co-operation.

Trypeticus deoudei spec. nov.
(figs 427-431)

Material.— **Malaysia:** Holotype, ♀ (MHNG), three segments of right mesotarsus missing, [white label,

printed:] “♀”; [white label, printed:] “W. Malaysia: Pahang/Fraser’s Hill, 1050m/Jeriau Waterfalls #12a/Löbl & Calame, 19.iii.93”; [red label, printed:] “HOLOTYPUS/*Trypeticus/deoudei* sp. n./P. Kanaar des./ 2000”; 4 ♂♂ (MHNG, CHPK), same locality, date and collectors (paratypes).

Female.— Length (without head and abdominal tergites) 2.2 mm, width 0.9 mm, height 0.8 mm. Cylindrical, shiny, dark castaneous, anterior part of rostrum, anterior pronotal margin, sides of metasternum, abdominal segments and legs rufous.

Head.— Face in lateral view very faintly bisinuous. Rostrum short (fig. 431), in frontal view broadly truncate anteriorly. Frons and rostrum slightly concave along the median line with distinct extensions of the frontal concavity behind the antennal insertions. Head with distinct and very dense double punctation, producing a rather granular surface. Primary punctures on the frons with a short erect hair, a little longer at the sides. Interstices shiny. Transition between frons and vertex slightly arcuate, gradual. Vertex (as far as visible) rather densely punctate.

Pronotum.— In dorsal view about 1.1 times longer than wide with nearly parallel sides, in front broadly rounded towards the anterior angles (fig. 427), convex in transversal direction, in profile almost straight in the posterior half, thence moderately convex and finally flattened off towards the anterior margin. Marginal striae distinct, at their posterior end curved upwards along the rounded posterolateral angles, in front ending a little behind the distinctly but not extensively impressed anterior pronotal angles. Punctation not very dense, punctures of unequal size, rather small, more closely set along anterior margin. Interspaces smooth. A fine antescutellar median stria is present.

Elytra.— Along the suture nearly 1.1 times longer than pronotum (fig. 427), apices rounded; elytra convex in transversal direction, in profile almost straight in the anterior half, thence slightly convex towards apex, the suture here slightly elevated, and finally very convex at the apices. Elytra about equally punctate as pronotum, but punctures along base and near suture more closely set. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura almost impunctate, with linear microsculpture and a very indistinct marginal epipleural stria in the posterior half.

Propygidium.— Short, rather concave, with rather dense fine punctation, with some short erect yellowish-white hairs along the posterior margin. Oblique lateral striae wanting.

Pygidium.— Broadly rounded in outline, rather strongly concave, especially posteriorly and near the anterolateral angles, not densely punctate, larger punctures with a rather long erect hair.

Prosternum.— Carina in lateral view distinctly convex, disc rather broad (fig. 429), slightly concave, sides divergent anteriorly, posterior margin emarginate. Lateral sides margined by a narrow elevated rim, at their inner side accompanied by a shallow, ill-delimited carinal stria. The lateral rims are indistinctly continuous with a narrow rim along the anterior margin. Carinal disc not very densely punctate, interspaces with linear microsculpture.

Mesosternum.— Slightly convex in both directions, without distinct interprocoxal impression. Lateral striae sulciform, almost parallel posteriorly, thence wider and curved inward, continued for some distance along the procoxae (fig. 429). Mesosternal disc not very densely punctate, punctures of moderate and slightly unequal size, slightly elongate; interspaces smooth. Meso-metasternal suture fine, angulate backward.

Metasternum.— Median suture canaliform, especially in posterior half. A small rounded median fovea is present behind the meso-metasternal suture; behind this fovea metasternal disc slightly elevated. Lateral striae fine, curved inward anteriorly, almost parallel posteriorly, about reaching the anterior metasternal third (fig. 429). Metasternal disc about equally punctate as mesosternum, punctures slightly elongate, a little smaller posteriorly; a rather broad band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc about equally punctate as posterior part of metasternum. Oblique lateral striae along the metacoxae present, rather long and fine.

Legs.— Pro- and mesotibiae with five large teeth on the outer margin. Hindtibiae with a row of spines and two small apical teeth on the outer margin.

The male differs from the female as follows:

Head.— Face in lateral view almost straight. Rostrum in frontal view broadly truncate anteriorly with slightly raised apical margin, lateral sides slightly impressed. Frons and posterior part of rostrum slightly concave along the median line, frons at either side distinctly concave behind the antennal insertions (fig. 430). Frons and rostrum less densely and less granularly punctate than in the female, interspaces with indistinct linear microsculpture. Transition between frons and vertex slightly arcuate, gradual, at the lateral sides with some punctures that have a very short, barely visible bristle. Vertex punctate as frons.

Pronotum.— Shorter (fig. 428), not flattened off anteriorly, about punctate as in the female.

Propygidium and pygidium.— Much more densely fimbriate, especially along the margins, the yellowish-white hairs rather long.

Prosternum.— The fine lateral rims distinctly continuous with the anterior marginal rim. Carinal striae almost obsolete.

Metasternum.— Median fovea behind the meso-metasternal suture much less distinct.

Variation.— PE-length male paratypes: 2.0 mm. In one paratype the small foveae in the anterior pronotal angles are indistinct.

Etymology.— This species is dedicated to my friend and Nitidulidae-specialist Jan E. de Oude, to whom I am indebted for many nice specimens in my private Histeridae-collection.

Trypeticus dohertyi (Lewis, 1891)
(figs 237-241)

Tryponaeus dohertyi Lewis, 1891b: 188.

Trypeticus dohertyi Lewis, 1892: 351.

Material.— **Burma**: Lectotype, ♀ (BMNH), [white round label with red margin, printed:] "Type"; [white label, hand-written:] "Ruby Mines/Birma/Doherty"; [white label, printed:] "George Lewis Coll./B.M. 1926-369."; [white label, hand-written:] "*Tryponæus./Dohertyi/Lewis/Type ♂*"; [red label, printed and hand-written:] "LECTOTYPUS/*Tryponaeus/dohertyi/Lewis, 1891 ♀* / P. Kanaar des. 2000" (present designation); [white label, hand-written and printed:] "To genus/*Trypeticus/det. P. Kanaar 2000*". 1 ♂, 1 ♀ (BMNH), Birmah, Ruby Mines, Doherty (paralectotypes, present designation); 1 ♀

(ZMHB), Burmah, Doherty (paralectotype, present designation); 1 ♂, 5 ♀♀ (BMNH, MNHN), Ruby Mines, Doherty; 4 ♂♂, (MNHN, CHPK), Hte Birmanie, Mines des Rubis, 1200 m-2300 m, 1880, Doherty. **India:** 1 ♀ (BMNH), Darjeeling, Gopaldhara, 4720-6100 ft., 24.vii.1917, in fresh cut wood, H. Stevens (with doubt). **North Vietnam:** 1 ♀ (ZMAS), Fan-si-pan, 2000 m, 25.v.1963, O. Kabakov. **Laos:** 4 ♀♀ (CHFP, CHPK), Hua Phan prov., Phu Loei N. P., Ban Sakok, 20°10' N. 103°12' E, 23-26.v.2001, D. Hauck. **Nepal:** 1 ♂ (CHSM), Khandbari District, above Sheduwa, 3000 m, 31.iii-1.iv.1982, A. & Z. Smetana.

Male.— Length (without head and abdominal tergites) 4.1 mm, width 1.7 mm, height 1.5 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Rostrum in frontal view broadly rounded-truncate anteriorly, apical margin faintly emarginate and elevated, with two paramedian tubercles (fig. 240). Frons and rostrum almost straight in profile from the apex towards the posterior third of the eyes, thence sloping down towards the rather sharp transverse transition between frons and vertex, bordered at the lateral sides by a distinct ridge, that fades away towards the apical tubercles; outside this ridge the lateral parts of the rostrum slope down towards the lateral rostral margin. Frons concave in transversal direction, rostrum and anterior part of frons with a vague lozenge-shaped median elevation. Frons and rostrum with sparse small punctures, interstices with an indistinct linear microsculpture along the eyes and on the rostrum, elsewhere smooth.

Pronotum.— About 1.2 times longer than wide (fig. 237), in dorsal view with parallel sides, obliquely truncate between anterior and slightly rounded anterolateral pronotal angles, moderately convex in transversal direction, in profile convex over its entire length. Marginal striae fine, curved inward at their posterior end, in front ending in the barely impressed anterior angles. Pronotal disc not very densely covered with moderate, distinct primary punctures of slightly unequal size, slightly irregularly dispersed, mixed with sparse small secondary punctures, punctures along the anterior margin more closely set, here interspaces with dense microsculpture, elsewhere smooth. A fine median stria is present in the posterior half, without a distinct impunctate median band.

Elytra.— Along the suture nearly as long as pronotum (fig. 237) with rounded apices, slightly depressed near scutellum, moderately convex in transversal direction, in profile faintly convex, more distinctly so towards apex. Elytra a little more sparsely punctate than pronotum, with the exception of the anterior margin and a band near the suture. A narrow band along the suture is impunctate. Interspaces smooth. Epi-pleura punctulate with a fine linear microsculpture. Marginal stria indistinct.

Propygidium.— Almost straight in longitudinal direction, with an oblique stria at the sides. Punctuation as on elytra, interstices smooth.

Pygidium.— Parabolic in outline, with a large shallow impression in the anterolateral angles. Punctuation as propygidium, punctures without hairs.

Prosternum.— Carina broad, a little narrower in front than posteriorly (fig. 239), straight in lateral view. Carinal disc margined at the sides and in front by a narrow elevated rim, at the lateral sides accompanied by a narrow carinal stria, ill-delimited at their inner side. Carinal disc with a slight impression behind the anterior rim, and with rather large flaccid punctures, interspaces with distinct linear microsculpture.

Mesosternum.— Between procoxae faintly impressed. Lateral striae rather broad and sulciform, ill-delimited at the inner side, slightly divergent anteriorly, ending close behind the procoxae (fig. 239). Mesosternal disc not very densely punctate with

distinct, slightly elongate punctures. Interspaces with indistinct linear microsculpture in front and at the sides, elsewhere smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Median suture distinct, narrowly sulciform. Lateral striae slightly divergent posteriorly (fig. 239), slightly sinuous posteriorly, nearly reaching the posterior metasternal third. Metasternal disc slightly finer punctate than mesosternum, with sparse additional small punctures between. A broad band along the median suture is impunctate. Interspaces smooth, but for some indistinct microsculpture in the anterior angles.

First visible sternite.— Disc more densely punctate than metasternum, primary punctures a little larger. Interstices at the sides and along the posterior margin with indistinct linear microsculpture. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five large teeth on the outer margin and a small apical tooth. Outer margins of hindtibiae with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Frons and rostrum faintly concave in profile, bordered at the lateral sides by a distinct, elevated ridge (fig. 241), delimited at the medial side by a shallow groove; outside this ridge the lateral parts of the rostrum slope down towards the lateral rostral margin; in front these ridges end on the non-elevated, slightly emarginate tip of the rostrum. Frons and rostrum moderately concave, mainly in transversal direction, with an additional, ill-delimited impression in the median line. Transition between frons and vertex slightly curved forwards, well-delimited behind and rather sharp cariniform, continuous with the ridges at either side of frons and rostrum. Frons and rostrum with rather sparse small punctures, interstices dull by a very fine microsculpture, less distinct in the mid-frontal fossa and on the ridge between frons and vertex. Vertex with small punctures, slightly elongate in transversal direction, interstices with dense microsculpture.

Pronotum.— Nearly 1.7 times longer than wide, obliquely truncate between anterior and slightly rounded anterolateral angles (fig. 238). Superior side in anterior third sloping down towards anterior margin, with a distinct elongate tubercle in front, that is highest at its posterior third, and two paramedian bosses just at the posterior end of the anterior pronotal slope, ill-delimited at their lateral sides, separated by an elongate median depression behind the anterior tubercle. Disc a little finer punctate than in the male; behind the anterior emargination for the head the punctures are elongate, more closely set and rugosely confluent. A fine antescutellar median stria is present, in front ending between the paramedian bosses.

Pygidium.— The primary punctures are larger and distinctly ciliate.

Prosternum.— Carina not margined in front, sides more parallel.

Variation.— PE-length lectotype: 4.0 mm, males 3.8-4.1 mm, females 3.6-4.0 mm. In one male a vestigial median ridge is visible behind the anterior emargination for the head, mainly marked by smooth interstices. In the female from Vietnam the median groove on the rostrum is shallower.

Remarks.— The female specimen from ZHMB has a label, written by Lewis, with the text "*Trypaneus* [sic!] *dohertyi* ♂, Co-type Lewis". Though there are more speci-

mens from Burma in the Lewis-collection that have been obtained from Doherty, they have not been provided by Lewis with a name label. Therefore, they have not been given paralectotype status. The second female paralectotype (BMNH) is smaller and the paramedian bosses behind the anterior median pronotal ridge are much less developed; Lewis has added "minor" to the name label. The specimen from India (Darjeeling) is smaller, has a very distinct and well-delimited median sulcus on frons and rostrum, and the paramedian bosses behind the anterior median ridge are much more distinct, like elongate tubercles. The male specimen from Nepal has distinct anterolateral foveae on the pygidium, some other males have faint pygidial foveae.

Trypeticus fagi (Lewis, 1884)
(figs 227-231)

Tryponaeus fagi Lewis, 1884: 138.

Trypeticus fagi; Lewis, 1905: 7.

Material.— **Japan**: Lectotype, ♀ (BMNH), protarsi wanting, three segments of right middle- and hind-leg loose, glued apart, remounted on original cardboard; cardboard with two specimens of the prey species on the same insect pin; [white label, hand-written:] "Old Beech/Chiuzenji"; [white label, hand-written:] "*T. fagi* Lewis"; [white label, hand-written:] "*Platypus/severini*/Bland"; [white label, printed:] "George Lewis Coll./B.M. 1926-369."; [red label, printed and hand-written:] "LECTOTYPUS/*Tryponaeus/fagi* Lewis 1884/♀/P. Kanaar des. 2000" (present designation); [white label, hand-written and printed:] "To genus/*Trypeticus*/det. P. Kanaar 2000"; 1 ♀ (BMNH), Chiuzenji, vi.1880 (paralectotype, present designation); 2 ♂♂, 1 ♀ (BMNH), Chiuzenji, 19-24.viii.1881 (paralectotypes, present designation); 3 ♂♂, 6 ♀♀ (BMNH, ZMHB, MNHN), Nikko, Lewis; 1 ♀ (BMNH), 16.vi.1881, G. Lewis; 3 ♂♂, 1 ♀ (BMNH, MNHN), Sapporo, G. Lewis; 1 ♂ (BMNH), Oyayama; 2 ♂♂ (BMNH), Nispimura; 1 ♂ (BMNH), Japan, G. Lewis; 1 ♂, 1 ♀ (ZMHB), "*fagi* Lew. Japan. typ."; 1 ♂ (ZMHB), without data; 1 ♂ (BMNH), "*T. fagi* Lew. ♂ teste J. Muir 1912 (dissected specimen); 3 ♂♂ (MNHN), Nippon moyen, env. de Tokio et Alpes de Nikko, 1901, J. Harmand.

Male.— Length (without head and abdominal tergites) 3.0 mm, width 1.3 mm, height 1.2 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Rostrum in frontal view broadly rounded-truncate anteriorly, apical margin with two tubercles (fig. 230). Frons moderately concave, especially posteriorly and at the sides where the concavity is slightly continued onto the rostrum. Medially from the antennal insertions the concavity is delimited by a blunt and indistinct oblique ridge, fading away on the rostrum. Lateral sides of the rostrum convex towards the lateral margin. Frons and rostrum with rather sparse small punctures, interstices with a dense linear microsculpture. Transition between frons and vertex arcuate and rather gradual. Vertex as far as visible punctate and microsculptured as frons.

Pronotum.— About 1.1 times longer than wide (fig. 227), in dorsal view with parallel sides, rounded in front, thence oblique and rather straight towards the anterior pronotal angles, convex in transversal direction, in profile slightly convex over its entire length, more distinctly so towards the anterior emargination. Marginal striae fine, well curved inward posteriorly, in front ending beyond the slightly impressed anterior angles. Pronotal disc not very densely covered with moderate, distinct punctures of unequal size, in the anterior third mixed with very small punctures, along the anterior margin and especially near the anterior angles punctures more closely set and

smaller. Interspaces smooth. A narrow impunctate median band is present, without an antescutellar median stria.

Elytra.— Along the suture about as long as pronotum (fig. 227) with rounded apices, slightly impressed near scutellum and along the anterior margin, convex in transversal direction, in profile faintly convex over nearly their entire length, posteriorly abruptly and strongly convex towards apex. Elytra distinctly finer punctate than pronotum, punctures near suture more closely set, punctures near scutellum and base about as large as on pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with a fine linear microsculpture. Marginal epipleural stria fine in posterior half, obsolete in front.

Propygidium.— Almost straight in longitudinal direction, with an oblique stria and a faint impression at the sides. Punctuation rather dense, with punctures of moderate size, mixed with very small punctures. Interstices smooth.

Pygidium.— Rather triangular with rounded apex, slightly convex in both directions, distinctly impressed near the anterolateral angles. Punctuation as propygidium, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad with parallel sides, slightly divergent in anterior third (fig. 229), in lateral view nearly straight. Carinal disc with a moderate median impression in anterior third. Sides neither margined by an elevated rim, nor by a stria in a few males, but with a shorter or longer fine lateral rim in the posterior part in most males. Carinal disc with shallow primary punctures and very small secondary punctures, interspaces with linear microsculpture.

Mesosternum.— Between procoxae moderately impressed. Lateral striae rather narrow sulciform, parallel, ending behind the procoxae (fig. 229). Mesosternal disc not very densely punctate with distinct, slightly elongate primary punctures, smaller in the anterior depression, and with very small secondary punctures. Interspaces with indistinct linear microsculpture at the sides and in front, elsewhere smooth. Mesometasternal suture fine, slightly angulate backwards.

Metasternum.— Median suture distinct, for the greater part canaliform, not quite reaching the posterior metasternal margin. Lateral striae rather fine, slightly divergent posteriorly (fig. 229), about reaching the metasternal half. Metasternal disc punctate as mesosternum, the primary punctures more elongate. A rather broad band along the median suture is impunctate. Interspaces smooth but for some vague linear microsculpture in the anterolateral angles.

First visible sternite.— Disc finer and denser punctate than metasternum. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Face very faintly concave in lateral view. Frons and vertex separated by a distinct, smooth, slightly bisinuate transverse ridge, well-delimited at its posterior side, less so towards the frons. Frons and rostrum margined at the lateral sides by a distinct, slightly sinuous elevated smooth ridge (fig. 231), continuous with the transverse ridge at their posterior end, connected in front by a slightly elevated rim along the apical margin, that has two indistinct transverse paramedian tubercles. Frons dis-

tinctly concave in longitudinal direction, with an additional moderate longitudinal median impression on rostrum and anterior part of frons. Frons and rostrum with rather scarce small punctures, interstices dull by a very fine microsculpture. Vertex with a transverse impression behind the transverse ridge, distinct punctures and a median fovea; interstices with dense linear microsculpture.

Pronotum.— Amply 1.2 times longer than wide, with nearly parallel sides, obliquely truncate between the anterior and the broadly rounded anterolateral angles (fig. 228). Superior side in anterior fourth a little flattened down towards anterior margin, with a median ridge, that is most distinct at its posterior end and that fades away towards anterior margin. Anterior angles more distinctly impressed than in the male. Disc about equally punctate as in the male; near the anterior angles the punctures become elongate and are more closely set. In an anterior parabolic area (indicated by a dotted line in the figure) the punctures are almost invisible by a dense microsculpture, causing a dull appearance. A fine antescutellar median stria is present.

Pygidium.— Broadly rounded in outline, slightly convex in both directions. Anterolateral impressions obsolete. The primary punctures have a very short yellow hair.

Variation.— PE-length female lectotype 3.2 mm; PE-length males 2.9-3.2 mm, females 3.2-3.4 mm. In most males the prosternal carinal disc has a fine elevated lateral rim in at least the posterior half, and sometimes this rim reaches to the anterior impression. Usually these rims are not accompanied by a distinct stria, but in a few males an indistinct stria is present in the posterior half. Also in one female there are short fine carinal striae near the base. The anterior median impression of the prosternal carinal disc is rather indistinct in most females. In some males the anterolateral pygidial foveae are obsolete. The length of the lateral metasternal striae is a little variable; when they are long their posterior end is slightly curved inward. The anterior pronotal ridge of the females is more distinctly developed in some specimens than in others.

Remarks.— Lewis described the female first, though he thought that it was a male. Therefore, a female has been chosen as lectotype. Lewis' description of this species is extremely short and he did not mention type localities. He did not add "Type" on the name-labels of one or two specimens (usually a male and a female), as he used to do later when describing species. In his discussion after the description he made mention of the prey species. Therefore, the female specimen with the two prey specimens added to the same insect pin has been chosen as lectotype, moreover on account of the mention of the old beech tree, that inspired Lewis to the name "*fagi*". The date was not mentioned on the locality label of the lectotype, so it could not be assessed which specimens have been caught at the same occasion. Only specimens from Chiuzenji with an identification-label in Lewis' handwriting have been given paralectotype status.

Among the *T. fagi* specimens in the Lewis' collection still two other specimens of the prey species are present, besides of the two specimens attached to the insectpin of the lectotype, but they have an identification-label with "*T. furcatus* Blandf."

Trypeticus ferrarii (Gestro, 1875)
(figs 279-284)

Trypanaeus (Trypeticus) ferrarii Gestro, 1875: 996.

Trypeticus ferrarii; Lewis, 1905: 7.

Material.— **Indonesia:** Holotype by inference, ♂ (MCSN), right middle leg missing, [white label with black frame, printed:] “Giava/Tcibodas Ott. 1874/O. Beccari”; [white label with red frame, printed in red:] “TYPUS”; [discoloured white cardboard with black frame, hand-written:] “Ferrarii/Gestro”; [red label, printed and hand-written:] “HOLOTYPUS/*Trypanaeus*(*Trypeticus*)/*ferrarii*/Gestro, 1876”; [white label, printed:] “Museo Civico/di Genova”; 2 ♂♂, 2 ♀♀ (RMNH, CHPK), Java, Mount Gedé, 800 m, 141p, 1924, L.G.E. Kalshoven; 1 ♀ (RMNH), idem, but 1000 m, d197g; 1 ♂, 1 ♀ (RMNH), idem, but 1200 m, d197g; 1 ♂ (MNHN), idem, but 1200 m, 199e; 1 ♂ (RMNH), idem, but xi.1924, 1000 m, d141; 2 ♂♂, 3 ♀♀ (RMNH, CHPK), Java, Soekaboemi, 2.xii.1934, d141a, L.G.E. Kalshoven; 2 ♂♂ (BMNH), Java (with doubt). **Malaysia:** 1 ♀ (MNHN), Perak, Malacca, Doherty; 1 ♂ (BMNH), W. Sarawak, Mt. Matang, 2000 m(?), 23.i.1914, G.E. Bryant; 1 ♂, 1 ♀ (MZLU), Sabah, Sipitang, Mendolong, 4.v.1988, S. Adebratt; 1 ♂ (CHPK), idem, but 11.v.1988; 2 ♂♂ (MZLU), idem, but 13.v.1988; 1 ♂ (MZLU), idem, but 8.iii.1989; 1 ♂ (CHPK), idem, but 31.iii.1989; 1 ♂ (USNM), Sabah, Mt. Kinabalu N. P., Silau-Silau trail, 1588 m, 10.viii.1988, branches of large fallen tree, D.E. Bright; 11 ♂♂, 2 ♀♀ (USNM, CHPK), Sabah, Mt. Kinabalu N. P., Liwagu Trail, 1490 m, 12.viii.1988, large fallen tree, D.E. Bright. **Vietnam:** 2 ♂♂, 1 ♀ (MNHN), Hoa Binh, Tonkin, de Cooman.

Male.— Length (without head and abdominal tergites) 2.0 mm, width 0.8 mm, height 0.8 mm. Cylindrical, shiny, castaneous, antennae and legs ferruginous.

Head.— Face nearly straight in profile, only just behind the barely elevated rostral tip a little deflected. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two small paramedian tubercles (fig. 282). Frons distinctly concave, rostrum with an additional impression. At each side an oblique ill-delimited blunt ridge runs from the eye anteromedially, ending on the rostrum at some distance from the tubercles. Outside this ridge the rostrum slopes down towards the lateral edges. Frons and rostrum with rather sparse small but distinct punctures, interstices with indistinct microsculpture, shiny. Transition between frons and vertex arcuate and rather gradual. Vertex with a small shallow median fovea and small punctures, with indistinct interstitial microsculpture.

Pronotum.— Nearly 1.3 times longer than wide, in dorsal view slightly widening in front (fig. 279), thence broadly rounded and convergent towards the anterior angles that are just visible in dorsal view, strongly convex in transversal direction, in profile nearly straight in posterior half, thence moderately convex towards anterior margin. Marginal striae distinct, slightly turned upwards at their posterior end, at a rather great distance from the edge in the anterior half, ending at a rather great distance from the non-impressed anterior angles. Pronotal disc not very densely covered with distinct punctures of slightly unequal size, rather irregularly dispersed, in the anterior half mixed with some very small punctures; punctures in the anterior angles more closely set. Interspaces smooth. A narrow impunctate median band without antescutellar median stria is present in the posterior half.

Elytra.— Along the suture a little shorter than pronotum (fig. 279), faintly impressed near the scutellum, strongly convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation much finer than on pronotum, punctures rather irregularly dispersed, smaller towards apical margin and especially towards sides, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura finely punctulate with indistinct linear microsculpture; an indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. At either side an oblique lateral stria is present. Punctuation distinct, not very dense, interstices smooth.

Pygidium.— Triangular with rounded apex, slightly convex, near the anterolateral angles with a shallow fovea, punctures larger than on propygidium, along margins finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina in lateral view faintly convex, more distinctly so in front. Carinal disc very faintly divergent anteriorly (nearly parallel), rather broad (fig. 281), margined at the sides and in front by a rather broad elevated rim, at the lateral sides accompanied by a carinal stria, in front passing into a distinct transversal impression behind the anterior rim. Carinal disc slightly impressed near the base, and with rather sparse deep punctures. Interspaces with some indistinct microsculpture, shiny.

Mesosternum.— Crosswise impressed between the procoxae. Lateral striae deep, sulciform, very slightly divergent anteriorly, in front curved inward, ending behind the procoxae (fig. 281), indistinctly continued for some distance along the procoxae by the lateral boundary of the anterior impression. Mesosternal disc rather densely punctate with deep, slightly elongate punctures, mixed with a few very small punctures. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, in front sulciform, slightly divergent posteriorly, very fine posteriorly and nearly reaching the posterior metasternal third (fig. 281). Disc in front about equally punctate as mesosternum, punctures deep, slightly elongate and gradually decreasing in size posteriorly. A broad band along the median suture is impunctate. Interspaces smooth. Median suture finely canaliform in the anterior third, elsewhere finer.

First visible sternite.— Punctures of sternite smaller and more closely set than on metasternum, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with some small teeth on the distal third.

The female differs from the male as follows:

Punctuation finer than in the male.

Head.— Face in profile straight in the posterior two-thirds, thence slightly elevated towards the rostral tip, the apical margin of the latter rounded, in the median line elevated and indistinctly tuberculate. Frons and vertex separated by a transverse keel, well-delimited posteriorly, ill-delimited in front. Frons and rostrum together moderately concave, delimited at the sides by a very faint, slightly arcuate ridge, fading away towards the transverse keel posteriorly, and in front fading away towards the apex, the ridge most distinct near the antennal insertions (fig. 283). Rostrum with an indistinct shallow median sulcus, most distinct anteriorly, posteriorly fading away on the frons. Frons and rostrum with rather scarce small punctures, interstices with dense linear microsculpture, giving a rather dull appearance. Vertex with a transverse depression behind the transverse keel, a faint median fovea and more distinctly punctate than frons. Interstices with dense microsculpture.

Pronotum.— Nearly 1.5 times longer than wide (fig. 280), with an impunctate median band in the posterior half and a short antescutellar median stria. A very faint anterior median ridge is present in some specimens.

Pygidium.— Parabolic in outline, convex with small anterolateral foveae. Larger punctures with a very short yellowish-white hair. Interstices with microsculpture.

Prosternum.— Carina in profile almost straight. Disc not margined or impressed along the anterior margin, carinal striae abbreviated in front, a little before the middle.

Metasternum.— A distinct triangular median fovea is present, just behind the meso-metasternal suture, widest in front.

Variation.— PE-length of holotype 2.3 mm, males 1.9-2.4 mm, females 2.2-2.5 mm. The males from Java have a slightly more elongate pronotum than the other specimens. The colour varies from ferruginous to piceous black. The intensity of the punctation is a little variable; the punctation of the metasternum is more distinct in the specimens from Java and Vietnam than in the specimens from Borneo. The small pygidial foveae are obsolete in most males. In some specimens there are faint rudiments of lateral striae on the first abdominal sternite. The anterior impression of the prosternal carinal disc is more distinct in the males from Java than in the males outside Java. The length of the lateral metasternal striae is a little variable. In the females from Borneo and Vietnam the rostral apex protrudes more strongly over the labrum and is more elongately rounded when seen from below. The shallow median impression on the rostrum is rather obsolete in some females from Java. In the female from Vietnam this faint median impression is flanked at the sides by very faint blunt paramedian ridges, slightly divergent posteriorly and fading away on the frons (fig. 284). In one female from Mt. Kinabalu the anterior metasternal fovea is only represented by a slight widening of the median suture. Also in some males the anterior part of the metasternal median suture widens considerably, in others this suture is very fine.

Remarks.— The female was hitherto unknown. The two males that have been attributed with doubt to this species have a slightly broader body-form and the lateral mesosternal striae are a little convergent anteriorly.

Trypeticus foveicollis spec. nov.
(figs 118-120)

Material.— **Malaysia:** Holotype, ♀ (MZLU), left ala protruded, genitalia a little protruded, four tarsal segments of left metatarsus missing, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, Mendolong, T1B/W4/10.iv.1988/leg. S. Adebratt”; [pale orange label, printed:] “14/87”; [red label, printed:] “HOLOTYPUS/*Trypeticus foveicollis* sp. n./P. Kanaar des. 2000”; 1 ♀ (CHPK), same locality and collector, but T5/R and 8.iii.1989 (paratype); **Borneo:** 1 ♀ (MNHN), Wallace (paratype).

Female.— Length (without head and abdominal tergites) 2.9 mm, width 1.3 mm, height 1.1 mm. Rather thick-set cylindrical, shiny, piceous black, antennae, legs and abdominal sternites rufous.

Head.— Face in profile strongly concave. Rostral apex very bluntly acuminate, the tip indistinctly bituberculate and directed upwards (fig. 120), in frontal view little protruding beyond the anterior margin along the labrum, underside of the tip indistinctly impressed. Frons and vertex separated by a smooth, sharp, slightly bisinuous transverse ridge, well-delimited at its posterior side. Starting from this keel two fainter paramedian longitudinal ridges run anteriorly, slightly convergent and less distinct on the rostrum and ending near the rostral tip. They enclose a deep longitudinal median fovea, shal-

lower in front. Other ridges are present along the eyes, continuous with the transversal keel at their posterior end, obliquely passing along the antennal insertions and rapidly fading away on the sides of the rostrum. Between these lateral ridges and the paramedian ridges the frons is deeply concave, these lateral concavities narrowing in front and gradually shallower on the rostrum. Frons and rostrum with scarce small punctures, interstices with dense microsculpture, giving a rather dull appearance, with the exception of the central part of the median fovea that is smooth. Vertex with a distinct transversal impression behind the transverse ridge, an additional median transverse impression at some distance from the transverse ridge and a small median fovea. Punctuation more distinct than on frons, interstices with linear microsculpture.

Pronotum.— About 1.2 times longer than wide (fig. 118), in dorsal view slightly widening in front, thence broadly rounded towards anterior angles. Pronotum moderately convex in transversal direction, in profile almost straight in the posterior two-fifths, thence sloping down anteriorly, more abruptly so behind the anterior emargination. Marginal striae distinct, turned upwards at their posterior end, in front reaching the barely impressed anterior angles. Behind the anterior emargination for the head an area (indicated by a dotted line in the figure) with dense interstitial microsculpture is present, causing a dull appearance; this area corresponds more or less with the anterior slope of the pronotum. In the posterior part of the dull area a very indistinct median ridge is visible. Postero-laterally from the dull area large and rather deep but ill-delimited foveae are present. Another pair of distinct but ill-delimited foveae is present at about the posterior pronotal third, just behind the area where the forward sloping of the pronotum begins, each fovea situated about halfway the median line and the lateral margin. Pronotal disc densely punctate with rather coarse punctures of unequal size, mixed with very small punctures in the anterior half; punctures near the anterior angles more closely set and smaller, punctures in the dull area ill-visible. Interstices outside the dull area smooth. A narrow, well-delimited impunctate median band is present, reaching from the base to the posterior end of the anterior median ridge. A rather short antescutellar median stria is present.

Elytra.— Along the suture distinctly shorter than pronotum, with rather rounded sides (fig. 118), distinctly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile slightly convex, more progressively so towards apex. Elytral punctuation slightly sparser than on pronotum, some very small punctures are present between the coarse punctures; punctures near suture smaller and slightly more closely set, punctures towards apex also smaller. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria distinct in posterior half, obsolete in anterior half.

Propygidium.— Faintly impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present. Punctuation dense, punctures coarse, mixed with very small punctures. Interstices smooth.

Pygidium.— Parabolic in outline, faintly convex, with shallow foveae near the tip and near the anterolateral angles. Punctuation as on propygidium, punctures along the margins finer, larger punctures near the tip with a very short, barely visible bristle. Interstices smooth.

Prosternum.— Carina in lateral view very faintly convex. Carinal disc broad with parallel sides (fig. 119), margined at the sides by a narrow carinal stria, slightly abbrevi-

viated in front, and with rather sparse double punctation, the primary punctures rather small. Interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae rather broad, well-delimited, sulciform, slightly bent inwards in front (fig. 119). Mesosternal disc densely punctate with coarse elongate punctures of unequal size, mixed with very small punctures, interspaces smooth. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Lateral striae distinct, curved inwards in front, divergent posteriorly, about reaching the anterior metasternal two-fifths (fig. 119). Disc less coarsely and less densely punctate than mesosternum, punctures smaller posteriorly and towards the sides. A narrow band along the finely canaliform median suture is impunctate but for some very small punctures. Interspaces smooth. A small but deep triangular fovea is present where the median stria meets the meso-metasternal stria.

First visible sternite.— Punctation fine, double, rather dense, primary punctures of unequal size and rather elongate, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with long hairs and with some small teeth on the distal third.

The male is unknown.

Variation.— PE-length other females: 2.8 and 3.0 mm. In the other specimen from Sipitang the pygidial foveae are shallower and rather indistinct, the anterior metasternal fovea on the contrary larger. In the specimen caught by Wallace ("Borneo") the posterior pronotal foveae are much shallower than in the specimens from Sipitang. In the holotype the right protibia has a proximal additional sixth tooth.

Remarks.— It could be that this species is the female of *T. convexicollis* spec. nov. Both have some characters in common. However, the punctation in *T. foveicollis* is much coarser than in *T. convexicollis* spec. nov., which is unusual within the genus, the elytra are shorter and more rounded at the sides, and the mesosternum has a distinctly different shape. Especially the differences of the elytra and the mesosterni inhibit in my opinion a matching of these species.

Etymology.— The name refers to the distinct pronotal foveae.

Trypeticus frontalis Schmidt, 1897
(figs 64-66)

Trypeticus frontalis Schmidt, 1897: 299-300.

Material.— **Indonesia**: Holotype by inference, ♂ (MCSN), some segments of right hindtarsus missing, [white label with black frame, printed:] "SUMATRA/SI-RAMBÉ/xii.90-iii.91/E. MODIGLIANI"; [white label with red frame, printed in red:] "TYPUS"; [white label, hand-written:] "*Trypeticus*/type:/*frontalis*"; [white label, hand-written:] "*Trypeticus/frontalis*/type Schm."; [discoloured white cardboard with black frame, hand-written:] "*frontalis*/Schm."; [red label, printed and hand-written:] "HOLO-TYPUS/*Trypeticus/frontalis*/J. Schmidt, 1897"; [discoloured white label, hand-written:] "*Trypeticus/frontalis*/Schm."; [white label, printed:] "Museo Civico/di Genova".

Male.— Length (without head and abdominal tergites) 3.4 mm, width 1.4 mm, height 1.3 mm. Cylindrical, shiny, pronotum piceous black, elsewhere dark castaneous brown, legs and antennae rufous.

Head.— Face in profile sinuous. Rostral tip in frontal view broadly rounded-truncate (fig. 66). Transition between frons and vertex rather gradual, slightly arcuate. From this transition a faint median ridge runs anteriorly, ending in front in an ill-delimited, little elevated, slightly elongate tubercle. At either side of this ridge and tubercle the frons is slightly impressed. In front of the tubercle the rostrum has a moderate median impression with faint anterolateral extensions at either side of the slightly raised median part of the rostrum. Medially from the antennal insertions the frontal margin is rather raised. Frons and rostrum with fine punctation. Interstices with dense microsculpture, with the exception of the median tubercle and ridge, and of the transition between frons and vertex, where the punctures are much larger. Vertex with a very small transverse median fovea and a fine punctation, interstices smooth.

Pronotum.— Amply 1.2 times longer than wide (fig. 64), in dorsal view sides parallel, in front rounded inwards and thence oblique and straight towards anterior angles. Pronotum convex in transversal direction, in profile straight in the posterior half, thence progressively convex towards anterior margin. Marginal striae fine, turned upwards at their posterior end, in front ending in the barely impressed anterior angles. Pronotal disc not densely punctate with moderate punctures of unequal size, punctures along the anterior emargination more closely set. Interstices smooth. A distinct impunctate median band without median stria is present in the anterior two-fifths.

Elytra.— Along the suture slightly shorter than pronotum (fig. 64), impressed near scutellum, convex in transversal direction, in profile straight in anterior third, thence sloping down and progressively convex towards apex. Elytral punctation slightly sparser than that of pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture. Marginal epipleural stria fine, obsolete in front.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present, rather curved. Punctation as on elytra. Interstices smooth.

Pygidium.— Broadly rounded in outline, disc very faintly convex, anterolateral angles with large and deep foveae. Punctation as on propygidium, punctures without hairs, along the margin smaller.

Prosternum.— Carina very faintly sinuous in lateral view. Carinal disc narrowing anteriorly (fig. 65), margined at the sides and in front by a narrow elevated rim, at the inner side not distinctly accompanied by a carinal stria. Disc deeply impressed in front, with rather sparse punctation. Interspaces with linear microsculpture. In front the fine lateral prosternal striae are visible in ventral view (not shown in the figure).

Mesosternum.— Lateral striae narrow, shallow sulciform, ill-delimited at their inner side, divergent anteriorly, in front bent inwards and ending near the procoxae (fig. 65), their outer margins continuous with and connected by the boundary of a sharply delimited distinct anterior mesosternal impression. Mesosternal disc with a rather sparse punctation, the punctures faintly elongate. Meso-metasternal suture fine, angulate backwards. Interspaces with fine linear microsculpture at the sides.

Metasternum.— Lateral striae fine, short, curved inwards in front, about parallel posteriorly (fig. 65). Disc about punctate as mesosternum. Median suture finely canaliform. A band along the median suture is impunctate. Interspaces smooth but for some indistinct linear microsculpture in the anterolateral angles.

First visible sternite.— More closely punctate than metasternum, punctuation double, interstices smooth. Oblique lateral striae wanting.

Legs.— Protibiae with four, mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female is unknown.

Trypeticus gestroi (Marseul, 1879)
(figs 242-246)

Trypanaeus gestroi Marseul, 1879: 255-256.

Trypeticus gestroi; Lewis, 1905: 7.

Material.— **Indonesia**: Lectotype, ♂ (MCSN), [white label with black frame, printed and hand-written:] “N. Guinea/Dorei 9bre/Beccari 1875”; [white label with red frame, printed in red:] “TYPUS”; [red label, printed and hand-written:] “TYPUS/*Trypanaeus*/(*Trypeticus*)/*gestroi*/ Marseul, 1879”; [discoloured white cardboard with black frame, hand-written:] “*Gestroi*/Mars.”; [white label, printed:] “Museo Civico/di Genova”; {red label, printed and hand-written:] “LECTOTYPUS/*Trypanaeus*/(*Trypeticus*)/*gestroi*/Marseul, 1879/P. Kanaar des. 1999” (present designation); 2 ♂♂ (MCSN, ZMHB), N. Guinea, Ighibirei, vii-viii.1890, Loria; 1 ♂, 1 ♀ (SMNS), Irian Jaya, Manokwari, Ransiki, Mayuby, 300 m, 26-30.ix.1990, A. Riedel.

Male.— Length (without head and abdominal tergites) 2.6 mm, width 1.2 mm, height 1.1 mm. Thick-set cylindrical, shiny, colour of pronotum piceous brown, elsewhere more reddish brown, antennae and legs rufous.

Head.— Face in lateral view slightly sinuous with moderately elevated rostral tip. Rostrum in frontal view with rounded-truncate apex with two small tubercles (fig. 245), almost flat in the middle, convex towards the sides. Frons strongly concave, mainly in transversal direction; at either side a faint oblique ridge is present behind the antennal insertions, fading away anteriorly. Frons and rostrum with sparse small punctures, mixed with very small punctures, and an indistinct linear interstitial microsculpture. Transition between frons and vertex slightly arcuate and gradual. Vertex with small punctures, interstices with linear microsculpture.

Pronotum.— Nearly 1.3 times longer than wide (fig. 242), in dorsal view with parallel sides, rounded in front towards anterior pronotal angles, convex in transversal direction, in profile straight in the posterior two-thirds, thence strongly convex towards anterior margin. Marginal striae distinct, rather distant from the margin in the anterior half, in front ending in the anterior angles, that are not deeply, but rather extensively impressed. Pronotal disc in posterior half with coarse punctures of unequal size, punctures a little smaller anteriorly, along the anterior margin still smaller and mixed with very small punctures. Interspaces smooth but for some indistinct linear microsculpture in the anterior foveae. No impunctate median band.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 242) with slightly rounded apices, convex in transversal direction, in profile slightly convex in the anterior two-thirds, thence progressively convex towards apex. Elytra distinctly less coarsely punctate than pronotum, punctures of unequal size, with some very small punctures between. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture and some small punctures, and with a marginal stria, obsolete in front.

Propygidium.— Faintly impressed behind the anterior margin, especially at the sides. Oblique lateral striae present. Punctuation distinct, rather dense, larger punctures mixed with some small punctures; interstices smooth.

Pygidium.— Broadly parabolic in outline, disc punctate as propygidium, punctures without hairs. Interstices smooth. Along the apex there is a faint marginal stria.

Prosternum.— Slightly convex in lateral view. Carinal disc broad with parallel sides (fig. 244), margined by a distinct carinal stria and a narrow elevated rim at the sides, not margined along the anterior margin. Carinal disc with rather fine double punctuation, interspaces smooth but for some vague linear microsculpture along anterior border.

Mesosternum.— Slightly, mainly crosswise impressed in anterior third. Lateral striae broad and deep sulciform, slightly convergent anteriorly, curved inward in front, ending posteromedially from the procoxae (fig. 244). Mesosternal disc rather convex, not densely punctate with distinct, slightly elongate punctures, mixed with small punctures. Interspaces smooth. Meso-metasternal suture fine, a little depressed, strongly and a little sinuously angulate backward.

Metasternum.— Median suture distinct, canaliform. Lateral striae distinct, strongly divergent posteriorly, nearly reaching the metasternal half, rather sulciform in front (fig. 244). A faint impression connects the lateral mesosternal- and metasternal striae. Metasternal disc with distinct elongate punctures of unequal size, mixed with small punctures. A very narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc about equally punctate as metasternum, with a faint longitudinal median impression. Oblique lateral striae present, rather fine.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with a few spines and some small teeth on the distal part.

The female differs from the male as follows:

Head.— Face more distinctly sinuous in lateral view. Apex of rostrum moderately elevated, in frontal view bluntly pointed, tip very finely bituberculate (fig. 246). Rostrum and anterior part of frons with distinct oblique, slightly sinuous carinae, running from the eyes to the rostral apex. At their medial side these carinae are delimited by broad and distinct sulci. At the lateral side of these carinae the rostrum slopes steeply down to its margin. Frons distinctly concave. Rostrum with an additional longitudinal median impression, that becomes shallower posteriorly and merges with the frontal concavity. Punctuation a little coarser than in the male, with linear interstitial microsculpture. Transition between frons and vertex slightly arcuate, rather gradual.

Pronotum.— About 1.4 times longer than wide (fig. 243). Superior side in anterior one-fifth abruptly flattened down toward anterior margin, with an ill-delimited area (indicated by a dotted line in the figure) with very fine microsculpture, causing a dull appearance. In this area a faint median ridge is present. Foveae in the anterior angles slightly deeper and larger than in the male, outline of pronotum here more rectangular. Additional vague impressions are present a little behind the anterior foveae, extending to the marginal striae, punctures on the disc a little less coarse than in the male, in the flattened anterior area small. A long distinct antescutellar median stria is present, without a distinct impunctate band.

Pygidium.— More broadly rounded in outline, faintly impressed anterolaterally, with a fine marginal stria along the apex. Larger punctures in the apical half with a short pale yellow hair.

Prosternum.— Carina almost straight in lateral view, disc not margined along the anterior margin.

Variation.— PE-length lectotype 2.8 mm, other males 2.6–2.7 mm, female 3.0 mm. In the specimens from Manokwari the lateral striae on the first abdominal sternite are indistinct. Their colour is piceous black. In the male from Manokwari the foveae in the anterior pronotal angles are deeper.

Remarks.— The length given by Marseul (3.5 mm) is the total length. He did not mention the number of specimens used for his description, though it was probably only one specimen. Therefore, the type specimen has been given lectotype status.

Trypeticus gibberosus spec. nov.
(figs 421–426)

Material.— **Malaysia:** Holotype, ♂ (MZLU), right metatarsus missing, [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang/Mendolong, T6/R/6.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/gibberosus* sp. n./P. Kanaar des. 2000”; 1 ♂ (CHPK), idem, but T1B/W4 and 25.iv.1988 (paratype); 1 ♂ (MZLU), idem, but 3.v.1988 (paratype); 1 ♀ (MZLU), idem, but T4/R and 11.v.1988 (paratype); 1 ♂ (MZLU), idem, but T5/R and 13.v.1988 (paratype).

Male.— Length (without head and abdominal tergites) 1.8 mm, width 0.8 mm, height 0.8 mm. Rather thick-set cylindrical, shiny; pronotum and elytra (except margins) and vertex piceous brown, body elsewhere ferruginous.

Head.— Vertex and face together slightly convex in lateral view, more distinctly so posteriorly. Rostrum rather short (fig. 425), in frontal view broadly rounded-truncate anteriorly. At either side a short and fine oblique, slightly curved stria runs from the eye anteromedially. Rostrum and frons very shiny, finely punctate, together convex in both longitudinal and lateral directions. Transition between frons and vertex completely gradual.

Pronotum.— In dorsal view about 1.1 times longer than wide (fig. 421) with nearly parallel sides, in front very broadly rounded towards the non-impressed anterior angles, strongly convex in transversal direction, in profile concave in the posterior third, strongly elevated convex before the middle (fig. 423), sloping down towards anterior margin. Marginal striae distinct, curved inward over the rounded posterolateral angles, in front a little leaving the pronotal margin and ending at about the anterior pronotal fourth. Disc finely and rather densely punctate, very finely so on the top of the anterior hump, punctures along the anterior emargination larger. No impunctate median band or antescutellar stria. Interspaces smooth.

Elytra.— Along the suture about as long as pronotum (fig. 421) with rounded apices, strongly convex in transversal direction, convex in lateral view, progressively so towards apex. Elytral punctation in anterior half about equal to that of posterior part of pronotum, in posterior half progressively larger, more elongate and a little rugosely confluent along the elytral apex. Interspaces smooth in the greater part, only along the elytral apex with linear microsculpture. A narrow band along the suture is impunctate. Epipleura almost impunctate, with a distinct linear microsculp-

ture. A fine marginal epipleural stria is present in the posterior third.

Pygidium.— Densely punctate, the punctures with a distinct, rather long yellowish hair. No distinct oblique lateral striae, but they may be obscured by the ciliation.

Pygidium.— Disc densely punctate, the punctures with a rather long yellowish hair. Pygidial apex broadly rounded, with an apical hooklet (fig. 421); this hooklet has a same shape as in *T. hamatipygus* spec. nov. (cf. fig. 417). A faint median ridge is present in the anterior half of the pygidial disc that is slightly impressed towards the sides and at either side of the hooklet.

Prosternum.— Carina slightly convex in lateral view. Carinal disc rather broad (fig. 424), sides divergent anteriorly, margined by a narrow elevated rim at the sides and in front, at the inner side accompanied by indistinct narrow carinal striae. Carinal disc with a distinct crosswise impression before the posterior margin, irregularly and rather densely punctate, punctures deep, slightly elongate; interspaces smooth.

Mesosternum.— Slightly impressed between and along the procoxae. Lateral striae sulciform, narrow, slightly bent outward anteriorly and posteriorly (fig. 424). Mesosternal disc rather densely punctate with large elongate, slightly ocellate punctures, interspaces smooth. Meso-metasternal suture fine, angulate backward.

Metasternum.— Median suture distinctly canaliform, with a longitudinal fovea before the metasternal middle; metasternal disc depressed around this fovea, as well as just before the hindmargin. Lateral striae fine, about parallel, ending just before the metasternal middle (fig. 424). Metasternal disc about punctate as mesosternum; a narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Short oblique lateral striae present, punctures on disc a little smaller than on metasternum.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of the hindtibiae with a row of spines and with a few minute teeth on the apical third.

The female differs from the male as follows:

Head.— Frons and rostrum moderately concave. A short and fine oblique stria runs from each eye anteromedially (fig. 426). Rostrum in frontal view broadly rounded anteriorly, with a fine marginal stria delimiting a narrow, slightly elevated border. Frons densely punctate, the punctures with a rather long erected yellowish-white hair, gradually shorter anteriorly; rostrum before the level of the antennal insertions with small punctures without hairs. Interspaces with indistinct linear microsculpture. Transition between frons and vertex arcuate, rather gradual. Vertex behind this transition slightly impressed, punctate and ciliate as frons.

Pronotum.— Anterior hump less distinctly developed but still visible in lateral view; punctation as in male (fig. 422).

Pygidium.— Broadly rounded in outline, slightly concave along the lateral and apical margins, densely punctate, the punctures ciliate; apex without hooklet.

Pro-, meso- and metasternum.— Slightly finer punctate. Prosternal carina margined along the anterior side as in the male. Metasternal fovea and depressions less distinct.

Variation.— PE-length other males: 1.7-2.0 mm, female: 1.8 mm. The depth and extent of the metasternal fovea is a little variable. In one male the punctation of the underside is a little coarser.

Etymology.— The name refers to the hunchbacked anterior part of the pronotum, especially in the male.

Trypeticus gilolous (Marseul, 1864)
(figs 54-58)

Trypanaeus (*Trypeticus*) *gilolous* Marseul, 1864: 282.

Trypanaeus gilolous; Gemminger & Harold, 1868: 793.

Trypeticus gilolous; Lewis, 1905: 7.

Trypanaeus (*Trypeticus*) *terebellus* Marseul, 1864: 282-283. **New synonym.**

Material.— **Indonesia:** Lectotype, ♂ (MNHN), left protarsus missing, [round yellowish label, hand-written, partly illegible:] “*Trypanaeus/gilolous*/Morty I./Wall 64.”; [round white label, hand-written:] “Morty”; [white label, printed:] “MUSEUM PARIS/COLL. DE MARSEUL/2842-90”; [white label, printed in red:] “TYPE”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypanaeus*/(*Trypeticus*)/*gilolous*/Marseul 1864 ♂/P. Kanaar des. 1999” (present designation); 1 ♂ (MNHN), Dorey, Wall. 64 (paralectotype, present designation); 1 ♂ (MNHN), N. Guinea, Wall. 64 (paralectotype, present designation); 2 ♂♂ (MNHN), Mandehouri, Deyrolle (paralectotypes, present designation); 1 ♀ (MNHN), lectotype of *T. terebellus*, right antennal club and several tarsal segments missing, [round yellowish label, hand-written, partly illegible:] “*Trypana/terebellus*/ I. Arou./ Wall 64” [round white label, hand-written:] “Aru”; [white label, printed:] “MUSEUM PARIS/ COLL. DE MARSEUL/ 2842-90”; [white label, printed in red:] “TYPE”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypanaeus*/(*Trypeticus*)/*terebellus* ♀/Marseul 1864/P. Kanaar des. 1999” (present designation); [white label, hand-written and printed:] “Synonymous/with/*Trypeticus/gilolous* (Mars.)/det. P. Kanaar 2000” (present addition); 1 ♂ (RMNH), Ceram, Wabai, Moens; 1 ♂ (BMNH), New Guinea, Wallace; 1 ♂ (MNHN), Ternate, L. Laglaize; 5 ♂♂, 5 ♀♀ (MCSN, ZMHB, MNHN, BMNH), Nuova Guinea, Andai, viii.1872, L.M. d’Albertis; 3 ♀♀ (BMNH, ZMHB), Gilolo, Wallace; 3 ♂♂ (BMNH, CHTY) Gilolo [abbreviation of Gilolo?], Wallace; 1 ♀ (MNHN), Andai, Gestro 1894; 1 ♂ (SMNS), Irian Jaya, Jayapura, Sentani, Cyclop Mt., 380 m, 19-21.ix.1990, A. Riedel; 1 ♀ (BMNH), “Borneo”; **Papua New Guinea:** 1 ♂ (ZMHB), Erima, Astrolabe Bay, 1897, Biró; 1 ♂, 1 ♀ (BMNH), Stony L. A., 3.ix.1976, ex *Cerebera*, H. Roberts; 1 ♂, 1 ♀ (FMNH), Stony Logging area nr. Bulolo, ex Forest Res. Bulolo, 2300’, in burrows of *Ambrosia* beetles in barked Toona, 4.viii.1976, H. Roberts; 2 ♀♀ (FMNH, CHPK), Stony Logging area nr. Bulolo, ex Forest Res. stat. Bulolo, 2300’, in burrows of *Ambrosia* beetles on unknown hosts, 3.ix.1976, H. Roberts; 1 ♂ (CHND), NE, Mt Missim, 1050 m, 28.xii.1978; 1 ♀ (MHNG), Merebo, Umg. Gurakor, xii.1979, W.G. Ullrich. **Australia:** 1 ♀ (QMBA), N. Queensland, West Claudie R., Iron Range, 3-10.xii.1985, *Pyrethrum* knockdown, RF, G. Monteith & D. Cook. **Malaysia:** 2 ♀♀ (BMNH), “Malay Peninsula”.

Male.— Length (without head and abdominal tergites) 3.0 mm, width 1.5 mm, height 1.3 mm. Thick-set cylindrical, shiny, piceous black, legs rufous.

Head.— Face slightly sinuous in profile, with distinctly elevated rostral apical margin. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two paramedian tubercles (fig. 57), before these tubercles steeply sloping down, slightly concave in longitudinal direction. At either side a rather blunt oblique ridge is present medially from the antennal insertion, fading away anteriorly, accompanied by a shallow sulcus at its inner side. Frons moderately concave, mainly in transversal direction. Frons and rostrum with fine double punctation, the secondary punctures ill visible by linear interstitial microsculpture. Transition between frons and vertex arcuate, gradual, interstices here rather smooth. Vertex with fine punctation and interstitial microsculpture.

Pronotum.— Amply 1.1 times longer than wide, in dorsal view with about parallel

sides (fig. 54), in front rounded towards the slightly impressed anterior angles, strongly convex in transversal direction, in profile faintly convex in posterior half, thence stronger convex and sloping down towards anterior margin. Marginal striae distinct but not very deep, slightly curved inwards behind, rather distant from the edge in the anterior pronotal half, in front ending a little beyond the anterior angles. Pronotal disc not very densely covered with moderate punctures of unequal size in posterior half, with a frankly double punctation in the anterior half, punctures along the anterior margin more closely set. Interspaces smooth. A narrow, ill-delimited impunctate median band is present in the posterior half. No antescutellar median stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 54) with rounded apices, distinctly impressed near scutellum and for some distance along anterior margin, strongly convex in transversal direction, in profile convex over its entire length, progressively so towards apex. Elytra about equally punctate as posterior part of pronotum, punctures near scutellum more closely set. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, interstices with linear microsculpture. Marginal stria present in posterior half only, indistinct.

Propygidium.— Slightly concave in lateral view, with an oblique stria at the sides. Punctation distinct, double, interstices smooth.

Pygidium.— Convex with anterolateral foveae, apex broadly rounded. Punctation as propygidium, at apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad and rather short, sides a little convergent anteriorly (fig. 56), faintly convex in lateral view, margined at the sides and in front by an elevated rim, at the sides accompanied by a broad sulciform carinal stria. Carinal disc with a transverse impression along the anterior marginal rim, and a rather sparse double punctation. Primary punctures distinct, of slightly unequal size, interspaces with indistinct linear microsculpture.

Mesosternum.— Faintly impressed between the procoxae. Lateral striae distinct, broadly sulciform, ill-delimited at the medial side, curved inward in front and ending behind the procoxae (fig. 56). Mesosternal disc with sparse double punctation, interspaces with indistinct linear microsculpture. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, rather short, slightly divergent posteriorly (fig. 56). Metasternal disc with distinct double punctation, the primary punctures a little elongate. A narrow band along the distinctly canaliform median suture is impunctate. Interspaces near the lateral striae with indistinct microsculpture, elsewhere smooth.

First visible sternite.— Disc slightly impressed behind the anterior margin, with double punctation. Interstices with indistinct linear microsculpture. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal fourth.

The female differs from the male as follows:

Head.— Face in lateral view angulately concave before the eyes, the rostrum strongly and angulately raised, but not overhanging the anterior margin along the labrum. This rostral elevation with two very small tubercles, strongly sloping down towards the sides and in front of the tubercles. The anterior face of this median rostral

elevation is just visible in frontal view and has a distinct semicircular concavity (fig. 58). Along the median line the rostrum has a faint elongate impression, delimited at either side by a very fine, slightly curved ridge that fades away on the frons. Bordering the eyes the frons has a lateral ridge, that is continued as an oblique ridge onto the rostrum, fading away near the paramedian ridge (fig. 58). Frons distinctly concave, with extensions of the concavity between the paramedian and oblique lateral ridges. Transition between frons and vertex rather transverse and rather gradual, at the sides indistinctly continuous with the lateral ridges bordering the eyes. Frons and rostrum with fine punctation, ill visible by a dense interstitial microsculpture, interstices smooth on the transition between frons and vertex. Vertex punctate, interstices dull by dense microsculpture.

Pronotum.— A little longer and more rectangular in outline than in the male, slightly dilated before the middle (fig. 55). Behind the anterior margin a rather short median ridge is present, highest at its posterior end. Behind this ridge the pronotum has a distinct longitudinal median impression, near its end accompanied by two paramedian tubercles. Just medially from the distinctly impressed anterior angles an ill-delimited longitudinal boss is present, fading away posteriorly. Between these bosses and the median ridge the pronotum is slightly depressed. Disc about equally punctate as in the male. Behind the anterior margin the punctures are more closely set and slightly elongate. Between the lateral bosses and the median ridge the interstices are dull by dense microsculpture. The impunctate median band has a long median stria, reaching from the scutellum to the paramedian tubercles.

Pygidium.— More triangular in outline with broadly rounded tip, convex with anterolateral foveae and with double punctation, punctures without hairs.

Prosternum.— Without elevated rim or anterior impression, the carinal striae basal, abbreviated in front.

Variation.— PE-length lectotype: 3.4 mm, males: 3.0-3.6 mm, females: 3.2-3.7 mm. As usual the pygidial foveae are rather variable, not seldom they are obsolete. The lateral metasternal striae are sometimes finer and/or shorter. In a few males an indication of a very faint anterior median pronotal ridge is visible in tangential light, just behind the anterior emargination for the head. In large males the pronotal carina is broader than that of the depicted specimen, the sides not slightly convergent anteriorly. The anterior pronotal ridge and the pronotal tubercles are sometimes less developed in certain females. Also the very fine tubercles and the fine paramedian ridges on the female rostrum are sometimes less distinct. The length of the carinal striae on the female prosternal disc is rather variable.

Remarks.— In the discussion after the description of *T. terebellus* Marseul already considered the possibility that this species was merely the other sex (in his view the ♂) of *T. gilolous* that he had described just before, but he rejected this idea starting from the wrong assumption that the prosternum was not subject to sexual variation and on account of the entirely different pronotum. The citations from "Borneo" and "Malay Peninsula", without further details, should be considered with distrust; they need confirmation by better documented material.

Trypeticus gomyi spec. nov.
(figs 174-178)

Material.— **Malaysia:** Holotype ♀ (MZLU), protarsi missing, genitalia and right ala protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T4/R/31.iii.1989/ leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/gomyi* sp. n./P. Kanaar des. 2000”; 1 ♂ (MZLU), same locality, date and collector as holotype (paratype).

Female.— Length (without head and abdominal tergites) 2.3 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, reddish brown, sutures darker, antennae and legs ferrugineous.

Head.— Face sinuous in profile, with turned up rostral tip, the latter in frontal view pointed, minutely bituberculate, distinctly protruding over the anterior rostral margin along the labrum and triangularly concave at the underside (fig. 178). Frons and posterior part of rostrum distinctly concave. Sides of the rostrum along a straight line between antennal insertion and rostral tip rather abruptly sloping down towards the lateral margin, thus causing a triangular aspect of the superior side of the rostrum. Frons and rostrum with small punctures, interstices with linear microsculpture, shiny. Transition between frons and vertex arcuate and gradual. Vertex more densely and distinctly punctate than frons, interstices with linear microsculpture.

Pronotum.— About 1.2 times longer than wide, in dorsal view with slightly sinuous sides (fig. 174), in front broadly rounded towards the anterior angles, moderately convex in transversal direction, in profile nearly straight and a little sloping down anteriorly in the posterior half, thence slightly convex towards anterior margin. Marginal striae distinct, turned upwards at their posterior end, rather distant from the margin in the anterior half, ending at a rather great distance from the non-impressed anterior angles. Pronotal disc with moderate punctures of unequal size, with some very small punctures between, punctures slightly more closely set along the base, along the anterior margin also a little more closely set and smaller. Interstices smooth. A short indistinct antescutellar median stria is present, in the centre of the disc an ill-delimited elongate area is devoid of punctures.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 174), slightly impressed near scutellum, moderately convex in transversal direction, in profile almost straight in anterior half, thence increasingly convex towards apex. Elytral punctuation slightly finer and less closely set than that of pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture and a distinct marginal epipleural stria in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards the sides. Oblique lateral striae present. Punctuation distinct, rather dense, punctures of unequal size. Interstices smooth.

Pygidium.— Triangular with broadly rounded apex, slightly convex, slightly impressed along the base medially from the anterolateral angles. Punctuation as on propygidium, punctures with a barely visible short yellow bristle, along the lateral and apical margins punctures smaller.

Prosternum.— Carina in lateral view very faintly convex. Carinal disc with nearly parallel sides, slightly widening in front, rather broad (fig. 176), margined at the sides and in front by a narrow elevated rim, at the sides accompanied by an indis-

tinct narrow sulciform carinal stria, obsolete in front, not continuous with the deep transversal impression behind the anterior marginal rim. The anterior impression has a shallow extension along the median line, gradually disappearing posteriorly. Carinal disc with rather scarce distinct punctures, interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae, with a rather sharp delimitation in front. Lateral striae sulciform, ill-delimited at the inner side, faintly sinuous, slightly curved inward anteriorly and ending behind the procoxae (fig. 176). Mesosternal disc with rather scarce elongate punctures. Interspaces smooth. Meso-metasternal suture indistinct, slightly depressed, angulate backwards.

Metasternum.— Lateral striae fine, slightly sinuous, divergent posteriorly, about reaching the metasternal middle (fig. 176). Disc in front about equally punctate as mesosternum, punctures smaller posteriorly. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, with the exception of its posterior end.

First visible sternite.— About equally punctate as posterior part of metasternum, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The male differs from the female as follows:

PE-length 2.6 mm.

Head.— Face in profile slightly sinuous, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, barely emarginate in the middle (fig. 177). Apical margin with two tubercles. Frons and posterior part of rostrum distinctly concave, the concavity delimited anterolaterally by rather blunt sinuous ridges along the antennal insertions. Frons and rostrum with small punctures, interstices with very indistinct microsculpture, shiny. Transition between frons and vertex arcuate, gradual, punctures on vertex more distinct, more closely set, interstices with indistinct microsculpture, shiny.

Pronotum.— About 1.1 times longer than wide (fig. 175), anterior angles very slightly impressed. Punctuation about equal to that of the female.

Pygidium.— Apex a little more broadly rounded, punctures without bristles, very small along the apex.

Prosternum.— Carinal striae less obsolete in front, therefore the lateral marginal rims more distinctly continuous with the anterior rim.

Metasternum.— Lateral striae a little longer, more curved inwards at their posterior end.

Etymology.— This species is dedicated to my friend and well-known histeridologist Yves Gomy (Nevers), in appreciation of our long-standing co-operation.

Trypeticus gracilis spec. nov.
(figs 380-384)

Material.— **Indonesia:** Holotype, ♀ (SMNS), some segments of mesotarsi missing, [white label, printed:] “♀”; [blue label, printed:] “Irian Jaya: Jayawi-/jaya. Langda, 2100-/27.-28.viii.1992 2300 m/leg. A. RIEDEL”; [red label, printed:] “HOLOTYPUS/*Trypeticus/gracilis* sp. n./P. Kanaar des. 2000”; 1 ♂

(SMNS), Irian Jaya, Baliem-Tal, Jiwika-Wandaku, 1700-2300 m, 5-6.ix.1990, A. Riedel (paratype); 1 ♀ (MCSN), N. Guinea S.E., Moroka, 1300 m, vii-xi.1893, Loria (with doubt).

Female.— Length (without head and abdominal tergites) 2.28 mm, width 0.65 mm, height 0.60 mm. Elongate cylindrical, shiny, piceous black, antennae, legs, elytra and posterior part of metasternum rufous.

Head.— Face in profile very faintly sinuous (almost straight). Frons and vertex separated by a transverse ridge, well-delimited posteriorly, ill-delimited to the frons. Rostrum in frontal view broadly truncate anteriorly, faintly emarginate in the middle. Frons and rostrum delimited at the sides by a fine ridge, continuous with the transverse ridge posteriorly, sinuous near eyes and antennal insertions, almost parallel on the rostrum and for a short distance prolonged along the apical margin, thence indistinctly connected along in the apical middle, this median part depressed (fig. 384); the ridges are accompanied at their inner side by a distinct narrow groove, wider and shallower near the eyes. At the outer side of the lateral ridges the rostrum slopes steeply down towards its lateral margins. Frons very slightly impressed postero-laterally, face slightly concave in longitudinal direction a little before the antennal insertions. Rostrum with an additional median impression, widening and deepening anteriorly. Frons and rostrum with a rather dense fine punctation, the punctures of unequal size. Interstices with a dense microsculpture, causing a rather dull appearance. Vertex with a transversal impression behind the transversal ridge and a small median fovea. Punctation a little more distinct than on frons, interstices with dense microsculpture.

Pronotum.— About 1.8 times longer than wide (fig. 380), in dorsal view slightly tapering anteriorly, strongly convex in transversal direction, slightly convex in profile, a little progressively so towards anterior emargination, the latter bisinuous in dorsal view with well-visible anterior angles. Disc very sparsely punctate in posterior half, with some very large punctures in an area halfway the median line and lateral margin, punctures along the median line smaller and more closely set; in the anterior pronotal half the punctures are smaller and more closely set, progressively so towards anterior margin and anterior angles. Interspaces smooth. Marginal striae fine, curved upwards at their posterior end, in the anterior third leaving the strongly sinuous pronotal margin, ending at a short distance from the not impressed anterior angles. A narrow impunctate median band is present in the posterior two-thirds, with a long distinct antescutellar stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 380), apices rounded; elytra slightly impressed near scutellum, strongly convex in transversal direction, in profile faintly convex over nearly its entire length, only near the apex strongly convex. Punctation along the base dense and distinct, elsewhere punctures sparse and very small, mixed with few larger punctures. Interspaces smooth. A narrow band along the suture is impunctate. Epipleura impunctate with linear microsculpture. Marginal epipleural stria fine, obsolete in the anterior half.

Propygidium.— Distinctly impressed along the anterior margin, distinctly and rather densely punctate. Faint oblique lateral impressions without distinct striae are present. Interstices with indistinct linear microsculpture.

Pygidium.— Broadly parabolic in outline, convex, along the anterior margin slightly

impressed. Punctuation and microsculpture as on propygidium, punctures in the apical half with a rather long yellowish hair.

Prosternum.— Carina in profile almost straight, sides of carinal disc slightly arcuate inwards (fig. 382), base emarginate. Disc margined at the sides by distinct, parallel carinal striae, fragmented and abbreviated in front. Carinal disc faintly impressed along the median line, not densely punctate, punctures of unequal size, interspaces with linear microsculpture. Lateral prosternal striae well-visible in ventral view (not shown in the figure).

Mesosternum.— Interprocoxal part faintly impressed, in profile convex, protruding with respect to the levels of the prosternal carinal disc and the posterior part of the mesosternum. Lateral striae rather narrow, slightly convergent anteriorly, narrowing and abbreviated posteriorly (fig. 382). Mesosternal disc not densely punctate with elongate punctures of unequal size, interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— In profile slightly concave. Lateral striae indicated by very indistinct traits behind the mesocoxae (fig. 382). Metasternal disc about punctate as mesosternum. A narrow band along the median suture is impunctate, the latter distinctly canaliform, wider and rather impressed at its posterior end. Interspaces smooth.

First visible sternite.— Disc with a longitudinal impression in the middle, rather densely and finely punctate. Oblique lateral striae short and rather indistinct.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of hindtibiae with hairs and with some minute teeth on the distal third.

The male differs from the female as follows:

Head.— Face sinuous in profile, with slightly elevated rostral tip. Rostral apex in frontal view broadly rounded anteriorly, slightly emarginate in the middle, with two small paramedian tubercles (fig. 383). Frons and rostrum together distinctly concave, mainly in transversal direction, the concavity at the sides delimited by a rather blunt bisinuous ridge. Rostrum and frons finely punctate, interspaces with indistinct linear microsculpture, shiny. Transition between frons and vertex arcuate, rather gradual. Vertex a little more distinctly punctate than frons, interstices with distinct linear microsculpture.

Pronotum.— Nearly 1.6 times longer than wide, sides in dorsal view a little tapering anteriorly (fig. 381), in front less abruptly rounded towards the anterior angles than in the female. Punctuation coarser than in the female, especially in the posterior half, where the punctuation is very coarse, the punctures nearly in touch with each other. An impunctate median band without median stria is present in the posterior half, not quite reaching the pronotal base.

Elytra.— More distinctly punctate than in the female.

Pygidium.— Sides in dorsal view less convergent posteriorly, slightly concave; apex more broadly rounded, almost truncate in the middle. Punctuation more distinct, punctures of unequal size, the hairs in the larger punctures much shorter than in the female.

Prosternum.— Carina faintly convex in lateral view, disc margined at the sides and in front by a narrow elevated rim, the lateral rims accompanied at their inner side by a carinal stria. Behind the rim along the anterior margin a distinct transversal impression.

Mesosternum.— Lateral striae more distinct than in the female, slightly divergent and wider anteriorly, not abbreviated posteriorly.

Metasternum.— Lateral striae very fine, running for a short distance and nearly parallel backwards from the posterior end of the vestiges that are present in the female.

Variation.— PE-length male: 2.18 mm, other female: 2.34 mm.

Remarks.— Notwithstanding the differences in the striation of mesosternum and metasternum, I believe that I have properly matched the two specimens. In many other characters they are in agreement, the differences being due to the sexual dimorphism that is also present in related species. The female specimen from Moroka that has been attributed with doubt to this species has not been given paratype status. The rostral apex is less broadly truncate, without the median emargination, the crosswise impression of the face before the antennal insertions and the longitudinal impression of the rostrum are wanting, and the prosternal carinal disc is a little wider. The lateral metasternal striae are a little longer than those of the male paratype. However, in other characters it is quite similar to the holotype.

Etymology.— The name refers to the slender body form.

Trypeticus gratus spec. nov.
(figs 375-379)

Material.— **Indonesia**: Holotype, ♀ (SMNS), right metatarsus missing, [white label, printed:] “♀”; [blue label, printed:] “IRIAN JAYA: Testega/1100 m-1200 m/11.iv.1993/leg. A. Riedel”; [red label, printed:] “HOLOTYPUS/*Trypeticus/gratus* sp. n./P. Kanaar des. 2000”; 2 ♂♂ (SMNS, CHPK), same data as holotype (paratypes).

Male.— Length (without head and abdominal tergites) 1.9 mm, width 0.6 mm, height 0.6 mm. Slender cylindrical, shiny, reddish brown with darker parts, especially along the sutures, anterior margin and posterolateral parts of pronotum, as well as antennae, rostrum and legs lighter.

Head.— Face in profile faintly bisinuous. Rostrum in frontal view rounded-truncate anteriorly (fig. 378), with two indistinct paramedian tubercles. Frons and posterior part of rostrum moderately and irregularly concave, this concavity indistinctly continuous with a faint impression on the anterior part of the rostrum. At either side the concavity is delimited by a faint sinuous ridge, running from the eye along the antennal insertion anteriorly, on the rostrum very fine and ending near the apical tubercle. Frons with additional faint oblique ridges, beginning behind the antennal insertions, running posteromedially and indistinctly ending near the transition between frons and vertex, the latter slightly bisinuous and very gradual. Frons and rostrum with sparse flaccid punctures, ill-visible in the irregular granular background microsculpture that causes a rather greasy appearance. Vertex densely punctate, punctures small, interstices with indistinct microsculpture.

Pronotum.— Nearly 1.8 times longer than wide (fig. 375), slightly dilated anteriorly, strongly convex in transversal direction, in profile straight in the posterior half, thence faintly convex toward the anterior margin. Punctuation very coarse and dense in the posterior half, punctures deep; along the base, along the median line and in the anterior half the punctures are smaller, the transition of the areas with very coarse and

smaller punctures rather sudden. Interspaces smooth. No median stria or impunctate band. Marginal striae fine, in the anterior half rather distant from the pronotal edge and ending at a short distance from the not impressed anterior angles. Area between marginal stria and pronotal edge sparsely punctulate.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 375), with rounded apices, strongly convex in transversal direction, in profile nearly straight in the anterior two-thirds, thence slightly convex posteriorly, progressively so towards apex. Elytra distinctly finer and more sparsely punctate than pronotum, punctures on elytral disc very small, along the suture more closely set and elongate, punctures along base and towards apices larger. A narrow band along the slightly elevated suture is impunctate. Interspaces smooth. Epipleura punctulate, with a marginal epipleural stria, indistinct in front.

Propygidium.— Densely punctate, interstices smooth. Indistinct oblique lateral striae (probably) present.

Pygidium.— Triangular in outline with very broadly rounded, slightly impressed tip, slightly convex in transversal direction, nearly straight in longitudinal direction, disc densely and distinctly punctate, the larger punctures ciliate. Interstices shiny.

Prosternum.— Carina nearly straight in lateral view, carinal disc with parallel sides, in front slightly divergent (fig. 377), at the sides margined by a narrow stria with a narrow elevated rim outside. Carinal disc slightly impressed along the median line, rather densely punctate, punctures distinct, flaccid and rather ill-delimited, interspaces smooth.

Mesosternum.— Impressed between the procoxae. Lateral striae distinct, narrow sulciform, parallel, ending in front at a rather great distance from the procoxae (fig. 377). Mesosternal disc rather densely punctate, punctures distinct, elongate, of unequal size, interspaces smooth. Meso-metasternal suture fine, depressed, slightly angulate backward.

Metasternum.— Median suture finely canaliform in the middle, distinctly canaliform in its anterior and posterior parts. Lateral striae fine, curved inwards anteriorly, almost parallel posteriorly (fig. 377), about ending at the anterior metasternal two-fifths. Metasternal disc very finely punctate, only just behind the meso-metasternal suture punctures larger, elongate. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc sparsely and finely punctate, with a faint median impression; oblique lateral striae present, fine, rather long.

Legs.— Protibiae with six teeth on the outer margin, mesotibiae with five teeth on outer margin. Outer margin of the hindtibiae with a row of spines and a few small teeth on the distal third.

The female holotype differs from the male as follows:

PE-length 2.1 mm.

Head.— Frons and vertex separated by a distinct, smooth, rather blunt transverse ridge, well-delimited at its posterior side, ill-delimited at its anterior side. Face in lateral view slightly bisinous in the posterior two-thirds, apex distinctly turned upwards, the latter in frontal view bifid (fig. 379). Frons and rostrum strongly concave in longitudinal direction, traversed by faint paramedian ridges, that indistinctly begin in the rear at

some distance from the transverse keel between frons and vertex, for the greater part parallel, slightly divergent anteriorly and ending as indistinct tubercles on the apical lobes. These ridges enclose a median sulcus, finely punctate, rather deep on rostrum and anterior part of frons, shallower and fading away posteriorly at some distance from the transverse keel between frons and vertex. At either side a distinct sinuous ridge runs from the eye along the antennal insertion, with a distinct concavity at its inner side. Medially from this concavity an indistinct, ill-delimited longitudinal ridge runs from the frons anteriorly, slightly sinuously continued on the side of the rostrum. Rostrum and frons between this ridge and the paramedian ridge slightly concave. Frons and rostrum with flaccid punctures, ill-visible by granular microsculpture. Vertex with a small median fovea, distinctly punctate, interspaces dull by microsculpture.

Pronotum.— Slightly longer than in the male, a little tapering anteriorly (fig. 376). Punctuation slightly less coarse than in the male. A fine, rather long median stria is present in the posterior half.

Pygidium.— More broadly rounded, less triangular in outline. Disc convex in both directions, impressed along the anterior margin, not impressed at the apex, punctuation double, the larger punctures with a longer hair than in the male.

Remarks.— Especially on propygidium and pygidium, but also a little elsewhere, the specimens are polluted by whitish, ill-removable encrustments, probably dried-up juice of the host-trees. Therefore, a proper assessment of the presence of oblique lateral striae on the propygidium is problematic.

Etymology.— The name refers to the slender body form.

Trypeticus hamatipygus spec. nov.
(figs 415-420)

Material.— **Malaysia:** Holotype, ♂ (MZLU), genitalia partly protruding, [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T6/R/3.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/hamatipygus* sp. n./P. Kanaar des. 2000”; paratypes: 3 ♂♂, 4 ♀♀ (MZLU, CHPK), same locality, date and collector, but various trap codes; 1 ♂ (CHPK), same locality and collector, but 11.iv.1988; 1 ♂ (CHPK), idem, but 21.iv.1988; 1 ♂ (MZLU), idem but 29.iv.1988; 2 ♂♂, 1 ♀ (MZLU, CHOK), idem, but 25.iv.1988; 1 ♀ (MZLU), idem, but 1.v.1988; 2 ♂♂, 2 ♀♀ (MZLU, CHPK), idem, but 4.v.1988; 1 ♀ (MZLU), idem, with doubt; 2 ♀♀ (MZLU), idem, but 6.v.1988; 4 ♂♂, 3 ♀♀ (MZLU, CHPK, CHTL), idem, but 11.v.1988; 5 ♂♂, 5 ♀♀ (MZLU, CHSM, CHPK), idem, but 13.v.1988; 4 ♂♂ (MZLU, CHPK, CHFP), idem, but 2.iii.1989; 2 ♂♂, 4 ♀♀ (MZLU, CHSM, CHPK), idem, but 8.iii.1989; 1 ♀ (MZLU), idem, with doubt; 1 ♀ (MZLU), idem, but 14.iii.1989; 4 ♂♂, 2 ♀♀ (MZLU, CHND, CHPK), idem, but 31.iii.1989.

Male.— Length (without head and abdominal tergites) 1.42 mm, width 0.62 mm, height 0.58 mm. Cylindrical, shiny, castaneous, anterior pronotal margin, abdominal segments, greater part of underside and legs rufous.

Head.— Face in lateral view convex. Rostrum rather short (fig. 419), in frontal view rounded-truncate anteriorly. Frons and rostrum together slightly convex in both directions, with rather irregularly scattered small punctures, interstices smooth and shiny. Frons with an arcuate impression behind each antennal insertion. Transition between frons and vertex arcuate and gradual. Vertex with a transversal impression, more distinctly and densely punctate than frons.

Pronotum.— About as long as wide (fig. 415), in dorsal view with nearly parallel sides, in front broadly rounded towards the acute anterior angles that are strongly bent downward and barely visible in dorsal view. Pronotum strongly convex in transversal direction, in profile convex, progressively so towards anterior margin. Anterior emargination for the head deep. Disc not densely punctate, punctures rather small, of slightly unequal size, punctures along the anterior margin more closely set, mixed with very small punctures. Interspaces smooth. Marginal striae fine, curved upward over the rounded posterolateral angles, ending in front at some distance from the anterior angles.

Elytra.— Along the suture about 1.1 times longer than pronotum (fig. 415), apices rounded, strongly convex in transversal direction, in profile faintly convex in anterior half, progressively convex towards apex in posterior half; punctuation as pronotum, punctures near suture more closely set. A narrow band along the suture is impunctate. Interstices smooth. Epipleurae punctulate, with linear interstitial microsculpture. A fine marginal epipleural stria is present in the posterior third.

Propygidium.— Densely punctate, punctures in the posterior half with a rather long yellowish-white hair. Interstices with dense microsculpture. Oblique lateral striae obviously wanting, but a proper assessment thwarted by the ciliation.

Pygidium.— Rather flat, parabolic in outline, densely punctate, punctures with a long yellowish-white hair. Pygidial apex adorned with a thorn that is curved anteriorly (fig. 417).

Prosternum.— Carina slightly convex in lateral view, carinal disc with slightly divergent sides (fig. 418), at the lateral sides and along the anterior edge margined by a narrow elevated rim, less distinctly so along the base. At the inner side the lateral rims are accompanied by a narrow and shallow carinal stria, the anterior and posterior rims by an ill-delimited impression. Carinal disc with rather sparse small punctures, interspaces with indistinct linear microsculpture.

Mesosternum.— Lateral striae indicated by an indistinct oblique trait at some distance behind the procoxae (fig. 418). Mesosternal disc not densely punctate, punctures of moderate size, slightly elongate; interspaces smooth. Meso-metasternal suture fine, distinctly curved backward.

Metasternum.— Median suture canaliform, with a deep, ill-delimited elongate fovea just behind the middle. Lateral striae very fine, slightly divergent posteriorly, more distinctly impressed and curved inwards anteriorly near the mesocoxae (fig. 418). Metasternal disc a little more densely punctate than mesosternum, punctures more elongate; a narrow band along the median suture is impunctate, punctures along this impunctate band more closely set and larger than the punctures on the lateral metasternal parts. Interspaces smooth.

First visible sternite.— Disc finer and scantier punctate than metasternum. Oblique lateral striae present, distinct.

Legs.— Protibiae with six teeth on outer margin, mesotibiae with five teeth on outer margin. Hindtibiae with two small distal teeth and some spines on the outer margin.

The female differs from the male as follows:

Head.— Face in profile almost straight. Frons and rostrum distinctly concave (fig.

420). Lateral sides of rostrum with a fine stria, posteriorly ending behind the antennal insertions, in front not continued along the broadly rounded-truncate anterior margin, punctures on vertex and posterior part of rostrum distinct, of unequal size, with an erect short hair, punctures on anterior part of rostrum smaller, not setose.

Pronotum.— About 1.2 times longer than wide (fig. 416), slightly flattened off and finely margined behind the anterior emargination. A short antescutellar stria is present.

Propygidium.— Less densely fimbriate than in the male.

Pygidium.— Less strongly fimbriate, slightly concave near the apex and without the apical thorn.

Prosternum.— Carinal disc less distinctly margined along the anterior and posterior sides.

Variation.— PE-length males: 1.40-1.56 mm, females: 1.46-1.56 mm. The colour is rather variable: in many specimens large parts of the body are reddish brown, obviously by immaturity. Also the intensity of the punctuation varies a little. The lateral mesosternal striae are sometimes more distinct, but in most specimens they are entirely obsolete. The very fine lateral metasternal striae are often more or less shorter than in fig. 418. The median fovea of the metasternum is sometimes larger and deeper, sometimes obsolete. Also the lateral striae on the first sternite vary a little in length. In the females the fine marginal stria of the rostrum is sometimes indistinct, and the fine marginal rim along the anterior edge of the prosternal carinal disc is sometimes wanting. The two females that have been attributed with doubt to this species have a very deep impression on the rostrum. In other respects they are equal to the other females. They have not been given paratype status.

Etymology.— The name refers to the curved hooklet on the pygidial apex of the male.

Trypeticus helleri Bickhardt, 1918
(figs 43-47)

Trypeticus helleri Bickhardt, 1918: 233.

Material.— **Papua New Guinea:** Lectotype, ♂ (SMTD), most tarsi missing, one tarsus loose, glued apart, [light blue label, reverse side white, printed:] "D. Neuguinea/Rawlinson Geb."; [light blue label, reverse side white, printed and hand-written:] "1914/16"; [red label, hand-written:] "Type"; [folded green paper, hand-written:] "*Trypeticus/Helleri*/n. sp. Bickh."; [white label, printed:] "Staatl. Museum für/Tierkunde Dresden"; [red label, printed and hand-written:] "LECTOTYPUS ♂/*Trypeticus/helleri*/Bickhardt 1918/P. Kanaar des. 1999" (present designation); 2 ♂♂ (SMTD, ZMHB), same locality data as lectotype (paralectotypes); 1 ♂, 1 ♀ (FMNH), Latep, nr. Bulolo, ex Forest Res. stat. Bulolo, 4500 ft, in burrows of *Ambrosia* beetles in *Bielschmeidia*, 17.v.1976, H. Roberts. **Indonesia:** 1 ♀ (SMNS), Irian Jaya, Testega, 1200 m, 31.iii-12.iv.1993, A. Riedel.

Male.— Length (without head and abdominal tergites) 3.5 mm, width 1.6 mm, height 1.4 mm. Thick-set cylindrical, shiny, piceous black, legs rufous.

Head.— Face very faintly sinuous in profile, almost straight. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two very small, rather wide-set tubercles (fig. 46). Very fine oblique lateral ridges are present on the rostrum, indis-

tinctly continued onto the frons towards the eyes, fading away on the rostrum at a rather great distance from the tubercles. At the inner side they are accompanied by a very faint impression. Frons with a large, moderate median impression. Frons and rostrum with fine double punctation, the secondary punctures ill visible by linear interstitial microsculpture. Transition between frons and vertex arcuate, gradual. Vertex (as far as visible) densely punctulate with interstitial microsculpture.

Pronotum.— Amply 1.1 times longer than wide, in dorsal view a little widened in the anterior half (fig. 43), in front with rounded anterolateral angles, thence nearly straight towards the rather rounded anterior angles. Emargination for the head shallow. Pronotum moderately convex in transversal direction, in profile convex over its entire length. Marginal striae fine, slightly curved inwards behind, rather distant from the edge before the pronotal middle, in front ending a little beyond the non-impressed anterior angles. Pronotal disc not very densely covered with rather small punctures of slightly unequal size in posterior two-thirds, and with a frankly double punctation in the anterior third, punctures along the anterior margin more closely set. Interspaces smooth. A narrow impunctate median band is present in the posterior two-thirds, faintly impressed along the median line in its anterior part, but without distinct stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 43) with rounded apices, distinctly impressed near scutellum and for some distance along anterior margin, convex in transversal direction, in profile slightly convex over its entire length, more distinctly so near apex, punctures on the elytral disc a little finer and a little scantier than on posterior part of pronotum, punctures near scutellum and anterior margin more closely set and larger. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, interstices with linear microsculpture. Marginal epipleural stria fine, slightly interrupted in the middle.

Propygidium.— Slightly concave in lateral view, with a fine oblique stria and a small impression at the sides. Punctation distinct, double, interstices smooth.

Pygidium.— Broadly arcuate in outline, slightly convex, slightly impressed in the anterolateral angles. Punctation as propygidium, at apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad, sides slightly rounded posteriorly, a little convergent anteriorly (fig. 45), faintly convex in lateral view, margined at the sides and in front by a distinct narrow elevated rim, at the sides accompanied by a shallow carinal stria, ill-delimited at the inner side. Carinal disc with a distinct impression along the median line over its entire length and with a rather scarce double punctation. Primary punctures distinct, interspaces with indistinct linear microsculpture.

Mesosternum.— Distinctly impressed between the procoxae and deeply impressed along the median line in the centre. Lateral striae distinct, sulciform, ill-delimited at the medial side, nearly parallel, ending at some distance from the procoxae (fig. 45). Mesosternal disc with rather scarce double punctation, the primary punctures of slightly unequal size, interspaces with indistinct linear microsculpture. Mesometasternal suture fine, angulate backwards.

Metasternum.— Lateral striae distinct, short, divergent posteriorly (fig. 45). Metasternal disc with double punctation, the primary punctures a little elongate and smaller than those on mesosternum, decreasing in size posteriorly. The finely canali-form median suture is situated in a rather broad shallow longitudinal impression over

nearly the entire metasternal length. A narrow band along the median suture is impunctate. Interspaces smooth, but for some strigillation near the lateral striae.

First visible sternite.— Disc slightly impressed along the median line, with rather dense fine punctation. Interstices with indistinct linear microsculpture, especially at the sides. A distinct oblique lateral stria is present at either side, medially from the metacoxae.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal fourth.

The female differs from the male as follows:

Head.— Vertex and frons separated by a rather sharp transverse ridge, slightly interrupted in the middle by a shallow median fovea on the vertex immediately behind this ridge. Face in lateral view very slightly sinuous, almost straight. Apex of rostrum in frontal view rounded. Frons and rostrum at either side bordered by a very fine, oblique, slightly sinuous lateral ridge, this ridge more distinct near the eyes and continuous with the transverse ridge between frons and vertex (fig. 47). At the inner side the lateral ridge is accompanied by a fine narrow sulcus. Frons distinctly concave with an additional elongate deep median fovea just before the transverse ridge. Frons and rostrum with fine double punctation, the larger punctures a little elongate, the small punctures ill visible by a very dense interstitial microsculpture, giving a dull appearance, interstices smooth in the central frontal fovea and on the transversal ridge between frons and vertex. Vertex with a distinct transversal impression and an additional large median fovea behind the transversal ridge; punctation double, interstices with indistinct microsculpture.

Pronotum.— A little longer than in the male (fig. 44). Behind the anterior margin a large triangular area (indicated by dotted lines in the figure) is dull by a dense interstitial microsculpture; a median ridge is very faintly indicated in the posterior part of this dull area. Behind the dull area the pronotum has a distinct longitudinal median impression, accompanied by two paramedian, slightly elongate tubercles. From the anterior angles broad oblique impressions run backwards and inwards just outside the dull area, fading away posteromedially. Also behind the anterolateral angles the pronotum has a slight impression. Both impressions give rise to an oblique, ill-delimited boss directed towards the anterolateral angle and fading away postero-medially. Along these bosses the marginal striae are interrupted. Disc about equally punctate as in the male, punctures in the dull anterior area smaller and distinctly elongate. The impunctate median band has a long median stria, reaching from the scutellum to the paramedian tubercles.

Pygidium.— More triangular in outline with broadly rounded apex. The larger punctures in the apical half have a pale yellow hair.

Prosternum.— Carina almost straight in lateral view, sides more parallel. The narrow elevated rim along the anterior margin is less distinct, mainly produced by the anterior boundary of the distinct carinal impression.

Variation.— PE-length males 3.4-3.6 mm, females 3.7 mm. In one of the females the lateral metasternal striae are rather obsolete. The impunctate median band on the pronotum of the males is sometimes rather indistinct.

Remarks.— The female was hitherto unknown. Two type specimens (one in

ZMHB and one in SMTD) bear a red label "Type", and a by Bickhardt written green paper with the name; the specimen in Dresden is in a better condition and has been designated as lectotype. In the male specimen that has been used for the drawings the genitalia are extruded; the propygidium and pygidium are strongly reflexed ventrally, the former barely visible in dorsal view. The tergite before the propygidium protrudes strongly beyond the elytra. It is divided in two parts by a bisinuous transversal ridge. Before this ridge two deep paramedian sulci produce a median ridge (fig. 43), behind the transversal ridge an oblique sulcus is present at either side.

Trypeticus hielkemaorum spec. nov.
(figs 150-154)

Material.— **Philippines:** Holotype, ♀ (FMNH), genitalia partly protruded, right antennal club and flagellum missing, protarsi, right mesotarsus and right metatarsus missing one or more segments, [white label, printed:] "♀"; [white label, printed:] "Mt. Makiling/Luzon P. I./16.viii.1932"; [white label, printed:] "F.C. Hadden/Collection"; [green label, printed:] "A. Newton/Collection"; [red label, printed:] "HOLOTYPUS/*Trypeticus hielkemaorum* sp. n./P. Kanaar des. 2000"; 1 ♀ (FMNH), same locality, date and collector (paratype); 1 ♀ (ZMHB), Masbate, Arory (?), 18.ix.1917, collector's name illegible (paratype); 1 ♂ (ZMHB), N. Luzon, Ibicos (?) - Norte, i.1918, same illegible collector's name (paratype); 1 ♂ (MNHN), "Philippine Isl.", without further locality data, donated by H.E. Andrewes (paratype); 1 ♀ (SMTD), Mindoro, Mt. Calavito, W. Schulze (with some doubt).

Male.— Length (without head and abdominal tergites) 3.1 mm, width 1.4 mm, height 1.2 mm. Rather thick-set cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face nearly straight in profile with slightly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two small paramedian tubercles (fig. 153). Frons and posterior part of rostrum distinctly concave, the concavity delimited along the eyes and antennal insertions by a distinct, rather sharp ridge, that fades away on the rostrum. A separate, much shallower impression is present on the anterior part of the rostrum, behind and between the tubercles. Frons and rostrum with distinct small punctures, interstices with indistinct microsculpture. Transition between frons and vertex arcuate and gradual. Vertex with a small median fovea, punctate as frons.

Pronotum.— Nearly 1.2 times longer than wide with slightly sinuous sides in dorsal view (fig. 150), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile nearly straight in posterior half, thence convex towards anterior margin. Marginal striae fine, curved upward at their posterior end, in front indistinct and ending at a short distance from the faintly impressed anterior angles. Pronotal disc rather densely punctate, punctures deep and of unequal size, behind the anterior emargination for the head and in the anterior angles smaller and very closely set. Interspaces smooth. No distinct impunctate median band or median stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 150), slightly impressed near the scutellum, moderately convex in transversal direction, in profile convex, progressively so near apex. Elytral punctation a little finer than that of pronotum, punctures of unequal size and near the suture a little more closely set. A narrow

band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture. A short marginal epipleural stria is present in the posterior half.

Propygidium.— Concave in longitudinal direction, with punctures of unequal size, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Rather triangular in outline with broadly rounded apex, very faintly concave in longitudinal direction, with a large and shallow impression near the tip and faint impressions near the anterolateral angles. Punctuation as on propygidium, along lateral sides and apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina slightly convex in lateral view. Carinal disc broad (fig. 152), margined at the faintly sinuous sides and in front by a narrow elevated rim, accompanied at the lateral sides by a distinct carinal stria. Carinal disc with a distinct transverse impression behind the anterior rim and a faint impression along the median line, more distinct in front; disc with small punctures. Interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly impressed along the median line in the anterior half. Lateral striae distinct, broad and sulciform, well-delimited at both sides, nearly parallel, in front ending near the procoxae (fig. 152). Mesosternal disc with double punctuation, the primary punctures elongate. Interspaces smooth. Meso-metasternal suture very fine, mainly indicated by an impression between meso- and metasternum, slightly angulate backwards.

Metasternum.— Lateral striae distinct, in front sulciform, divergent posteriorly, about reaching the metasternal middle (fig. 152). Median suture sulciform. Metasternum more coarsely punctate than mesosternum, punctures elongate, of unequal size, along the median suture before the posterior margin smaller and more rounded. Interspaces smooth.

First visible sternite.— Faintly impressed along the median line, about punctate as the metasternum before it, punctures smaller towards posterior margin. Interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Punctuation, especially that of pronotum and underside, finer.

Head.— Face in lateral view faintly concave in the posterior three-fourths, thence with strongly raised rostrum, the latter rather triangular in lateral view, its underside rather long, concave, especially so anteriorly. Rostral tip finely bifid in frontal view by a slight emargination of the anterior margin (fig. 154). Vertex and frons separated by a sharp transverse ridge, well-delimited behind, less so to the frons. Frons and rostrum delimited at the sides by a distinct, slightly sinuous ridge, continuous with the transverse ridge behind, and fading away on the rostrum aside of the raising tip. At the medial side the ridge is accompanied by a distinct sulcus, at the lateral side the rostrum slopes steeply down to its edge. Frons and posterior part of rostrum concave, especially so along the median line. Frons and rostrum with small, slightly elongate punctures. Interstices with dense and fine microsculpture, producing a dull appearance, with the exception of the median part of the frons and the transverse ridge. Vertex

with a deep and broad transversal depression behind the ridge and a small median fovea; punctation fine, interstices with dense interstitial microsculpture.

Pronotum.— Amply 1.3 times longer than wide, in dorsal view slightly widening in the anterior half (fig. 151). Behind the anterior emargination for the head a distinct median ridge is present, gradually fading away at its posterior end; at the sides of the ridge the pronotum is distinctly impressed. Anterior angles more distinctly and more extensively impressed than in the male. A narrow impunctate median band is present, with a fine antescutellar median stria in the posterior third.

Pygidium.— Broadly parabolic in outline, convex in both directions, with shallow paramedian foveae in front, punctures more distinct, with a rather long pale-yellow hair.

Prosternum.— Carina almost straight in lateral view, not margined by lateral and anterior rims, the carinal striae a little abbreviated in front. Disc in front very faintly impressed along the median line.

Variation.— PE-length female holotype: 3.4 mm; other females: 3.3 and 3.4 mm. PE-length other male: 3.0 mm. The carinal and mesosternal impressions vary a little in depth and extension. The lateral mesosternal striae are sometimes a little more sinuous than in the depicted specimen. The lateral metasternal striae are sometimes a little curved inwards at their posterior end, and also their anterior end is sometimes bent inward. The oblique lateral striae on the first visible abdominal sternite are rather short in one specimen. In the non-depicted male the carinal striae are a little more arcuate than in the depicted specimen, their anterior and posterior ends bent outwards. In the depicted male the median metasternal suture is distinctly canaliform rather than sulciform. In the holotype and the other female from Mt. Makiling the tip of the rostrum is less distinctly emarginate in frontal view, and therefore less distinctly bifid than in the depicted female. The female from Mindoro that has been attributed with some doubt to this species is a little finer punctate; the face is less concave, especially the concavity along the median line is less distinct. The rostral tip is less turned upwards. Therefore, this specimen has not been given paratype status.

Etymology.— This species is dedicated to my friend and Scarabaeidae-specialist Mr Meindert A. Hielkema and his wife Mas, to whom I am indebted for many nice specimens in my private Histeridae-collection.

Trypeticus hinei spec. nov.
(figs 271-273)

Material.— **Papua New Guinea** (?): Holotype, ♂ (BMNH), four segments of left protarsus and one segment of left metatarsus missing, [white label, printed:] "♂"; [discoloured white label, printed, with frame:] "N. GUINEA S.E./Moroka, 1300 m./LORIA vii-vi.93"; [discoloured white label, printed:] "Museo Civ./Genova"; [white label, printed:] "George Lewis Coll./B.M.1926-369."; [white label, hand-written:] "*T. gestroi*/♂. Mars?"; [red label, printed:] "HOLOTYPUS/*Trypeticus/hinei* sp. n./P. Kanaar des. 2000".

Male.— Length (without head and abdominal tergites) 3.3 mm, width 1.3 mm, height 1.2 mm. Cylindrical, shiny, reddish brown with darker sutures, antennae and legs ferruginous.

Head.— Face nearly straight in profile with slightly elevated rostral tip, the latter

in frontal view rounded-truncate anteriorly with two paramedian tubercles (fig. 273). Frons strongly concave with shallow extensions of the concavity along sides of rostrum; on the rostrum a faint additional impression at some distance behind the tubercles and a distinct median impression on the apical margin between the tubercles. Concavity of frons sharply delimited at the sides by elevated ridges along the eyes and antennal insertions, fading away on rostrum. Frons and rostrum with rather scarce small punctures, interstices with fine microsculpture. Transition between frons and vertex arcuate, rather sharp, in the middle depressed by an extension of the frontal concavity. Vertex with an indistinct median fovea, more densely and distinctly punctate than frons, punctuation double, interstices with fine microsculpture.

Pronotum.— Nearly 1.3 times longer than wide (fig. 271), in dorsal view with almost parallel sides, in front broadly rounded towards the anterior angles. Pronotum moderately convex in transversal direction, in profile faintly convex, progressively so towards anterior margin. Before the scutellum a shallow impression is present. Marginal striae distinct, distinctly turned upwards at their posterior end, at a rather great distance from the margin in the anterior half, in front ending at a short distance from the not impressed anterior angles. Pronotal disc rather densely punctate, punctures of moderate and slightly unequal size, along the anterior margin very closely set. Interstices smooth. An impunctate median band is present over almost the entire length, with an indistinct antescutellar stria.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 271), slightly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctuation a little finer, sparser and more irregularly dispersed than on pronotum, mixed with few very small punctures; punctures along suture more closely set, punctures near apex smaller. A narrow band along the slightly elevated suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria shallow and rather broad in posterior half, indistinct in anterior half.

Propygidium.— Impressed along anterior margin. Oblique lateral striae present. Punctuation distinct, rather dense, punctures of unequal size. Interstices smooth.

Pygidium.— Parabolic in outline, convex. Punctuation as on propygidium, larger apical punctures with a short yellow hair.

Prosternum.— Carina in lateral view nearly straight in posterior half, thence slightly convex towards anterior margin. Carinal disc rectangular with about parallel sides (fig. 272), margined at the sides by a narrow elevated ridge, at their inner side with a well-delimited sulciform carinal stria, nearly reaching the anterior margin. Lateral prosternal striae well visible in ventral view (not shown in the figure). Carinal disc faintly impressed along the median line, with double punctuation, interspaces with indistinct linear microsculpture.

Mesosternum.— Impressed between the procoxae. Lateral striae distinct, rather broad, sulciform, well-delimited, slightly curved inwards (fig. 272). Mesosternal disc with elongate punctures of unequal size, mixed with few very small punctures, interspaces smooth. Meso-metasternal suture slightly impressed, fine, angulate backwards, at the sides indistinct and sinuous between the almost meeting lateral mesosternal and metasternal striae.

Metasternum.— Lateral striae distinct, sinuously divergent posteriorly, strongly

curved inwards just behind the metasternal middle, about ending at the posterior metasternal fifth (fig. 272). Disc about punctate as mesosternum. A narrow band along the distinctly impressed and sulciform median suture is impunctate. Interspaces smooth.

First visible sternite.— Distinctly impressed along the median line. Punctuation dense, interstices smooth. Oblique lateral striae along the postcoxae distinct and long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with long hairs and with some small teeth on the distal third.

The other sex is unknown.

Remarks.— Though the prosternal carinal disc is not margined along the anterior side I think that the only available specimen is a male as typical female structures on head and pronotum are wanting. Also in the male of *T. gestroi* (Marseul) the prosternal carinal disc is not margined along the anterior edge. A certain assessment of the sex may be possible when the other sex is discovered.

Etymology.— This species is dedicated to Mr Stuart J. Hine, Curator of the Coleoptera in the collection of the Natural History Museum in London, in appreciation of his full co-operation.

Trypeticus houseae spec. nov.
(figs 296-298)

Material.— **Malaysia:** Holotype, ♂ (MZLU), [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang./Mendolong, T6/R/11.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/houseae* sp. n. /P. Kanaar des. 2000”.

Male.— Length (without head and abdominal tergites) 1.9 mm, width 0.7 mm, height 0.6 mm. Cylindrical, shiny, piceous black, antennae, legs and abdominal segments rufous.

Head.— Face in profile faintly bisinuous with slightly elevated rostral tip. Rostrum in frontal view broadly truncate and slightly emarginate anteriorly, tip with two small paramedian tubercles (fig. 298). Frons and rostrum distinctly concave, the concavity subdivided into a deep frontal and a shallower rostral part. The concavity of the frons is delimited at the sides by a fine, rather blunt, slightly sinuous ridge that runs from the eye anteromedially, well-dilimited at the inner side, fading away on the rostrum. At the lateral side of the ridge the rostrum slopes down towards the lateral edge. Frons and rostrum with rather sparse small punctures, interstices with indistinct microsculpture, shiny. Transition between frons and vertex arcuate and gradual. Vertex with a shallow median fovea and small punctures, interstices with indistinct microsculpture.

Pronotum.— Amply 1.3 times longer than wide, in dorsal view with nearly parallel sides (fig. 296), in front broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile nearly straight in posterior half, thence slightly convex towards anterior margin. Marginal striae fine, turned upwards at their posterior end, indistinct in the anterior curvature, in front ending in the non-impressed anterior angles. Pronotal disc not very densely punctate, punctures of moderate and slightly unequal size, along the anterior margin and in the anterior angles more closely set. Interspaces smooth. A narrow impunctate median band

without antescutellar median stria is present in the posterior two-fifths.

Elytra.— Along the suture nearly as long as pronotum (fig. 296), faintly impressed near the scutellum, strongly convex in transversal direction, in profile faintly convex over nearly its entire length, only strongly convex near the apex. Elytral punctation a little finer than that of pronotum, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate with distinct linear microsculpture; marginal epipleural striae obsolete.

Propygidium.— Slightly impressed along anterior margin. Punctation not very dense, finer than that of elytra, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Triangular in outline with rounded apex, slightly concave in longitudinal direction, slightly convex in transversal direction, without anterolateral impressions. Punctation as on propygidium, along margins finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina in lateral view faintly convex in front, elsewhere straight. Prosternal disc rather broad with nearly parallel sides (fig. 297), margined at the sides by a narrow elevated rim, accompanied by a carinal stria; in front a distinct transversal impression delimits an anterior marginal rim, the impression indistinctly continuous with the right carinal stria. Carinal disc with a slight median impression near the base and with distinct punctures. Interspaces with some indistinct microsculpture, shiny.

Mesosternum.— In front very faintly, crosswise impressed. Lateral striae well-delimited, sulciform, nearly parallel, ending behind the procoxae (fig. 297). Mesosternal disc with distinct elongate punctures of unequal size, some punctures very small. Interspaces smooth. Meso-metasternal suture fine, mainly indicated by a depression, angulate backwards.

Metasternum.— Lateral striae rather fine, slightly bisinuous, slightly divergent posteriorly, about reaching the metasternal middle (fig. 297). Disc about punctate as mesosternum. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform in the anterior third, elsewhere finely canaliform.

First visible sternite.— Punctures smaller and more closely set than on metasternum, interstices smooth. Oblique lateral striae present, distinct and long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The female is unknown.

Remarks.— The asymmetry of the prosternal carinal striation is probably an individual aberration.

Etymology.— This species is dedicated to Mrs Gloria N. House (National Museum of Natural History, Washington), in appreciation of her kind co-operation.

Trypeticus huijbregtsi spec. nov
(figs 81-87)

Material.— **Philippines:** Holotype, ♀ (FMNH), left antenna and one segment of left protarsus missing, three segments of right metatarsus loose, glued apart, [white label, printed:] “♀”; [white label, printed:] “Imugan/Luzon”; [white label, printed:] “F.M.N.H./Ballou Coll.”; [white label, hand-written:] “*Trypeticus*/#1”; [red label, printed:] “HOLOTYPUS/*Trypeticus/huijbregtsi* sp. n./P. Kanaar des. 2000”; 3 ♂♂ (FMNH, CHPK), same data as holotype (paratypes); 1 ♀ (ZMBH), Luzon, Balbalan (?), iii.1914 (paratype); 1 ♂ (ZMBH), Luzon, Imugan, 23.vi.1917 (paratype); 1 ♂ (NHMW), Mindoro, 28 km

S Calapan, Balete, 100-700 m (19), 27-29.xi.1992, Jäch (paratype); 1 ♂ (FMNH), Mindanao, Momugan; 1 ♂, 2 ♀♀ (FMNH, CHPK), Mindanao, Cotabato Province, Burungkot, Upi, 1500 ft, 1-6.i.1947, F.G. Werner. **Indonesia:** 1 ♂ (RMNH), N Sulawesi, Mt Ambang NR, 20 km E of Kotamobagu, Base Camp, 1120 m, multistr. evergreen forest, window trap, 10-13.ix.1985, J. Huijbregts (paratype).

Male.— Length (without head and abdominal tergites) 3.4 mm, width 1.5 mm, height 1.3 mm. Thick-set cylindrical, shiny, piceous black to dark castaneous, antennae and legs rufous.

Head.— Face in lateral view straight with slightly elevated rostral tip. Antennal scapes with many long hairs. Rostrum in frontal view broadly rounded-truncate anteriorly, faintly convex in transversal direction, apical margin very slightly raised, with two small tubercles (fig. 85). Frons feebly concave, mainly posteriorly and a little at the sides. Frons and rostrum with rather sparse small punctures. Interstices with dense linear interstitial microsculpture, with the exception of a small area in the posterior concavity. Transition between frons and vertex arcuate, rather gradual. Vertex punctate, short and rapidly passing into the neck.

Pronotum.— Nearly 1.2 times longer than wide (fig. 81) with parallel sides, broadly rounded in front towards the anterior pronotal angles, strongly convex in transversal direction, in profile faintly convex in the posterior two-thirds, thence strongly convex towards the anterior margin. Marginal striae fine, curved upwards at their posterior end, in front ending in the barely impressed anterior angles. Pronotal disc not very densely covered with distinct deep punctures of slightly unequal size, punctures along the anterior margin more closely set and smaller. Interspaces smooth. A narrow indistinct impunctate median band is indicated in the middle. Just before the scutellum a very small elongate fovea or trait of a median stria is present.

Elytra.— Along the suture a little shorter than pronotum (fig. 81) with rounded apices, strongly convex in transversal direction, in profile faintly convex the anterior half, thence progressively convex towards apex, punctures along base large and more closely set, elytra elsewhere much finer and sparsely punctate than pronotum, punctures near suture more closely set. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate, interstices with fine linear microsculpture. Marginal epipleural stria fine and distinct in posterior half, elsewhere indistinct.

Propygidium.— Slightly impressed along the anterior margin, especially at the sides. Oblique lateral striae present. Punctuation rather dense, punctures larger than those on elytra, smaller along posterior margin, interstices smooth.

Pygidium.— Broadly rounded parabolic in outline, slightly convex. No distinct foveae near the anterolateral angles. Punctuation as propygidium, without hairs. Interspaces smooth.

Prosternum.— Carina very faintly convex in lateral view. Disc broad with nearly parallel sides (fig. 84), margined by a narrow elevated rim at the sides and in front, accompanied by a carinal stria at the sides and a deep transversal impression in front. Carinal disc with rather dense distinct punctuation, interspaces with fine linear microsculpture.

Mesosternum.— Between procoxae with deep semicircular impression. Lateral striae broad and rather deep sulciform, slightly sinuous, turned inwards anteriorly, ending behind the procoxae (fig. 84). Impressions along the procoxae connect indis-

tinctly the outer margin of the lateral striae with the anterior impression. Mesosternal disc not densely punctate, punctures distinct and barely elongate. Interspaces smooth. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Median suture distinctly canaliform, ending posteriorly in a faint impression of the metasternal disc, a little before the posterior margin. Lateral striae distinct, slightly curved inwards in front, elsewhere straight (fig. 84), divergent posteriorly, well reaching the metasternal half. Metasternal disc slightly finer punctate than mesosternum. A rather broad band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc more densely punctate than metasternum, punctures of unequal size, smaller along the posterior margin. Interstices along the posterior margin with linear microsculpture. Oblique lateral striae present, short and fine.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Face straight in lateral view. Rostrum in frontal view rounded-truncate anteriorly, with an indistinctly tuberculate, slightly raised apical margin. Frons and vertex separated by a smooth transverse ridge, slightly angulate forwards, well-delimited at its posterior side, less so to the frons. Frons and rostrum bordered at the lateral sides by a narrow smooth elevated rim (fig. 86), slightly sinuous, delimited at their inner side by a shallow groove, ill-delimited at the inner side, especially in front, and widening backwards. The lateral rims are continuous with the transverse keel posteriorly, in front they reach the slightly raised apical margin. Frons and rostrum together slightly concave, mainly so on the frons. In this concavity an additional broad and shallow median groove runs from the apical margin to the keel between frons and vertex, this median groove shallower and indistinct just behind the apex, deeper at its posterior end. Frons and rostrum with small punctures, interstices with a dense microsculpture, giving a rather dull appearance. Vertex with a crosswise impression behind the transverse ridge, a small median fovea and distinct punctures, interstices with dense linear microsculpture.

Pronotum.— Amply 1.3 times longer than wide, obliquely truncate between anterior and broadly rounded anterolateral angles (fig. 82). Superior side in anterior third flattened down towards anterior margin, with a median ridge, that is most distinct at its posterior end. Disc about equally punctate as in the male, but behind the emargination for the head the punctures progressively more elongate and rugosely confluent. Marginal striae shortly interrupted near the anterolateral angles. Anterior angles faintly impressed. No distinct antescutellar median stria but for the short trait before the scutellum that is also present in most males; no distinct impunctate median band.

Pygidium.— Shallow foveae near the anterolateral angles, punctures without hairs.

Prosternum.— Carinal striae ending a little behind the anterior margin, carina not margined or impressed in front, punctures larger, interstitial microsculpture less distinct.

Mesosternum.— The impressions along the procoxae are more marked; in this way the outer margins of the lateral striae seem to be continued along the procoxae

and to be connected along the anterior concavity. In this area some vague linear interstitial microsculpture is visible.

Metasternum.— Lateral striae longer, reaching the posterior metasternal third, slightly bent inwards posteriorly.

Variation.— PE-length female holotype: 3.4 mm, width: 1.4 mm, height: 1.2 mm. PE-length males: 3.3-3.5 mm, other females: 3.3-3.4 mm. The punctation varies a little in intensity, especially on the elytra. The short antescutellar trait of a stria on the pronotal disc is sometimes wanting. As usual the expression of pygidial fovei is vary variable: sometimes they are small but distinct, sometimes entirely wanting. The anterior impression of the prosternal carina of the males is sometimes shallower. Also the anterior impression of the mesosternum is rather variable in depth. The lateral metasternal striae vary a little in length, from the metasternal middle in the specimen from Sulawesi till the posterior metasternal third. The short lateral stria on the first sternite is very variable, sometimes well-impressed, sometimes entirely wanting. The males from Mindanao are not different from those of Luzon, but the face of the females from Mindanao are a little longer and narrower (fig. 87), the anterolateral pronotal angles less rounded (fig. 83), and the pronotum has two faint foveae. Therefore, the specimens from Mindanao have not been given paratype status. Maybe they represent a subspecies, but more material from the entire Philippine archipelago is needed to make a decision about this.

Remarks.— One large male has a slightly broader body form than the others, also the carinal disc and the mesosternum are a little broader than shown in the figure. In other respects there are no differences. A same phenomenon has been observed in very large males of *T. crassus*.

Etymology.— The name of this species is given in honour of my friend and Hydrophilidae-specialist J. ("Hans") Huijbregts, to whom I am indebted for enriching my collection with many species of Histeridae.

Trypeticus immanis spec. nov.
(figs 10-14)

Material.— **Malaysia:** Holotype, ♀ (BMNH), several tarsal segments missing, [white label, printed:] "♀"; [white label with yellow line, printed:] "SARAWAK/foot of Mt.Dulit./Junction of rivers/Tinjar & Lejok./5.ix.1932."; [white label, printed:] "Oxford Univ.Exp./B.M.Hobby & /A.W.Moore./B.M.1933-254"; [white label, printed:] "Under bark/felled timber."; [white label, printed:] "Old secondary forest."; [white label, hand-written:] "Details of/timber/R 1187"; [white label, printed:] "TRYPETICUS"; [red label, printed:] "HOLOTYPUS/*Trypeticus/immanis* sp. n./P. Kanaar des. 2000"; 1 ♂ (BMNH), same data as holotype, but 26.viii.1932 (paratype).

Female.— Length (without head and abdominal tergites) 5.2 mm, width 2.7 mm, height 2.2 mm. Thick-set cylindrical, shiny, piceous black, antennal flagelli and legs rufous.

Head.— Rostrum in frontal view broadly rounded anteriorly, margined by a distinct elevated rim, fading away posteriorly medially from the eyes (fig. 14). Frons and rostrum straight in profile, angulate backwards at the level of the distinct transverse ridge that separates frons and vertex, this ridge slightly sinuous and sharply delimited at its posterior side, barely delimited anteriorly. Frons slightly concave, with an addi-

tional more distinct concavity on rostrum, both concavities connected by a slight impression along the median line. Frons and rostrum with fine scarce double punctation, interstices a little dull by a very fine microsculpture at the sides, smooth in a rather triangular median area. Vertex with a small median fovea and a crosswise impression behind the transverse ridge, finely punctate, interstices with dense linear microsculpture.

Pronotum.— About as long as wide in dorsal view with nearly parallel sides (fig. 11), broadly rounded in front and thence almost transverse towards anterior angles, moderately convex in transversal direction, in profile convex in the posterior two-thirds, thence sloping down towards the anterior margin. A distinct elongate median tubercle, well visible in profile, is present about the anterior third. This tubercle is situated in a faint median impression that widens anteriorly and that is delimited by faint paramedian bosses, directed anteromedially and here rather well visible, but not delimited against the pronotal surface at their lateral and posterior sides. The median impression is faintly continued posteriorly along the median line. Behind the very shallow anterior emargination for the head a triangular area (indicated by a dotted line in the figure) is dull by a very dense interstitial microsculpture; in this area a very faint elevation along the median line is visible. At either side an ill-delimited shallow fovea is present, a little before the level of the median tubercle. Marginal striae fine, distinctly curved upwards at their posterior end, abbreviated in front near the anterior inward curvature of the pronotal outline, with a short appendix near the anterior angles. No distinct antescutellar stria, but median line accentuated by the median impression. Pronotal disc with a rather sparse fine double punctation; primary punctures larger and more closely set towards the anterior angles, in the dull area slightly elongate. Interstices outside the dull area smooth.

Elytra.— Along the suture a little shorter than pronotum with rounded apices, distinctly depressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile convex over its entire length, progressively so near apex. Elytra a little finer punctate than pronotal disc. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, with a fine linear interstitial microsculpture. Marginal epipleural stria partly present, indistinct and shallow.

Propygidium.— Broadly impressed along the anterior margin, with an oblique stria at the sides. Punctation fine, double, interstices smooth.

Pygidium.— Broadly rounded in outline, slightly convex, with a large fovea in each anterolateral angle. Punctation distinctly stronger than on propygidium, towards apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad, sides almost parallel, slightly convex in lateral view, margined at the sides by a distinct carinal stria, abbreviated in front a little behind the anterior margin. Carinal disc with a faint impression before the posterior margin and a distinct double punctation, interspaces with linear microsculpture.

Mesosternum.— At the sides the mesosternum is distinctly impressed, the impression sharply delimited laterally, but not medially; therefore only an indistinct indication of a lateral groove is visible for a short distance behind the procoxae (fig. 12). The sharp lateral delimitation of the mesosternal impression is continuous with the sharp delimitation of a deep anterior impression between the procoxae; this interprocoxal impression reaches a little less forward than in figure 12 of the male mesosternum.

Mesosternal disc with a rather sparse fine double punctation, interspaces with some indistinct linear microsculpture at the sides. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Distinctly convex in lateral view, its anterior part in a slight angle with the mesosternum. Median suture fine. Lateral striae wanting. Metasternal disc about equally punctate as mesosternum. A narrow band along the median suture is impunctate. Interspaces with indistinct linear microsculpture at the sides, elsewhere smooth.

First visible sternite.— Disc more densely and more distinctly punctate than meso- and metasternum. Interstices with indistinct linear microsculpture at the sides and along the posterior margin. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with some distinct small teeth on the distal fourth.

The male differs from the female as follows:

Length (without head and abdominal tergites) 4.8 mm, width 2.8 mm, height 2.2 mm.

Head.— Frons and rostrum in the anterior part straight in profile, at the posterior fourth of the eyes curved backwards. Rostrum in frontal view rounded-truncate, faintly emarginate, apical margin slightly elevated with two lateral small tubercles (fig. 13). Frons and posterior part of rostrum faintly concave, mainly in transversal direction, with an additional median depression of the apical part of the rostrum. A very fine oblique ridge runs from each eye anteromedially along the antennal insertion, fading away on the rostrum. Frons and rostrum with sparse, very fine double punctation, interstices with a very dense and fine linear microsculpture at the sides, mainly in oblique-longitudinal direction; in a triangular median area the interspaces are smooth. Transition between frons and vertex arcuate, rather gradual. Vertex (as far as visible) with fine punctation.

Pronotum.— Outline in dorsal view more oblique laterally from the anterior angles (fig. 10), in profile convex over its entire length, more strongly so in front, faintly impressed behind the shallow anterior emargination for the head. No tubercle, bosses or anterior dull area present, not impressed along the median line but for a shallow rounded fovea before the scutellum. Anterior angles slightly and widely impressed. Punctation of the disc about equal to that of female, punctures in the depression behind the anterior emargination and in the anterior angles more closely set, with many small punctures and some microsculpture in the interstices.

Pygidium.— Broadly parabolic in outline, with a deep and large fovea in each anterolateral angle, punctures without hairs. Interstices smooth.

Prosternum.— Carina slightly convex in lateral view, margined at the sides and in front by an elevated rim, at the sides accompanied by a distinct carinal stria (fig. 12). Carinal disc with a transverse impression along the anterior marginal rim and a distinct fine double punctation, interspaces with linear microsculpture.

Mesosternum.— Intercoxal impression more reaching anteriorly than in the female (fig. 12), lateral grooves still more indistinctly delimited medially than in the female.

Metasternum.— Lateral striae present, short, strongly divergent posteriorly (fig.

12), at a rather great distance from the meso-metasternal suture.

Remarks.— Besides of the anterolateral symmetric regular foveae some additional, asymmetrical small pits are present on pronotum and elytra in the male specimen, probably due to mutilation.

Etymology.— The name refers to the extraordinary large body size.

Trypeticus incilis Lewis, 1897
(figs 59-63)

Trypeticus incilis Lewis, 1897: 363.

Trypeticus meridianus Lewis, 1899: 27. **New synonym.**

Material.— **Indonesia:** Lectotype, ♀ (BMNH), left middle leg missing, [original mounting cardboard, hand-written:] “♂”; [white label, printed:] “♀”; [white round label with red margin, printed:] “Type”; [white label, hand-written:] “Sumatra”; [white label, printed:] “George Lewis Coll./B.M.1926-369”; [white label, hand-written:] “Sumatra”; [white label, hand-written:] “*Trypeticus/incilis*/Type ♂ Lewis”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/incilis*/Lewis, 1897/P. Kanaar des. 2001 (present designation); 1 ♂ (BMNH), Sumatra, Donkier, 1897 (paralectotype); 1 ♀ (BMNH), Sumatra, 1896 (paralectotype); 1 ♀ (BMNH), lectotype of *Trypeticus meridianus* Lewis, four segments of left hindtarsus missing, [white round label with red margin, printed:] “Type”; [white label, printed:] “Lombok/Sapit 2000/iv.1896/H. Fruhstorfer”; [white label, printed:] “George Lewis Coll./B.M.1926-369”; [white label, hand-written:] “*Trypeticus/meridianus*/Type ♀ Lewis”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/meridianus*/G. Lewis 1899 ♀ / P. Kanaar des. 2001” (present designation); [white label, hand-written and printed:] “synonymous/with/*T. incilis* Lew./det. P. Kanaar 2001”; 1 ♀ (BMNH), same locality, date and collector (paralectotype); 1 ♀ (MNHN), same locality, date and collector; 1 ♀ (BMNH), Sumatra; 1 ♀ (ZMHB), Java, Frühst[orfer]. **Malaysia:** 1 ♂ (BMNH), Sarawak, Mt. Dulit, Dulit Trail, 27.viii.1932, primitive forest, on bark of felled tree, B.M. Hobby, A.W. Moore; 1 ♂ (MZLU), Sabah, Sipitang, Mendolong, 11.v.1988, S. Adebratt.

Female.— Length (without head and abdominal tergites) 3.3 mm, width 1.5 mm, height 1.3 mm. Cylindrical, shiny, piceous brown-black, antennae and legs rufous.

Head.— Face faintly bisinuuous in profile before the middle of the eyes, with slightly elevated rostral tip, posteriorly over the eyes convex. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two paramedian tubercles (fig. 63). Frons moderately concave, rostrum with additional faint oblique impressions anterolaterally. At the sides the rostrum is convex towards the lateral edges. Frons and rostrum with rather sparse small punctures, interstices with distinct linear microsculpture in oblique-longitudinal direction. Transition between frons and vertex arcuate and gradual, slightly depressed in the median line. Vertex with an ill-delimited median fovea, punctuation more distinct than on frons, with indistinct interstitial microsculpture.

Pronotum.— Nearly 1.2 times longer than wide, in dorsal view with nearly parallel sides (fig. 59), slightly narrowing in front and thence broadly rounded towards the anterior angles, moderately convex in transversal direction, in profile faintly convex, progressively so towards anterior margin. Behind the anterior emargination for the head the pronotum has a distinct parabolic impression, rather ill delimited posteriorly, at the sides delimited by distinct bosses. In this anterior impression a very faint median ridge is present, most distinct posteriorly. Large and shallow, ill-delimited impressions are present behind the anterior angles. Marginal striae fine, slightly turned

upwards at their posterior end, at a rather great distance from the edge in the anterior half, ending in the anterior angles. Pronotal disc not densely covered with moderate punctures of unequal size, a little irregularly dispersed, mixed with very small punctures in the anterior fourth, the punctures more flaccid and with indistinct interstitial microsculpture in the parabolic impression behind the anterior emargination. Interspaces elsewhere smooth. A distinct impunctate median band is present in the posterior three-fifths, without distinct median stria.

Elytra.— Along the suture shorter than pronotum (fig. 59), slightly impressed near the scutellum, moderately convex in transversal direction, in profile slightly convex in the anterior two-thirds, thence more convex towards apex. Elytral punctation along anterior margin equal to that of pronotum, elsewhere a little finer, punctures of slightly unequal size and a little irregularly dispersed. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura scarcely punctate with linear microsculpture; a shallow and wide marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly impressed along anterior margin, more distinctly so towards sides, with an oblique lateral stria at either side. Punctation as on pronotum, interstices smooth.

Pygidium.— Triangular with rounded apex, faintly convex, slightly impressed along the anterior margin and a little more distinctly so near the anterolateral angles. Punctation a little coarser than on propygidium, along margins finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad and rather short, sides almost parallel (fig. 61), in lateral view faintly convex. Carinal disc margined at the lateral sides and in front by a narrow elevated rim, at the sides accompanied by a carinal stria, ill-delimited at their inner side, and in front by a distinct transversal impression. Carinal disc with distinct punctures. Interspaces with fine linear microsculpture and some indistinct minute punctures.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae distinct, broad and sulciform, ill-delimited at the inner side, nearly parallel in the posterior half, slightly arcuate in front, ending behind the procoxae (fig. 61). Mesosternal disc with distinct, rather sparse punctures of slightly unequal size. Interspaces with indistinct minute punctures and some indistinct microsculpture. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Lateral striae rather fine, slightly sinuous and slightly divergent posteriorly, nearly attaining the metasternal half (fig. 61). Disc a little finer punctate than mesosternum. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, except its posterior end.

First visible sternite.— Punctation more closely set than on metasternum, mixed with some small punctures. Interstices with some indistinct linear microsculpture along posterior margin. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The male differs from the female as follows:

Punctation more distinct.

Head.— Face in profile slightly sinuous before the middle of the eyes, posteriorly convex. Rostrum in frontal view rounded-truncate anteriorly, apex with two paramedian tubercles (fig. 62), with an impression between. Frons slightly more concave than in the female, the concavity obliquely and slightly ridgelike delimited medially from the antennal insertions. Frons and rostrum rather densely punctate, punctures small, interstices with dense microsculpture. Transition between frons and vertex arcuate, gradual. Vertex with a small median fovea and more distinctly punctate than frons, punctures of unequal size, interstices with dense microsculpture.

Pronotum.— Amply 1.1 times longer than wide (fig. 60), in dorsal view with nearly parallel sides in the posterior two-thirds, thence tapering and broadly rounded towards anterior angles. Pronotum strongly convex in transversal direction, in profile faintly convex, increasingly so towards anterior margin. Behind the middle of the anterior emargination for the head the pronotum has a narrow sickle-shaped impression, influencing the pronotal outline in dorsal view. Along the anterior emargination this impression is finely margined. Anterior angles not impressed. Pronotal disc rather densely punctate, punctures along the anterior margin very closely set, mixed with very small punctures.

Pygidium.— Broadly parabolic in outline, convex, with faint anterolateral impressions. Punctuation distinct, punctures without hairs, along the lateral and apical margins finer.

Prosternum.— Carinal striae more distinctly impressed. Carinal disc with double punctuation, the larger punctures slightly elongate; interspaces with linear microsculpture.

Meso- and metasternum.— Punctuation distinct, double, the larger punctures elongate.

Variation.— PE-length male paralectotype: 3.3 mm, other males: 3.4 mm; PE-length female lectotype: 3.5 mm, other females: 3.2-3.5 mm. The punctuation varies a little in intensity: slightly finer than in the type specimens in the females from Lombok, slightly stronger in the male specimens from Malaysia. The faint median ridge in the anterior depression of the female pronotum is rather obsolete in the females from Java and Lombok. The length of the lateral metasternal striae is rather variable; in the male paralectotype and the male from Sarawak they are much shorter than in the other specimens. In some specimens the colour is castaneous instead of piceous brown-black, obviously by immaturity. Sometimes there are rudiments of lateral striae on the first abdominal sternite.

Remarks.— In the original description no holotype has been designated. As Lewis described the female first (though he thought it was a male) the female specimen with the label "Type" has been designated lectotype. The male specimen has also been labeled as "type", whereas the other female has a label "co-type". Distinct margination along the anterior edge of the pronotal carinal disc of the females is rather uncommon in this genus.

Trypeticus indicus Lewis, 1893
(figs 190-194)

Trypeticus indicus Lewis, 1893b: 184-185.

Material.— **India:** Lectotype, ♀ (BMNH), [white round label with red margin, printed:] “Type”; [white label, printed:] “Kanara”; [white label, printed:] “George Lewis Coll./B.M.1926-369.”; [white label, hand-written:] “841”; [white label, hand-written:] “*Trypeticus/indicus* ♂/Type. Lewis”; [red label, printed and hand-written:] LECTOTYPUS/*Trypeticus/indicus*/Lewis, 1893 ♀ / P. Kanaar des. 2000” (present designation); 1 ♂ (BMNH), same data as lectotype, but “♀” on Lewis’ written namelabel (paralectotype, present designation); 24 ♂♂, 7 ♀♀ (BMNH, MNHN) Nilgiri Hills, H.L. Andrewes; 1 ♂ (ZMHB), Nilgiri Hills; 1 ♂ (MNHN), Chambaganor, Madura; 1 ♂ (MNHN), Coonoor R., Nilgiris, Madras, 2.ii.1924, ex *Poinciana elata*, C.F.C. Beeson; 4 ♂♂, 7 ♀♀ (MNHG, CHPK, CHSM, CHYG), Kerala, Cardamon H., Kumilly, 1000 m, 6.xi.1972, Besuchet, Löbl, Mussard; 1 ♂ ((ZMUC), Karnataka, Mudigere area, c. 900 m, 2-10.xi.1977, Zool. Mus. Copenhagen Exp.; 1 ♂ (CHTL), S. Tamil Nadu, Nilgiris, 15 km SE of Kotagiri, Kunchappanai, 900 m, 11°22′N 76°56′E, 7-22.v.2000, D. Hauck; 1 ♀ (BMNH), illegible hand-written label, H.L. Andrewes collection. **Laos:** 1 ♂ (NHMW), N. Laos, Prov. Lg. Nam, ca. 10 km E Lg. Nam Tha, 600 m, 19.vi.1996, Schillhammer. **Vietnam:** 1 ♀ (SMTD), Phuc-Son, Annam (with doubt).

Male.— Length (without head and abdominal tergites) 2.6 mm, width 1.1 mm, height 1.0 mm. Cylindrical, shiny, castaneous, sutures darker, antennae and legs ferrugineous.

Head.— Face in profile bisinuous, with distinctly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate, apical margin with two distinct conical tubercles (fig. 193), rostrum depressed between these tubercles and in a lesser degree behind the tubercles. Frons distinctly and broadly concave, this concavity sharply delimited medially from the eyes and antennae, causing a moderate ridge that fades away at the sides of the rostrum. Frons and rostrum with rather sparse small punctures, interstices smooth. Transition between frons and vertex arcuate and rather sharp.

Pronotum.— About 1.2 times longer than wide (fig. 190), in dorsal view with parallel sides, rounded in front, thence rather straight towards the anterior pronotal angles, strongly convex in transversal direction, in profile almost straight in its posterior half, thence moderately and rather evenly convex towards the anterior margin. Marginal striae distinct, curved inward behind, more distant from the margin in front, ending at some distance from the slightly impressed anterior angles. Pronotal disc not very densely covered with coarse deep punctures of unequal size, punctures along the anterior margin more closely set and smaller. Interspaces smooth. No distinct impunctate median band or antescutellar median stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 190), with rounded apices, strongly convex in transversal direction, in profile moderately convex, progressively so towards apex, punctures along the anterior margin a little smaller than on pronotum, elsewhere much finer, punctures near suture more closely set. A narrow band along the slightly raised suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate, interstices with fine linear microsculpture. Marginal stria distinct in posterior half, obsolete in anterior half.

Propygidium.— Slightly concave in longitudinal direction, especially in front, faintly impressed at the sides. Oblique lateral striae wanting. Punctuation rather dense, punctures small and of unequal size, interstices smooth.

Pygidium.— Triangular in outline with broadly rounded tip, slightly convex in transversal direction, almost straight in lateral view, faintly impressed near the anterolateral angles, apex rounded. Punctuation as propygidium, punctures near the apex

with very short, barely visible bristles. Interstices smooth.

Prosternum.— Carina broad with nearly parallel sides, slightly divergent in front (fig. 192), in lateral view almost straight in its posterior half, thence progressively convex towards anterior margin. Carinal disc along the median line faintly impressed, especially so in front, margined at the sides and in front by an elevated rim, at the sides accompanied by a distinct sulciform carinal stria. The carinal striae are connected in front by a shallow transverse impression behind the anterior rim. Carinal disc with rather scarce distinct punctation, the punctures slightly elongate, interspaces with indistinct linear microsculpture, shiny. Lateral prosternal striae visible in ventral view, fine (not shown in the figure).

Mesosternum.— Between the procoxae faintly impressed. Lateral striae rather broad and deep sulciform, well-delimited at both sides, faintly curved outwards, ending behind the procoxae (fig. 192). Mesosternal disc not very densely punctate with distinct elongate punctures of slightly unequal size. Interspaces smooth. Mesometasternal suture fine, impressed, slightly angulate backwards.

Metasternum.— Median suture distinct, deep sulciform, just before the posterior metasternal margin less distinctly delimited. Lateral striae distinct, divergent posteriorly (fig. 192), about reaching the posterior third, here slightly curved inward. Metasternal disc a little coarser and denser punctate than mesosternum, before the posterior margin the punctures smaller and more closely set. A rather broad band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc faintly impressed, about equally punctate as posterior part of metasternum. Oblique lateral striae distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Face in profile for the greater part nearly straight with distinctly raised tip. Frons and vertex separated by a transverse and sharp ridge, well-delimited behind, less so towards the frons. Frons and rostrum bordered at the lateral sides by a distinct elevated rim (fig. 194), continuous with the transverse ridge at their posterior end and at their inner side accompanied by a shallow groove. On the elevated apex of the rostrum these rims end in a distinct paramedian tubercle. Between these tubercles the apex is slightly emarginate and depressed. A moderate median impression is present on the rostrum just before the level of the antennal insertions, frons slightly impressed to the sides. Frons and rostrum with small punctures, interstices smooth on rostrum and median part of frons, with dense linear microsculpture on the impressed lateral parts of the frons, causing a dull appearance. Vertex with distinct punctures and a median fovea, interstices with dense linear microsculpture.

Pronotum.— About 1.4 times longer than wide with parallel sides, in front broadly rounded and thence oblique, very faintly emarginate towards the anterolateral angles (fig. 191). Superior side in anterior fourth flattened down towards anterior margin, with a median ridge, that is most distinct at its posterior end and that fades away towards anterior margin, pronotal disc a little depressed alongside this ridge. Anterior angles more distinctly impressed than in the male. Disc a little finer punctate than in the male; behind the emargination for the head the punctures

become elongate. A short antescutellar median stria is present.

Propygidium.— In some specimens the propygidium has distinct lateral foveae. The punctures at the sides of the propygidium have a yellow hair.

Pygidium.— More convex and less triangular than in the male, the punctures are distinctly ciliate.

Prosternum.— Almost straight in lateral view. Carinal striae ending shortly behind the anterior margin. Apical stria wanting, punctures a little smaller, especially in front.

Variation.— PE-length lectotype 2.9 mm, males 2.4-3.0 mm, females 2.6-3.4 mm. The size of the punctures is a little variable. The length of the lateral metasternal striae is rather variable; in some specimens they reach about the metasternal half, without the posterior inward curvation, in others they reach the posterior metasternal fourth. In some specimens the sulciform impression of the metasternal median suture is continued for a short distance onto the mesosternum. In a few specimens the lateral striae of the first abdominal sternite are obsolete. In some females (also in the lectotype) the pronotal ridge is less distinctly developed than in most other females, and the depressions alongside are less distinct; also the punctation is a little finer. The tubercles on the rostral apex are closer set in the lectotype than in the specimen drawn in figure 194 and the apical margin between is less emarginate. In some females the faint impressions on the face are less distinct and also the extension of the dull areas at the sides of the frons is variable. In some females a narrow band along the anterior pronotal emargination is dull by a dense microsculpture of the interstices.

Remarks.— Lewis described the female first, though he thought that it was a male. Therefore, the female has been chosen as lectotype. The female from Phuc-Son, that has been attributed with doubt to this species, has a broader rostrum and a more rounded apex of the pygidium.

Trypeticus jaegeri spec. nov.
(figs 352-354)

Material.— **Malaysia:** Holotype ♀ (MZLU), left protarsus, three segments of left mesotarsus and left metatarsus missing, alae protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T6/R/3.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/jaegeri* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 1.8 mm, width 0.6 mm, height 0.6 mm. Slender cylindrical, shiny, piceous brown with rufous areas, antennae and legs rufous.

Head.— Face in lateral view very faintly concave (almost straight). Frons and vertex separated by a transverse ridge, well delimited behind, less so to the frons. Frons and rostrum delimited at the sides by a narrow and fine, barely sinuous ridge, less distinct along the eye and here continuous with the transverse ridge behind, in front convergent and passing into a slightly elevated pointed rostral tip (fig. 354) that slightly overhangs the anterior rostral margin along the labrum in frontal view, underside of this protruding tip triangular and slightly concave. At their medial side the lateral ridges are accompanied by a narrow and indistinct sulcus. Just medially from the anterior end of these sulci the base of the pointed tip has two very indistinct

tubercles, between these tubercles the pointed tip is slightly impressed. At the lateral sides of the oblique ridges the rostrum slopes steeply down to its lateral margin. Frons and rostrum very little concave, with small, slightly elongate punctures, interstices with a dense, very fine microsculpture causing an egg-shell lustre. Vertex with a distinct crosswise impression behind the transverse ridge, a small median fovea at a rather great distance from the transverse ridge, more distinctly punctate than frons, interstices with a dense linear microsculpture.

Pronotum.— About 1.6 times longer than wide (fig. 352), with nearly parallel sides, slightly wider in the anterior half, in front slightly tapering and thence abruptly curved inwards and oblique towards anterior angles, strongly convex in transversal direction, in profile almost straight in posterior three-fourths, thence progressively convex towards anterior margin. Marginal striae distinct, a little curved inward over the posterolateral angles, in the anterior half at a rather great distance from the lateral pronotal margin and ending just behind the anterolateral abrupt curvatures. Anterior pronotal angles with a small, but deep fovea. Disc not densely covered with moderate, slightly elongate punctures of slightly unequal size, the punctures more closely set near the anterior angles. In an ill-delimited triangular area behind the anterior emargination (shown by a dotted line in the figure) the punctures are smaller, with an indistinct very fine interstitial microsculpture. Interspaces elsewhere smooth. An indistinct impunctate median band with a short antescutellar stria is present in the posterior third. No anterior median ridge.

Elytra.— Along the suture shorter than pronotum (fig. 352), apices rounded. Elytra strongly convex in transversal direction, in profile slightly convex, more distinctly so towards apex. Elytra slightly impressed near scutellum and along the base, slightly finer punctate than pronotum; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate, interstices with indistinct linear microsculpture. A shallow marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly impressed along the anterior margin. No distinct oblique lateral striae, though oblique impressions mark their usual position. Punctuation not very dense, punctures of unequal size, in the posterolateral angles with a short hair. Interstices with linear microsculpture.

Pygidium.— Broadly rounded in outline (fig. 352), convex in both directions, slightly impressed near the anterolateral angles. Pygidium punctate as propygidium, the larger punctures in the apical half with a rather short yellow hair. Interspaces with linear microsculpture.

Prosternum.— Carina in profile very little convex. Carinal disc rather broad (fig. 353), sides nearly parallel, divergent anteriorly; at either side a narrow carinal stria is present, slightly abbreviated in front. Carinal disc slightly impressed along the posterior margin, with sparse small punctures, interstices with linear microsculpture. The lateral prosternal striae are well visible in ventral view (not shown in the figure).

Mesosternum.— Interprocoxal part in lateral view at a lower level than the prosternal carinal disc, slightly impressed. Lateral striae slightly divergent anteriorly, sulciform (fig. 353), ill-delimited at their inner side, ending in front behind the procoxae. Mesosternal disc not densely punctate, punctures rather small, elongate, of unequal size; interspaces smooth. Meso-metasternal suture fine, strongly angulate posteriorly.

Metasternum.— Median suture in front sulciform, elsewhere finely canaliform.

Lateral striae fine, slightly divergent posteriorly (fig. 353), not quite reaching the metasternal half. Metasternal disc in front punctate as mesosternum, punctures smaller and shallower posteriorly, A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Between the metacoxa almost impunctate, punctures posteriorly more distinct and more closely set. Oblique lateral striae present, fine and long.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of the hindtibiae with hairs and some indistinct teeth in the distal third.

The male is unknown.

Etiology.— This species is dedicated to Mr Olaf Jäger (Museum of Dresden), in appreciation of his co-operation.

Trypeticus jelmeri spec. nov.
(figs 355-359)

Material.— **Indonesia**: Holotype ♂ (RMNH), [white label, printed:] “♂”; [white label, printed and hand-written:] “L.G.E. Kalshoven/Java 800 M./Mount Gedé/.....1924. No 141m”; [white label, hand-written:] “*Trypeticus/minutulus*/Lew./det. Desbordes”; [white label, printed:] “Museum Leiden/collectie/L. Kalshoven”; [red label, printed:] “HOLOTYPUS/*Trypeticus/jelmeri* sp. n./P. Kanaar des. 2000”; 2 ♂♂, 2 ♀♀ (RMNH, MNHN, CHPK), same locality, date and collector as holotype (paratypes).

Male.— Length (without head and abdominal tergites) 1.64 mm, width 0.55 mm, height 0.51 mm. Slender cylindrical, shiny, pale-brown with darker parts on elytra and along sutures.

Head.— Face in lateral view faintly convex. Rostrum in frontal view rounded-truncate anteriorly, with slightly elevated apical margin in the middle (fig. 358), without distinct tubercles. Frons and rostrum distinctly concave, the concavity divided into a frontal and a rostral part by a crosswise elevation just before the level of the antennal insertions. At the lateral sides the concavity is delimited by a rather blunt bisinuous ridge, less distinct before the antennal insertions. Rostrum and frons sparsely and finely punctate, punctures of slightly unequal size, interstices with very fine microsculpture, shiny. Transition between frons and vertex strongly arcuate, rather sharp. Vertex more distinctly punctate than frons, interstices with microsculpture.

Pronotum.— About 1.5 times longer than wide (fig. 355), in dorsal view slightly wider in the anterior half, in front broadly rounded toward the anterior angles. Pronotum strongly convex in transversal direction, in profile straight in the posterior two-thirds, thence progressively convex toward the anterior margin. Marginal striae distinct, continued for a rather long distance along the base as a very fine stria, in front distinctly and sinuously leaving the pronotal edge and ending at a short distance behind the not impressed anterior pronotal angles. Punctuation not very dense, punctures deep, of moderate and slightly unequal size, irregularly dispersed, smaller and more closely set along the anterior margin. Interspaces smooth. No median stria or impunctate band. Area between marginal stria and pronotal edge smooth.

Elytra.— Along the suture slightly shorter than pronotum (fig. 355), with rounded apices, strongly convex in transversal direction, in profile faintly convex and raising posteriorly, strongly convex just near the apices. Elytral disc distinctly finer punctate

than pronotum, punctures in a band along suture more closely set, larger, elongate and of unequal size. A very narrow band along the slightly elevated suture is impunctate. Interspaces smooth. Epipleura punctulate, with indistinct interstitial linear microsculpture; an indistinct marginal stria is present in the posterior half.

Propygidium.— Distinctly punctate, interstices smooth, oblique lateral striae wanting.

Pygidium.— Triangular in outline with broadly rounded apex, slightly concave in longitudinal direction, slightly convex in transversal direction. Disc distinctly punctate, punctures of slightly unequal size, without hairs. Interstices smooth.

Prosternum.— Carina slightly convex in lateral view. Carinal disc narrow, with parallel sides, in front slightly divergent (fig. 357), margined at the sides by a narrow elevated rim and a distinct carinal stria. Along the anterior margin the rim is indistinct, with a shallow transverse impression behind it. Carinal disc with sparse, rather fine elongate punctures of unequal size, interspaces smooth.

Mesosternum.— Very faintly crosswise impressed in front. Lateral striae rather broad, sulciform, nearly parallel, ill-delimited at the inner side, ending behind the procoxae (fig. 357). Mesosternal disc sparsely punctate, punctures rather small, elongate. Interspaces smooth. Meso-metasternal suture fine, mainly indicated by a depression, slightly angulate backward.

Metasternum.— Lateral striae distinct, very long, slightly curved (fig. 357), ending a little before the hindcoxae, close to the meta-metepimeral suture. Median suture sulciform. Metasternal disc about punctate as mesosternum, punctures smaller posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Intermetacoxal part with a fine median impression. Punctuation as on posterior part of metasternum, punctures along the posterior margin more closely set and a little larger. Oblique lateral striae distinct, rather long.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with a row of spines on the outer margin and some distal teeth.

The female differs from the male as follows:

Head.— Face in lateral view for the greater part nearly straight, with strongly elevated rostral tip. Rostral apex rather sharply pointed, the acuminate apex strongly turned up, therefore in frontal view very little protruding beyond the anterior rostral margin along the labrum (fig. 359), the anteroventrally directed underside concave. Frons moderately concave, the concavity continuous with lateral concavities of the rostrum; these concavities distinctly delimited at the sides by a rather blunt bisinuous ridge, fading away on the rostrum near the elevated apex. Frons and rostrum with small, slightly elongate punctures, ill-visible by dense microsculpture. Transition between frons and vertex arcuate, rather sharp. Vertex with a small median fovea, more distinctly punctate than frons, interspaces with microsculpture.

Pronotum.— About 1.7 times longer than wide (fig. 356), with a long antescutellar median stria, punctures slightly elongate.

Propygidium.— Punctures in the posterolateral parts with a short yellow hair.

Pygidium.— Slightly convex, apex rounded; punctures with a yellow hair.

Prosternum.— Carina not margined along the anterior edge, the carinal striae slightly abbreviated in front.

Variation.— PE-length other male: 1.62 mm; PE-length of the not entirely fragmented female: about 1.8 mm.

Remarks.— The two females and one male are in a bad condition, more or less fragmented and missing parts of the body. Probably they were already dead for some time at the moment of sampling or they have been subject to dry rot.

Etymology.— This species is named after my grandson Jelmer Kanaar. Though still very young I hope that he will enjoy the wonderful world of insects as much as I do.

Trypeticus jorisi spec.nov.
(figs 432-436)

Material.— **Malaysia:** Holotype, ♂ (MZLU), [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T 1B/W4/11.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus jorisi* sp. n./P. Kanaar des. 2000”; 6 ♂♂, 2 ♀♀ (MZLU, CHPK, CHTL), same locality, date and collector, but various trap codes (paratypes); 2 ♂♂, 1 ♀ (MZLU), idem, but 12.xii.1987 (paratypes); 1 ♂, 3 ♀♀ (MZLU, CHOK, CHPK), idem, but 22.xii.1987 (paratypes); 2 ♂♂, 1 ♀ (MZLU, CHPK), idem, but 25.iv.1988 (paratypes); 2 ♂♂, 2 ♀♀ (MZLU, CHPK), idem, but 3.v.1988 (paratypes); 2 ♀♀ (MZLU, CHPK), idem, but 4.v.1988 (paratypes); 1 ♂, 1 ♀ (MZLU, CHPK), idem, but 6.v.1988 (paratypes); 4 ♂♂, 2 ♀♀ (MZLU, CHPK), idem, but 13.v.1988 (paratypes); 1 ♂ (CHND), idem, but 2.iii.1989 (paratype); 1 ♀ (MZLU), idem, but 8.iii.1989 (paratype); 1 ♀ (MZLU), idem, but 10.iii.1989 (paratype); 1 ♂ (MZLU), idem, but 14.iii.1989 (paratype); 1 ♂, 3 ♀♀ (MZLU, CHPK, CHFP), idem, but 31.iii.1989 (paratypes). **Indonesia:** 1 ♂ (CHSM), Sumatra, Aceh #25a, Mt. Leuser NP, 300-500 m, Ketambe, 23-30.xi.1989, Löbl, Agosti, Burckhardt.

Male.— Length (without head and abdominal tergites) 1.95 mm, width 0.85 mm, height 0.80 mm. Rather thick-set cylindrical, shiny, piceous brown-black, abdominal segments, parts of underside, antennae and legs rufous.

Head.— Face in profile bisinuous, rostrum rather short (fig. 435), in frontal view rounded-truncate anteriorly. Frons and posterior part of rostrum rather strongly concave, this concavity delimited along the antennal insertions by an elevated sinuous rim, anterior part of rostrum convex. Frons and rostrum not densely punctate, the punctures of moderate, slightly unequal size, interspaces with distinct linear microsculpture. Transition between frons and vertex strongly arcuate, rather gradual, smooth between the punctures. Vertex with a distinct oblique impression at either side, punctures in these impressions more closely set with dense interstitial microsculpture.

Pronotum.— Very little longer than wide (fig. 432), strongly convex in transversal direction, in profile moderately convex, slightly progressively so immediately behind the anterior emargination. Disc not very densely punctate, punctures deep, of moderate, slightly unequal size. Interspaces smooth. Marginal striae rather fine, curved inward over the rounded posterolateral angles, ending at some distance from the not impressed anterior pronotal angles. A short, very fine median stria is present before the scutellum.

Elytra.— Along the suture about as long as pronotum (fig. 432) with rounded apices, strongly convex in transversal direction, moderately convex in profile, progressively so near their posterior end, about equally punctate as pronotum, but punctures in an impression along the anterior margin more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura almost impunctate,

with linear microsculpture; indistinct marginal epipleural striae present in posterior half.

Propygidium.— Densely punctate and very densely covered with very thin, rather long yellowish hairs; presence or absence of oblique lateral striae not assessable by this pilosity.

Pygidium.— Distinctly concave along sides and apex, punctate, anteriorly and anterolaterally very densely fimbriate as propygidium, elsewhere the hairs less closely set.

Prosternum.— Carina slightly convex in lateral view, carinal disc rather broad (fig. 434), sides divergent anteriorly, margined by a narrow elevated rim at the sides and in front, the rim along the anterior margin very fine. The rims at the lateral sides are accompanied by a very shallow and indistinct carinal stria. Carinal disc distinctly impressed before the slightly emarginate posterior margin, not very densely punctate, punctures of unequal size, interspaces with linear microsculpture.

Mesosternum.— Distinctly and crosswise impressed behind the slightly convex interprocoxal part. Lateral striae distinct, rather shallow and narrow at their posterior end, thence faintly convergent anteriorly, deeper and wider sulciform, bent inward and narrower in front, continued for a rather long distance as a fine stria along the procoxae (fig. 434). Mesosternal disc not very densely punctate, punctures of moderate size, slightly elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Lateral striae fine, slightly curved inwards anteriorly, elsewhere almost parallel, nearly reaching the anterior metasternal third (fig. 434). Median suture finely canaliform. Metasternal disc more finely punctate than mesosternum, punctures slightly elongate, rather sparse at the lateral sides of the disc; a rather broad band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Short oblique lateral striae present. Disc with rather small elongate punctures.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with a row of spines and two small distal teeth on the outer margin.

The female differs from the male as follows:

Head.— Face in lateral view distinctly sinuous with slightly elevated rostral apex. Rostrum in frontal view broadly rounded-truncate anteriorly, apical margin slightly raised and indistinctly bituberculate (fig. 436). Frons and rostrum together moderately concave, margined along the antennal insertions and along the sides of the posterior part of the rostrum by a fine elevated ridge. Frons and rostrum rather densely punctate, primary punctures of moderate size and with a short erect hair. Interspaces with small secondary punctures and dense interstitial microsculpture, producing a dull appearance of the greater part of the face. Transition between frons and vertex arcuate, rather gradual.

Pronotum.— Barely longer than wide, in dorsal view less broadly rounded at the anterolateral parts, slightly flattened off towards anterior emargination and therefore slightly emarginate in dorsal view (fig. 433). Along the anterior emargination the pronotum is finely margined. In the flattened anterior area the punctation is very fine with some indistinct interstitial microsculpture, elsewhere punctation about equal to

that of male, but punctures more unequal in size. Antescutellar stria longer, more distinct.

Propygidium.— Densely punctate, but much less densely fimbriate than in the male.

Pygidium.— About equal to that of the male, but only in the anterior third with a very fine and dense ciliation, elsewhere less densely fimbriate.

Prosternum.— The rim along the anterior margin of the carinal disc still finer or obsolete.

Variation.— PE-length males: 1.8-2.0 mm, females: 2.0-2.1 mm. Many specimens are not yet fully coloured. Also in some males the fine rim along the anterior margin of the carinal disc is obsolete. In some females the sides of the prosternal carinal disc are slightly less divergent anteriorly. The anterior impression of the mesosternum is sometimes more distinct, extending anteriorly, in other specimens less distinct. The length of the lateral metasternal striae is a little variable, the short lateral striae of the first sternite are sometimes obsolete.

Remarks.— In the male specimen used for fig. 434 the prosternum is a little giving way from the mesosternum; in other specimens the convex interprocoxal part of the mesosternum fits against the posterior emargination of the prosternal keel.

Etymology.— This species is named after my grandson Joris Matthijs van der Bijl, in appreciation of his keen interest in my insect collection.

Trypeticus kalemantanus (Marseul, 1864)
(figs 108-112)

Trypanaeus (*Trypeticus*) *kalemantanus* Marseul, 1864: 283-284.

Tryponaeus kalemantianus (sic!); Gemminger & Harold, 1868: 793.

Trypeticus kalemantanus; Lewis, 1905: 7.

Material (Form A).— **Malaysia:** Lectotype, ♀ (MNHN), several tarsal segments, left antennal flagellum and club missing, [round yellowish label, hand-written, partly illegible:] "*Trypanaeus/Kalemantanus/Saraw./Wall 64*"; [round white label, hand-written:] "*SAR./783*"; [red label, printed:] "*TYPE*"; [white label, printed:] "*MUSEUM PARIS/COLL. DE MARSEUL/2842-90*"; [red label, printed and hand-written:] "*LECTOTYPUS/Trypanaeus/(Trypeticus)/kalemantanus/Marseul 1864 ♀/P. Kanaar des. 1999*" (present designation); 1 ♂ (MZLU), Sabah, Sipitang, Mendolong, 8.xii.1987, S. Adebratt. **Indonesia:** 2 ♂♂ (CHSM, CHPK), Sumatra, Aceh, Mt Leuser NP, 300-500 m, Ketambe, 23-30.xi.1989, Löbl, Agosti, Burckhardt; 1 ♂ (NHMW), W. Sumatra, Nsg Panti, 300-450 m (5), 6.ii.1991, Jäch; 1 ♂ (NHMW), W. Sumatra, Nsg Panti (5), 6.ii.1991, Schödl.

Form A. Male.— Length (without head and abdominal tergites) 3.2 mm, width 1.7 mm, height 1.4 mm. Subcylindrical, shiny, piceous brown-black, antennae, legs and abdominal segments rufous.

Head.— Face faintly concave in profile with barely elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two paramedian tubercles (fig. 111). Frons slightly concave, rostrum with very faint paramedian impressions. At the sides the rostrum is convex towards the lateral edges. Frons and rostrum with rather scarce small punctures, interstices with fine linear microsculpture, mainly in oblique direction. Transition between frons and vertex arcuate and gradual. Vertex (as far as visible) punctate as front.

Pronotum.— A little longer than wide, in dorsal view with nearly parallel sides

(fig. 108), broadly rounded in front towards the anterior angles, moderately convex in transversal direction, in profile faintly convex, sloping down towards anterior margin. Emargination for the head shallow. Marginal striae distinct, sinuous, at a rather great distance from the edge in the anterior half, broadly interrupted in the anterolateral curvature, finely continued near the non-impressed anterior angles. Pronotal disc not densely covered with rather small punctures of slightly unequal size, rather irregularly dispersed, mixed with very small punctures, the punctures more closely set behind the anterior emargination for the head and in the anterior angles. Interspaces smooth. An indistinct impunctate median band is present without distinct median stria.

Elytra.— Along the suture shorter than pronotum (fig. 108), slightly impressed near the scutellum, moderately convex in transversal direction, in profile slightly convex in the anterior two-thirds, thence strongly convex towards apex. Elytral punctation a little finer than on pronotum, punctures of slightly unequal size and rather irregularly dispersed, mixed with small punctures, near suture punctures more closely set. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture, without distinct marginal epipleural stria.

Propygidium.— Slightly concave in longitudinal direction, with an oblique lateral stria at either side. Punctation not very dense, distinct, interstices smooth.

Pygidium.— Triangular with broadly rounded apex, impressed in the anterolateral angles. Punctation as on propygidium, along margins finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina not very broad, in the posterior half a little wider (fig. 110), in lateral view nearly straight. Carinal disc margined at the lateral sides and in front by a narrow elevated rim, at the sides accompanied by a shallow carinal stria, ill-delimited at their inner side, indistinct in front and merging with a distinct transversal impression along the anterior marginal rim. Carinal disc with distinct punctures. Interspaces with indistinct linear microsculpture.

Mesosternum.— Lateral striae distinct, sulciform, ill-delimited at the inner side, parabolic arcuate and connected in front between the procoxae (fig. 110). Mesosternal disc with distinct, slightly elongate punctures. Interspaces smooth but for some indistinct microsculpture at the sides. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae rather fine, slightly curved and divergent posteriorly, nearly reaching the anterior metasternal third (fig. 110). Disc finer punctate than mesosternum. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture finely canaliform, excepted its posterior end.

First visible sternite.— Punctation finer and more closely set than on metasternum. Interstices with some indistinct linear microsculpture along posterior margin. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a slightly bisinuate transverse ridge, well-delimited at its posterior side, barely so to the frons. Face in lateral view faintly con-

cave with barely elevated rostral tip. Rostrum with broadly rounded-truncate tip. Frons and rostrum delimited at the sides by a faintly sinuous ridge, continuous with the transverse ridge behind, and in front fading away a little behind the faintly elevated apical margin (fig. 112). At their medial side each lateral ridge is accompanied by a shallow sulcus, ill-delimited at their inner side; at the lateral side of the ridges the rostrum slopes steeply down to its edge. Frons and rostrum deeply concave, with an additional elongate ill-delimited median fovea at some distance from the transversal ridge, and reaching well onto the rostrum. Frons and rostrum with scarce small punctures. Interstices with dense fine microsculpture, giving a rather dull appearance, with the exception of the median fovea. Vertex with an ill-delimited median fovea; punctuation fine, interstices with dense microsculpture.

Pronotum.— A little longer than in the male, with nearly parallel sides (fig. 109), convergent in front and a little more abruptly rounded towards the anterior angles. Disc a little scantier punctate than in the male. Behind the anterior emargination for the head the pronotum is flattened down with a parabolic area (indicated by a dotted line in the figure) with dense interstitial microsculpture, giving a dull appearance; in the posterior part of this dull area an indistinct median ridge is present. In this area the punctures are smaller. A fine antescutellar median stria is present.

Pygidium.— Along anterior margin impressed, apex more broadly rounded.

Prosternum.— Carinal disc less deeply impressed in front.

Variation (form A).— PE-length lectotype: 3.2 mm, males 3.2-3.4 mm. The punctuation is in some specimens a little finer than in others. The course of the mesosternal striae is rather variable: in the female lectotype and some males the shape is as depicted in fig. 110, in other males the posterior branches are more or less parallel, but in none of the specimens the anterior parabolic arch has a distinct indention along the postero-median part of the procoxa. The two males from NHMW have a distinct transversal impression of the pronotum behind the anterior emargination.

Remarks.— The male was hitherto unknown. In the collection Marseul two female specimens have the round yellowish label, written by Marseul, reading "*Trypanaeus kalemantanus*". However, there are rather great differences between the two specimens. The larger specimen has a PE-length of nearly 3.2 mm, the smaller specimen of 3.0 mm. The lateral ridges on the face are more sinuous in the former, and the median groove is deeper, beginning at some distance from the transversal ridge separating frons and vertex, and is continued for a rather great distance onto the rostrum (fig. 112). In the smaller specimen this median groove is shallower, shorter, delimited only to the frons and situated immediately before the transversal ridge. The prosternal carina is longer in the larger specimen, with an anterior impression and a fine elevated margin along the anterior edge, and the mesosternal striae have a parabolic course (fig. 110). In the smaller specimen the carina is shorter, without anterior impression or anterior marginal ridge, and the mesosternal striae are strictly parallel on the broader part of the mesosternum; the outer margin of the lateral mesosternal stria follows than strictly the outline of the procoxa before it is connected in front with the other side, comparable with the configuration in *T. crassus* (fig. 22). The pronotum is a little narrower in the smaller specimen. The median metasternal suture is finely canaliform in the larger specimen, very fine in the smaller one.

From the details in the description it is clear, that Marseul used the larger speci-

men for his description, so this specimen has been chosen as lectotype. The width, given as 2.6 mm, is obviously an error: it is 1.6 mm. The length given by Marseul (4.5 mm) is the total length. On account of the enumerated differences it is doubtful, whether the two specimens of Marseul belong to the same species. Therefore, the smaller specimen has not been given paralectotype status. More material from more regions is needed to settle the taxonomic implications of the observed differences. For the time being I mention Marseul's larger specimen form A, the smaller specimen form B. The following material has been attributed to this form B:

Material (Form B).— **Malaysia:** 1 ♀ (MNHN), same data as lectotype (Marseul's second type specimen); 1 ♂ (BMNH), W. Sarawak, Mt. Matang, 18.i.1914, G.E. Bryant; 1 ♂ (BMNH), Sarawak, Borneo, Wallace; 1 ♀ (BMNH), Sarawak, Wallace.

Variation (form B).— PE-length males: 2.9-3.0; females: 3.0 mm. In the males the frontal impression is shallower than in the males of form A.

Trypeticus kalshoveni spec. nov.
(figs 121-125)

Material.— **Indonesia:** Holotype ♀ (RMNH), left protarsus and four segments of right mesotarsus missing, [white label, printed:] "♀"; [discoloured white label, printed and hand-written:] "L.G.E. Kalshoven/Java 1200 M./Mount Gedé/.....1924 . No. /[transverse:] "d 196 c"; [white label, printed:] "Museum Leiden/collectie/L. Kalshoven"; [red label, printed:] "HOLOTYPUS/*Trypeticus/kalshoveni* sp. n./P. Kanaar des. 2000"; 5 ♂♂, 1 ♀ (RMNH, MNHN, CHPK), same data as holotype (paratypes); 1 ♀ (RMNH), idem, but 800 m, d196. (paratype). **Malaysia:** 1 ♂ (CHSM), Sabah, Mt. Kinabalu N. P., Headquarters, 1558 m, 19-23.v.1987 (paratype).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.4 mm, height 1.2 mm. Rather thick-set cylindrical, shiny, reddish brown, antennae, legs, pygidium and abdominal sternites rufous.

Head.— Face slightly sinuous in profile. Rostrum in frontal view broadly rounded anteriorly, with two small paramedian tubercles (fig. 124). Frons and posterior part of rostrum moderately concave, the concavity not sharply delimited along the antennal insertions. Frons and rostrum with a fine double punctation, interstices with indistinct linear microsculpture. Transition between frons and vertex arcuate, gradual. Vertex with a small median fovea, punctation more distinct than that of frons, interstices with indistinct linear microsculpture.

Pronotum.— Slightly longer than wide, in dorsal view with almost parallel sides (fig. 121), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile very faintly convex in the posterior two-thirds, thence more convex towards anterior margin. Marginal striae fine, strongly curved upwards behind, rather distant from the margin in the anterior half, ending at a rather great distance from the non-impressed anterior angles, with a short appendix near the latter. Pronotal disc not very densely punctate, punctures of moderate and slightly unequal size, a little irregularly dispersed, mixed with some very small punctures in the anterior half. Interspaces smooth. A narrow impunctate median band is present in the posterior two-thirds.

Elytra.— Along the suture shorter than pronotum (fig. 121) with slightly rounded apices, impressed near scutellum, moderately convex in transversal direction, in profile very faintly convex in the anterior two-thirds, thence more convex towards apex. Elytral punctation along the anterior margin equal to that of pronotum, elsewhere finer and sparser. A narrow band along the slightly raised suture is impunctate. Interspaces smooth. Epipleura punctulate, interstices with linear microsculpture. Marginal epipleural stria present in posterior half, indistinct in anterior half.

Propygidium.— Distinctly punctate, impressed along the anterior margin, with a very fine oblique stria at the sides, interstices smooth.

Pygidium.— Broadly parabolic in outline, slightly convex, faintly impressed in the anterolateral angles, punctation as on propygidium, at apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina in lateral view slightly convex. Disc broad and rather short, with nearly parallel sides (fig. 123), margined at the sides by a narrow elevated rim, accompanied by a carinal stria, rather ill-delimited at the inner side and abbreviated at a short distance from the anterior margin. Disc with a transverse impression along the anterior margin, deepest in the middle, and a distinct double punctation, the secondary punctures ill-visible by linear interstitial microsculpture.

Mesosternum.— Rather short, slightly impressed between the procoxae. Lateral striae distinct, sulciform, slightly arcuate, more curved inwards in front, ending behind the procoxae (fig. 123). Mesosternal disc not very densely punctate, the punctures distinct, a little elongate, mixed with few very small punctures. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae rather deep in front, divergent posteriorly, about reaching the metasternal middle (fig. 123). Metasternal disc in anterior part about equally punctate as mesosternum, punctures smaller posteriorly. Median suture distinctly canaliform, with the exception of its posterior end. Interspaces smooth.

First visible sternite.— Disc with rather dense double punctation. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Face almost straight in lateral view, with moderately elevated rostral apex, the latter in frontal view rather triangular with broadly rounded tip (fig. 125). Vertex and frons separated by a smooth transverse ridge, well-delimited at its posterior side, less so to the frons. Frons and rostrum delimited at the sides by a fine, slightly sinuous ridge, continuous with the transverse ridge behind, on the rostrum convergent anteriorly and ending near the triangular apex. On the rostrum the lateral ridges are accompanied at their inner side by an ill-delimited shallow sulcus, at the outer side of the ridge the rostrum slopes steeply down to its margin. Frons and posterior part of rostrum slightly concave, mainly in longitudinal direction. Frons and rostrum with distinct punctation, interstices with a very dense microsculpture, producing a rather dull appearance. Vertex with a broad crosswise impression behind the transversal ridge and a small median fovea; punctation distinct, interstices with fine microsculpture.

Pronotum.— Nearly 1.2 times as long as wide, the anterolateral angles less broadly rounded (fig. 122). In front the pronotum slopes down towards the anterior emargination for the head, without a median ridge. Disc about equally punctate as in the male, punctures along the anterior emargination and in the anterior angles more closely set, along the anterior emargination elongate, without distinct interstitial microsculpture. The impunctate median band has a rather short antescutellar median stria.

Pygidium.— Apex more broadly rounded, punctures without hairs.

Prosternum.— Carina not impressed in front, sides without elevated rims, lateral striae reduced to very short posterior rudiments.

Variation.— PE-length males: 2.7-2.9 (3.1) mm, females: 3.0-3.1 mm. The length of the carinal and the lateral metasternal striae varies a little; the specimen from Borneo is larger (PE-length 3.1 mm), the oblique lateral striae of the propygidium are more distinctly impressed, the elevated rims along the sides of the carinal disc are continued along the anterior margin, the anterior impression of the carinal disc more distinct and about continuous with the carinal striae. In many specimens the anterolateral foveae of the pygidium are distinct. A male from Java has on the pronotal disc in front of the scutellum a median area with longitudinal scratches; the punctures in this region are indistinct and near the median line obsolete. Maybe this area is a result of abrasion by creeping through galleries.

Etymology.— This species is dedicated to the Dutch forestry-entomologist L.G.E. Kalshoven, who has contributed so much to the knowledge of this genus by his collecting-activities on Java and Sumatra in the period 1920-1930.

Trypeticus kapleri spec. nov.
(figs 96-98)

Material.— **Malaysia:** Holotype, ♀ (CHPK), left mesotarsus and three segments of right metatarsus missing. [white label, printed:] “♀”; [white label, printed:] “MALAYSIA - Sabah prov./Banjaran Crocker Mts./GUNUNG ALAB peak/30.iv.-27.v.1996, 1650-1800 m/M. Sitra & R. Hergovits leg.”; [white label, hand-written and printed:] “*Trypeticus*/sp. 2/Det. S. Mazur, 1995”; [red label, printed:] “HOLOTYPUS/*Trypeticus/kapleri* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 3.5 mm, width 1.6 mm, height 1.4 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in profile almost straight with strongly elevated rostral tip, the latter pointed, obliquely directed upwards, in frontal view well protruding beyond the anterior rostral margin (fig. 98), underside of the tip rather convex. Frons and vertex separated by a slightly arcuate transverse keel, not very sharply delimited behind, especially in the middle, and ill-delimited to the frons. Frons and rostrum delimited at either side by a fine and narrow, slightly sinuous ridge, continuous with the transversal ridge behind, in front fading away near the pointed tip. At their inner side the oblique ridges are sharply delimited by a broad and moderate lateral concavity of frons and rostrum, more distinct on the latter. At the lateral side of the sinuous ridge the rostrum slopes steeply down towards its lateral margin. Between the impressed lateral areas a slightly elevated median area is present that widens posteriorly and that has a faint, ill-delimited median groove on the rostrum, and, in a lesser degree, on the frons. Frons and rostrum with irregularly dispersed small punctures, slightly elon-

gate on the median elevation. Interstices with fine microsculpture in the lateral impressions, shiny. Vertex with a small median fovea and a distinct double punctation, interstices with dense microsculpture.

Pronotum.— Nearly 1.2 times longer than wide (fig. 96), sides in dorsal view nearly parallel, in front rounded inwards and thence nearly straight towards anterior angles. Pronotum convex in transversal direction, in profile nearly straight in the posterior two-thirds, thence convex towards anterior margin. A very faint median impression is present just behind the anterior emargination. Marginal striae fine, turned upwards at their posterior end, in front ending at a rather great distance from the anterior angles. Indistinct oblique impressions are present just laterally from the anterior angles. Pronotal disc not very densely punctate, punctures distinct, of unequal size, irregularly dispersed, in front mixed with some very small punctures. Interstices near the anterior angles with indistinct linear microsculpture, elsewhere smooth. An ill-delimited narrow impunctate median band is present in the posterior two-thirds, with a fine, rather short antescutellar stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 96), impressed near scutellum and along anterior margin, convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation much finer and more closely set than on pronotum, punctures of unequal size; a narrow band along the suture and the apical margin is impunctate. Interspaces smooth. Epipleura punctulate with fine linear microsculpture. Marginal epipleural stria obsolete.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present, very fine. Punctation double, distinct, interstices smooth.

Pygidium.— Parabolic in outline, slightly convex in transversal direction, with an indistinct apical fovea and distinct anterolateral foveae. Punctation as on propygidium, punctures without hairs, along the lateral and apical margins smaller.

Prosternum.— Carina in lateral view very faintly convex (almost straight). Carinal disc broad, sides nearly parallel (fig. 97), faintly margined along the base, not margined at the sides and in front by carinal striae or an elevated rim. Disc slightly impressed along the median line, more distinctly so towards anterior margin, with distinct punctures of unequal size. Interspaces with fine linear microsculpture.

Mesosternum.— Distinctly impressed between the procoxae. Lateral striae sulciform, broad, slightly curved inwards at both ends, ill-delimited at their inner side, in front ending well behind the procoxae (fig. 97). Mesosternal disc with a rather dense punctation, the punctures of unequal size, elongate. Interspaces smooth. Mesometasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae distinct, rather sulciform, faintly sinuous and divergent posteriorly, nearly reaching the metasternal middle (fig. 97). Disc punctate as mesosternum, punctures a little smaller posteriorly. A narrow band along the finely canaliform median suture is impunctate. Interspaces smooth.

First visible sternite.— Punctation distinct, rather dense, punctures of unequal size, interstices with linear microsculpture. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal two-fifths.

The male is unknown.

Etymology.— The name is given in honour of my friend and histeridologist Mr Oldřich ("Olda") Kapler (Prague), in appreciation of our co-operation.

Trypeticus kirtoni spec. nov.
(figs 91-95)

Material.— **W. Malaysia:** Holotype ♀ (CHPK), [white label, printed:] “♀”; [white label, printed:] “MALAYSIA-W. Perak, /25 km NE of IPOH, 1200 m, /Banjaran Titi W angsa mts., /KORBU Mt, 1-15.iv.2000, /P. Cechovsky leg.”; [pale blue-green label with frame, printed:] “coll. Fabio Penati/Morbegno (Italy)”; [red label, printed:] “HOLOTYPUS/*Trypeticus/kirtoni* sp. n./P. Kanaar des. 2000”; 2 ♂♂ (MHNG), Pahang, Cameron Highlands trail 5, 1600 m, 28.iii.1993, Löbl, Calame, #22 (paratypes).

Female.— Length (without head and abdominal tergites) 3.9 mm, width 1.5 mm, height 1.4 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in lateral view slightly sinuous with moderately elevated rostral tip. Rostrum in frontal view rather bluntly pointed, the tip little protruding over the anterior rostral margin along the labrum (fig. 95), its underside very faintly convex (almost flat). Frons and vertex separated by a slightly bisinuous transverse keel, sharply delimited at its posterior side, less so to the frons. Frons and rostrum delimited at either side by a narrow, slightly arcuate ridge, continuous with the transversal ridge behind, in front fading away laterally from the raised pointed tip. At their inner side the oblique ridges are sharply delimited by a shallow sulcus, more distinct and wider on the frons. At the lateral sides of the arcuate ridges the rostrum slopes steeply down towards its lateral margins. Frons distinctly concave, posterior part of rostrum faintly concave, mainly in longitudinal direction. Frons and rostrum with small punctures, diminishing in size anteriorly. Interstices with dense microsculpture, producing a rather dull appearance. Vertex with a crosswise impression behind the transverse ridge, more distinct in the middle, and small punctures. Interstices with indistinct microsculpture, shiny.

Pronotum.— About 1.3 times longer than wide (fig. 92), sides in dorsal view nearly parallel, in front abruptly, rather angulately rounded inwards and thence oblique towards anterior angles. Pronotum moderately convex in transversal direction, in profile faintly convex and slightly sloping down in the posterior three-fifths, thence distinctly sloping down towards anterior margin, in the anterior part with the distinct silhouette of a strong and broad, rather short anterior median ridge. In dorsal view this ridge protrudes a little anteriorly, influencing the outline of the anterior emargination. At either side of the anterior median ridge the pronotum is slightly impressed; behind the ridge the pronotum is slightly depressed along the median line. Marginal striae fine, turned upwards at their posterior end, interrupted at the anterolateral angles, ending in the barely impressed anterior angles. Pronotal disc not densely punctate, punctures of moderate and unequal size, mixed with very small punctures in the posterior half, punctures along the anterior margin more closely set, elongate in the impressions alongside the anterior ridge, interstices here with indistinct linear microsculpture, elsewhere smooth. A long but rather indistinct antescutellar median stria is present, without a distinct impunctate median band.

Elytra.— Along the suture shorter than pronotum (fig. 92), impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile faintly convex over nearly the entire length, only strongly convex at the apex. Elytral punctuation about equal to that of pronotum, punctures more closely set near the

suture, smaller posteriorly; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria shallow and ill-delimited in the posterior half, obsolete in the anterior half.

Propygidium.— Impressed along anterior margin. Oblique lateral striae present, fine. Punctuation rather sparse and rather fine, punctures of unequal size, interstices with indistinct linear microsculpture.

Pygidium.— Broadly parabolic in outline, slightly convex, indistinctly impressed along the anterior margin. Punctuation and microsculpture as on propygidium, punctures without hairs, along the lateral and apical margins smaller.

Prosternum.— Carina in lateral view slightly convex. Carinal disc rather broad, sides nearly parallel (fig. 93), faintly impressed along the posterior margin, at the sides margined by a narrow elevated rim, accompanied by an indistinct carinal stria, slightly abbreviated in front. Disc slightly impressed in front along the median line, punctuation dense, punctures large and shallow. Interspaces with distinct linear microsculpture.

Mesosternum.— Moderately impressed between the procoxae. Lateral striae sulciform, rather narrow, ill-delimited at their inner side, slightly curved inwards anteriorly, in front ending behind the procoxae (fig. 93). Mesosternal disc not densely punctate, the punctures of unequal size, elongate. Interspaces with some indistinct microsculpture. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Lateral striae fine, faintly sinuous and divergent posteriorly, about reaching the anterior metasternal third (fig. 93). Disc much finer punctate than mesosternum. A rather broad band along the median suture is impunctate, the latter finely canaliform, slightly depressed before the hindmargin. Interspaces smooth.

First visible sternite.— Punctuation distinct, rather dense, punctures of unequal size, interstices smooth. Oblique lateral striae wanting, though vague impressions are present instead.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The male differs from the female as follows:

Head.— Face faintly sinuous (almost straight) in lateral view. Rostrum in frontal view broadly rounded-truncate anteriorly, apex with two paramedian tubercles and a triangular median impression between (fig. 94). Frons distinctly concave, especially in a rather triangular posterior part. Frons and rostrum with rather sparse small punctures of slightly unequal size, interstices with dense microsculpture. Transition between frons and vertex slightly arcuate, rather sharp in the middle, at the sides rather gradual. Vertex (as far as visible) punctate as frons, interstices with less microsculpture, rather smooth.

Pronotum.— About 1.2 times longer than wide (fig. 91) with nearly parallel sides, broadly rounded in front and thence oblique towards anterior pronotal angles, moderately convex in transversal direction, in profile very faintly convex in the posterior two-thirds, thence progressively convex towards anterior margin. No anterior median ridge or anterior impressions. Marginal striae not interrupted, ending in the non-impressed anterior angles. Pronotal disc a little more densely punctate than in the female, punctures along the anterior margin more closely set, not elongate. Interspaces smooth. An impunctate median band without median stria is present over the

entire length, narrower in front.

Elytra.— Elytra more distinctly punctate than in the female (fig. 91).

Pygidium.— More triangular in outline, with broadly rounded apex.

Prosternum.— Carina in lateral view nearly straight, only posteriorly very faintly convex. Carinal disc margined by a narrow elevated rim at the sides and in front, at the sides accompanied by an indistinct carinal stria, ill-delimited at their inner side, punctures on carinal disc smaller than in the female.

Mesosternum.— Punctuation a little finer than in the female.

Metasternum.— Punctuation a little more distinct than in the female.

Variation.— PE-length males: 3.6 and 3.7 mm. In one of the males the median metasternal suture is a little widened in the depressed area before the metasternal hindmargin. The length of the lateral metasternal striae varies a little.

Etymology.— This species is dedicated to Dr Laurence G. Kirton (Forest Research Institute of Kepong), in appreciation of his co-operation.

Trypeticus lackneri spec. nov.

(figs 203-205)

Material.— **Indonesia:** Holotype, ♂ (RMNH), protarsi and right mesotarsus missing, [white label, printed:] “♂”; [white discoloured label, printed and hand-written:] “L.G.E. Kalshoven/[stricken out: Java] Singkal ...M./Sumatra/26.v.1924. No. d80g”; [white label, hand-written:] “d80g”; [white label, printed:] Museum Leiden/collectie/L. Kalshoven”; [red label, printed:] “HOLOTYPUS/*Trypeticus/lackneri* sp. n./P. Kanaar des. 2000”; 3 ♂♂ (RMNH, MNHN, CHPK), same data as holotype (paratypes). **Malaysia:** 1 ♂ (ZMAS), N. S. Sg: menyala F. R., ex bases galleries in *Shorea pauciflora*, 22.v.1936, F.G. Browne (paratype); 1 ♂ (FRIM), Malaya, Kelantan, Temangan F. R., 10.viii.1960, on *Parashorea lucida* (paratype).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.3 mm, height 1.1 mm. Thick-set cylindrical, shiny, reddish brown with dark sutures, antennae and legs rufous.

Head.— Face in lateral view before the eyes nearly straight with slightly elevated rostral apex, over the eyes convex towards vertex. Rostrum in frontal view rounded-truncate anteriorly, barely emarginate in the middle, with two paramedian tubercles (fig. 205). Frons and posterior part of rostrum slightly concave. Frons and rostrum with fine punctuation, interstices with a dense and fine microsculpture. Transition between frons and vertex arcuate and gradual. Vertex with a small median fovea, as far as visible more distinctly punctate than frons, interstices smooth.

Pronotum.— About 1.1 times longer than wide, in dorsal view with nearly parallel sides (fig. 203), rather abruptly rounded inwards in front and thence straight towards anterior angles, strongly convex in transversal direction, in profile slightly convex in the posterior two-thirds, in front progressively convex towards the anterior margin. Marginal striae distinct, strongly curved upwards at their posterior end, in front interrupted along the anterior curvature, and again finely continued towards the slightly impressed anterior angles. Pronotal disc rather densely punctate, punctures deep, rather coarse, a little irregularly dispersed and of unequal size, mixed with very small punctures in the anterior third, punctures in the anterior angles more closely set. Interspaces smooth but for some indistinct linear interstitial

microsculpture in the anterior angles. A narrow, ill-delimited impunctate median band without antescutellar stria is present in the posterior half.

Elytra.— Along the suture shorter than pronotum (fig. 203) with rounded apices, slightly depressed near scutellum, strongly convex in transversal direction with slightly elevated suture, in profile convex over its entire length, progressively so towards apex, punctures along the anterior margin equal to that of the pronotum, elsewhere elytra a little finer punctate than pronotum, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with a fine linear microsculpture. Marginal epipleural striae shallow and broad in the posterior half, obsolete in front.

Propygidium.— Slightly impressed along the anterior margin, more distinctly so towards sides, with fine oblique lateral striae. Punctuation distinct, punctures of unequal size, mixed with some very small punctures, interstices smooth.

Pygidium.— Triangular in outline with broadly rounded tip, slightly convex, mainly in transversal direction, with small but distinct anterolateral foveae. Punctuation as propygidium, towards apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina almost straight in lateral view. Disc broad, sides nearly parallel (fig. 204), margined at the sides and in front by a distinct elevated rim, at the sides accompanied by a broad and shallow carinal stria, ill-delimited at the inner side, in front continuous with a broad and deep transversal impression behind the anterior rim. Carinal disc with large shallow punctures, mixed with some very small punctures, the latter ill-visible by linear interstitial microsculpture.

Mesosternum.— Interprocoxal part in lateral view at a lower level than the prosternal carinal disc, distinctly impressed. Lateral striae broad and sulciform, slightly divergent anteriorly, ending behind the procoxae (fig. 204). Mesosternal disc with a dense double punctuation, the primary punctures large, deep, slightly elongate and a little rugosely confluent. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly (fig. 204), curved inwards at their posterior end, about reaching the posterior metasternal third. Median suture deeply sulciform, except for its posterior end. Metasternal disc about equally punctate as mesosternum, the primary punctures a little smaller, less elongate and not rugosely confluent posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Punctuation of disc double, slightly denser and finer than on metasternum, primary punctures smaller posteriorly. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with some small teeth on the distal third.

The female is unknown.

Variation.— PE-length other males: 2.5-2.7 mm. In one of the specimens from West Malaysia the punctuation of the underside is a little less coarse than in the other specimens, the lateral metasternal striae are a little shorter, their posterior inward curvature wanting.

Remarks.— The specimens from Sumatra are all more or less incomplete, missing tarsi, legs etc. Besides of the paratypes another specimen is present, of which only

head and prothorax with fore-legs are left.

Etymology.— This species is dedicated to the young Slovak histeridologist and friend Mr Tomáš Lackner, in appreciation of our co-operation.

Trypeticus latilabris spec. nov.
(figs 410-414)

Material.— **Malaysia:** Holotype, ♀ (MHNG), [white label, printed:] “♀”; [white label, printed:] “BORNEO Sabah Mt./Kinabalu Nat.Pk./HQ Liwagu Riv.Tr./1495 m 12.viii.88/A. Smetana (B105)”; [red label, printed:] “HOLOTYPUS/*Trypeticus/latilabris* sp. n./P. Kanaar des. 2000”; 3 ♂♂ (MHNG, CHSM), same data as holotype (paratypes).

Female.— Length (without head and abdominal tergites) 2.07 mm, width 0.78 mm, height 0.71 mm. Cylindrical, shiny, castaneous, rostrum, anterior pronotal margin, elytral margins, sides of metasternum, abdominal segments and legs rufous.

Head.— Face in lateral view nearly straight, with barely raised apical rostral margin. Rostrum short (fig. 414), in frontal view broadly rounded-truncate anteriorly. Frons and rostrum slightly concave, the concavity delimited along the antennal insertions and on the sides of the rostrum by an indistinct ridge. Face with dense punctation, causing a rather granular surface, the punctures on the frons large, with a long erect hair, punctures on the rostrum smaller anteriorly, the hairs diminishing in length. Interstices shiny. Transition between frons and vertex slightly arcuate, gradual. Vertex with a small median fovea and a rather dense punctation.

Pronotum.— In dorsal view nearly 1.3 times longer than wide with nearly parallel sides, in front broadly rounded towards the anterior angles (fig. 410), strongly convex in transversal direction, in profile faintly convex in the posterior two-thirds, thence more convex and flattened off towards the anterior margin. Marginal striae fine, at their posterior end curved upwards along the rounded posterolateral angles, in front ending a little behind the non-impressed anterior pronotal angles. Punctation fine, not very dense, punctures of subequal size, punctures larger in the anterior third and more closely set along the anterior margin. Interspaces smooth. A long antescutellar median stria is present.

Elytra.— Along the suture about 1.1 times longer than pronotum (fig. 410), apices rounded; elytra strongly convex in transversal direction, in profile slightly convex over nearly its entire length, thence progressively and strongly convex towards apex. Elytral disc about equally punctate as pronotum, but mixed with some larger punctures; also the punctures along anterior margin and near suture larger. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture and a marginal epipleural stria in the posterior half.

Propygidium.— Short, rather concave in longitudinal direction, with rather dense fine punctation, punctures at the sides with an erect yellowish-white hair. Oblique lateral striae wanting.

Pygidium.— Broadly rounded in outline, rather strongly concave, especially along the sides and apical margin, not densely punctate, larger punctures with a rather long erect hair.

Prosternum.— Carina in lateral view slightly convex, carinal disc rather broad (fig. 412), sides slightly divergent anteriorly (nearly parallel), posterior margin emarginate.

Lateral sides margined with a very narrow elevated rim, at their inner side not accompanied by a distinct carinal stria. Carinal disc faintly impressed at the sides, not densely punctate, interspaces with linear microsculpture.

Mesosternum.— Very slightly impressed between the procoxae. Lateral striae rather fine, slightly sulciform, narrower posteriorly, curved inward and wider anteriorly (fig. 412). Mesosternal disc not very densely punctate, punctures rather small, slightly elongate; interspaces smooth. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Median suture fine, partly canaliform. Small rounded paramedian foveae are present behind the meso-metasternal suture. Lateral striae arcuate, short, very close to the mesocoxae (fig. 412). Metasternal disc about equally punctate as mesosternum, punctures smaller posteriorly; a band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc finely punctate. Distinct oblique lateral striae wanting, though shallow ill-delimited impressions along the metacoxae are present instead. The posterior margin of the last sternite has a row of short yellow hairs.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae with a row of spines and two small distal teeth on the outer margin.

The male differs from the female as follows:

Head.— Face in lateral view almost straight. Rostrum in frontal view broadly truncate anteriorly. Frons and posterior part of rostrum slightly concave (fig. 413). Frons and rostrum less densely punctate than in the female, punctures without hairs, interspaces with indistinct microsculpture. Transition between frons and vertex arcuate, rather sharp. Vertex punctate as frons, interstices with linear microsculpture.

Pronotum.— Shorter (fig. 411), less flattened off anteriorly, about punctate as in the female.

Propygidium.— Densely fimbriate, hairs long, yellowish-white.

Pygidium.— Concave, more densely fimbriate than in the female, the yellowish-white hairs long.

Prosternum.— The fine lateral rims continuous with a fine rim along the anterior margin. Carinal striae obsolete.

Metasternum.— Paramedian foveae behind the meso-metasternal suture much less distinct.

Variation.— PE-length males: 1.88, 1.90 and 1.94 mm. In two males the lateral metasternal striae are almost obsolete.

Etymology.— The name refers to the large labrum, broadly protruding beyond the rostral apex, especially so in the holotype.

Trypeticus latirostrum spec. nov.
(figs 105-107)

Material.— **N-Thailand:** Holotype, ♀ (CHPK), left mesotarsus and four segments of right metatarsus missing, [white label, printed:] “♀”; [white label, printed:] “THAI-N, 1-19.v.1998,/Chiang Mai prov.,/BAN SANPAKIA, 1400 m,/Ivo Martinù leg.”; [red label, printed:] “HOLOTYPUS/*Trypeticus/latirostrum* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 3.5 mm, width 1.6 mm, height 1.3 mm. Cylindrical, very shiny, piceous black, prosternal carinal disc, antennae and legs rufous.

Head.— Face in profile very faintly concave (nearly straight). Rostrum in frontal view slightly and broadly rounded anteriorly (fig. 107), a little dilated just behind the apex. Frons and vertex separated by a distinct, smooth, trisinuous transversal ridge, well-delimited at the posterior side, elevated in the middle. From the anterior side of this ridge a little elevated median ridge originates, canaliculate at its superior side, especially posteriorly, reaching in front the distinctly elevated rim along the rostral apex, this apical rim elevated in the middle and near the lateral sides. At the sides frons and rostrum are delimited by a distinct sinuous lateral ridge, sharply delimited at their inner side, originating from the transversal ridge behind and continuous with the rim along the rostral apex. Between the median ridge and the lateral ridge frons and rostrum are distinctly concave, mainly in transversal direction. The lateral side of the rostrum behind the apical dilatation is slightly concave. Frons and rostrum with small punctures, interspaces with indistinct microsculpture, shiny. Vertex with a broad crosswise impression behind the transversal ridge and a small median fovea. Vertex with distinct punctures, interstices with dense microsculpture.

Pronotum.— About 1.25 times longer than wide (fig. 105), sides in dorsal view almost parallel, in front broadly rounded and thence very faintly concave towards the distinctly impressed anterior angles. The anterior emargination is bisinuous in dorsal view by protrusion of a little elevated anterior median ridge, pronotum at either side of this ridge distinctly impressed. Pronotum moderately convex in transversal direction, in profile faintly convex over its entire length, slightly flattened off anteriorly. Punctuation rather sparse, punctures very irregularly scattered and of unequal size, mixed with very small punctures, especially posteriorly, punctures in the anterior angles very closely set, at the sides of the anterior median ridge rather closely set and elongate. Interspaces in the anterior angles and aside of the median ridge with indistinct microsculpture, elsewhere smooth. A rather short antescutellar median stria is present, without distinct impunctate median band. Pronotal disc in the middle slightly impressed along the median line. Marginal striae distinctly bent upwards at their posterior end, shortly interrupted in the anterior curvature.

Elytra.— Along the suture shorter than pronotum, with rounded apices (fig. 105), moderately convex in transversal direction, in profile almost straight in the anterior third, thence progressively convex towards apex, punctures with the exception of some larger punctures along the anterior margin smaller than on pronotum, less irregularly scattered and less different in size, near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture, marginal epipleural striae in the posterior half indistinct, wanting in anterior half.

Propygidium.— Impressed along the anterior margin, more distinctly so towards the sides. Oblique lateral striae present. Punctuation distinct, rather dense. Interstices with indistinct microsculpture.

Pygidium.— Broadly parabolic in outline, convex, with a small but distinct fovea a little medially from each anterolateral angle. Punctuation as on propygidium, punctures without hairs, along the lateral and apical margins smaller. Interstices with some indistinct microsculpture.

Prosternum.— Carina faintly convex in lateral view. Carinal disc broad, not impressed, sides slightly divergent anteriorly (fig. 106). In the posterior half distinct carinal striae are present, slightly convergent anteriorly. Punctuation sparse, punctures small, interspaces with indistinct linear microsculpture.

Mesosternum.— Between the procoxae slightly impressed. Lateral striae broad and sulciform, well-delimited, nearly parallel, curved inwards anteriorly, ending behind the procoxae (fig. 106). Mesosternal disc with distinct elongate punctures of slightly unequal size, mixed with very shallow and indistinct small punctures, interspaces smooth. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Lateral striae distinct, bisinuous and divergent posteriorly (fig. 106), ending a little before the metasternal middle. Punctuation of the metasternal disc a little finer than that of mesosternum, the punctures smaller posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform with the exception of its posterior end.

First visible sternite.— Disc with rather dense double punctuation, primary punctures elongate in the anterior two-thirds, smaller and rounded posteriorly. Oblique lateral striae present, distinct, rather short.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of hindtibiae with a row of spines and some small teeth in distal third.

The male is unknown.

Etymology.— The name refers to the broad, slightly dilated rostrum.

Trypeticus latisternum spec. nov.
(figs 450-454)

Material.— **Malaysia:** Holotype, ♂ (MZLU), genitalia protruded, [white label, printed] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang,/Mendolong, T4/R/6.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/latisternum* sp.n./P. Kanaar des. 2000”; 1 ♂ (CHPK), idem, but 21.iv.1988 (paratype); 1 ♂ (MZLU), idem, but 27.iv.1988 (paratype); 1 ♂ (CHPK), idem, but 29.iv.1988; 2 ♂♂ (CHPK), idem, but 3.v.1988 (paratypes); 1 ♂ (MZLU), idem, but 4.v.1988 (paratype); 1 ♂, 1 ♀ (MZLU, CHPK), idem, but 6.v.1988 (paratypes); 2 ♂♂, 2 ♀♀ (MZLU, CHSM), idem, but 11.v.1988 (paratypes); 1 ♂, 2 ♀♀ (MZLU, CHPK), idem, but 13.v.1988 (paratypes); 1 ♂, 3 ♀♀ (MZLU, CHPK), idem, but 2.iii.1989 (paratypes); 1 ♂ (MZLU), idem, but 14.iii.1989 (paratype); 1 ♂ (MZLU), idem, but 17.iii.1989 (paratype); 1 ♀ (MZLU), idem, but 31.iii.1989 (paratype); 1 ♂ (MZLU), idem, but 31.iii.1989 (with doubt).

Male.— Length (without head and abdominal tergites) 2.15 mm, width 0.92 mm, height 0.87 mm. Thick-set cylindrical, shiny, colour reddish brown with darker sutures.

Head.— Face slightly bisinuous in lateral view. Rostrum in frontal view short, broadly truncate anteriorly with slightly raised apical margin (fig. 453). Frons and posterior part of rostrum distinctly concave, with a less impressed transversal part between the antennal insertions, and faint extensions of the concavity at the rostral sides. The frontal concavity is obliquely and ridgelike delimited behind the antennal insertions, that are deeply incised into the frontal margin. The transition of the frontal concavity towards the convex vertex is arcuate and rather sharp. Frons and vertex with rather small punctures, not very densely set, punctures on the posterior part of

the frons with a short erect hair. Interspaces with dense linear microsculpture, producing a dull aspect when seen under a slight angle.

Pronotum.— Nearly 1.2 times longer than wide (fig. 450), in dorsal view with parallel sides, in front broadly rounded towards the anterior angles that are strongly bent downward, not visible in dorsal view. Pronotum strongly convex in transversal direction, moderately convex in longitudinal direction, slightly flattening down anteriorly. Pronotal disc with rather small punctures of slightly unequal size, not closely set, mixed with very small punctures in the anterior half. A narrow median band in the posterior half is impunctate, with a very fine antescutellar median line. Interspaces smooth. Marginal striae fine, slightly curved inward over the posterolateral angles, in front ending at a rather great distance from the anterior angles.

Elytra.— Along the suture about as long as pronotum (fig. 450), apices rounded, strongly convex in transversal direction, slightly impressed near scutellum and along the anterior margin, a little more coarsely punctate than pronotum. Interspaces smooth. A narrow band along the suture is impunctate. Epipleura with linear microsculpture and an indistinct marginal epipleural stria in the posterior half.

Propygidium.— Short, distinctly concave in longitudinal direction, with rather sparse small punctures, along the posterior margin with a short yellow hair. Oblique lateral striae wanting, but an oblique impression is present instead.

Pygidium.— Broadly rounded in outline when seen perpendicularly to the pygidial plane, strongly concave, especially in the posterior half, with a narrow elevated margin with highest parts posterolaterally; between these highest parts the pygidial marginal rim is lower, causing a truncate aspect in dorsal view (fig. 450). Pygidium not very densely punctate, punctures small, with a short yellow hair. Interspaces with indistinct microsculpture.

Prosternum.— Carina in lateral view slightly convex, disc broad, sides strongly divergent anteriorly (fig. 452), margined in front and at the sides by a narrow elevated rim, at the inner side accompanied by a shallow and indistinct, ill-delimited carinal stria. Base slightly emarginate. Carinal disc distinctly concave, with double punctation, the larger punctures of slightly unequal size. Interspaces with linear microsculpture.

Mesosternum.— Crosswise impressed behind and between the procoxae. Lateral striae sulciform, almost parallel in the posterior part, broader anteriorly and curved inwards along the procoxae (fig. 452). Mesosternal disc not densely punctate, punctures slightly elongate, of unequal size, interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae fine, curved in front, almost parallel posteriorly, ending a little before the metasternal middle (fig. 452). Metasternal disc not very densely punctate, punctures slightly elongate, of unequal size. A rather broad band along the finely canaliform median suture is impunctate. Interspaces smooth.

First visible sternite.— Distinct oblique lateral striae medially from the metacoxae present. Disc about punctate as metasternum.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with spines and two small distal teeth on the outer margin.

The female differs from the male as follows:

Head.— Rostrum and frons (fig. 454) less concave than in the male, punctures more distinct, the hairs on the frons much longer, especially at the sides. Interstitial microsculpture less distinct than in the male.

Pronotum.— Barely longer (fig. 451), more flattened off anteriorly, behind the anterior emargination indistinctly margined, antescutellar stria longer, more distinct.

Pygidium.— Less concave than in the male, margin less distinctly elevated.

Prosternum.— Marginal rims less distinct, at the lateral sides not accompanied by an indistinct carinal stria.

Variation.— PE-length males: 2.0-2.1 mm, females: 2.1-2.2 mm. The punctuation and interstitial microsculpture vary a little in intensity. The antescutellar stria is obsolete in some males. The lateral mesosternal striae vary a little in depth and width, especially in the posterior part. The lengths of the lateral metasternal striae and the lateral striae of the first sternite are a little variable.

Remarks.— In a few specimens the colour is piceous brown-black; in most specimens the colour is reddish brown with darker sutures, probably by immaturity. The male specimen that has been attributed with doubt to this species has a less divergent carinal disc; in all other respects it is similar to the other males. It has not been given paratype status.

Etymology.— The name refers to the anteriorly dilated prosternal keel.

Trypeticus loebli spec. nov.
(figs 405-409)

Material.— **W. Malaysia:** Holotype, ♂ (MHNG), [white label, printed:] “♂”; [white label, printed:] “W. Malaysia: Pahang/Fraser’s Hill, 1050 m/Jeriau Waterfalls # 12a/Löbl & Calame, 19.iii.1993”; [red label, printed:] “HOLOTYPUS/*Trypeticus/loebli* sp. n./P. Kanaar des. 2000”; 1 ♂, 1 ♀ (MHNG, CHPK), same data as holotype (paratypes).

Male.— Length (without head and abdominal tergites) 1.58 mm, width 0.63 mm, height 0.60 mm. Cylindrical, shiny, piceous brown, face, antennae, posterior margin of metasternum, abdominal segments and legs rufous.

Head.— Face in lateral view faintly sinuous with slightly raised rostral tip. Rostrum in frontal view rounded-truncate (fig. 408), apical margin in the middle slightly raised, with two indistinct paramedial tubercles. Frons and posterior part of rostrum distinctly concave, this concavity slightly continued on the rostrum along the median line, sides of rostrum also slightly concave. Frons and rostrum not very densely punctate, the punctures with a very short hair, their outlines indistinct by a dense interstitial microsculpture, producing a rather dull appearance. Transition between frons and vertex slightly arcuate, rather gradual. Vertex (as far as visible) densely punctate, interstices with microsculpture.

Pronotum.— Nearly 1.2 times longer than wide (fig. 405), in dorsal view with nearly parallel sides, in front broadly rounded towards the downward bent, not impressed anterior angles. Pronotum strongly convex in transversal direction, in profile faintly convex, more distinctly so anteriorly. Punctuation not very dense, punctures distinct, of unequal size, rather irregularly dispersed. A narrow median band in the posterior third is impunctate, with a fine antescutellar stria. Interspaces smooth. Behind the middle of the anterior emargination the pronotum has a faint transversal impression. Mar-

ginal striae fine, ending at some distance from the anterior pronotal angles.

Elytra.— Along the suture a little longer than pronotum (fig. 405), apices rounded. Elytra together strongly convex in transversal direction, in profile slightly convex, more distinctly so towards apex, slightly impressed behind the anterior margin and around the scutellum, about equally punctate as pronotum, but punctures near anterior margin and suture more closely set. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura with some small punctures, interstices with linear microsculpture. A fine marginal epipleural stria is present in the posterior half.

Propygidium.— Very short at the sides, punctate, punctures with a rather long yellow hair. Interspaces dull by microsculpture. Presence or absence of oblique lateral striae difficult to assess by the ciliation, but striae probably absent.

Pygidium.— Broadly rounded in outline, slightly concave; disc punctate, ciliate and microsculptured as propygidium.

Prosternum.— Carina faintly convex in lateral view (nearly straight). Sides of carinal disc slightly divergent anteriorly (fig. 407), margined by a narrow, very fine elevated rim at the sides and in front, these rims rather indistinct in front at the lateral sides. Very indistinct carinal striae are present in the posterior half, at the medial side of the lateral rims. Carinal disc slightly impressed anteriorly and along the median line, not very densely punctate, interspaces with linear microsculpture.

Mesosternum.— Faintly and crosswise impressed between the procoxae. Lateral striae sulciform, rather narrow, parallel, curved inward anteriorly and ending behind the procoxae (fig. 407). Mesosternal disc rather sparsely punctate, punctures distinct, elongate; interspaces smooth. Meso-metasternal suture fine, angulate backward.

Metasternum.— Lateral striae fine, rather short (fig. 407), median suture finely canaliform. Metasternal disc more finely punctate than mesosternum, punctures slightly elongate, gradually diminishing in size and very fine posteriorly. A rather broad band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc finely punctate, with short, very indistinct oblique lateral striae medially from the metacoxae.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae with a row of spines and two distal teeth on the outer margin.

The female differs from the male as follows:

Head.— Face almost straight in lateral view, with slightly elevated rostral tip. Rostrum in frontal view rounded-truncate anteriorly. Anterior rostral margin slightly elevated with indistinct tubercles (fig. 409). Frons and rostrum faintly concave, with an indistinct central elevation and a faint elevation shortly behind the anterior margin. Hairs in the punctures longer than in the male. Interstices dull by dense microsculpture. Transition between frons and vertex slightly arcuate, rather sharp.

Pronotum.— A little longer than in the male (fig. 406). Behind the marginal impression along the anterior emargination a very faint and short median ridge is present, only visible in proper tangential light.

Propygidium and pygidium.— More densely fimbriate, pygidium less concave.

First sternite.— Oblique lateral striae more distinct.

Variation.— PE-length female: 1.56 mm. The male paratype has a small median

fovea on the metasternum just behind the meso-metasternal suture. The intensity of the punctation varies a little.

Etymology.— This species is dedicated to one of the collectors, Dr Ivan Löbl (Geneva).

Trypeticus longicollis Heller, 1915
(figs 317-322)

Trypeticus longicollis Heller, 1915: 20-21.

Material.— **Philippines:** Lectotype, ♀ (SMTD), three tarsal segments of right protarsus and two tarsal segments of right metatarsus missing, [white label, printed:] “Los Ranos/P.I., Baker”; [light yellow label, printed and hand-written:] “1913/28”; [red label, hand-written and printed:] “*longicollis*/Typus!”; [white label, printed:] “Staatl. Museum für/Tierkunde Dresden”; [red label, printed and hand-written:] “LECTOTYPUS ♀ /*Trypeticus/longicollis*/Heller 1915/P. Kanaar des. 1999” (present designation); 3 ♂♂, 1 ♀ (FMNH, CHPK), Luzon, Imugan; 1 ♂ (SMTD), Mt. Banabao, Baker; 1 ♀ (MNHN), Bangued, Water... [partly illegible]; 1 ♀ (SMNS), Mindanao, Misamis Occ., 1700 m, Don Victoriano, 1-3.v.1996, Bolm; 1 ♂ (MNHN), nr. 253, donated by H.E. Andrewes. **Malaysia:** 1 ♀ (ZMAS), Bukit Kajang F. R., in brood bores galleries, 4.viii.1933, F.G. Browne (with doubt).

Male.— Length (without head and abdominal tergites) 2.2 mm, width 0.9 mm, height 0.8 mm. Cylindrical, shiny, castaneous with darker sutures, antennae and legs rufous.

Head.— Face straight in profile with slightly elevated rostral tip. Rostrum in frontal view broadly rounded anteriorly, tip with two small paramedian tubercles (fig. 321). Frons distinctly concave, rostrum with a separate shallower impression. Starting from the eyes fine oblique, slightly sinuous lateral ridges run to the rostrum, fading away a little behind the apical margin. At the inner side of each ridge a shallow sulcus is present, ill-delimited at their inner side, indistinct on rostrum. At the outer side of the ridges the rostrum slopes steeply down towards the lateral edges. Frons and rostrum with distinct small punctures, interstices smooth and shiny. Transition between frons and vertex arcuate and rather gradual. Vertex more densely punctate than frons, interstices with linear microsculpture.

Pronotum.— Nearly 1.4 times longer than wide, in dorsal view a little widened in the anterior half (fig. 317), broadly rounded in front, thence nearly straight towards the anterior angles, rather convex in transversal direction, in profile faintly convex in posterior half, thence moderately convex towards anterior margin. Marginal striae distinct, in front ending in the slightly impressed anterior angles. Pronotal disc densely covered with very coarse punctures of unequal size in the posterior half, and smaller punctures in the anterior half, punctures behind the anterior emargination for the head and in the anterior angles still smaller and very closely set. Interspaces smooth. An indistinct impunctate median band without stria is suggested by a greater distance between the punctures along the median line.

Elytra.— Along the suture a little shorter than pronotum (fig. 317), slightly impressed near the scutellum, rather convex in transversal direction, in profile almost straight in anterior half, thence progressively convex towards apex. Elytral punctation much finer than on pronotum, punctures of unequal size and near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epi-

pleura impunctate with linear microsculpture. A marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly impressed along the anterior margin, densely and coarsely punctate, punctures of unequal size, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Short triangular with broadly rounded, distinctly impressed apex, in profile faintly concave. Punctuation as on propygidium, along sides and apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad, sides nearly parallel (fig. 320), in lateral view straight in posterior two-thirds, slightly convex in front. Carinal disc margined at the sides and in front by a narrow elevated rim, accompanied at the lateral sides by a distinct carinal stria. Carinal disc with a faint impression along the median line, and a slight transversal impression along the anterior marginal rim. Carinal disc sparsely punctate, punctures elongate and of unequal size. Interspaces with some indistinct linear microsculpture.

Mesosternum.— In front slightly impressed along the median line. Lateral striae distinct, broad sulciform, well-delimited at both sides, nearly parallel, in front ending behind the procoxae (fig. 320). Mesosternal disc with sparse double punctuation, the primary punctures elongate. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae distinct, in front sulciform, divergent posteriorly, slightly curved inwards, well reaching the posterior metasternal third (fig. 320). Disc with elongate punctures of unequal size, more closely set towards the median suture, gradually smaller towards posterior margin. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, slightly encroaching upon the mesosternum.

First visible sternite.— Distinctly, rather coarsely punctate, punctures smaller towards posterior margin. Interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a sharp transverse ridge, well-delimited behind, less so in front. Face in lateral view nearly straight with distinctly elevated rostral tip. Frons and rostrum delimited at the sides by a distinct, slightly sinuous ridge (fig. 322), continuous with the transverse ridge behind, and in front indistinctly continuous with the slightly elevated and indistinctly tuberculate apical margin. At the medial side each ridge is accompanied by a shallow sulcus, ill-delimited at the inner side; at the lateral side of the ridges the rostrum slopes steeply down to its edge. Frons faintly impressed. Frons and rostrum with distinct punctures of unequal size, gradually smaller towards rostrum. Interstices with indistinct microsculpture. Vertex with a slight across depression behind the transverse ridge and a small median fovea; punctuation distinct, interstices with dense interstitial microsculpture.

Pronotum.— Nearly 1.5 times longer than wide, distinctly widening in the anterior half (fig. 318). Disc less coarsely punctate than in the male. Behind the anterior emargination for the head there is a faint and smooth median ridge, more distinct near its

posterior end. A narrow impunctate median band is present in the posterior half, with a short and fine antescutellar median stria.

Pygidium.— Convex in both directions, apex without impression, coarsely punctate, punctures with a short pale-yellow hair.

Prosternum.— Carina in lateral view almost straight over its entire length, not margined in front, the carinal striae a little abbreviated in front. Disc not impressed.

Variation.— PE-length males: 2.1-2.2 mm, females: 2.2-2.3 mm. The intensity of the punctuation of the elytra and the underside is rather variable. The anterior mesosternal impression is indistinct in some specimens. Also the length of the lateral metasternal striae varies a little; when they are long their posterior end is curved inwards. The lateral striae on the first sternite are indistinct in one male. In other males the marginal pronotal striae are interrupted in the anterior curvature or indistinct near the anterior angles. The female from Mindanao differs a little from the specimens from Luzon by a very indistinct anterior pronotal ridge and a more parallel course of the lateral ridges on the rostrum.

Remarks.— The male was hitherto unknown. In the original description nothing is said about the number of specimens on which the description has been based. Probably it was only one, but as there is no certainty about this matter the type specimen has been designated as lectotype. The figure in Heller's publication (1915) shows the anterior widening of the pronotum in an exaggerated and incorrect way. As discussed in the chapter "Morphological features, terminology and methods" this widening is due to the visibility in dorsal view of the emargination of the pronotal edge (figs 318 and 319). The length given by Heller (2.8 mm) is the total length. The specimen from Malaysia has a slightly narrower face, the rostral tip is more strongly turned up with less distinct apical marginal rim.

Trypeticus mazuri spec. nov.
(figs 48-50)

Material.— **Indonesia:** Holotype ♀ (CHSM), [white label, printed:] "♀"; [white label, printed:] "SUMATRA (Jambi), GUNUNG/KERINCI, 1800-2100 m/6-7.iii.1991/Bocák & Bocáková lgt"; [red label, printed:] "HOLOTYPUS/*Trypeticus/mazuri* sp. n./P. Kanaar des. 2001".

Female.— Length (without head and abdominal tergites) 3.6 mm, width 1.6 mm, height 1.4 mm. Cylindrical, shiny, black, antennae and legs rufous.

Head.— Face in profile faintly concave with barely elevated rostral tip. Apex of the rostrum in frontal view faintly emarginate, with two large paramedian tubercles (fig. 50). Frons and vertex separated by a distinct, smooth, slightly bisinuous transverse keel, sharply delimited posteriorly, less so to the frons. At either side a distinct, slightly sinuous ridge runs from the transverse keel anteriorly, at some distance from the eyes. At the rostral apex this ridge turns abruptly inwards and ends at the paramedian tubercle. At the inner side the longitudinal ridge is well-delimited and accompanied by a very shallow and broad sulcus, ill-delimited at the inner side. On the frons the longitudinal ridge is also well-delimited at the outer side, the area between ridge and eye slightly concave; on the rostrum the ridge is less distinctly delimited at the outer side, the lateral parts of the rostrum steeply sloping down towards its margin. The slightly concave area between longitudinal ridge and eye is obliquely delimit-

ited anteriorly by an elevation medially from the antennal insertion. Frons distinctly concave. In this concavity frons and rostrum traversed by an additional shallow, ill-delimited median groove, more distinct on the frons. Frons and rostrum with rather scarce fine punctation. Interstices with dense microsculpture, producing a rather dull appearance, with the exception of the transverse and longitudinal ridges that are smooth. Vertex with a small median fovea; punctation more distinct than on the frons, interstices with dense microsculpture.

Pronotum.— In dorsal view nearly 1.2 times longer than wide, sides nearly parallel, in front rather abruptly curved inwards and oblique towards anterior angles (fig. 48), moderately convex in transversal direction, in profile faintly convex in posterior half, thence more convex and sloping down towards anterior margin. On the flattened area behind the anterior emargination an ill-delimited area (indicated by a dotted line in the figure) with dense interstitial microsculpture. Behind this area a distinct median ridge is present, rather short and more distinct posteriorly. At either side of this ridge the pronotum is slightly depressed. Faint impressions are also present behind and medially from the anterior angles. Marginal striae fine, curved inwards at their posterior end, indistinct near the anterolateral angles, ending in the faintly impressed anterior angles. Punctation of the disc rather sparse, punctures of moderate and slightly unequal size, mixed with very small punctures near the posterior margin, punctures along the anterior emargination more closely set and elongate, interstices outside this area rather smooth. A narrow impunctate median band is present between scutellum and anterior median ridge, behind the latter slightly depressed along the median line, with traces of a median stria.

Elytra.— Along the median suture about as long as pronotum (fig. 48) with rounded apices, moderately convex in transversal direction, in profile very faintly convex, more distinctly so near apex. Elytra slightly finer punctate than pronotum, punctation double. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture, marginal striae indicated by a very shallow sulcus, indistinct in front.

Propygidium.— Distinctly impressed along the anterior margin, more distinctly so towards sides. Oblique lateral striae present. Disc not very densely punctate, punctures of moderate size. Interstices with linear microsculpture.

Pygidium.— Broadly rounded in outline, disc slightly convex, mainly in transversal direction, with faint lateral impressions. Punctation and microsculpture as on propygidium, the punctures not ciliate, smaller along the lateral and apical margins.

Prosternum.— Carina in lateral view straight over nearly its entire length, only in front convex. Carinal disc with slightly sinuous sides (fig. 49), not margined at the sides by a carinal stria or an elevated rim, but along the posterior margin a stria is present, at the sides continued along the procoxae and thence continuous with the lateral prosternal striae that are visible in ventral view (not shown in the figure). Carinal disc in the anterior half slightly concave, with an additional large anterior median impression, more distinct and sharply delimited in front; disc not densely punctate, punctures rather small, interspaces with dense microsculpture.

Mesosternum.— Lateral striae rather narrow and slightly sulciform, ill-delimited at the inner side, slightly divergent anteriorly, ending at a rather great distance from the procoxae (fig. 49). Mesosternal disc slightly impressed between the procoxae, not

densely punctate, punctures rather small, mixed with very small punctures. Interspaces with linear microsculpture. Meso-metasternal suture distinct, slightly depressed, angulate backwards.

Metasternum.— Lateral striae fine, in front broadly curved inwards (fig. 49), almost parallel posteriorly, about reaching the anterior metasternal one-fourth. Metasternal disc about punctate as mesosternum, the larger punctures faintly elongate. A rather broad band along the finely canaliform median suture is impunctate. Interspaces with vague linear microsculpture.

First visible sternite.— Disc more densely punctate than metasternum, interstices with linear microsculpture. Oblique lateral striae wanting, but vague lateral impressions instead.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae with hairs on the outer margin and with some distinct teeth on the distal third.

The male is unknown.

Remarks.— On account of the slightly divergent narrow mesosternal striae the possibility has been considered that this specimen could be the female of *T. frontalis* Schmidt. As in the present species the anterior mesosternal margination of *T. frontalis* is wanting and the base of the prosternal keel is less widened this possibility has been rejected. Moreover the lateral metasternal striae are more divergent posteriorly and longer than in *T. frontalis*.

Etymology.— This species is dedicated to my friend and well-known histeridologist Slawomir Mazur (Warsaw), in appreciation of our long-standing co-operation.

Trypeticus merkli spec. nov.
(figs 179-181)

Material.— **Malaysia:** Holotype, ♂ (MZLU), left protarsus missing, alae protruded, [white label, printed:] “♂”; [white label, printed:] “Malaysia, SABAH/Sipitang, Mendolong/Leg. S. Adebratt” [reverse side, hand-written:] “T2A/8.vii.1987”; [yellow label, printed:] “12/08”; [red label, printed:] “HOLOTYPE/*Trypeticus/merkli* sp. n./P. Kanaar des. 2000”.

Male.— Length (without head and abdominal tergites) 3.0 mm, width 1.4 mm, height 1.2 mm. Rather broadly cylindrical, shiny, reddish brown, sutures darker.

Head.— Face in profile almost straight anteriorly, near the eyes convex towards vertex. Rostrum in frontal view rounded-truncate anteriorly, with two tubercles, in front of these tubercles sloping down towards anterior margin (fig. 181). Frons and posterior part of rostrum slightly concave, with a slight additional impression behind the tubercles. Frons and rostrum with small punctures of unequal size, interstices with fine linear microsculpture. Transition between frons and vertex arcuate and very gradual. Vertex with a small median fovea, punctures more distinct and more closely set than on frons, interstices with fine microsculpture.

Pronotum.— Nearly 1.1 times longer than wide, in dorsal view with almost parallel sides (fig. 179), in front rather abruptly rounded towards the anterior angles, moderately convex in transversal direction, in profile faintly convex, more distinctly so towards anterior margin. Marginal striae fine, slightly abbreviated at their posterior end, in front ending in the non-impressed anterior angles. Pronotal disc rather densely punctate in the posterior third, more sparsely so anteriorly, punctures of

unequal size, mixed with some very small punctures in the anterior half, punctures along the anterior margin a little more closely set and smaller. Interstices smooth. A narrow, ill-delimited impunctate median band with an indistinct antescutellar stria is visible in the posterior two-thirds.

Elytra.— Along the suture shorter than pronotum (fig. 179), distinctly depressed near the scutellum, moderately convex in transversal direction, in profile faintly concave just behind the scutellum, thence slightly convex, progressively so towards apex. Elytral punctation along the base as coarse as on the posterior part of pronotum, elsewhere sparser and finer. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture, marginal epipleural stria indistinct in posterior half, wanting in anterior half.

Propygidium.— Slightly impressed along anterior margin. At either side a distinct oblique lateral stria is present. Punctation distinct, not very dense, punctures of subequal size. Interstices smooth.

Pygidium.— Parabolic in outline with rather narrow tip, very faintly convex, with shallow anterolateral foveae and a very faint apical impression. Punctation as on propygidium, punctures not ciliate, along lateral and apical margins smaller.

Prosternum.— Carina in lateral view almost straight. Carinal disc with nearly parallel sides, rather broad (fig. 180), margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a very indistinct narrow carinal stria, indistinctly continuous with the deep transversal impression behind the anterior marginal rim, this impression extending posteriorly along the median line and gradually shallower. Carinal disc with rather large and scarce shallow punctures of unequal size, their margins blurred by dense interstitial linear microsculpture.

Mesosternum.— Impressed between the procoxae. Lateral striae sulciform, rather narrow and ill-delimited at the inner side, parallel, in front slightly curved inwards (fig. 180), ending behind the procoxae. Mesosternal disc with elongate punctures of unequal size. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, curved outwards at their posterior end, nearly reaching the metasternal middle (fig. 180). Disc finer punctate than mesosternum, punctures decreasing in size posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture finely canaliform, with the exception of its posterior end.

First visible sternite.— Finely and rather densely punctate, interstices smooth. Oblique lateral striae wanting.

Legs.— Protibiae with five teeth on the outer margin, the fourth tooth (counted from the base) much larger than the other teeth. Mesotibiae with five teeth on the outer margin, the distance between the fourth and the distal tooth much larger than the other interdental distances. Outer margin of hindtibiae with hairs and with some very small teeth on the distal third.

The female is unknown.

Remark.— The alea of the holotype are protruded. To expose the propygidium they have been drawn aside.

Etymology.— This species is dedicated to Dr Otto Merkl (Museum of Budapest), in appreciation of his co-operation.

Trypeticus minutissimus spec. nov.
(figs 390-394)

Material.— **Malaysia:** Holotype, ♀ (MZLU), genitalia protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang,/Mendolong, T5/R/13.v.1988/leg. S. Adebatt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/minutissimus* sp. n./P. Kanaar des. 2000”; 3 ♂♂, 1 ♀ (MZLU, CHPK), same locality, date and collector, but various trap codes (paratypes); 1 ♀ (CHPK), idem, but 19.iv.1988 (paratype); 1 ♂, 1 ♀ (CHSM, CHND), idem, but 29.iv.1988 (paratypes); 1 ♂, 2 ♀♀ (MZLU, CHPK), idem, but 1.v.1988 (paratypes); 1 ♂, 1 ♀ (MZLU), idem, but 3.v.1988 (paratypes); 1 ♂ (MZLU), idem, but 4.v.1988 (paratype); 2 ♂♂, 1 ♀ (MZLU, CHPK), idem, but 6.v.1988 (paratypes); 2 ♂♂, 2 ♀♀ (MZLU, CHPK), idem, but 11.v.1988 (paratypes); 1 ♂ (MZLU), idem, but 14.iii.1989 (paratype); 1 ♂, 1 ♀ (MZLU), idem, but 20.iii.1989 (paratypes); 1 ♂ (CHPK), idem, but 31.iii.1989 (paratype).

Female.— Length (without head and abdominal tergites) 1.46 mm, width 0.50 mm, height 0.44 mm. Rather elongate cylindrical, shiny, ferruginous, parts of pronotum, parts of elytra and sutures darker.

Head.— Face in lateral view faintly bisinuous with slightly elevated rostral tip, posteriorly broadly rounded over the eyes. Rostrum in frontal view broadly rounded-truncate anteriorly with slightly raised, indistinctly tuberculate apical margin (fig. 394), transversely impressed behind this margin, and with another faint crosswise impression before the level of the antennal insertions. Frons with slight median impression and with a slight impression along the antennal insertions that are bordered by a slightly elevated rim. Eyes very large and convex, with very large facets (about two times as large as the punctures of the dotted transfer foil used in the figure). Rostrum, frons and vertex finely and sparsely punctate, punctures on the posterolateral parts of the frons with some rather long hairs; interspaces smooth. Transition of frons and vertex very gradual, convex in longitudinal direction.

Pronotum.— Nearly 1.4 times longer than wide (fig. 390), in dorsal view with parallel sides, broadly rounded anteriorly towards the anterior angles. Anterior margin bisinuous, anterolateral angles bent downward and inward, not impressed. Pronotum strongly convex in transversal direction, in profile almost straight in posterior half, thence slightly convex and flattening off towards anterior margin. Disc rather sparsely and finely punctate, the punctures slightly elongate, interspaces smooth. A narrow impunctate median band is present in the posterior two-thirds. Marginal striae distinct, curved inward over the posterolateral angles, in the anterior third leaving the pronotal edge, slightly bent upward and more impressed, ending at some distance from the anterior angles.

Elytra.— Along the suture nearly 1.3 times longer than pronotum (fig. 390), slightly impressed near scutellum, apices rounded. Elytra strongly convex in transversal direction, in profile almost straight in the anterior two-thirds, thence progressively convex towards apex, slightly scantier punctate than pronotum, interspaces smooth; a narrow band along the suture is impunctate. Epipleura with fine linear microsculpture and a shallow, indistinct marginal epipleural stria, mainly in the posterior half.

Propygidium.— Distinctly punctate, punctures of unequal size, the larger punctures along the posterior margin with a long yellow hair, the distance between these hairs rather great.

Pygidium.— Broadly parabolic in outline, faintly impressed along the sides (fig. 390), distinctly punctate, larger punctures with a rather long yellow hair, the hairs not closely set. Interspaces with microsculpture.

Prosternum.— Carina in lateral view slightly convex, disc about rectangular (fig. 392), slightly narrowed near the middle, margined by a narrow elevated rim in front and at the sides. At the lateral sides this rim is accompanied by a very shallow and indistinct carinal stria. Base slightly emarginate. Carinal disc transversely concave, sparsely punctate, interspaces with linear microsculpture.

Mesosternum.— Slightly impressed behind the slightly convex interprocoxal part (fig. 392). Lateral striae indistinct, faintly impressed, ill-delimited. Mesosternal disc not densely punctate, punctures deep, elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Median suture canaliform. Lateral striae wanting (fig. 392). Metasternal disc about punctate as mesosternum; a narrow band along the median suture is impunctate. Between the punctures along this smooth band indistinct longitudinal strioles are visible, elsewhere interspaces smooth.

First visible sternite.— Lateral striae wanting. Disc about punctate as metasternum.

Legs.— Protibiae with five teeth on outer margin, the two proximal teeth very small; mesotibiae with four teeth. Hindtibiae with hairs on the outer margin, without distinct teeth. Tarsi strikingly long.

The male differs from the female as follows:

Punctuation a little more distinct.

Head.— In profile almost straight in the anterior half with slightly elevated apical margin, posteriorly broadly rounded. Rostrum slightly convex, shorter, in frontal view broadly rounded-truncate anteriorly with slightly raised apical margin (fig. 393). Between frons and rostrum a slight crosswise impression is present. Some interstitial linear microsculpture between punctures on anterior part of frons and on rostrum. Hairs on the posterolateral parts of frons much shorter, barely visible.

Pronotum.— Not distinctly different from the female pronotum (fig. 391).

Pygidium.— Distinctly concave, especially in the apical half, margins distinctly raised. Rather sparse long yellow hairs as in the female present.

Prosternum.— Carinal disc less transversely concave.

Variation.— PE-length males: 1.26-1.34 mm, females: 1.38-1.50 mm. In some specimens a short antescutellar stria is visible. In some specimens the vestigial lateral mesosternal striae are more distinctly impressed. The faint lateral impressions of the female pygidium are rather variable; sometimes they are distinct, sometimes almost obsolete.

Etymology.— The name refers to the very small body size. In fact it is the smallest of the species known at present.

Trypeticus minutulus Lewis
(figs 346-351)

Trypeticus minutulus Lewis, 1891a: 403.

Material.— **Indonesia**: Lectotype, ♀ (BMNH), abdomen with postcoxae and hindlegs loose from

remainder of the body, [white label with red margin, printed:] "Type"; [white label, hand-written:] "Sumatra/A. Gr."; [white label, hand-written:] "Sumatra"; [white label, printed:] "George Lewis Coll./B.M.1926-369"; [white label, hand-written:] "*Trypeticus/minutulus*/Type Lewis"; [red label, printed and hand-written:] "LECTOTYPUS/*Trypeticus/minutulus*/Lewis, 1891 ♀" (present designation). **Malaysia:** 1 ♀ (MZLU), Sabah, Sipitang, Mendolong, 1.xii.1987, T2A/W4; S. Adebratt; 1 ♂ (MZLU), idem, but 11.v.1988 and T1B/W4; 1 ♂ (CHPK), idem, but 2.iii.1989 and T1B/W4; 1 ♂, 1 ♀ (USNM), Sabah, Danum Valley F. S., 85 km W Lahad Datu, 100 m, 28.viii.1988.

Male.— Length (without head and abdominal tergites) 1.50 mm, width 0.50 mm, height 0.47 mm. Elongate cylindrical, shiny, dark brown, elytra and legs ferruginous.

Head.— Face in profile almost straight. Rostrum in frontal view rounded anteriorly (fig. 349) with indistinct paramedian tubercles on the apical margin. Rostrum rather concave in the posterior half, frons deeper concave, the concavity distinctly delimited anterolaterally by sinuous ridges along the antennal insertions, fading away on the sides of the rostrum. Rostrum and frons sparsely and finely punctate, interstices with indistinct linear microsculpture. Transition between frons and vertex strongly arcuate, sharp, especially so at the sides. Vertex more distinctly punctate than frons, with faint lateral impressions and a small median fovea. Interstices with indistinct microsculpture.

Pronotum.— About 1.5 times longer than wide (fig. 346), in dorsal view with slightly sinuous sides, broadly rounded anteriorly towards the anterior angles, strongly convex in transversal direction, in profile faintly sinuous, slightly more convex just behind the anterior margin. Marginal striae distinct, indistinctly continued for a short distance along the posterior margin, about the middle of the pronotal sides leaving the pronotal margin and ending a little behind the not impressed anterior pronotal angles. Punctuation rather coarse and rather dense, punctures deep, smaller and more closely set along the deep anterior emargination. Interspaces smooth. A narrow, indistinct median band is impunctate, without antescutellar median stria.

Elytra.— Along the suture about as long as pronotum (fig. 346), distinctly impressed near scutellum, apices rounded; strongly convex in transversal direction, in profile faintly convex over nearly its entire length, only near the apices strongly and progressively convex. Elytra distinctly finer punctate than pronotum, punctures elongate, near suture more closely set and larger. A very narrow band along the slightly raised suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture and a fine marginal epipleural stria in the posterior half.

Propygidium.— Impressed along the anterior margin, distinctly punctate, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Slightly concave in longitudinal direction, rather long, triangular in outline with rounded, distinctly impressed apex, disc distinctly and densely punctate, the punctures of slightly unequal size, with very short and fine hairs at the apex. Interstices smooth.

Prosternum.— Carina in lateral view almost straight. Sides of carinal disc parallel in the posterior half, slightly divergent anteriorly (fig. 348), margined by a distinct and narrow elevated rim at the sides and in front, lateral rims with a rather broad carinal stria at their inner side, in front connected by an impression along the anterior rim.

Carinal disc with sparse, rather fine elongate punctures, interspaces smooth.

Mesosternum.— Interprocoxal part very faintly impressed. Lateral striae sulciform, rather narrow, faintly divergent anteriorly, ending behind the procoxae (fig. 348). Mesosternal disc sparsely punctate, punctures small, elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Median suture distinctly canaliform, especially anteriorly and posteriorly. Lateral striae fine, very long, slightly bisinuate (fig. 348), ending at the metasternal posterior fifth, its posterior end curved inward and close to the meta-metepimeral suture. Metasternal disc about equally punctate as mesosternum, but punctures near the median suture and posteriorly smaller. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Very narrow between the metacoxae, punctuation as metasternum, oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae rather broad, with a row of spines on the outer margin.

The female differs from the male as follows:

Head.— Face in profile almost straight with distinctly elevated rostral tip. Rostrum in frontal view very bluntly acuminate anteriorly (fig. 350), apical margin slightly raised near the middle, indistinctly tuberculate. Frons and rostrum together distinctly concave, with posterolateral extensions of the concavity on the frons, and anterolateral extensions on the rostrum. The concavity delimited at the sides by a bisinous ridge, fading away on the rostrum near the apex. Frons and rostrum with small punctures, interstices with dense microsculpture, with the exception of a small triangular area before the transverse transition between frons and vertex, that is well-delimited at its posterior side, less so to the frons. Vertex with lateral impressions and a median fovea, densely punctate, interspaces with dense microsculpture.

Pronotum.— Nearly 1.9 times longer than wide (fig. 347), punctures a little smaller than in the male. A short very fine median stria is visible in front of the scutellum.

Pygidium.— Broadly rounded in outline, slightly concave in posterior half, punctate, punctures with rather long hairs.

Prosternum.— Carinal disc only margined at the sides by fine carinal striae, ending a little behind the anterior edge, that is not impressed or margined by a rim.

Variation.— PE-length other males: 1.48 and 1.52 mm, female lectotype: 1.48 mm, other females: 1.60 and 1.64 mm.

Remarks.— The lectotype is finer punctate than the specimens from Sabah, and the pronotum is in dorsal view a little constricted in the posterior third. Lewis misinterpreted the sex, like all older authors. The female from Danum Valley has a more distinctly turned up rostral apex that is bluntly triangular (fig. 351), without the apical tubercles. Seen from below the protruding apex is concave, shortly triangular with very broadly rounded tip. The lateral metasternal striae in this specimen are shorter. In the female from Sipitang the protruding rostral apex is also concave at its underside, but slightly bifid when seen from below, like in the lectotype. However, the associated male from Danum Valley is indistinguishable from the other male from Mendolong. As only few females are available it cannot be said which of the two forms of the rostral apex is the most general one.

Trypeticus mirandus spec. nov.
(figs 102-104)

Material.— **Indonesia:** 1 ♀ (MNHN), left protarsus missing, right elytron slightly luxated, [white label, printed:] “♀”; [white label, printed:] “Lombok/Sapit 2000’/April 1896/H. Fruhstorfer”; [yellow label, printed:] “MUSÉUM PARIS/1952/COLL. R. OBERTHUR”; [red label, printed and handwritten:] “HOLOTYPUS/*Trypeticus/mirandus*/sp. n./P. Kanaar des. 2001”.

Female.— Length (without head and abdominal tergites) 3.3 mm, width 1.4 mm, height 1.3 mm. Cylindrical, shiny, piceous brown-black, antennae and legs rufous.

Head.— Vertex and frons separated by a smooth transverse ridge, well-delimited behind. A smooth strong and broad median ridge, traversing frons and rostrum, originates from this transverse ridge, very broad when starting from the transverse ridge, thence narrowing anteriorly and finally again widening towards its slightly bifid end on the rostral tip (fig. 104); the edges of the ridge are rounded off. In lateral view the ridge is strongly sinuous, very high on the frons behind the level of the antennal insertions, thence faintly concave anteriorly and again raising near the rostral tip. In front of this bifid raised tip the ridge falls very steeply and a little backwards down to the anterior rostral margin along the labrum. At each side the median ridge is accompanied by a deep, oblique fovea on the frons, open towards sides of rostrum. On their turn the frontal foveae are delimited by a faintly sinuous lateral ridge that runs obliquely from the eyes towards the rostrum, continuous with the transverse ridge behind, and in front fading away on the rostrum, well behind the apical margin. Frontal foveae and lateral ridges also smooth, only the anterolateral parts of rostrum with scarce small punctures and interstitial microsculpture. Vertex with a transverse impression behind the transverse ridge and an ill-delimited median fovea; punctuation fine, interstices with fine microsculpture.

Pronotum.— About 1.3 times longer than wide, in dorsal view with nearly parallel sides (fig. 102), slightly narrowing in front and thence broadly rounded towards the anterior angles, moderately convex in transversal direction, in profile very faintly convex in the posterior two-thirds, than more convex and thence sloping down towards anterior margin. Behind the anterior emargination for the head the pronotum has a narrow, ill-delimited parabolic dull area (indicated by dotted lines in the figure), caused by dense interstitial microsculpture, in which a very faint median ridge is present. At either side of the dull area the pronotum is slightly impressed. Additional large and shallow, ill-delimited impressions are present behind the anterior angles. Marginal striae fine, slightly turned upwards at their posterior end, at a rather great distance from the edge in the anterior half, ending at some distance from the anterior angles; short appendices of the marginal striae are present near the anterior angles, delimiting the shallow impressions in front. Pronotal disc not densely covered with rather small punctures of unequal size in the posterior half, a little irregularly dispersed; in the anterior pronotal half the punctures are progressively larger anteriorly, mixed with very small punctures, the punctures in the dull area rather small. Interspaces elsewhere smooth. A narrow impunctate median band is present in the posterior two-thirds, with a fine antescutellar stria.

Elytra.— Along the suture shorter than pronotum (fig. 102), slightly impressed

near the scutellum, moderately convex in transversal direction, in profile slightly convex and raising in the anterior two-thirds, thence progressively convex towards apex. Elytral punctation about equal to the punctation of the posterior pronotal half, with the exception of some larger punctures along the anterior margin; punctures of slightly unequal size, more closely set near the suture and apex. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture; an indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly concave in longitudinal direction, with an oblique lateral stria at either side. Punctation distinct, rather dense, interstices smooth.

Pygidium.— Broadly rounded in outline, convex, at either side with a distinct small anterior fovea behind the propygidial oblique striae, these foveae connected by a distinct transversal impression. Punctation as propygidium, along margins finer, punctures near apex with a very short, barely visible yellow bristle. Interstices smooth.

Prosternum.— Carina broad and rather short, sides almost parallel (fig. 103), in lateral view straight. Carinal disc without carinal striae, not impressed, finely and sparsely punctate. Interspaces with fine linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae distinct, broad and sulciform, ill-delimited at the inner side, slightly curved, more arcuate inwards in front, ending behind the procoxae (fig. 103). Mesosternal disc with distinct, rather sparse punctures of unequal size, mixed with some very indistinct minute punctures. Interspaces smooth. Meso-metasternal suture fine, depressed, slightly sinuous, angulate backwards.

Metasternum.— Lateral striae distinct, slightly divergent posteriorly, nearly attaining the metasternal half (fig. 103). Disc about punctate as mesosternum. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, except its posterior end.

First visible sternite.— Punctation as on metasternum. Interstices smooth. Distinct oblique lateral striae wanting, though faint, ill-delimited impressions are present instead.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

Remarks.— No doubt this species is very close to *T. planisternus* Lewis. The main difference is the entirely other shape of the median carina of the face. Maybe *T. mirandus* is a subspecies of *T. planisternus*.

Etymology.— The name refers to the extraordinary shape of the head.

Trypeticus monteithi spec. nov.
(figs 266-270)

Material.— **Australia** (N. Queensland): Holotype, ♀ (QMBA), [white label, printed:] “♀”; [white label, printed:] “NE QLD. Bell Peak North/10 km E Gordonvale/13.x.1982, 900-1000 m/Monteith, Yeats & Thompson/*Pyrethrum* knockdown, RF”; [white label with black cadre, hand-written and printed:] “TRYPETICUS/sp./Det./J.F. Lawrence”; [green label, printed:] “QUEENSLAND/MUSEUM LOAN/DATE: vi.1999 /No. LE 99.25”; [red label, printed:] “HOLOTYPUS/*Trypeticus/monteithi* sp. n./P. Kanaar des. 2000” (present designation); [white label:] “Registration/Number/QMT99045”; 1 ♂ (ZMAS), Loc. Gadgarra, 22.i.1932, host Quondong, Fielding (paratype); 2 ♀♀ (ZMAS), Loc. Gadgarra, 7.ii.1932, host Ash, Fielding (paratypes); 1 ♂, 1 ♀ (ZMAS, CHPK), Loc. Gadgarra, 2.ii.1934, host Wal-

nut, J.N. Smith (paratypes); 6 ♂♂, 2 ♀♀ (ZMAS, CHPK), idem, but 22.ii.1934 (paratypes); 1 ♂ (CHPK), N.E. Qld., Cardwell Range, Upper Broadwater Ck Valley, 700 m, *Pyrethrum* knockdown, Monteith, Thompson & Hamlet (paratype); 1 ♂ (QMBA), N. Qld., Windsor Tableland, 27.xii.1988-9.i.1989, flight interception trap site 3, E. Schmidt & ANZSES (paratype); 1 ♀ (CHPK), N. Qld., Mt Lewis Rd, 22 km from highway, 1000 m, 18.xii.1989, *Pyrethrum* logs, Monteith & Thompson (paratype); 1 ♀ (QMBA), idem, but 18.xii.1989-13.i.1990, flight interception trap site 3, Monteith, Thompson, ANZSES (paratype); 3 ♂♂, 2 ♀♀ (QMBA), N.E. Qld., Crater Nat. Park, 950 m, Atherton Tblnd, 28.xii.1990, *Pyrethrum* logs, G. Monteith (paratypes); 1 ♂, 1 ♀ (QMBA, CHPK), N.E. Qld., Big Tableland, 740 m, 15°43'S 145°17'E, 20.xii.1990-8.i.1991, flight interception traps and pitfalls, ANZSES expedition (paratypes); 2 ♂♂ (QMBA), N.E. Qld., Mt Halcyon, 870 m, 16°03'S 145°25'E, 23.xi.1993, *Pyrethrum* trees and logs, Monteith & Janetzki (paratypes); 5 ♂♂ (QMBA, CHPK), N.E. Qld., Mt Boolbun South, 850 m, 15°57'S 145°08'E, 5.xi.1995, *Pyrethrum* trees, G.B. Monteith (paratypes); 1 ♂ (QMBA), N.E. Qld., Hilltop, 18 km N Mt Lewis, 1300 m, 16°30'S 145°16'E, 23.xi.1998, *Pyrethrum* trees, rainforest G. Monteith (paratype).

Male.— Length (without head and abdominal tergites) 2.5 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, piceous black with bronze hue, antennae and legs rufous.

Head.— Face nearly straight in profile, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly with two paramedian tubercles (fig. 269). Frons and posterior part of rostrum distinctly concave, concavity delimited anterolaterally by a faint sinuous ridge, fading away on the rostrum towards the paramedian tubercles, and delimited at the inner side by an indistinct shallow groove, more distinct near eyes and antennal insertions. At the lateral sides of these ridges the rostrum is sloping down towards its lateral margin. An additional faint impression is present in front between the tubercles. Frons and rostrum with rather scarce small punctures, interstices with indistinct linear microsculpture, shiny. Transition between frons and vertex slightly arcuate and rather sharp, constituted by the posterior margin of the frontal impression. Vertex with a small median fovea, more densely punctate than frons, interstices with linear microsculpture.

Pronotum.— Nearly 1.3 times longer than wide, with parallel sides (fig. 266), in front broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile faintly convex in the posterior two-thirds, thence progressively convex towards anterior margin. Marginal striae rather fine, turned upwards at their posterior end, ending near the slightly impressed anterior angles. Pronotal disc with moderate punctures of unequal size, slightly irregularly dispersed, along the base a little larger and more closely set, along the anterior margin very closely set and smaller. Interstices smooth. An indistinct impunctate median band without antescutellar median stria is indicated by a greater distance between the punctures.

Elytra.— Along the suture slightly shorter than pronotum (fig. 266), slightly impressed near scutellum, strongly convex in transversal direction, in profile faintly bisinuous in anterior two-thirds, thence progressively convex towards apex. Elytral punctuation rather coarse and closely set near scutellum and anterior margin, smaller and slightly finer than on pronotal disc posteriorly. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture and an indistinct marginal epipleural stria, interrupted in the middle.

Propygidium.— Impressed along anterior margin, more distinctly so towards the sides. Oblique lateral striae present. Punctuation distinct, rather dense, punctures of unequal size, larger punctures at the sides and along the posterior margin with a long yellow hair. Interstices smooth.

Pygidium.— Triangular in outline with rounded apex, slightly convex. Punctuation as on propygidium, larger punctures with a long pale-yellow hair, this ciliation rather sparse.

Prosternum.— Carina in lateral view almost straight in posterior half, thence slightly convex towards anterior margin. Carinal disc with parallel sides, rather broad (fig. 268), margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a distinct narrow carinal stria, more or less continuous with the distinct transversal impression behind the anterior marginal rim, this anterior impression extended posteriorly with a faint impression along the median line. Carinal disc with rather scarce small punctures, mixed with some very small punctures. Interspaces with indistinct linear microsculpture.

Mesosternum.— Faintly impressed in front. Lateral striae deep, sulciform, rather narrow, well-delimited, almost parallel, at their posterior end slightly divergent, in front ending behind the procoxae (fig. 268). Mesosternal disc with elongate punctures of unequal size, mixed with very small punctures. Interspaces smooth. Mesometasternal suture impressed, strongly angulate backwards.

Metasternum.— Lateral striae fine, divergent posteriorly, about reaching the anterior metasternal third (fig. 268). Disc about equally punctate as mesosternum. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform.

First visible sternite.— Distinctly impressed along the median line, about equally punctate as metasternum, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by a transverse, indistinctly tuberculous smooth ridge, rather ill-delimited in front. Face distinctly concave in lateral view, especially so in front towards the rostral apex, that is strongly turned up and indistinctly bituberculate (fig. 270), at the underside with a triangular impression. Frons and rostrum delimited at the sides by a fine sinuous ridge, continuous with the transverse ridge behind, in front fading away and ending at a short distance from the rostral apex. At the medial side each ridge is accompanied by a shallow, rather indistinct groove. At the lateral sides of the ridges the rostrum slopes steeply down to its edge. Frons and rostrum distinctly concave, especially behind the elevated tip, with an additional shallow elongate median impression on anterior part of frons and posterior part of rostrum, deeper in front. Frons and rostrum with rather scarce small punctures, ill-visible by dense interstitial microsculpture, causing a rather dull appearance. Vertex with a broad crosswise impression behind the transverse ridge, a small median fovea and distinct small punctures; interstices with dense microsculpture.

Pronotum.— Amply 1.5 times longer than wide, sides in dorsal view nearly parallel posteriorly, slightly widening in front, with marked anterolateral angles (fig. 267). Between the anterolateral and anterior angles a very deep, large and well-delimited fovea is present, causing a concave outline of the anterior margin in dorsal view. Medially from the posteromedial part of this fovea another deep but much smaller

fovea is present. Between these foveae the pronotum has the shape of a strong ridge, slightly directed anterolaterally and ridgelike continuous along the medial side of the lateral fovea towards the anterior angle. In dorsal view this ridgelike configuration looks like a boss, protruding above the anterior angle. Behind the anterior emargination for the head the pronotum has a median ridge, faint in front, more distinct and smooth near its posterior end, where it is surrounded by a distinct pronotal impression. In a parabolic area behind the anterior emargination (indicated by a dotted line in the figure) a dense interstitial microsculpture is present, giving a dull appearance. From the deep lateral foveae faint impressions run posteromedially; laterally from each oblique impression the pronotum has an additional moderate lateral impression. The marginal stria ends near the anterior end of this lateral impression, a little behind the anterolateral angle. Disc about equally punctate as in the male, but punctures near the base not larger; on the contrary punctures anteriorly larger and closely set, punctures in the dull area elongate and rather indistinct. Interspaces outside the dull area smooth. A long antescutellar median stria is present, without distinct impunctate median band.

Pygidium.— Convex, more parabolic in outline, slightly impressed in the anterolateral angles, with a distinct double punctation, the larger punctures ciliate as in the male.

Prosternum.— Carina straight in profile, disc not margined along the anterior margin, without an impression in front; carinal striae abbreviated in front a little before the prosternal middle.

Metasternum.— Lateral striae obsolete. Median suture more sulciform, metasternal disc slightly impressed along the median line.

Variation.— PE-length of holotype: 2.75 mm, width: 1.0 mm, height: 0.9 mm. PE-length males: 2.4-2.6 mm, females: 2.7-2.9 mm. The colour of most specimens is castaneous without the bronze hue, probably by immaturity. The punctation is in some specimens a little coarser. The anterior margin of the prosternal carinal disc in the males is sometimes very fine, and also the impression behind it is a little variable. The lateral mesosternal striae are sometimes a little divergent anteriorly, the anterior impression is sometimes obsolete. The lateral metasternal striae vary a little in length in the males. In almost all females they are obsolete or entirely wanting, only in a few females it is rather developed. The depth and width of the metasternal median suture is a little variable. The rostral tip of the female is sometimes less distinctly bituberculate, and the median groove on frons and rostrum in the females is sometimes a little longer posteriorly. The length of the prosternal carinal striae in the females varies a little.

Remarks.— Sexual dimorphism of the metasternum apart from relative length and punctation is rarely observed in the genus *Trypeticus*. In the present species the lateral metasternal striae of the females are distinctly less developed than those of the males; the metasternum is slightly impressed along the median line and the median suture is deeper and broader in the females. This kind of sexual dimorphism is unique in the genus.

Etymology.— This species is dedicated to Mr Geoff Monteith of the Queensland Museum (Brisbane), who rediscovered this species after a period of nearly fifty years.

Trypeticus nasicus spec. nov.
(figs 247-251)

Material.— **Indonesia:** Holotype, ♀ (SMNS), left protarsus and right mesotarsus missing, [white label, printed:] “♀”; [blue label, printed:] “Irian Jaya: Baliem-/Tal, Jiwika-Wandaku/5.-6.ix.1990 1700-/leg. A. RIEDEL 2300 m”; [white label, hand-written and printed:] “*Trypeticus*/sp. 1/det. S. Mazur”; [red label, printed:] “HOLOTYPUS/*Trypeticus nasicus* sp. n./P. Kanaar des. 2000”; 1 ♂ (SMNS), Irian Jaya, Baliem distr., Ilugwa, Melanggama, 2100-2300 m, 9-10.ix.1990, A. Riedel (paratype); 1 ♂ (CHPK), Irian Jaya, Jayawi-jaya, N. Bime, 2000-2070 m, 21.ix.1993, A. Riedel (paratype).

Female.— Length (without head and abdominal tergites) 3.0 mm, width 1.1 mm, height 1.0 mm. Cylindrical, very shiny, piceous black with bronze hue, antennae and legs rufous.

Head.— Transition between vertex and frons slightly arcuate, rather sharp but without sharp transverse ridge. Face in lateral view sinuous with strongly elevated rostral tip, the latter rather sharply pointed and well protruding beyond the anterior rostral margin (fig. 251), its underside only impressed along the labrum. Frons and rostrum delimited at the sides by a distinct sinuous ridge, sharply delimited at the inner side, starting from the transition between frons and vertex posteriorly, in front fading away towards the rostral tip. At the medial side each ridge is accompanied by a distinct lateral concavity of frons and rostrum, broad, rather deep and divided by a faint longitudinal ridge posteriorly, narrowing anteriorly and fading away in front at the sides of the raising, transversally convex rostral tip. Frons between these lateral concavities with a faint posterior median impression. At the outer side of the lateral ridge the rostrum slopes steeply down towards its lateral margin; lateral sides of the rostrum rather concave near the pointed tip. Frons with distinct punctures just before the arcuate transition, punctures elsewhere on frons and rostrum very small. Interstices in the lateral concavities with fine and dense microsculpture, smooth elsewhere. Vertex with a small median fovea and distinct punctures. Interstices with linear microsculpture.

Pronotum.— Nearly 1.4 times longer than wide with nearly parallel sides in dorsal view (fig. 247), rather abruptly rounded in front and thence slightly convex and almost transverse towards the anterior angles, moderately convex in transversal direction, in profile irregularly convex, in front sloping down towards the anterior margin. Behind the anterior emargination for the head a distinct smooth median ridge is present, highest near its posterior end. Behind the median ridge two paramedian bosses are present, ill-delimited at their outer side, well accentuated at their inner side by a distinct median depression. Marginal striae distinct, turned upwards at their posterior end, at a rather great distance from the edge near the downwards bent anterolateral angles and ending just beyond the slightly impressed anterior angles. A little behind each anterolateral angle the pronotum has a faint lateral impression. Pronotal disc not densely punctate, punctures distinct, of unequal size, the punctures along the anterior margin and in the anterior angles more closely set, slightly rugose. Interspaces smooth. An indistinct impunctate median band is present, with a distinct long antescutellar median stria, passing in front into the depression between the bosses.

Elytra.— Along the suture shorter than pronotum (fig. 247), broadly impressed near the scutellum and along the anterior margin, moderately convex in transversal

direction, in profile faintly concave behind the scutellum, thence slightly convex over nearly the entire length, at the posterior end strongly convex towards apex. Elytral punctation rather coarse along the anterior margin, elsewhere slightly finer than on pronotum, punctures of unequal size, smaller towards sides and apex. A narrow band along the suture and apical margins is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture; a shallow sulciform marginal epipleural stria is present, more distinct in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides, with a fine oblique lateral stria at either side. Punctation distinct, punctures smaller along posterior margin and at the sides. Interstices smooth.

Pygidium.— Broadly parabolic in outline, moderately convex, faintly impressed near the anterolateral angles. Punctation rather coarse, mixed with smaller punctures, larger punctures in the apical half with a long pale-yellow hair. Interstices with indistinct linear microsculpture.

Prosternum.— Carina in lateral view almost straight, only in front slightly convex. Carinal disc broad and rather short with parallel sides (fig. 249), margined at the sides and in front by a narrow elevated rim, accompanied at the inner side by a shallow sulciform stria. Carinal disc slightly impressed along the median line, with a rather sparse double punctation. Interspaces with fine linear microsculpture.

Mesosternum.— Faintly impressed between the procoxae. Lateral striae short, rather narrow and sulciform, parallel, abbreviated posteriorly, ending in front well behind the procoxae (fig. 249). Mesosternal disc with rather sparse double punctation, the primary punctures elongate and smaller posteriorly. Interspaces smooth. Mesometasternal suture distinct, slightly sinuously angulate backwards.

Metasternum.— Median suture sulciform, with the exception of its posterior end. Lateral striae obsolete, indicated by some confluent elongate punctures at the sides (fig. 249). Disc with double punctation, the primary punctures slightly elongate. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Very faintly impressed in the middle along the median line, rather densely punctate, punctures of unequal size. Interstices smooth. Oblique lateral striae present, rather fine.

Legs.— Protibiae with five, mesotibiae with six teeth on the outer margin. Outer margin of hindtibiae with hairs and with small teeth on the distal half.

The male differs from the female as follows:

Head.— Face in profile slightly bisinuous with barely elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly with two small paramedian tubercles (fig. 250). Transition between frons and vertex rather gradual, arcuate. Frons and posterior part of rostrum moderately concave, mainly along the median line, with faint separate impressions on the sides of the rostrum. The concavity is delimited at the sides by a very faint sinuous ridge, more distinct along the antennal insertions, in front ending at some distance from the paramedian tubercles. Frons and rostrum with small punctures, interstices with fine microsculpture, shiny. Punctation of vertex more distinct than on the frons, interstices with linear microsculpture.

Pronotum.— Amply 1.2 times longer than wide, sides nearly parallel, in front broadly rounded inward towards anterior angles (fig. 248), moderately convex in

transversal direction, in profile faintly convex in posterior two-thirds, thence progressively more convex towards anterior margin. Disc without bosses or anterior median ridge, punctures larger than in the female, punctures a little smaller anteriorly, along the anterior emargination more closely set, interstices smooth. An indistinct impunctate median band without antescutellar stria is present in the posterior half.

Elytra.— Punctuation a little more distinct than in the female.

Pygidium.— Apex more broadly rounded, anterolateral foveae more distinct, hairs a little shorter.

Meso- and metasternum.— Punctuation more distinct than in the female.

First visible sternite.— Disc with a distinct longitudinal median impression.

Variation.— PE-length males: 2.8-3.1 mm. The larger male has a slightly more elongate pronotum than the other, longer mesosternal lateral striae, slightly divergent anteriorly, and indistinct pygidial foveae.

Remarks.— Margination of the anterior edge of the prosternal carinal disc is uncommon in the females of the genus *Trypeticus*.

Etymology.— The name (“with a pointed nose”) refers to the acuminate rostral tip of the female.

Trypeticus nemorivagus Lewis, 1892
(figs 73-80)

Trypeticus nemorivagus Lewis, 1892: 351-352.

Material.— **Burma**: Lectotype, ♀ (BMNH), two segments of left hindtarsus missing, [white label:] “Birmah/ Ruby Mes”; [white round label with red margin, printed:] “Type”; [white label:] “Doherty”; [white label, printed:] “George Lewis Coll./B.M.1926-369.”; [white label, hand-written:] “*Trypeticus/nemorivagus*/♂ Type Lewis”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/nemorivagus* ♀ / G. Lewis 1892/P. Kanaar des. 2000” (present designation); 1 ♂ (BMNH), Ruby Mines, Doherty (paralectotype); 1 ♀ (MNHN), Hte Birmanie, Mines des Rubis, 1200 m-2300 m, 1880, Doherty. **Thailand**: 1 ♂ (CHFP), Fang, Hot Spring, 25.v.1997, M. Snizek. **Laos**: 1 ♀ (BMNH), Betw. Vientiane & Luang Prabang, end 1919, R.V. de Salvaza; 2 ♂♂ (MHNG), Phong Saly, H. Perrot. **Vietnam**: 1 ♂ (MNHN), Tonkin, Hoa-Binh, Lac Thô, A. de Cooman; 2 ♂♂ (MNHN), Tonkin, Hoa-Binh, Lac Thô; 2 ♂♂ (MNHN), Hoa-Binh, Tonkin, 1939, A. de Cooman; 17 ♂, 24 ♀♀ (MNHN, CHPK), Hoa-Binh, Tonkin, A. de Cooman; 1 ♂ (MNHN), Mt. Bavi, Tonkin, de Cooman; 1 ♀ (MNHN), Lac-Thô, Tonkin, A. Phung; 1 ♀ (CHPK), Shon-suong, 23.ii.1962, O. Kabakov; 1 ♂, 1 ♀ (ZMAS), Mts NW Kun-Tshau, 8.iii.1962, O. Kabakov; 1 ♂ (ZMAS), 50 km NE Thai-nguen, 19.xii.1962, O. Kabakov; 1 ♂ (ZMAS), 125 km NW Than-hoa, 500 m, Batyok, 31.i.1989, B. Korotjaev.

Male.— Length (without head and abdominal tergites) 3.8 mm, width 1.8 mm, height 1.6 mm. Thick-set cylindrical, shiny, piceous brown-black, antennae and legs rufous.

Head.— Frons and rostrum in profile almost straight anteriorly with slightly elevated rostral apex, convex posteriorly at the level of the eyes. Rostral tip rounded-truncate in frontal view, with two small tubercles (fig. 77), apical margin slightly elevated. Frons and rostrum slightly concave, with rather sparse double punctuation, interstices with a dense and fine linear microsculpture, mainly in oblique-longitudinal direction. Transition between frons and vertex arcuate, rather gradual. Vertex with small median fovea and dense punctuation, interstices with strigillate microsculpture.

Pronotum.— A little longer than wide in dorsal view, with parallel sides (fig. 73), broadly rounded in front towards anterior angles, convex in transversal direction, in profile convex over its entire length, progressively so in front. Anterior emargination for the head rather shallow. Marginal striae distinct, slightly curved inward posteriorly, in front ending just beyond the slightly impressed anterior angles. Pronotal disc not very densely covered with distinct, irregularly dispersed punctures of unequal size, punctures along the anterior margin more closely set, with very small punctures between. Interspaces smooth. A distinct impunctate median band is present in the posterior two-thirds, without a median stria.

Elytra.— Along the suture about as long as pronotum (fig. 73) with rounded apices, distinctly depressed near scutellum and along anterior margin, convex in transversal direction, in profile convex over its entire length, more distinctly so towards apex. Elytra near scutellum and along anterior margin with distinct, closely set punctures, elsewhere a little finer punctate than pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, with a fine linear interstitial microsculpture. Marginal striae partly present.

Propygidium.— In profile faintly concave anteriorly, straight posteriorly, with an oblique stria at the sides, medially from these striae slightly impressed. Punctuation double, distinct, interstices smooth.

Pygidium.— Rather short, about triangular in outline with rounded tip, impressed along the anterior margin, especially so near the anterolateral angles. Punctuation as propygidium, towards apex finer, punctures without hairs. Interstices smooth.

Prosternum.— Carina broad, sides almost parallel (fig. 76), almost straight in lateral view, margined at the sides and in front by an elevated rim, at the sides accompanied by an indistinct carinal stria. Carinal disc with a distinct anterior impression and a distinct double punctuation, interspaces with indistinct linear microsculpture.

Mesosternum.— Between procoxae distinctly impressed, the sides of the impression indistinctly continuous with the outer margin of the rather broad and sulciform lateral striae, these parallel and ill-delimited at the inner side, in front curved inwards and ending behind the procoxae (fig. 76). Mesosternal disc with distinct double punctuation, the primary punctures elongate. Interspaces smooth. Meso-metasternal suture indistinct, mainly indicated by an impression, slightly angulate posteriorly.

Metasternum.— Median suture canaliform. Lateral striae strong, divergent posteriorly (fig. 76), slightly curved inward posteriorly, reaching the posterior metasternal fourth. Metasternal disc about equally punctate as mesosternum. A band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc more densely punctate than meso- and metasternum. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Apical margin of rostrum slightly elevated with two very indistinct transverse paramedian tubercles. Frons and rostrum almost straight in profile, bordered at the lateral sides by an elevated ridge (fig. 79), sharply delimited at the inner side; at the outer side of this ridge the lateral parts of the rostrum slope down towards the

lateral rostral margin. In front these ridges end a little behind the paramedian tubercles. Frons and vertex separated by a rather sharp transverse keel, near the median line a little curved forwards, well-delimited at its posterior side, smooth, continuous with the ridges at either side of frons and rostrum. Frons just behind the level of the antennal insertions with a slight concavity, especially at the sides. Frons and rostrum with distinct double punctation, the primary punctures slightly elongate, interstices dull by a very fine microsculpture. Vertex with a small median fovea, punctate, interstices with distinct linear microsculpture.

Pronotum.— About 1.1 times longer than wide, in front curved inward towards the anterior angles (fig. 74). A short and faint median ridge is present behind the anterior emargination, highest near its posterior end. Disc a little finer punctate than in the male; anterior angles slightly impressed. On the median ridge and along the anterior margin an indistinct interstitial microsculpture is present. The impunctate median band has an indistinct antescutellar median stria.

Elytra.— Slightly finer punctate than in the male.

Pygidium.— More broadly rounded in outline than in the male, punctures not ciliate.

Meso- and metasternum.— A little finer punctate than in the male.

Variation.— PE-length lectotype: 3.9 mm., males: 3.3-3.7 mm, females: 3.4-3.9 mm. The lectotype is lighter coloured than most other specimens, obviously by immaturity. The elevated rim along the anterior margin of the pronotal carinal disc is sometimes less distinct. The interprocoxal mesosternal impression is rather shallow in several specimens. The lateral mesosternal striae are sometimes a little divergent anteriorly. The lateral metasternal striae vary a little in length.

Remarks.— The specimens from Laos and Vietnam differ in some respects from the specimens from Burma. The head is a little narrower, the frons slightly more concave (figs 78, 80). The marginal pronotal striae have a discontinuity: the posterior part ends in the anterolateral curvature, and at about the same spot the anterior part retakes its course more closely to the margin. The anterior median ridge on the female pronotum, though variable, is more distinct in these specimens; in the female specimen from Laos there is a small median area behind the anterior margin with dense interstitial microsculpture, in the female specimens from Vietnam this area is large and reaches till the posterior end of the median ridge (indicated by a dotted line in fig. 75). In view of the very small number of specimens available from Burma it cannot be decided whether these differences justify a separate status as subspecies. More material from other regions in Burma and Indo-China is needed to answer this question. For the time being these different forms are considered as varieties.

Trypeticus nepalensis spec. nov.
(figs 291-295)

Material.— **Nepal:** Holotype, ♀ (SMNS), left antennal club missing, [white label, printed:] “♀”; [white label, printed:] “Nepal460 Myagdi Distr./Myagdi Kholā N Boghara/1800-2000 m, 21.v.1995/MARTENS & SCHAWALLER”; [red label, printed:] “HOLOTYPUS/*Trypeticus/nepalensis* sp. n./P. Kanaar des. 2000”; 9 ♂♂, 2 ♀♀ (SMNS, CHPK, CHSM), same data as holotype (paratypes).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.0 mm, height 0.9 mm. Rather slender cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face faintly sinuous in profile. Rostrum in frontal view broadly rounded-truncate anteriorly, with two small, rather widely separated apical tubercles (fig. 294). Frons and rostrum with a large, moderate concavity, delimited at either side by a blunt, ill-delimited sinuous ridge, a little sharper near the antennal insertion, ending in front at the apical tubercle. Frons and rostrum rather densely punctate, punctures small, interstices with indistinct linear microsculpture. Transition between frons and vertex arcuate, gradual, in the median line depressed by an extension of the frontal concavity. Vertex more distinctly and more densely punctate than frons, with lineary interstitial microsculpture and a small median fovea.

Pronotum.— About 1.35 times longer than wide, with parallel sides in dorsal view (fig. 291), broadly rounded in front towards anterior angles, strongly convex in transversal direction, in profile nearly straight in the posterior half, thence moderately convex towards anterior margin. Marginal striae fine, curved inward at their posterior end, ending in front a little beyond the barely impressed anterior angles. Pronotal disc not very densely punctate, punctures of moderate and slightly unequal size, mixed with very small punctures behind the anterior emargination for the head. Interspaces smooth. A narrow, ill-delimited impunctate median band is present in the posterior half.

Elytra.— Along the suture nearly as long as pronotum (fig. 291), slightly impressed near scutellum, strongly convex in transversal direction, in profile nearly straight in the anterior two-thirds, thence progressively convex towards apex. Elytral punctation along the base equal to that of pronotum, elsewhere finer, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture. Marginal epipleural stria present, shallow, evanescent in front.

Propygidium.— Slightly impressed along the anterior margin, punctate, punctures of unequal size, with an indistinct oblique stria at the sides, mainly indicated by an oblique impression; interstices with indistinct linear microsculpture.

Pygidium.— Strongly concave in lateral view, very broadly rounded in outline, deeply impressed in posterior half, the posterior margin strongly elevated, giving a spoon-shaped appearance to the pygidium. Punctation along base as on propygidium, in the concavity very fine, punctures without hairs. Interstices with indistinct linear microsculpture.

Prosternum.— Carina slightly convex in lateral view, sides of carinal disc slightly divergent anteriorly (fig. 293); disc margined at the sides and in front by a narrow elevated rim, accompanied at the sides by a carinal stria, ill-delimited at the inner side. Carinal disc with a distinct anterior impression, and punctures of unequal size. Interspaces with indistinct linear microsculpture.

Mesosternum.— Very faintly impressed between the procoxae. Lateral striae distinct, sulciform, almost parallel, curved inwards in front, ending behind the procoxae (fig. 293). Mesosternal disc not very densely punctate, punctures a little elongate and of unequal size, interspaces smooth. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Lateral striae rather fine, slightly divergent posteriorly, nearly reaching the metasternal middle (fig. 293). Metasternal disc in anterior third about equally punctate as mesosternum, punctures smaller and scarcer posteriorly. Median suture distinctly sulciform. Interspaces smooth.

First visible sternite.— Impressed behind the anterior margin, especially so in the median line. Punctuation distinct, rather dense, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Face distinctly sinuous in lateral view, with strongly elevated rostral apex. Vertex and frons separated by a distinct but not very raised transverse ridge, indistinctly tuberculous. Rostrum in frontal view broadly emarginate anteriorly, the elevated anterior margin protruding over the labrum, impressed in the middle (fig. 295). Frons and rostrum bordered at the sides by a distinct sinuous ridge, posteriorly continuous with the transverse ridge between frons and vertex; on the rostrum the ridges are convergent anteriorly and fade away a little behind the apical margin. At the inner side the ridges are accompanied by a distinct and broad sulcus, ill-delimited at their inner side; at the lateral side of the ridges the rostrum slopes steeply down toward its lateral margin. Behind the strongly elevated apical margin the rostrum is deeply impressed over its entire width. In addition there is a median longitudinal impression on rostrum and frons, widening on the latter, resulting in an ill-delimited sinuous elevation between the median impression and each lateral sulcus. Frons and rostrum with distinct small punctures of unequal size, interstices with indistinct linear microsculpture. Vertex with a transversal impression behind the transversal ridge and a large, ill-delimited median fovea; punctuation distinct, interstices with dense microsculpture.

Pronotum.— About 1.65 times longer than wide, slightly wider in the anterior half (fig. 292), in front the pronotum slopes down towards the anterior emargination for the head, without a median ridge. Disc about equally punctate as in the male, punctures coarser and more closely set near the anterior angles, that are more distinctly impressed than in the male. The impunctate median band has an indistinct antescutellar stria.

Elytra.— Slightly finer punctate than in the male.

Pygidium.— Slightly convex with broadly rounded tip. Disc with double punctuation, the primary punctures with a distinct pale-yellow hair.

Prosternum.— Carina slightly convex in lateral view, not margined in front, without anterior impression, carinal striae abbreviated in front at some distance from the anterior margin.

Metasternum.— Punctuation a little finer than in the male. Lateral striae a little shorter, well reaching the anterior metasternal third.

Variation.— PE-length of holotype: 3.3 mm; PE-length males: 2.7-2.9 mm, other females: 3.3 mm. Sometimes a rudimentary lateral stria is present on the first sternite. The rim along the anterior margin of the male prosternal carinal disc is sometimes rather indistinct, and in some males the apical margin of the pygidium is less distinctly turned upwards.

Etymology.— The name refers to the country where the species has been found.

Trypeticus nitens spec. nov.
(figs 139-141)

Material.— **Papua New Guinea:** Holotype, ♀ (CHPK), left antennal flagellum and club, right protarsus, left mesotarsus, both metatarsi and two segments of right mesotarsus missing, [white label, printed:] “♀”; [white label, printed and hand-written with pencil:] “NEW GUINEA: NE/Wau, 1750 m/25.ii.1979”; [red label, printed:] “HOLOTYPUS/*Trypeticus/nitens* sp. n./P. Kanaar des. 2000”; 1 ♀ (BMNH), Gumi, 13.iv.1976, on *Agathis*, H. Roberts, C.I.E. A9364, 311 (paratype). **Indonesia:** 1 ♀ (SMNS), Irian Jaya, Testega, 1200 m, 31.iii-12.iv.1993, A. Riedel (paratype).

Female.— Length (without head and abdominal tergites) 3.5 mm, width 1.5 mm, height 1.3 mm. Rather thick-set cylindrical, very shiny, piceous brown-black, superior side with faint bluish metallic hue, antennae and legs rufous.

Head.— Face in profile slightly sinuous. Rostrum in frontal view narrowly rounded anteriorly, tip slightly elevated (fig. 141), underside of the tip nearly flat. Frons and vertex separated by a smooth transverse keel, sharply delimited behind, ill-delimited anteriorly. Frons and rostrum delimited at either side by a narrow oblique ridge, continuous with the transversal keel posteriorly, in front connected by a very faint, indistinctly bituberculate rim along the rostral apex. At their inner side the oblique ridges are accompanied by a shallow groove, narrowing towards apex and fading away at a short distance from the tip. At the lateral sides of the oblique ridges the rostrum slopes steeply down towards its lateral margin. Frons moderately concave, the concavity gradually diminishing towards the faintly concave, nearly flat rostrum. Frons and rostrum with scarce small punctures, interstices with dense microsculpture, giving a dull appearance, with the exception of a smooth median triangular area against the transversal ridge. Vertex with a faint crosswise impression behind the transverse ridge and an ill-delimited median fovea. Punctuation more distinct and more closely set than on frons, interstices with dense microsculpture.

Pronotum.— About 1.1 times longer than wide (fig. 139), in dorsal view with nearly parallel sides, slightly widening in front, thence broadly rounded inward towards anterior angles. Pronotum moderately convex in transversal direction, in profile faintly convex in the posterior half, thence convex and sloping down anteriorly, with a slight elevation just before the middle. At this place the pronotum has two paramedian elongate tubercles, ill-delimited at their anterior and outer sides, more distinctly so at their inner and posterior sides. At their medial side they are separated by a long, distinct median impression; in front of this impression a broadly triangular area (indicated by dotted lines in the figure) has a dense interstitial microsculpture, giving a dull appearance. Anterolaterally this dull area is delimited by a faint oblique impression behind the anterior angle. Marginal striae fine, turned upwards at their posterior end, in front indistinctly reaching the anterior angles. Pronotal disc rather sparsely punctate with small punctures of unequal size, mixed with very small punctures in the anterior half; punctures in the dull area elongate, punctures near the anterior angles more closely set. Interstices outside the dull area smooth, with the exception of some indistinct interstitial microsculpture in the anterior angles. A narrow, ill-delimited impunctate median band is present, reaching from the base till between the paramedian bosses. A fine antescutellar median stria is present, in front ending in the median impression, a little behind the tubercles.

Elytra.— Along the suture about as long as pronotum, in dorsal view with rather rounded sides in posterior half (fig. 139), distinctly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation along the base rather coarse, elsewhere slightly finer than on pronotum; punctures near suture slightly more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria very fine and indistinct, complete.

Propygidium.— Faintly impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present. Punctation not very dense, distinct, punctures of unequal size. Interstices smooth.

Pygidium.— Broadly rounded in outline, convex, faintly impressed near the anterolateral angles. Punctation as on propygidium, larger punctures with a rather long pale-yellow hair. Interstices smooth.

Prosternum.— Carina in lateral view slightly convex. Carinal disc broad, sides in ventral view rather curved outward anteriorly (fig. 140), margined at the sides by a narrow elevated rim, at the inner side accompanied by a narrow, well-delimited carinal stria, in front continued for a short distance along the anterior margin. Disc slightly impressed along the median line, more distinctly so anteriorly, with distinct punctures of slightly unequal size, mixed with some very small punctures. Interspaces with indistinct linear microsculpture.

Mesosternum.— Moderately and crosswise impressed at the anterior third. Lateral striae narrow, in front slightly bent inwards and ending behind the procoxae, obsolete posteriorly and ending at a rather great distance from the fine, angulate meso-metasternal suture (fig. 140). Mesosternal disc flat, rather sparsely punctate with punctures of unequal size, mixed with some very small punctures, the primary punctures smaller towards meso-metasternal suture. Interspaces with indistinct linear microsculpture.

Metasternum.— Lateral striae distinct and broadly curved inwards in front, rather fine and nearly parallel posteriorly, ending just beyond the anterior metasternal one-fourth (fig. 140). Median part of disc flat, rather sparsely punctate, punctures small and slightly elongate. A narrow band along the median suture is impunctate, median suture distinctly canaliform but for its posterior end. Interspaces with some indistinct microsculpture at the sides, elsewhere smooth.

First visible sternite.— Along the median line faintly impressed. Punctation about equal to that of metasternum, interstices along posterior margin with linear microsculpture. Oblique lateral striae present, distinct, rather long.

Legs.— Pro- and mesotibiae with six teeth on the outer margin. Outer margin of hindtibiae with short hairs and with some very small teeth on the distal third.

The male is unknown.

Variation.— PE-length of other females: 3.4 and 4.1 mm. In these specimens there is a very faint indication of a short anterior pronotal ridge immediately behind the anterior emargination for the head, and the lateral metasternal striae are more abruptly curved anteriorly. In the specimen from Gumi the prosternal carinal disc has a complete stria along the anterior margin. The length of the mesosternal lateral striae varies a little, slightly longer posteriorly in the specimen from Gumi, almost reaching the

posterior margin in the specimen of Testega. In several respects the latter specimen differs from the others: it is much larger, the rostrum is more broadly rounded anteriorly, the pronotal tubercles are more distinct, the carinal striae are a little abbreviated anteriorly at a short distance from the anterior margin, the carinal disc has a distinct interstitial microsculpture, and the metasternal disc is slightly impressed along the median line, especially anteriorly. Maybe this specimen may belong to a subspecies, but in view of the small number of specimens the differences are considered to be due to variability within the species.

Etymology.— The name refers to the very shiny surface.

Trypeticus obeliscus Lewis, 1891
(figs 360-364)

Trypeticus obeliscus Lewis, 1891a: 402-403.

Material.— **Indonesia:** Lectotype, ♀ (BMNH), [white label, printed:] “♀”; [white round label with red margin, printed:] “Type”; white label, hand-written:] “Sumatra/Tobacco/A. Grouvelle”; [white label, printed:] “George Lewis Coll./B.M.1926-369”; [white label, hand-written:] “Sumatra”; [white label, hand-written:] “*Trypeticus/obeliscus/Type* Lewis”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/obeliscus/Lewis*, 1891/P. Kanaar des. 2001 (present designation); 1 ♂ (ZMHB), Sumatra, Grouvelle (with doubt); 1 ♂ (SMNS), Sumatra, Jambi, Gunung Kerinci, 1800-2100 m, 6-7.iii.1991, Bocák & Bocáková (with doubt); 1 ♂ (SMNS), N-Sumatra, Samosir, env. Partungkoan, 1600 m, 28.viii.1991, under bark of deciduous tree, Erber (with doubt).

Female.— Length (without head and abdominal tergites) 2.0 mm, width 0.64 mm, height 0.59 mm. Slender cylindrical, shiny, piceous brown-black, antennae, anterior margin of pronotum, elytra and legs testaceous.

Head.— Face in lateral view faintly sinuous with distinctly turned-up rostral tip. Frons and vertex separated by a not very strong, indistinctly tuberculate transverse ridge, well delimited behind, less so towards the frons. Frons and rostrum delimited at the sides by a distinct ridge, slightly sinuous along the antennal insertions, continuous with the transverse ridge at their posterior end, in front ending in a transverse tubercle on the lateral side of the strongly turned-up margin of the rostral apex (fig. 364), the latter slightly emarginate. At their inner side the lateral ridges are accompanied by a distinct sulcus, rather ill-delimited medially, deepest and widest along the eyes and antennal insertions, narrower and shallower anteriorly. At the lateral sides of the ridges the rostrum slopes steeply down to its lateral margin. Frons and posterior part of rostrum slightly concave, rostrum strongly concave in longitudinal direction behind the elevated apical margin. Frons and posterior part of rostrum with a fine punctation, interstices smooth and shiny. Vertex with a distinct crosswise impression behind the transversal ridge, a small median fovea, fine punctation and a dense interstitial microsculpture.

Pronotum.— In dorsal view about 1.65 times longer than wide (fig. 360), with nearly parallel sides, slightly wider in the anterior half, in front broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile nearly straight in the posterior half, thence gradually more convex towards anterior margin. Marginal striae fine, a little curved upwards at their posterior end, in the anterior half

at a rather great distance from the emarginate lateral pronotal margin and in front ending at some distance from the barely impressed anterior angles. Disc not very densely punctate, punctures of slightly unequal size, diminishing in size anteriorly, very closely set and small along the anterior margin. No distinct anterior median ridge. An indistinct impunctate median band with a fine median stria is present before the scutellum. Interspaces smooth.

Elytra.— Along the suture shorter than pronotum (fig. 360), strongly convex in transversal direction, in profile very faintly convex over nearly its entire length, only strongly convex just before the apical margin. Elytra slightly impressed near scutellum and along the base, slightly finer punctate than pronotum, punctures near suture more closely set; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate with indistinct linear microsculpture. An indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Impressed along the anterior margin, more distinctly so at the sides. No oblique lateral striae. Punctuation rather dense, punctures of slightly unequal size, at the sides with a short hair. Interstices smooth.

Pygidium.— Broadly rounded in outline (fig. 360), slightly convex in both directions. Pygidium punctate as propygidium, the larger punctures with a short yellow hair. Interspaces with some linear microsculpture.

Prosternum.— Carina in profile very faintly convex. Carinal disc rather narrow (fig. 362), sides parallel in the posterior half, curved outwards anteriorly; narrow but distinct parallel carinal striae are present, slightly abbreviated in front. Carinal disc slightly impressed before the posterior margin, with sparse, slightly elongate small punctures, interstices smooth.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae nearly parallel, sulciform (fig. 362), rather ill-delimited at their medial side, in front ending behind the procoxae. Mesosternal disc rather sparsely punctate, punctures elongate, of unequal size, interspaces smooth. Meso-metasternal suture fine, mainly indicated by a depression, angulate posteriorly.

Metasternum.— Median suture narrowly sulciform. Lateral striae fine, slightly divergent posteriorly (fig. 362), about attaining the anterior metasternal third. Metasternal disc about punctate as mesosternum, punctures diminishing in size posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Oblique lateral striae present. Disc not impressed, finely punctate, punctures near the posterior margin more closely set.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae rather short and wide, outer margin with hairs and with some indistinct teeth on the distal third.

The supposed male differs from the female as follows:

Head.— Face slightly sinuous in lateral view, with slightly elevated rostral apical margin. Rostrum in frontal view broadly rounded anteriorly, with two paramedian tubercles (fig. 363). Frons distinctly concave, rostrum with a separate shallow impression, both concavities connected along the median line. Frontal concavity sharply delimited along the antennal insertions by distinct sinuous ridges, fading away anteriorly and passing into the very blunt ridges that delimit at the sides the concavity of the

rostrum. Frons and rostrum with small punctures, diminishing in size anteriorly. Interstices with some indistinct microsculpture, shiny. Transition between frons and vertex arcuate, gradual. Vertex more distinctly punctate than frons, interstices with indistinct linear microsculpture.

Pronotum.— In dorsal view amply 1.3 times longer than wide (fig. 361). Punctuation not very dense, punctures of subequal size, gradually diminishing in size anteriorly and again increasing in size in the anterior third. Marginal striae abbreviated at some distance from the anterior angles.

Elytra.— Less elongate than in the female.

Pygidium.— Rather long, parabolic in outline, punctures without hair.

Prosternum.— Carinal disc more distinctly punctate, margined along the anterior edge by a fine elevated rim.

Metasternum.— Median suture only in front narrowly sulciform, elsewhere very fine. Lateral striae in front almost in touch with the posterior end of the mesosternal striae.

First visible sternite.— Oblique lateral striae reduced to short traits.

Variation.— PE-length of males: 2.25, 2.56 and 2.46 mm respectively.

Remarks.— In the original description nothing is said about the number of specimens on which the description has been based. Probably it was only one, but as there is no certainty about this question the type specimen has been designated lectotype. As all older authors Lewis has misinterpreted the sex. The matching of the two forms is rather doubtful. The supposed males are distinctly larger than the female lectotype, the elytra are shorter and wider, and the median metasternal suture is only partially narrowly sulcate. In some other respects, however, they are rather similar.

Trypeticus parobeliscus spec. nov.
(figs 370-374)

Material.— **Papua New Guinea**: Holotype, ♀ (BMNH), left middle leg missing, {white label, printed:] “♀”; [white label, printed and hand-written:] “PAPUA N.GUINEA/Gumi/22.iii.1976/H. Roberts/on *Dysoxylum*/C.I.E. A0364/[transverse:] 284”; [white label, printed:] “Pres by/Comm. Inst. Ent./B.M. 1977-1”; [white label, hand-written and printed:] “*Trypanaeus*/(*Trypeticus*)/sp./det. R.B. Madge, 1977”; [red label, printed and hand-written:] “HOLOTYPUS/*Trypeticus/parobeliscus* sp. n./P. Kanaar des. 2001”; 1 ♂ (BMNH), same locality, date and collector (paratype).

Female.— Length (without head and abdominal tergites) 2.2 mm, width 0.63 mm, height 0.57 mm. Slender cylindrical, shiny, piceous brown-black, antennae, lateral sides of elytra and legs rufous.

Head.— Face in lateral view over its entire length very faintly concave, nearly straight. Frons and vertex separated by a distinct transverse ridge, well delimited behind, ill-delimited towards the frons. Frons and rostrum delimited at the sides by a narrow but distinct ridge, slightly sinuous along the antennal insertions, continuous with the transverse ridge between frons and vertex at their posterior end, in front ending in an indistinct transverse paramedian tubercle on the barely turned-up margin of the rostral apex, the latter rounded in frontal view (fig. 374). At their inner side the lateral ridges are accompanied by a narrow sulcus, rather ill-delimited medially. At the lateral sides of the ridges the rostrum slopes steeply down to its lateral margin.

Frons and posterior part of rostrum at the level of the antennal insertions distinctly concave in longitudinal direction, rostrum slightly convex in transversal direction. Frons and rostrum with a fine punctation, interstices on the medial part of the frons smooth and shiny, elsewhere with dense microsculpture, with the exception of the lateral grooves. Vertex with a distinct crosswise impression behind the transversal ridge and a small median fovea; punctation slightly more distinct than on frons, interstices shiny.

Pronotum.— In dorsal view amply 1.8 times longer than wide (fig. 370), with nearly parallel sides, slightly wider in the anterior half, in front broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile nearly straight in the posterior two-thirds, thence gradually more convex and sloping down towards anterior margin. Marginal striae fine, curved upwards at their posterior end, in the anterior half at a rather great distance from the emarginate lateral pronotal margin and in front attaining the slightly impressed anterior angles. Disc rather sparsely punctate, punctures of subequal size, rather small, more closely set along the anterior margin and near the anterior angles, here also larger. A rather blunt smooth anterior median ridge is present behind the anterior emargination. A rather wide impunctate median band with a short median stria is present in the posterior half. Interspaces smooth.

Elytra.— Along the suture shorter than pronotum (fig. 370), strongly convex in transversal direction, in profile very faintly convex over nearly its entire length, only strongly convex just before the apical margin. Elytra slightly impressed near scutellum and along the base, distinctly finer punctate than pronotum, punctures near suture more closely set; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture. An indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— At the sides slightly concave in longitudinal direction. No oblique lateral striae, though vague impressions are present instead. Punctation rather dense, punctures distinct, of unequal size. Interstices smooth.

Pygidium.— Broadly rounded in outline (fig. 370), convex in both directions. Pygidium still more distinctly punctate than propygidium, the larger punctures with a rather short yellow hair. Interspaces smooth.

Prosternum.— Carina in profile straight. Carinal disc rather narrow (fig. 372), sides parallel in the posterior half, slightly curved outwards anteriorly; narrow but distinct, parallel carinal striae are present, slightly abbreviated in front. Carinal disc flat, with sparse, slightly elongate punctures of unequal size, interstices with linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae nearly parallel, sulciform (fig. 372), narrowing posteriorly, in front curved inwards and ending behind the procoxae. Mesosternal disc rather sparsely punctate, punctures elongate, of unequal size, interspaces smooth. Meso-metasternal suture fine, angulate posteriorly.

Metasternum.— Median suture narrowly sulciform. Lateral striae fine, slightly curved (fig. 372), not quite attaining the metasternal middle. Metasternal disc finer punctate than mesosternum, punctures diminishing in size posteriorly. A narrow band along the median suture is impunctate. Interspaces at the sides of the metasternal disc with indistinct longitudinal strigillation.

First visible sternite.— Oblique lateral striae present. Disc slightly impressed in the middle, finely punctate, punctures elongate, near the posterior margin smaller and rounded.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae rather short and wide, outer margin with hairs and with some distinct spines on the distal third.

The male differs from the female as follows:

PE-length 2.17 mm. More distinctly punctate.

Head.— Face very faintly bisinuous in lateral view. Rostrum in frontal view broadly rounded anteriorly, with two rather indistinct paramedian tubercles (fig. 373). Frons distinctly concave, rostrum with a separate shallow impression, mainly along the median line, both concavities connected. Frontal concavity rather sharply delimited along the antennal insertions by rather blunt sinuous ridges, fading away anteriorly. Frons and rostrum with small punctures, diminishing in size anteriorly. Interstices with indistinct microsculpture, shiny. Transition between frons and vertex arcuate, gradual. Vertex more distinctly punctate than frons, interstices with indistinct linear microsculpture.

Pronotum.— In dorsal view 1.5 times longer than wide (fig. 371), in profile more convex anteriorly, punctures more closely set along the anterior margin and near the non-impressed anterior angles. No anterior median ridge, no impunctate median band or antescutellar stria.

Pygidium.— Rather long, more triangular in outline with broadly rounded tip, larger punctures with a very short yellow hair.

Prosternum.— Carinal disc not margined along the anterior edge (like in the female).

Mesosternum.— Lateral striae less distinctly narrowed posteriorly.

Metasternum.— Lateral striae less curved, divergent posteriorly, attaining the metasternal middle. Interstices at the sides of the metasternal disc without longitudinal strigillation.

First visible sternite.— Oblique lateral striae longer, median impression of disc more distinct.

Remark.— The absence of an elevated margin along the anterior edge of the male prosternal carinal disc is not uncommon in species from New Guinea.

Etymology.— The name refers to the close relationship with *T. obeliscus* Lewis.

Trypeticus parrilloi spec. nov.
(figs 343-345)

Material.— **Malaysia:** Holotype, ♀ (MZLU), alae protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T4/R/28.iv.1988/leg. S. Adebratt”; [white label, hand-written and printed:] “*Trypeticus*/sp./det. S. Mazur”; [red label, printed and hand-written:] “HOLOTYPUS/*Trypeticus parrilloi* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 1.8 mm, width 0.6 mm, height 0.5 mm. Slender cylindrical, shiny, piceous black, underside with reddish brown areas, antennae and legs rufous.

Head.— Face in lateral view faintly concave. Frons and vertex separated by a transverse ridge, well delimited behind, less so towards the frons. Frons and rostrum delimited at the sides by a narrow but distinct, slightly sinuous ridge, continuous with the transverse ridge at its posterior end, at the rostral apex turned inwards and ending in an indistinct transverse tubercle (fig. 345). Between these tubercles the rostral tip has a distinct impression at its upper side just behind the apical margin; the rostral tip overhangs the labrum, its underside is trapezoid and slightly concave. At their medial side the lateral ridges are accompanied by a sulcus, broad and rather deep along the eyes and antennal insertions, narrowing and shallower anteriorly. At the lateral sides of the ridges the rostrum slopes steeply down to its lateral margin. Frons and rostrum slightly concave, mainly in transversal direction, more distinctly so on the rostrum, and with small punctures, interstices with a dense, very fine microsculpture causing an egg-shell lustre. Vertex with a distinct transversal impression behind the transverse ridge, a small median fovea, small punctures and a very dense interstitial microsculpture.

Pronotum.— About 1.7 times longer than wide (fig. 343), with nearly parallel sides, slightly wider in the anterior half, in front slightly tapering and thence rather abruptly curved inwards towards the deeply impressed anterior angles, strongly convex in transversal direction, in profile almost straight in the posterior half, thence convex and finally sloping down towards the anterior margin. Marginal striae rather fine, at their posterior end not prolonged along the rounded posterolateral pronotal angles, in the anterior pronotal half at a great distance from the lateral edge and ending at a short distance from the anterior angles. Disc not densely punctate, punctures of moderate, slightly unequal size, the punctures more closely set and smaller along the anterior emargination, interstices here with indistinct microsculpture, interspaces elsewhere smooth. An indistinct impunctate median band without antescutellar stria is present in the posterior half.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 343), apices rounded. Elytra strongly convex in transversal direction, in profile slightly convex over nearly its entire length, thence abruptly and strongly convex towards apex. Elytra slightly impressed near scutellum and along the base, finer punctate than pronotum with the exception of a band along the anterior margin; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture. Marginal epipleural striae obsolete.

Propygidium.— Slightly impressed along the anterior margin. Oblique lateral striae wanting. Punctation rather dense, punctures larger than on elytra, interstices smooth.

Pygidium.— Broadly rounded in outline (fig. 343), convex in both directions, slightly impressed near the anterolateral angles. Pygidium punctate as propygidium, the larger punctures in the apical half with a yellow hair. Interspaces smooth.

Prosternum.— Carina in profile almost straight. Carinal disc rather broad (fig. 344), sides nearly parallel in the posterior half, thence divergent anteriorly; at either side a narrow carinal stria is present, slightly abbreviated in front. Carinal disc without impressions, with sparse, very elongate small punctures, interstices with indistinct linear microsculpture, shiny. The lateral prosternal striae are well visible in ventral view (not shown in the figure).

Mesosternum.— Interprocoxal part slightly impressed. Lateral striae slightly divergent anteriorly, sulciform (fig. 344), ill-delimited at their inner side, ending in front behind the procoxae. Mesosternal disc not densely punctate, punctures of unequal size, small and very elongate, interspaces smooth. Meso-metasternal suture fine, mainly marked by a depression, strongly angulate backwards.

Metasternum.— Median suture sulciform. Lateral striae fine, slightly divergent posteriorly (fig. 344), about reaching the anterior metasternal third. Metasternal disc about punctate as mesosternum, punctures smaller posteriorly. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Between the metacoxa with elongate punctures, the punctures gradually less elongate and smaller posteriorly, here more closely set. Oblique lateral striae present, narrow and rather short.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Hindtibiae rather triangular, their outer margin with hairs and a row of small teeth in the distal third.

The male is unknown.

Etymology.— This species is dedicated to Mr Philip P. Parrillo (Museum of Chicago), in appreciation of his co-operation.

Trypeticus pederseni spec. nov.
(figs 30-34)

Material.— **Indonesia:** Holotype, ♀ (RMNH), left antennal flagellum and club missing, right mesotarsus missing, [white label, printed:] “♀”; [white discoloured label, printed and hand-written:] “L.G.E. Kalshoven/[stricken out: Salatiga]/11.xi.1924/d 129”; [white discoloured label, hand-written:] “Java 1000 M/Mnt. Gede/S.-Slope”; [white label, printed:] “Museum Leiden/collectie/L. Kalshoven”; [red label, printed:] “HOLOTYPUS/*Trypeticus/pederseni* sp. n./P. Kanaar des. 2001”; 1 ♂ (CHSM), Sumatra, Soekaranda, Dohrn (paratype); 1 ♀ (ZMAN), Sumatra, Deli, de Bussy (paratype).

Female.— Length (without head and abdominal tergites) 3.4 mm, width 1.5 mm, height 1.3 mm. Rather thick-set cylindrical, shiny, piceous black, sides of metasternum, antennae and legs rufous.

Head.— Face in profile nearly straight with slightly elevated rostral tip. Vertex and frons separated by a transverse, slightly bisinuous smooth ridge, sharply delimited at the posterior side, rather ill-delimited to the frons. Rostral apex in frontal view broadly rounded-truncate anteriorly (fig. 34). Frons and rostrum delimited at the sides by a slightly sinuous, rather blunt ridge, continuous with the transverse ridge behind, in front abruptly turned inwards, a little raised and ending at a short distance from the median line, the slightly raised ends of the ridges resembling faint transverse apical tubercles. Between these tubercles the apex is triangularly impressed. At the medial side each lateral ridge is sharply delimited by a shallow groove, ill-delimited at the inner side, rather broad and deep near the eyes and the antennal insertions, narrower anteriorly and fading away near the rostral apex. At the lateral sides of the ridges the rostrum slopes steeply down to its edge. Frons and posterior part of rostrum moderately concave, deepest behind the level of the antennal insertions. Frons and rostrum with distinct punctures, smaller anteriorly. Interstices with dense and fine microsculpture, causing a rather dull appearance, with the exception of the lateral grooves near the eyes. Vertex with a crosswise impression behind the transverse ridge and with a

small median fovea. Punctuation and microsculpture as on posterior part of frons.

Pronotum.— Amply 1.2 times longer than wide, sides in dorsal view nearly parallel, in front a little narrowing and broadly rounded towards anterior angles (fig. 30). Pronotum in transversal direction little convex in the anterior part, moderately convex in the posterior part, in profile faintly convex and sloping down anteriorly. Behind the anterior emargination for the head the pronotum has a little elevated, broad and ill-delimited elongate median boss, most distinct at its posterior end; at either side of this boss the pronotum is slightly impressed. From the distinctly impressed anterior angles oblique impressions run posteromedially. In a parabolic area (indicated by a dotted line in the figure) a dense interstitial microsculpture is present, producing a dull appearance. At either side two small shallow foveae are present in the anterior pronotal third (not exactly in a symmetrical position and possibly due to mutilation). Marginal striae distinct, slightly turned upwards at their posterior end, in front broadly interrupted, thence continued as the sharp anterior margins of the impressions in the anterior angles. Pronotal disc not densely punctate, punctures distinct, of unequal size, in the anterior half passing into a true double punctuation, punctures near the anterior angles more closely set and coarser, in the dull area closely set and much smaller. Interstices outside the dull area smooth. A narrow impunctate band is present between scutellum and anterior median boss, with a fine, rather short antescutellar median stria.

Elytra.— Moderately convex in transversal direction with slightly elevated suture, in profile slightly sinuous, progressively convex towards apex. Punctuation slightly sparser and a little finer than on pronotum (fig. 30), punctures of unequal size. Epipleura with linear microsculpture, marginal epipleural stria present only at the posterior end.

Propygidium.— Impressed along the anterior margin. Oblique lateral striae present. Punctuation distinct, double, the primary punctures larger than on elytra. Interstices with some indistinct microsculpture.

Pygidium.— Broadly parabolic in outline, slightly convex, with a large shallow impression at either side near the base. Punctuation double, dense, punctures not ciliate. Interstices smooth.

Prosternum.— Carina in profile very faintly convex. Carinal disc rather broad with parallel sides (fig. 32), slightly impressed along the posterior margin, carinal striae distinct, abbreviated in front. Punctuation not very dense, double, the secondary punctures rather ill-visible by interstitial microsculpture.

Mesosternum.— Between the procoxae with a deep trapezoid impression, sharply delimited in front and at the sides. Lateral striae broad and sulciform, ill-delimited at the inner side, broadly curved inwards anteriorly, ending at a short distance from the trapezoid impression (fig. 32). Punctuation double, the larger punctures a little elongate, interstices smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, about reaching the metasternal middle (fig. 32). Punctuation as mesosternum. The distinctly canaliform median suture is widened and deepened into an elongate fovea in the anterior one-fourth and more distinctly so posteriorly, at some distance from the posterior margin; behind the latter fovea the median suture is indistinct.

First visible sternite.— More densely punctate than metasternum, punctures of

unequal size, interstices along the posterior margin with linear microsculpture. Oblique lateral striae wanting, though vague impressions are present instead.

Legs.— Protibiae with four teeth on the outer margin, with an additional very small proximal tooth, mesotibiae with five teeth on the outer margin, hindtibiae rather slender, their outer margin with hairs and with some small teeth in the apical third.

The male differs from the female as follows:

Length (without head and abdominal tergites) 3.5 mm, width 1.7 mm, height 1.5 mm.

Head.— Face in profile slightly sinuous with slightly elevated rostral tip. Transition between frons and vertex strongly arcuate, rather sharp. Rostrum in frontal view broadly rounded-truncate anteriorly, with two paramedian tubercles (fig. 33). Frons rather strongly concave, rostrum slightly concave, mainly along the median line. In the posterior part of the rostrum some irregular pits with raised margins are present, obviously as a result of healed injury or mutilation. Frons and rostrum with small punctures, interstices with dense microsculpture.

Pronotum.— Amply 1.1 times longer than wide (fig. 31), convex in transversal direction, in profile slightly convex, progressively so towards anterior margin. No median boss or dull area behind the anterior emargination. Sides in dorsal view nearly parallel, in front broadly rounded towards anterior angles. Marginal striae not interrupted, ending in front in the anterior angles that are widely but not very deeply impressed. Punctuation denser than in the female. A narrow impunctate median band is present over nearly the entire length, without antescutellar stria. Behind the anterior margin the pronotum has a slight transverse impression in the middle. Another faint impression is present before the scutellum.

Elytra.— Nearly equally punctate as in female.

Pygidium.— Apex less broadly rounded, less impressed along the base.

Prosternum.— Carinal disc margined at the sides and in front by a narrow elevated rim. Carinal striae complete, connected in front by a very broad and rather deep transversal impression behind the anterior marginal rim.

Mesosternum.— Anterior impression more rectangular than trapezoid. Lateral striae less broadly rounded inwards anteriorly, primary punctures a little smaller.

Metasternum.— Median suture canaliform without elongate foveae.

Remarks.— The depicted male specimen is in a bad condition. The right side of the prothorax has been devoured by museum beetles, with loss of the right procoxa and foreleg, and also on the rostrum irregular pits (traces of gnawing?) are present. A hole is present through the right elytron and metasternum as a result of a former pinning procedure.

Variation.— PE-length female paratype: 3.6 mm. The pronotal punctuation of this specimen is slightly finer, with the exception of some larger punctures along the posterior margin.

Etymology.— This species is dedicated to the Danish histeridologist Mr Knud Pedersen (Silkeborg), in appreciation of our good co-operation.

Trypeticus penatii spec. nov.
(figs 195-197)

Material.— **Laos:** Holotype ♂ (NHMW), three segments of left mesotarsus, right metatarsus and four segments of left metatarsus missing, alae and genitalia protruded, [white label, printed:] “♂”; [white label, printed:] “C-LAOS: Prov. Viangchan/Phou Khao Khouay NP/Nam Leuk/env. Tad Leuk Waterf.”; [white label, printed:] “1-8.vi.1996, 200 m/flight intercept trap/leg. Schillhammer (15c)”; [red label, printed:] “HOLOTYPUS/*Trypeticus/penatii* sp. n./P. Kanaar des. 2000”.

Male.— Length (without head and abdominal tergites) 3.0 mm, width 1.3 mm, height 1.2 mm. Rather thick-set cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in profile almost straight in the anterior two-thirds with slightly elevated rostral tip, convex in the posterior third. Rostrum in frontal view rounded anteriorly with two small paramedian tubercles (fig. 197). Frons slightly concave with a very faint median elevation, the concavity not sharply delimited; an additional slight impression is present behind the tubercles on the rostrum. Before the tubercles the rostrum falls steeply down towards its anterior margin along the labrum, this part transversely concave. Frons and rostrum with fine double punctation, interstices with fine linear microsculpture. Transition between frons and vertex arcuate, very gradual. Vertex (as far as visible) more distinctly punctate than frons, interstices with fine microsculpture.

Pronotum.— Amply 1.1 times longer than wide (fig. 195), in dorsal view with almost parallel sides, in front broadly rounded and rather oblique towards anterior angles. Pronotum strongly convex in transversal direction, in profile faintly convex in posterior two-thirds, thence progressively convex towards anterior margin. Marginal striae fine, slightly turned upwards at their posterior end, interrupted in the anterior curvature, thence finely continued towards the slightly impressed anterior angles. Pronotal disc rather densely punctate, punctures distinct, deep, of unequal size, rather irregularly dispersed, mixed with very small punctures in the anterior half. Interstices smooth. A narrow, ill-delimited impunctate median band without antescutellar stria is present in the posterior two-thirds.

Elytra.— Along the suture shorter than pronotum (fig. 195), impressed near scutellum and along anterior margin, strongly convex in transversal direction, in profile slightly convex, progressively so towards apex. Elytral punctation along the anterior margin equal to that of pronotum, elsewhere slightly finer, punctures near suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, with linear interstitial microsculpture. Marginal epipleural stria shallow and broad in posterior half, obsolete in anterior half.

Propygidium.— Faintly impressed along anterior margin, more distinctly so laterally. Oblique lateral striae present. Punctation rather dense, double. Interstices smooth.

Pygidium.— Triangular in outline with rounded tip, faintly convex, with shallow anterolateral impressions. Punctation as on propygidium, punctures without hairs, along the lateral and apical margins smaller. Interstices smooth.

Prosternum.— Carina in lateral view nearly straight, only anteriorly and posteriorly faintly convex. Carinal disc broad with nearly parallel sides (fig. 196), margined at

the sides and in front by a narrow elevated rim, at the sides accompanied by a broad and shallow carinal stria, ill-delimited at the inner side. Behind the anterior rim the carinal disc has a deep, rather triangular impression, extending posteriorly and fading away along the median line. Carinal disc with a rather dense double punctation, interspaces with indistinct linear microsculpture.

Mesosternum.— Deeply impressed between the procoxae, this impression sharply delimited in front and at the lateral sides; behind this deep impression the mesosternum is moderately and transversally impressed, causing a sinuous outline in lateral view. Lateral striae broad, sulciform, nearly parallel, slightly curved inwards in front (fig. 196), ending behind the procoxae. Mesosternal disc with deep elongate punctures, mixed with small punctures, interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, curved inwards at their posterior end, about reaching the metasternal posterior two-fifths (fig. 196). Disc about punctate as mesosternum, punctures smaller posteriorly. A band along the median suture is impunctate. Median suture distinctly canaliform, in front slightly widened and deepened into a narrow elongate fovea. Interspaces smooth.

First visible sternite.— Punctation double, rather dense, primary punctures slightly elongate, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with some hairs and with some small teeth on the distal third.

The female is unknown.

Etymology.— This species is dedicated to my friend and histeridologist Fabio Penati (Morbegno), in appreciation of our co-operation.

Trypeticus penicillicauda spec. nov.

(figs 442-446)

Material.— **Malaysia:** Holotype, ♂ (MZLU), left protarsus missing, [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang./Mendolong, T3/W5/31.iii.1989/leg. S. Adebratt”; [orange label, reverse side white, printed:] “44/82”; [red label, printed:] “HOLOTYPUS/*Trypeticus/penicillicauda* sp. n./P. Kanaar des. 2000”; 1 ♀ (MZLU), same locality, date and collector (paratype).

Male.— Length (without head and abdominal tergites) 1.9 mm, width 0.8 mm, height 0.7 mm. Cylindrical, shiny, colour reddish brown, along sutures darker brown.

Head.— Face in lateral view slightly convex. Rostrum in frontal view rounded-truncate anteriorly (fig. 445) with indistinctly raised apical margin. Rostrum and frons together slightly convex, with a slight impression at either side on the frons; rostrum and frons sparsely and finely punctate, with very fine secondary punctures between and coarser punctures posterolaterally. Interstices smooth. Transition between frons and vertex very gradual, vertex punctate as frons.

Pronotum.— About as long as wide (fig. 442), in dorsal view with nearly parallel sides, in front broadly rounded towards the anterior angles, that are acute, strongly bent downward and a little inward, not impressed. Pronotum strongly convex in transversal direction, in profile convex over its entire length. Punctation fine, rather dense, punctures of unequal size. Interspaces smooth. A short antescutellar median stria is present, without distinct impunctate median band. Marginal striae fine, curved

upwards at their posterior end, in front ending a little behind the anterior pronotal angles.

Elytra.— Along the suture about 1.1 times longer than pronotum (fig. 442) with rounded apices, strongly convex in transversal direction, in profile moderately convex, more progressively so towards apex. Elytra about equally punctate as pronotum, punctures along base slightly more closely set and coarser. A very narrow band along the slightly elevated suture is impunctate. Interspaces smooth. Epipleura impunctate, with linear microsculpture and an indistinct marginal epipleural stria in the posterior half.

Propygidium.— Very short, mainly visible at the sides, obviously partly densely fimbriate, elsewhere finely punctate, interstices smooth.

Pygidium.— Apex broadly rounded, entire disc invisible by a very dense pilosity (fig. 442), the hairs long and yellowish-white, directed in the long axis of the body; the hairs in the centre apparently shorter than those along the borders (maybe as a consequence of a concavity of the pygidial disc). Reflexed posterior margin finely punctate, without hairs.

Prosternum.— Carina distinctly convex in lateral view, sides of carinal disc moderately divergent anteriorly (fig. 444). Carinal disc margined by a narrow elevated rim at the sides and in front, at the sides accompanied by a narrow indistinct carinal stria, in front by an ill-delimited impression. Carinal disc with rather fine punctures of unequal size, interspaces with indistinct microsculpture.

Mesosternum.— Lateral striae finely sulciform, slightly convergent anteriorly, bent inward in front and ending behind the procoxae (fig. 444). Mesosternal disc not very densely punctate with distinct slightly elongate punctures of slightly unequal size, interspaces smooth. Meso-metasternal suture very fine, slightly angulate backward.

Metasternum.— Lateral striae distinct, almost parallel (fig. 444), slightly curved inward anteriorly, their posterior end about reaching the anterior metasternal third. Metasternal disc equally punctate as mesosternum, leaving free a narrow smooth band along the finely canaliform median suture. Interspaces smooth.

First visible sternite.— Punctures on disc much finer than those on metasternum, oblique lateral striae distinct and rather long.

Legs.— Protibiae with five teeth on outer margin, and an additional apical tooth; mesotibiae with five teeth. Hindtibiae with a row of spines and three small distal teeth on the outer margin.

The female differs from the male as follows:

PE-length: 1.9 mm.

Head.— Face in profile moderately concave, with upwards directed, in profile bluntly convex apex. Rostrum in frontal view broadly rounded-truncate anteriorly, margined by a fine stria, apical margin with indistinct median triangular tubercle (fig. 446). Frons and rostrum moderately concave, frons rather densely covered with distinct setigerous punctures, these punctures and hairs smaller anteriorly; rostrum finely punctate without hairs, interspaces smooth. Transition between frons and vertex very gradual, punctate and ciliate as frons, vertex posteriorly finer punctate, without hairs.

Propygidium.— Longer than in the male (ill-visible by protruded alae).

Pygidium.— Slightly convex, apex broadly rounded. Disc finely punctate, with scarce, rather short hairs.

Prosternum.— Carina with finer rim along anterior margin, less distinctly impressed behind it.

Metasternum.— Median suture not canaliform.

Remarks.— There is no distinct sexual dimorphism of the prosternal carina, and also the pronotum exhibits no distinct sexual differences. Usually the female has a more distinct pilosity of the pygidium than the male. Nevertheless, I believe that I have properly attributed the sexes because the pilosity of the frons is a female character in related species, and because the prosternal carinal disc is a little less distinctly margined in the specimen with this frontal pilosity.

Etymology.— The name refers to the striking brush-like ciliation of the pygidial disc in the male.

Trypeticus planisternus Lewis, 1897
(figs 99-101)

Trypeticus planisternus Lewis, 1897: 362-363.

Material.— **Indonesia:** Lectotype, ♀ (BMNH), genitalia protruded, [original mounting cardboard, hand-written:] “♂”; [white label, printed:] “♀”; [white round label with red margin, printed:] “Type”; [white label, hand-written:] “Sumatra”; [white label, printed:] “George Lewis Coll./B.M.1926-369.”; [white label, hand-written:] “*Trypeticus/planisternus/Type* Lewis”; [white folded paper, printed:] “*planisternus*”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/planisternus/Lewis*, 1897/P. Kanaar des. 2001 (present designation); 2 ♀♀ (BMNH), same data, but “Co-type”, and one label “Sumatra 1897” (paralectotypes).

Female (paralectotype).— Length (without head and abdominal tergites) 3.8 mm, width 1.5 mm, height 1.4 mm. Cylindrical, shiny, piceous brown-black, antennae and legs rufous.

Head.— Vertex and frons separated by a smooth, not very sharp transverse ridge, well-delimited behind. Rostrum with an elongate, narrow, rather ill-delimited median fovea, deepest at some distance from the rostral tip, shallower and fading away anteriorly and posteriorly. The median fovea is flanked by very blunt paramedian ridges that posteriorly originate from a strongly elevated median frontal boss, this boss at its posterior side integrated with the transverse ridge between frons and vertex (fig. 101). The edges of the boss are rounded off. In lateral view the boss and paramedian ridges are very strongly sinuous, very high on the frons behind the level of the antennal insertions, thence strongly concave anteriorly and strongly raising towards the rostral tip. The underside of the protruding tip is rather long, faintly concave, the tip itself is slightly emarginate. The paramedian blunt rostral ridges end in front on the tip in indistinct tubercles. At either side of the median boss and blunt paramedian ridges there is a deep, rather ill-delimited fovea on the frons, open anteriorly. On their turn the frontal foveae are delimited by a faintly sinuous lateral ridge that runs obliquely from the eye anteriorly, in front fading away on the rostrum, well behind the apical margin. Posteriorly the lateral ridge is continuous with the transverse ridge between frons and vertex. Frons and rostrum with sparse, very small punctures, interstices

with some indistinct microsculpture, shiny. Vertex with a wide transverse impression behind the transverse ridge and an ill-delimited median fovea; punctation more distinct than on frons, interstices with dense microsculpture.

Pronotum.— About 1.4 times longer than wide, in dorsal view with nearly parallel sides (fig. 99), slightly wider before the middle and thence narrowing in front, broadly rounded towards the anterior angles; pronotum moderately convex in transversal direction, in profile very faintly convex in the posterior half, than more convex and thence sloping down towards anterior margin. Behind the anterior emargination for the head the pronotum has an ill-delimited parabolic dull area (indicated by dotted lines in the figure) with dense interstitial microsculpture, in which a faint median boss is present in the posterior half. At either side of the dull area the pronotum is slightly impressed. Additional large and shallow, ill-delimited impressions are present behind the anterior angles. Marginal striae fine, turned upwards at their posterior end, at a rather great distance from the edge in the anterior half, ending at some distance from the anterior angles; short appendices of the marginal striae are present near the anterior angles, delimiting the shallow impressions in front. Pronotal disc in the posterior half not densely covered with rather small punctures of slightly unequal size, mixed with very small punctures; in the anterior pronotal half the primary punctures are progressively larger anteriorly; the punctures in the dull area are rather small, shallow and slightly elongate. Interspaces elsewhere smooth. A narrow impunctate median band is present in the posterior half, with a fine antescutellar stria.

Elytra.— Along the suture much shorter than pronotum (fig. 99), slightly impressed near the scutellum, moderately convex in transversal direction, in profile slightly convex and raising in the anterior two-thirds, thence progressively convex towards apex. Elytral punctation about equal to the punctation of the posterior pronotal half, punctures of slightly unequal size, with less very small punctures. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with linear microsculpture; an indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly concave in longitudinal direction, more distinctly so to the sides, with an oblique lateral stria at either side. Punctation distinct, rather dense, interstices smooth.

Pygidium.— Broadly rounded in outline, with a distinct transversal impression along the anterior margin, elsewhere distinctly convex. Punctation as propygidium, along the margins finer, punctures not ciliate. Interspaces smooth.

Prosternum.— Carina in lateral view straight. Carinal disc broad and short, finely and sparsely punctate, sides almost parallel, in front divergent (fig. 100), disc without carinal striae or elevated rims, slightly rounded off at the sides, with a faint transverse impression just before the posterior margin. Interspaces with linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae distinct, broad and sulciform, rather ill-delimited at the inner side, parallel, ending behind the procoxae (fig. 100). Mesosternal disc with rather sparse elongate punctures, mixed with very small punctures. Interspaces smooth. Meso-metasternal suture fine, depressed, angulate backwards.

Metasternum.— Lateral striae distinct, very little divergent posteriorly, attaining the metasternal half (fig. 100). Disc about punctate as mesosternum. A narrow band

along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, except its posterior end.

First visible sternite.— More densely punctate than metasternum. Interstices smooth. Distinct oblique lateral striae wanting, though faint, ill-delimited impressions are present instead.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

Variation.— PE-length lectotype: 3.4 mm. In the other paralectotype the pronotum is luxated from the remainder of the body, so the length cannot be measured with accuracy.

Remarks.— In the original description no holotype has been designated. Therefore, the specimen with the label "Type" has been designated lectotype. Lewis misinterpreted the sex.

Trypeticus poggii spec. nov.
(figs 51-53)

Material.— **Papua New Guinea:** Holotype ♂ (MCSN), four segments of left metatarsus missing, [white label, printed:] "♂"; [discoloured white label, printed:] "N. GUINEA S. E./Moroka, 1300 m./LORIA vii-xi.93"; [brown label, printed:] "Museo Civ./Genova"; [white discoloured label, handwritten:] "*Trypeticus/frontalis*/♀ Sch.?. /Schmidt only/describes ♂"; [white label, printed:] "det. G. Lewis"; [white label, printed:] "Museo Civico/di Genova"; [red label, printed:] "HOLOTYPUS/*Trypeticus/poggii* sp. n./P. Kanaar des. 2000".

Male.— Length (without head and abdominal tergites) 3.6 mm, width 1.7 mm, height 1.5 mm. Rather thick set cylindrical, shiny, piceous brown, elytra and parts of underside lighter, antennae and legs rufous.

Head.— Face slightly sinuous in profile, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly with two paramedian tubercles (fig. 53). Frons distinctly concave, posterior part of rostrum slightly concave. The concavity of frons and rostrum is delimited at either side by very faint ridge, obliquely running from the slight elevation medially from the antennal insertions to halfway the rostrum. Sides of the rostrum rounded down towards the lateral margins. Frons and rostrum with small punctures, interstices with fine linear microsculpture, shiny. Transition between frons and vertex arcuate and rather sharp in the middle. Vertex with a small median fovea, punctation a little more distinct than on frons. Interstices with linear microsculpture.

Pronotum.— Nearly 1.2 times longer than wide, in dorsal view with parallel sides (fig. 51), in front broadly rounded towards the anterior angles, convex in transversal direction, in profile slightly convex in the posterior two-thirds, thence progressively convex towards anterior margin. Marginal striae distinct, strongly turned upwards at their posterior end, in front ending just beyond the barely impressed anterior angles. Pronotal disc with distinct punctures of slightly unequal size, mixed with very small punctures in the anterior third, the punctures along the anterior margin smaller and more closely set. Interspaces smooth. An impunctate median band without antescutellar median stria is present in the posterior four-fifths, very narrow and ill-delimited for some distance before the scutellum, thence widening

and rather broad in front, with a faint median impression near the pronotal middle.

Elytra.— Along the suture a little shorter than pronotum (fig. 51), distinctly impressed near scutellum and along anterior margin, convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation much finer than that of pronotum, punctures of unequal size, near the suture slightly more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with distinct linear microsculpture and a fine marginal epipleural stria.

Propygidium.— Impressed along anterior margin, more distinctly so at the sides, with oblique lateral striae. Punctation distinct, dense and double, interstices with indistinct linear microsculpture.

Pygidium.— Broadly parabolic in outline, rather short, convex, slightly impressed in the anterolateral angles. Punctation and microsculpture as on propygidium, larger punctures with a pale-yellow hair.

Prosternum.— Carina in lateral view faintly convex. Carinal disc broad with slightly curved sides (fig. 52), at the sides margined by a narrow rim, accompanied at their inner side by a narrow but distinct carinal stria, that nearly reaches the anterior margin. Lateral prosternal striae just visible in ventral view (not shown in the figure). Carinal disc impressed along the median line, more distinctly so behind the anterior margin, with rather sparse small punctures; some confluent punctures constitute a rudimentary anterior stria. Interspaces with indistinct linear microsculpture.

Mesosternum.— Barely impressed in front. Lateral striae distinct, narrow, sulciform, parallel, slightly curved inwards in front, ending behind the procoxae (fig. 52), in the rear not quite reaching the meso-metasternal suture. Mesosternal disc with sparse double punctation, the primary punctures elongate. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae rather fine and short, slightly curved inwards in front, divergent posteriorly, about reaching the anterior metasternal fourth (fig. 52). Disc about punctate as mesosternum. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, widened into ill-delimited elongate foveae in front and posteriorly.

First visible sternite.— Disc impressed along the median line, slightly more distinctly punctate than metasternum, interstices along posterior margin with linear microsculpture. Oblique lateral striae distinct, rather long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

Remarks.— As the other sex is unknown, some doubt remains about the sex of the present specimen. The head has the shape that is usual in males. Also the absence of special pronotal features suggests that it is a male. The absence of distinct margination along the anterior edge of the prosternal carina is also observed in the males of some other species from New Guinea.

Etymology.— This species is dedicated to Dr Roberto Poggi (Genoa), in appreciation of his kind co-operation.

Trypeticus pooti spec. nov.
(figs 288-290)

Material.— **Indonesia:** Holotype, ♂ (SMNS), [white label, printed:] “♂”; [blue label, printed:] “TRIAN JAYA: Testega:/1100-1300 m/30.iii-2.iv.1993/leg. A. RIEDEL”; [red label, printed:] “HOLOTYPUS/*Trypeticus/pooti* sp. n./P. Kanaar des. 2000”; 1 ♂ (SMNS), same data as holotype (paratype).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— In profile before the eyes almost straight, along the eyes convex towards vertex. Rostrum in frontal view broadly rounded-truncate, with two paramedian tubercles, anterior margin in front of these tubercles strongly sloping down and a little concave (fig. 290). Frons and rostrum with a distinct concavity along the median line, this concavity delimited at the sides by very fine, rather blunt ridges, running from the eyes to the rostral tubercles, most distinct near the antennal insertions. Frons and rostrum with small punctures, interstices with linear microsculpture, punctures on the frons a little more distinct. Transition between frons and vertex indistinctly arcuate and very gradual, the frontal concavity a little continued on this transition. Vertex finely punctate, interstices with dense microsculpture.

Pronotum.— About 1.3 times longer than wide, in dorsal view with parallel sides (fig. 288), in front broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile faintly convex, more distinctly so towards anterior margin. Marginal striae distinct, turned upwards at their posterior end, finer in front, ending just beyond the non-impressed anterior angles. Pronotal disc with rather large deep punctures of subequal size, along the anterior margin more closely set and smaller. Interstices smooth. A narrow impunctate median band without median stria is present in the posterior half.

Elytra.— Along the suture nearly as long as pronotum (fig. 288), slightly impressed near scutellum, strongly convex in transversal direction, in profile almost straight and a little raising in anterior half, thence convex and sloping down towards apex. Elytral punctation finer than on pronotum, sparsely mixed with very small punctures. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate with fine linear microsculpture, marginal epipleural stria indistinct.

Propygidium.— Impressed along anterior margin. At the sides an oblique impression with a fine lateral stria is present. Punctation distinct, rather dense, punctures of subequal size. Interstices smooth.

Pygidium.— Triangular in outline with broadly rounded apex, convex, especially towards apex. Punctation as on propygidium, apical punctures with short hairs.

Prosternum.— Carina in lateral view almost straight in posterior half, thence progressively convex towards anterior margin. Carinal disc with nearly parallel sides, rather broad (fig. 289), margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a narrow carinal stria, indistinctly continuous with the transversal impression behind the anterior marginal rim. Carinal disc with rather scarce shallow punctures of unequal size, with some very small punctures between, interspaces with indistinct linear microsculpture.

Mesosternum.— Faintly crosswise impressed between and behind the procoxae. Lateral striae sulciform, narrow, rather ill-delimited at the inner side, parallel (fig.

289). Mesosternal disc with elongate punctures of unequal size. Interspaces with indistinct linear microsculpture. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae distinct in front, short, divergent posteriorly, indistinctly reaching the anterior metasternal third (fig. 289). Disc in front about equally punctate as mesosternum, punctures smaller posteriorly. A narrow band along the median suture is impunctate. Interspaces at the sides with indistinct microsculpture. Median suture distinctly canaliform, with the exception of its posterior end.

First visible sternite.— Rather finely punctate, interstices smooth. Oblique lateral striae along the postcoxae present, distinct, rather long but narrow.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with long hairs and with some small teeth on the distal third.

The female is unknown.

Remarks.— The second specimen has a slightly more elongate pronotum, and a slightly finer punctation of the underside. The prosternal carina is slightly impressed along the median line. The pygidial hairs are a little longer. Notwithstanding the slightly longer pronotum and the more distinct pygidial ciliation I do not believe that it is the female. All other typical female characters, present in the females of related species, are wanting in this specimen. The differences may be due to individual variation.

Etymology.— This species is dedicated to my friend Piet Poot, to whom I am indebted for many nice specimens in my private Histeridae-collection.

Trypeticus protractus spec. nov.
(figs 255-257)

Material.— **Philippines:** Holotype, ♀ (FMNH), [white label, printed:] “♀”; [white label, printed and hand-written:] “Barungkot, Upi, Cotabato Province, MINDANAO/1500 ft, I: 1-6; 47”; [white label, printed:] CHNM-Philippine/Zool. Exped.(1946-47)/F.G. Werner leg.”; [white label, hand-written:] “Trypeticus/# 6”; [red label, printed:] “HOLOTYPUS/*Trypeticus/protractus* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 2.6 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, pronotum and sutures piceous black, elsewhere rufous.

Head.— Face nearly straight in profile, with a sharp transverse ridge between frons and vertex, in the median line a little produced anteriorly. Rostral tip in frontal view slightly emarginate between two distinct, widely separated apical tubercles, rostrum between these tubercles with a deep anterior impression (fig. 257), causing a rather bifid appearance of the rostral apex when seen obliquely from behind. Frons and posterior part of rostrum moderately concave, the concavity with shallow oblique anterolateral extensions. Frons and rostrum delimited at the sides by a distinct narrow ridge, continuous with the sharp transverse ridge posteriorly, in front fading away a little behind the rostral apical tubercles. Frons and rostrum with rather scarce small punctures, interstices with fine microsculpture. Vertex (as far as visible) finely punctate, interstices with dense microsculpture.

Pronotum.— In dorsal view in the median line nearly 1.4 times longer than wide, with slightly curved sides, slightly convergent anteriorly (fig. 255), in front with a

strongly protruding rounded, downward directed lobe at either side of the emargination for the head, the transition of the latter with the lobe without distinct anterior angle (fig. 257). Pronotum moderately convex in transversal direction, in profile faintly convex in the posterior three-fourths, in front sloping down towards the anterior margin, without distinct median ridge. Faint impressions are present behind the lateral sides of the emargination for the head, the latter indistinctly margined. Marginal striae distinct, turned upwards at their posterior end, in front ending just where the deflexion of the anterior lobe begins. Pronotal disc rather densely punctate with moderate punctures of unequal size, along the anterior margin more closely set and flaccid, slightly rugosely confluent. Interstices behind the anterior emargination with indistinct microsculpture, elsewhere smooth. An indistinct narrow impunctate median band is present in the posterior half, with a long median stria.

Elytra.— Along the suture much shorter than pronotum (fig. 255), distinctly impressed near scutellum, less so along anterior margin, moderately convex in transversal direction, in profile almost straight in anterior half, thence progressively convex towards apex. Elytral punctation in the anterior half about equal to that of pronotum, finer towards apex, punctures near the suture a little more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate with fine linear microsculpture and an indistinct marginal epipleural stria in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. No oblique lateral striae. Punctation distinct, rather dense. Interstices smooth.

Pygidium.— Parabolic in outline, almost flat with slight anterolateral and subapical impressions. Punctation as on propygidium, apical punctures with a fine, rather short yellow hair.

Prosternum.— Carina in lateral view straight. Carinal disc with almost parallel sides, rather short and broad (fig. 256), margined at the sides by a narrow elevated rim in the posterior two-thirds, accompanied by a narrow sulciform carinal stria, indistinctly delimited at the inner side. Carinal disc densely punctate, punctures of unequal size, elongate; interspaces with dense linear microsculpture.

Mesosternum.— Impressed between the procoxae. Lateral striae broad, sulciform, almost parallel (fig. 256). Mesosternal disc with elongate punctures of unequal size, interspaces smooth. Meso-metasternal suture impressed, fine, strongly angulate backwards.

Metasternum.— In profile slightly concave in the posterior two-thirds. Lateral striae distinct, divergent posteriorly, nearly reaching the metasternal half (fig. 256). Disc with elongate punctures mixed with very small punctures, punctures sparser posteriorly. A band along the median line is impunctate. Interspaces smooth. Median suture depressed, distinctly sulciform, with the exception of the posterior end.

First visible sternite.— Rather densely and distinctly punctate, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with long hairs and with some small teeth on the distal third.

The male is unknown.

Etymology.— The name refers to the long protracted anterior lobes of the pronotum.

Trypeticus rectangulus spec. nov.
(figs 35-39)

Material.— **Papua New Guinea:** Holotype, ♀ (FMNH), three segments of left protarsus and right hindleg but for the trochanter missing, [white label, printed:] “♀”; [white label, hand-written:] “Papua New Guinea/Latep, nr. Bulolo/4500 ft., 7.v.1976”; [white label, hand-written:] “Ex. Forest Res. Sta./Bulolo/leg. H. Roberts”; [white label, hand-written:] “Burrows of/*Ambrosia* beetles/in *Cryptocarya*”; [white label, type-written:] “801”; [red label, printed:] “HOLOTYPUS/*Trypeticus/rectangulus* sp. n./P. Kanaar des. 2000”; 2 ♂♂, 1 ♀ (FMNH, CHPK), same data as holotype (paratypes); 1 ♂ (BMNH), idem, but 12.v.1976 (paratype); 1 ♂, 1 ♀ (FMNH), idem, but 3.vi.1976 (paratypes); 1 ♀ (BMNH), Bulolo, Upper Manki. iii.1974, on *Castaneopsis acuminatissimus*, P. Shanahan. **Indonesia:** 1 ♂ (CHSM), Irian Jaya, Jajawi-jaya, Borme, 1500-2000 m, 14.viii.1992, A. Riedel (paratype).

Female.— Length (without head and abdominal tergites) 3.6 mm, width 1.7 mm, height 1.5 mm. Thick-set cylindrical, shiny, piceous black with distinct bluish metallic hue at the upper side, rather piceous brown at the underside, legs rufous.

Head.— Rostrum broadly rounded-truncate in frontal view (fig. 39), with blunt raised tip; behind this bluntly elevated tip distinctly concave in profile. A distinct transversal ridge separates frons and vertex, this ridge slightly sinuous and sharply delimited at its posterior side, distinctly impressed in the middle, slightly and obliquely impressed medially from the eyes, thus producing a tuberosus aspect of the paramedian parts, ill-delimited anteriorly. At the lateral sides frons and rostrum are delimited by a sinuous ridge, continuous with the transversal ridge behind, in front fading away on the rostrum. At the medial side each ridge is accompanied by a shallow groove, broader posteriorly. Frons concave with an additional ill-delimited deep, slightly elongate central fovea. Rostrum impressed at either side of a slight elevation in the median line, the median elevation more distinct anteriorly and passing into the bluntly elevated tip. Frons and rostrum with fine punctation, ill-visible by a dense interstitial microsculpture, interstices in the central fovea rather smooth. Vertex with a small median fovea and a transversal impression behind the transversal ridge, punctate, interstices dull by dense microsculpture.

Pronotum.— Slightly longer than wide, sides in dorsal view slightly divergent anteriorly and slightly convex, greatest pronotal width in the anterior fourth (fig. 36), with well-marked nearly rectangular anterolateral angles; these angles are accentuated by a minute notch in the lateral margin just behind the anterolateral angle. The anterior pronotal margin between the anterolateral and the anterior angle is almost straight, slightly directed posteriorly towards the anterior angle, and directed rather downwards towards the anterolateral angle. Emargination for the head shallow, slightly bisinuous in dorsal view. Pronotum moderately convex in transversal direction, in profile slightly convex, progressively so towards anterior margin. Marginal striae fine, slightly turned upwards at their posterior end, broadly interrupted behind the anterolateral angles. Punctation not very dense, punctures of slightly unequal size, in the posterior third moderate, gradually smaller anteriorly and here mixed with very small punctures. In an ill-delimited area behind the anterior emargination (indicated by a dotted line in the figure) the punctures are more closely set, elongate and blurred by interstitial microsculpture. In the posterior part of this area a very faint median ridge is present. An indistinct narrow impunctate

median band is present behind the anterior ridge, with an antescutellar stria.

Elytra.— Along the suture a little shorter than pronotum with slightly rounded apices, slightly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile faintly convex over its entire length, more distinctly so near apex. Elytra finer punctate than pronotum, except in a band along the anterior margin, punctures here and near suture more closely set. A very narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate, interstices with fine linear microsculpture. Marginal stria present in posterior half, indistinct.

Propygidium.— Slightly concave in lateral view, with a distinct oblique stria at the sides, on either side of these striae impressed. Punctuation distinct, mixed with very small punctures, interstices with indistinct microsculpture.

Pygidium.— Broadly parabolic in outline, with shallow impressions near the anterolateral angles. Punctuation double, distinct, larger punctures in apical half with distinct yellow hair.

Prosternum.— Carina almost straight in lateral view, disc broad, a little wider in the basal part, margined at the sides and in front by a narrow elevated rim, not distinctly accompanied by carinal striae. Carinal disc with a distinct transverse impression along the anterior marginal rim and concave in transversal direction, punctures large, shallow, of slightly unequal size, with some very small punctures between, interspaces with indistinct linear microsculpture.

Mesosternum.— In anterior half faintly and crosswise impressed, in the posterior half sharply delimited at the sides by an edge, without distinct lateral striae (fig. 37). Mesosternal disc with double punctuation, punctures between the procoxae more closely set. Interspaces with linear microsculpture. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Faintly convex in lateral view. At the left side a short trait of a lateral stria is present, rather laterally and at some distance from the mesocoxa, faintly divergent posteriorly in respect of the median suture. Metasternal disc with distinct double punctuation (fig. 37), interspaces with indistinct microsculpture. A narrow band along the partly canaliform median suture is impunctate.

First visible sternite.— Disc with dense double punctuation. Interstices along the posterior margin with linear microsculpture. Indistinct oblique lateral striae present

Legs.— Protibiae with five teeth on the outer margin, the distal tooth a little larger and with a greater intervening space than the others, and with an additional small curved apical tooth. Mesotibiae with hairs and six teeth on the outer margin, the third and fourth teeth larger than the others. Outer margins of hindtibiae with hairs and with some small teeth on the distal third.

The male differs from the female as follows:

Head.— Frons and rostrum straight in profile. Rostrum in frontal view broadly rounded-truncate anteriorly, with two very small paramedian tubercles (fig. 38), before these tubercles steeply sloping down. Frons and rostrum delimited anterolaterally by a fine and shallow sinuous sulcus, fading away anteriorly, partly rather sharply delimited at the outer side. Frons with a deep, large, rounded fovea, rather ill-delimited. Frons and rostrum with sparse, fine double punctuation, interstices with indistinct linear microsculpture at the sides. Transition between frons and vertex arcuate, gradual, con-

stituted by the posterior delimitation of the frontal fovea. Vertex with fine punctation and interstitial microsculpture.

Pronotum.— About as long as wide, its greatest width in the anterior third, with well-marked anterolateral angles, but less rectangular than in the female (fig. 35), anterior margin slightly rounded between anterolateral and anterior angles. Pronotum moderately convex in transversal direction, in profile convex over its entire length, more strongly so in front, with a large but faint impression behind the anterior angles. Pronotal disc about equally punctate as female, without anterior ridge and without the area with elongate punctures and interstitial microsculpture. No antescutellar median stria.

Pygidium.— Apical punctures without hairs.

Variation.— PE-length males: 3.6-3.7 mm, females: 3.5-3.8 mm. Two specimens are reddish brown without the blue metallic hue, obviously by immaturity. In a few males the transversal concavity of the prosternal disc is less evident, and in these cases indistinct carinal striae are visible at the sides (fig. 37). In most specimens the mesosternal and metasternal lateral striae are completely wanting, in a few specimens also the lateral striae of the first sternite are obsolete. The median suture of the metasternum is sometimes completely canaliform, sometimes very fine and not canaliform. The accentuation of the anterolateral pronotal angles by the minute notch is sometimes indistinct. In two females the anterior pronotal ridge is still less distinct than in the holotype.

Remarks.— All specimens are more or less incomplete or crushed. In a few specimens some pits or indistinct foveae are present on the pronotum, probably by mutilation, as they are not symmetrically localized. In this species the female prosternal disc has also an elevated rim and a depression along the anterior border. This is rather exceptional in the genus *Trypeticus*.

Etymology.— The name refers to the almost rectangular anterolateral pronotal angles, especially those of the females.

Trypeticus riedeli spec. nov.
(figs 252-254)

Material.— **Indonesia**: Holotype, ♀ (SMNS), left antennal club and flagellum, right protarsus and some segments of mesotarsi missing, [white label, printed:] “♀”; [blue label, printed:] “TRIAN-JAYA: Prov./Jayawijaya. Djurema/9-11.ix.1992 1900-/leg. A. RIEDEL 2100 m”; [red label, printed:] “HOLO-TYPUS/*Trypeticus/riedeli* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 3.0 mm, width 1.1 mm, height 1.0 mm. Cylindrical, shiny, piceous black, underside piceous brown, antennae and legs rufous.

Head.— Vertex and frons separated by a very blunt, slightly arcuate transverse ridge, at its posterior side delimited by a rather distinct transversal impression. Face slightly concave in lateral view with elevated rostral apex, the latter bluntly pointed, almost flat at the antero-inferior side and in frontal view barely protruding over the anterior rostral margin along the labrum (fig. 254). Frons and rostrum delimited at the sides by a fine ridge, continuous with the blunt transverse ridge behind, and fading away on the rostrum towards the elevated tip. At the medial side the ridge is accom-

panied by a shallow sulcus, broader near the eyes, indistinct and fading away on the rostrum. At the lateral side of the ridge the rostrum slopes steeply down to its edge. Frons and rostrum faintly concave, with small punctures. Interstices with very dense and fine microsculpture, causing a dull appearance. Vertex more densely and distinctly punctate than frons, with dense interstitial microsculpture.

Pronotum.— Nearly 1.6 times longer than wide, in dorsal view with parallel sides (fig. 252), in front slightly convergent and rounded towards the anterior angles, moderately convex in transversal direction, in profile almost straight in the posterior half, thence slightly convex anteriorly, near the anterior margin strongly convex. A distinct, rather short and blunt median ridge is present behind the anterior emargination. At either side of this ridge the pronotum is slightly impressed. Disc with moderate, distinct punctures of slightly unequal size, especially in the anterior half, more closely set along the anterior emargination. In an ill-delimited area behind the anterior emargination an indistinct interstitial microsculpture is present, interspaces elsewhere smooth. Marginal striae fine, curved upwards at their posterior end, abbreviated in front near the anterior curvature; a short appendix in the anterior angles constitutes the anterior delimitation of a distinct but small fovea. A long antescutellar median stria is present, at either side of this stria the pronotum is indistinctly impressed at about the posterior fourth.

Elytra.— Along the suture much shorter than pronotum (fig. 252), slightly impressed near the scutellum and along the anterior margin, convex in transversal direction, in profile slightly concave behind the scutellum, thence more convex, progressively so towards apex. Elytral punctation along the base about equal to that of pronotum, elsewhere a little finer. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture; a shallow indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides, with an oblique lateral stria at either side. Punctation rather coarse, punctures of unequal size, smaller towards posterior margin, interstices with some indistinct microsculpture.

Pygidium.— Broadly parabolic in outline, distinctly convex with shallow anterolateral impressions. Punctation as on propygidium, along margins finer, larger punctures in apical half with a long pale-yellow hair. Interstices with some indistinct microsculpture.

Prosternum.— Carina in lateral view very faintly convex, carinal disc broad and rather short with parallel sides (fig. 253), margined at the sides by a very narrow rim, at the inner side with a distinct but narrow carinal stria, in front nearly reaching the anterior margin. Carinal disc with rather sparse moderate punctures, mixed with very small punctures. Interspaces with fine linear microsculpture.

Mesosternum.— Not impressed between the procoxae. Lateral striae distinct and sulciform, parallel, curved inwards in front, ending behind the procoxae (fig. 253). Mesosternal disc with moderate elongate punctures, mixed with very small punctures. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae divergent posteriorly, sinuous and sulciform in front, here nearly in touch with the mesosternal lateral striae, posteriorly not quite reaching the anterior metasternal third (fig. 253). Disc about equally punctate as

mesosternum, punctures smaller posteriorly. A narrow band along the strongly impressed, sulciform median suture is impunctate. Interspaces smooth.

First visible sternite.— Barely impressed along the median line in the middle, punctuation fine, double, the larger punctures elongate. Interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some indistinct teeth on the distal third.

The male is unknown.

Remarks.— This species is close to *T. andaiensis* (Gestro) in the configuration of the ventral side. The pronotum and head are distinctly different.

Eymology.— This species is dedicated to the collector Mr A. Riedel, who has much contributed to the knowledge of the *Trypeticus* species of Irian Jaya.

Trypeticus rombauti spec. nov.
(figs 219-221)

Material: **Malaysia:** Holotype, ♀ (MZLU), alae and genitalia partly protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T5/R/28.iv.19898 [sic!]/leg. S. Adebratt”; [yellow label, printed:] “18/16”; [red label, printed:] “HOLOTYPUS/*Trypeticus/rombauti* sp. n./P. Kanaar des. 2000”; 1 ♀ (CHPK), Sabah, Sipitang, Mendolong, 28.iv.1988, S. Adebratt (paratype); 1 ♀ (MZLU), idem, but 4.v.1988 (paratype); 1 ♀ (MZLU), idem, but 20.iii.1989 (paratype).

Female.— Length (without head and abdominal tergites) 2.7 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, reddish brown with darker sutures.

Head.— Vertex and frons separated by a distinct smooth transverse ridge, well-delimited at its posterior side, ill-delimited to the frons. Face in profile for the greater part almost straight, rostral apex strongly and rather abruptly turned up, the apex in frontal view bluntly acuminate and strongly overhanging the labrum (fig. 221), the underside rather convex anteriorly, transversely and deeply impressed along the labrum. Frons and rostrum delimited at the sides by a very fine sinuous ridge, starting medially from the eyes at a rather great distance from the transverse ridge, in front very fine and indistinctly ending near the rostral tip. At the medial side each ridge is accompanied by a narrow, very shallow and indistinct groove, most distinct along the antennal insertions. At the lateral sides of the ridges the rostrum slopes down to its edge. Frons distinctly concave, the concavity continuous with a shallower separate concavity of the rostrum. Frons and rostrum with rather scarce small punctures, interstices with fine microsculpture, causing a rather dull appearance, with the exception of the lateral grooves and the transverse ridge. Vertex with a transversal impression behind the transverse ridge, a small median fovea, small punctures and dense interstitial microsculpture.

Pronotum.— Nearly 1.4 times longer than wide, moderately convex in transversal direction, in profile almost straight and a little sloping down in the posterior half, thence more convex, and again more sloping down towards anterior margin. Sides in dorsal view nearly parallel, in front rather abruptly rounded inwards and thence oblique towards the slightly impressed anterior angles (fig. 219). Disc not very densely punctate, punctures moderate, of unequal size, mixed with very small punctures in the anterior half, punctures near the anterior margin more closely set,

larger, slightly elongate and flaccid. A very indistinct anterior median ridge is visible in tangential illumination. Interspaces smooth. Marginal striae rather fine, curved upward at their posterior end, shortly interrupted at the anterolateral curvature. A narrow impunctate median band is present in the posterior half, with an antescutellar median stria.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 219), slightly impressed near scutellum, moderately convex in transversal direction, in profile very faintly convex in the anterior three-fourths, thence progressively and strongly convex towards apex. Elytral punctation slightly finer and scantier than that of pronotum, with the exception of some large punctures along the anterior margin; punctures near the suture a little more closely set, slightly elongate. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture and a distinct marginal epipleural stria in the posterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards the sides. Oblique lateral striae present. Punctation distinct, rather dense, punctures of unequal size. Interstices smooth.

Pygidium.— Triangular in outline with broadly rounded apex, slightly convex, slightly impressed along the base. Punctation as on propygidium, punctures near the apex with a very short, barely visible bristle.

Prosternum.— Carina in lateral view almost straight. Carinal disc with nearly parallel sides, slightly divergent in front, rather broad (fig. 220), margined at the sides by a rather narrow carinal stria, abbreviated in front. Carinal disc faintly impressed along the posterior margin, with rather scarce distinct punctures, interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae deep, sulciform, ill-delimited at the inner side, almost parallel, slightly curved inward anteriorly and ending behind the procoxae (fig. 220). Mesosternal disc with rather scarce elongate punctures. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards.

Metasternum.— Lateral striae fine, slightly sinuous, divergent posteriorly, nearly reaching the metasternal middle (fig. 220). Disc in front about equally punctate as mesosternum, punctures smaller posteriorly. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform.

First visible sternite.— About equally punctate as posterior part of metasternum, punctures along the posterior margin more closely set. Interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The male is unknown.

Variation.— PE-length: 2.6-2.7 mm. The lengths of the antescutellar stria, the prosternal carinal striae and the lateral metasternal striae are a little variable.

Etymology.— This species is dedicated to Mr E. ("Ed") Rombaut, technical assistant of the Coleoptera-department of the Museum of Leiden, in appreciation of the thirty years of pleasant co-operation.

Trypeticus rostricauda spec. nov.
(figs 113-117)

Material.— Holotype, ♂ (MZLU), left protarsus missing, genitalia protruded, [white label, printed:] “♂”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T4/R/11.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/rostricauda* sp. n./P. Kanaar des. 2000”; 1 ♂ (CHPK), same locality and collector, but 28.xi.1987 and other trap-code; 1 ♀ (CHPK), idem, but 12.xii.1987; 1 ♀ (MZLU), idem, but 18.xii.1987; 1 ♂ (MZLU), idem, but 22.xii.1987; 1 ♀ (MZLU), idem, but 6.v.1988; 1 ♀ (MZLU), idem, but 13.v.1988; 1 ♂ (ZMAS), Semangkok F. R., 2000', 7.iv.1933, unidentified [tree], F.G. Browne, Forest Dept.; 1 ♂ (ZMAS), Pahang F. M. S., Fraser's Hill, 4000', 12.x.1936, M.L. Webber, For. Dept.; **Indonesia**: 1 ♂ (CHSM), Sumatra, Aceh, Mt Leuser NP, 300-500 m, Ketambe, 23-30.xi.1989, Löbl, Agosti, Burckhardt.

Male.— Length (without head and abdominal tergites) 2.9 mm, width 1.3 mm, height 1.2 mm. Thick-set cylindrical, shiny, castaneous brown, sutures darker.

Head.— Face slightly sinuous in profile, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, apex with two paramedian tubercles (fig. 116). Frons and posterior part of rostrum strongly concave, the concavity delimited along the eyes and the antennal insertions by an arcuate ridge, fading away on the rostrum and accompanied by a very shallow groove at their inner side. Frons and rostrum with sparse small punctures of slightly unequal size, interstices smooth. Transition between frons and vertex rather sharp, arcuate. Vertex with larger and more closely set punctures of unequal size, and a small median fovea; interstices smooth.

Pronotum.— In dorsal view nearly as long as wide (fig. 113) with nearly parallel sides in the posterior half, in front more convergent and thence rounded towards anterior pronotal angles, moderately convex in transversal direction, in profile faintly convex in its full length. Marginal striae distinct, curved upward at their posterior end, in front ending at some distance from the barely impressed anterior angles. Pronotal disc rather densely punctate, punctures distinct, slightly elongate, of subequal size; punctures along the anterior margin more closely set. Interspaces smooth. An indistinct impunctate median band without median stria is present a little before the scutellum.

Elytra.— Along the suture a little longer than pronotum (fig. 113), moderately convex in transversal direction, in profile faintly convex in the anterior two-thirds, thence progressively convex towards apex. Elytra about equally punctate as pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria shallow and indistinct in posterior half, wanting in anterior half.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae wanting. Punctuation dense, punctures of slightly unequal size, interstices smooth.

Pygidium.— Slightly concave in longitudinal direction with distinct anterolateral impressions. Sides distinctly emarginate (fig. 113), apical half extended into a spatulate elongation; this elongation rounded-truncate at its tip, broadly impressed and slightly bent upward in respect to the anterior part of the pygidium. Punctuation nearly as on propygidium, punctures without hairs. Interspaces smooth.

Prosternum.— Carina faintly convex in lateral view, disc broad with nearly parallel sides (fig. 115), margined at the sides and in front by a narrow ridge, at the sides accompanied by a shallow sulciform carinal stria, ill-delimited at their inner side and almost continuous with the deep concavity of the carinal disc that is most distinct in the anterior half. Disc with rather sparse punctures of unequal size, interspaces with indistinct linear microsculpture.

Mesosternum.— Distinctly impressed in anterior half. Lateral striae broad and sulciform, faintly divergent anteriorly, ending behind the procoxae (fig. 115). Mesosternal disc rather densely punctate with elongate punctures of unequal size, mixed with small punctures. Interspaces with indistinct linear microsculpture at the sides. Mesometasternal suture fine, slightly angulate backward.

Metasternum.— Median suture distinctly canaliform. Lateral striae distinct, almost parallel in their anterior half, slightly curved outward and divergent posteriorly, nearly reaching the metasternal half (fig. 115). Metasternal disc with double punctation, a little finer than on mesosternum. A band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc about punctate as metasternum, interstices smooth. Oblique lateral striae present, distinct.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with small teeth on the distal half.

The female differs from the male as follows:

Punctation of the underside a little finer.

Head.— Face in lateral view very little convex (nearly straight). Vertex and frons separated by a sharp and smooth transverse ridge, well-delimited at its posterior side, less so to the frons. Frons and rostrum delimited at the sides by a narrow ridge, at their posterior end indistinctly continuous with the transverse ridge, and in front connected by a fine and narrow apical marginal rim that is slightly depressed in the middle (fig. 117). At the medial side each lateral ridge is accompanied by a shallow sulcus, ill-delimited at the inner side; at the lateral side of the ridges the rostrum slopes steeply down to its edge. Frons and rostrum together concave, more distinctly so on the frons. Frons and rostrum with small punctures of unequal size, decreasing in size towards rostrum. Interstices smooth. Vertex with a slight transversal depression behind the transverse ridge and a small median fovea; punctation more distinct than on frons, double; interstices in the transverse groove with dense interstitial microsculpture, elsewhere about smooth.

Pronotum.— In dorsal view nearly 1.1 times longer than wide, in front more rectangular in outline than the male pronotum (fig. 114), in profile faintly convex in the posterior half, progressively convex anteriorly and thence sloping down towards anterior margin. A short appendix of the marginal striae is present in the barely impressed anterior angles, punctures along the anterior emargination for the head and in the anterior angles more closely set and a little rugosely confluent. Behind the anterior emargination the pronotum is very little impressed at either side of the median line, the latter therefore slightly elevated when seen in tangential light, but without a distinct ridge. The indistinct impunctate median band has an antescutellar stria.

Pygidium.— Rather triangular in outline with broadly rounded, slightly impressed

tip, without a spatulate apical prolongation fig. 114). Disc faintly convex, along base slightly impressed, with distinct and large anterolateral foveae, punctures large, of unequal size, along sides and apex smaller, punctures without hairs. Interstices smooth.

Prosternum.— Sides of carinal disc slightly divergent anteriorly, in lateral view faintly convex, slightly progressively so towards anterior margin. Carinal disc at either side with a sulciform carinal stria at a rather great distance from the lateral margin, ill-delimited at their inner side, well-delimited at the outer side, these outer sides continuous with the distinct anterior margin of a deep anterior impression that is continuous with a distinct elongate median impression over nearly the entire carinal length. Carinal disc sparsely punctate, punctures of unequal size. Interspaces with linear microsculpture.

Variation.— PE-length of males: 2.7-3.2 mm, females: 2.9-3.1 mm. Colour, intensity of the punctation and length of the lateral striae on the first sternite vary a little. The metasternal median suture is sometimes less canaliform. The mesosternal impression is rather variable: in some specimens (also in the holotype) it is very deep anteriorly, the sharp boundary about continuous with the outer margins of the lateral striae; in other specimens the impression is shallower and less extended. The male specimens from Perak are a little larger than the others, and have a more distinct impression of the pygidial apex. The shape of the male pygidium varies a little: in some specimens the sides are less distinctly emarginate, and consequently the spatulate apical extension is less distinct. In some females the prosternal carinal disc is a little less concave.

Remarks.— This species is very close to *T. rostripygus* Bickhardt. The differences will be clear from the key.

Etymology.— The name refers to the elongation of the pygidial apex of the male.

Trypeticus rostripygus Bickhardt, 1912
(figs 67-72)

Trypeticus rostripygus Bickhardt, 1912: 218-219.

Material.— **Indonesia:** Holotype, ♂ (ZMHB), [white label, printed:] "P.F. Sijthoff/Preanger/Java"; [red label, printed:] "Type"; [white label, hand-written:] "*Trypeticus/rostripygus/Bickh*"; [white label, hand-written:] "*rostripygus/Bickh.*"; [white label, printed:] "Zool. Mus./Berlin"; [red label, printed and hand-written:] "HOLOTYPUS/*Trypeticus/rostripygus* Bickhardt ♂ /1912 (by inference)/P. Kanaar des. 1998" (present addition); 1 ♂ (RMNH), W. Java, Toegoe, J.B. Pasteur; 2 ♀♀ (RMNH, CHPK), Java, Mount Gedé, 1500 m, c904, viii.1923, L.G.E. Kalshoven.

Male.— Length (without head and abdominal tergites) 3.8 mm, width 1.7 mm, height 1.5 mm. Thick-set cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in lateral view very faintly bisinuous with barely elevated rostral tip. Rostrum in frontal view broadly rounded anteriorly with two small tubercles (fig. 71). Frons strongly concave, the concavity delimited anterolaterally by a very blunt oblique ridge, starting from the antennal insertions and fading away on the rostrum, the latter strongly convex in transversal direction. Frons and rostrum with sparse small punctures of slightly unequal size, interstices smooth. Transition between frons and vertex rather gradual, slightly arcuate. Vertex with larger punctures of unequal size and a small median fovea, interstices smooth.

Pronotum.— In dorsal view nearly 1.1 times longer than wide (fig. 67) with slightly sinuous, nearly parallel sides, slightly wider in the anterior half, rounded in front towards anterior pronotal angles, convex in transversal direction, in profile faintly convex over its entire length. Marginal striae distinct but not very deep, ending in front at some distance from the barely impressed anterior angles. Pronotal disc rather densely covered with moderate punctures of unequal size, punctures along the anterior margin more closely set and smaller. Interspaces smooth. Neither a distinct impunctate median band nor an antescutellar median stria is present.

Elytra.— Along the suture about as long as pronotum (fig. 67) with rounded apices, convex in transversal direction, in profile slightly convex over its entire length. Elytra about equally punctate as pronotum. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate, interstices with fine linear microsculpture. Marginal stria distinct in posterior half, wanting in anterior half.

Propygidium.— Concave in longitudinal direction, slightly impressed at the sides, without oblique lateral striae. Punctation rather dense, punctures of slightly unequal size, interstices smooth.

Pygidium.— Strongly concave in longitudinal direction. Sides distinctly emarginate (fig. 68), apical half extended into a spatulous elongation; this elongation foveate near the rounded apex and distinctly bent upward with respect to the anterior part of the pygidium, punctures on disc larger than on propygidium, without hairs. Interstices smooth.

Prosternum.— Carina broad with slightly divergent sides (fig. 70), faintly convex in lateral view, margined at the sides and in front by a narrow elevated rim. In the posterior half the lateral rim is accompanied by an indistinct carinal stria that merges in front with a deep concavity in the anterior half; carinal disc also in the posterior half with a slight median impression. Carinal disc with rather fine double punctation, the smaller punctures ill visible by linear interstitial microsculpture.

Mesosternum.— Distinctly impressed in anterior third. Lateral striae broad and sulciform, rather shallow, ill-delimited at their inner side, slightly divergent anteriorly, ending behind the procoxae (fig. 70). Mesosternal disc not densely punctate with distinct, slightly elongate punctures, mixed with small punctures. Interspaces with linear microsculpture. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Median suture distinct, canaliform, with the exception of its posterior end. Lateral striae distinct, slightly divergent posteriorly, not quite reaching the metasternal half (fig. 70). Metasternal disc a little finer punctate than mesosternum. A band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Impressed along the median line. Disc a little more densely and finer punctate than metasternum, interstices with indistinct linear microsculpture at the sides and along posterior margin. Oblique lateral striae present, rather broad and shallow.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and small teeth on the distal half.

The female differs from the male as follows:

Head.— Face in lateral view very faintly bisinuous without distinctly raised rostral tip. Apex of rostrum in frontal view broadly rounded-truncate (fig. 72). Frons and

vertex separated by a sharp, transverse keel, well-delimited at its posterior side, less so towards the frons. Rostrum and sides of frons bordered by a broad, distinct elevated rim, delimited at its inner side by a shallow sulcus. Rim smooth with a few punctules. Posteriorly the rim is narrowing and thence merging with the margin of the eye. The shallow sulcus is also continued along this part and separates the rim from the transverse ridge. In front of the eyes the rim is slightly bent outward, concealing the antennal insertions in frontal view. Frons and rostrum with a large, deep, round concavity with its deepest part slightly behind the middle. Punctuation fine and rather scarce, punctures of unequal size. Interstices mainly smooth, but some vague longitudinal strigillation can be observed under high magnification. Vertex with a transversal impression along the transverse ridge, distinct punctures and a distinct median fovea, interstices with dense linear microsculpture.

Pronotum.— A little longer than in the male, in front broadly rounded and thence oblique towards the faintly impressed anterior angles (fig. 69). Superior side in anterior third slightly flattened down towards anterior margin. Behind the anterior emargination for the head a very indistinct indication of a median ridge is visible under tangential illumination. Disc about equally punctate as in the male. A fine antescutellar median stria is present; no distinct impunctate band.

Propygidium.— Slightly concave in longitudinal direction, with a shallow fovea at either side, without distinct oblique lateral striae.

Pygidium.— Triangular in outline with broadly rounded tip, without the spatulate elongation that is present in the male. Disc with shallow foveae near the tip and near the anterolateral angles, punctures rather coarse on the disc, finer towards apex, punctures without hairs.

Prosternum.— Carina not margined by an elevated rim, carinal striae short, basal, ending about the middle; apical stria wanting. A shallow median impression is present well behind the anterior margin. Punctuation and interstitial microsculpture as in the male.

Variation.— PE-length of holotype: 3.7 mm, other male: 3.8 mm, females: 3.8 and 4.0 mm respectively. The length of the carinal striae is slightly different in the two females. In one of the females the lateral mesosternal striae are shallower and slightly abbreviated at their posterior end.

Remarks.— The length given by Bickhardt (4.25 mm) is the total length. The female was hitherto unknown.

Trypeticus sanneae spec. nov.
(figs 385-389)

Material.— **Malaysia:** Holotype, ♀ (MZLU), genitalia protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabang, Sipitang, /Mendolong, T5/R/3.v.1988/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/sanneae* sp. n./P. Kanaar des. 2000”; 1 ♂ (MZLU), same locality, date and collector, but T4/R (broken specimen); 1 ♂ (MHNG), Sabah, Poring Hot Springs, 500 m, 6.v.1987, Burckhardt & Löbl (paratype); 1 ♀ (CHPK), same locality and collector as holotype but other trap code and 3.xii.1987 (paratype); 1 ♂ (CHPK), idem but 12.xii.1987; 1 ♂, 1 ♀ (MZLU, CHPK), idem, but 22.xii.1987 (paratypes); 1 ♂ (CHPK), idem, but 19.iv.1988 (paratype); 1 ♀ (MZLU), idem, but 28.iv.1988 (paratype); 1 ♂ (MZLU), idem, but 29.iv.1988 (paratype); 2 ♂♂ (MZLU), idem, but 13.v.1988 (paratypes); 1 ♀ (MZLU), idem, but 23.ii.1989 (paratype); 2 ♂♂ (CHPK), idem, but 2.iii.1989

(paratypes); 1 ♂ (MZLU), idem, but 8.iii.1989 (paratype); 1 ♂ (MZLU), idem, but 10.iii.1989 (paratype); 1 ♂, 2 ♀♀ (MZLU), idem, but 31.iii.1989 (paratypes).

Male.— Length (without head and abdominal tergites) 1.66 mm, width 0.60 mm, height 0.57 mm. Rather elongate cylindrical, shiny, reddish brown with darker parts on elytra and along sutures.

Head.— Face in profile almost straight. Rostrum in frontal view rather short (fig. 388), broadly truncate anteriorly with slightly raised anterior margin, sides slightly impressed, more distinctly so anterolaterally. Rostrum with rather sparse small punctures, interstices with dense linear microsculpture. Transition between rostrum and frons marked by a slight crosswise impression. Frons impressed at the sides, delimiting a slightly elevated rim along the antennal insertions. Posterior part of frons with some rather coarse setigerous punctures, mixed with smaller punctures, interspaces smooth and shiny. Posterior part of frons and vertex together convex without distinct transition.

Pronotum.— About 1.3 times longer than wide (fig. 386), with nearly parallel sides in dorsal view, in front slightly widening and thence broadly rounded towards the downward bent anterior angles, strongly convex in transversal direction, in profile slightly convex and sloping down towards the anterior margin, more distinctly so in front. Disc rather sparsely punctate, punctures rather small, slightly elongate and of unequal size; punctures along the anterior margin more closely set. A narrow median band is impunctate, with a fine median line in the posterior fourth. Interspaces smooth. Marginal striae distinct, curved inward over the posterolateral angles, halfway leaving the strongly sinuous pronotal edge, slightly bent upward and ending at some distance from the not impressed anterior angles.

Elytra.— Along the suture nearly 1.2 times longer than pronotum (fig. 386), strongly convex in transversal direction, faintly convex in profile, progressively so towards the rounded apices. Punctuation rather sparse, punctures of unequal size, punctures near the suture more closely set and distinctly elongate. Interspaces smooth. A very narrow band along the suture is impunctate. Epipleura impunctate with linear microsculpture. An indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Short, finely punctate; along the posterior margin some larger punctures have a rather long yellowish-white hair. Oblique lateral striae wanting.

Pygidium.— Broadly rounded in outline, strongly concave (fig. 386). Punctuation rather sparse, double, the larger punctures with a rather long yellowish-white hair. Interspaces with some very indistinct radial microsculpture, shiny.

Prosternum.— Carina in lateral view slightly convex. Carinal disc rather broad (fig. 387), sides about parallel, margined at the sides and along the anterior margin by a narrow elevated rim. At the sides the rim is accompanied by an indistinct carinal stria that is indistinctly continuous with a slight transverse impression behind the anterior rim. Base slightly emarginate. Carinal disc with rather sparse distinct, slightly elongate punctures of unequal size, interspaces with indistinct linear microsculpture, shiny.

Mesosternum.— Intercoxal part slightly elevated, barely impressed. Lateral striae reduced to short traits (fig. 387). Mesosternal disc not densely punctate, punc-

tures elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Median suture distinctly canaliform. Lateral striae wanting (fig. 387). Metasternal disc less densely and more finely punctate than mesosternum; a narrow band along the median suture is impunctate, punctures along this impunctate band more closely set and more elongate. Interspaces smooth.

First visible sternite.— Finely punctate, oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with hairs and two small distal teeth on the outer margin.

The female differs from the male as follows:

Punctuation finer than in the male.

Head.— Face in profile slightly sinuous with bluntly raised rostral apex. Rostrum in frontal view broadly truncate anteriorly, slightly emarginate (fig. 389). Transition between frons and rostrum distinctly crosswise impressed, with faint anterolateral extensions on rostrum. Frons with lateral impressions, delimiting a distinct sinuous ridge along the antennal insertions, and a slight central impression. Rostrum and frons with small punctures, on the frons mixed with several coarse punctures that have a rather long erect hair. Interspaces with some indistinct microsculpture, shiny. Transition between frons and vertex slightly arcuate, gradual.

Pronotum.— About 2.0 times longer than wide, sides in dorsal view tapering anteriorly and thence very gradually curved towards anterior angles (fig. 385). Antescutellar stria distinct, long.

Pygidium.— Slightly concave, the concavity arcuate, situated along the anterior margin and the anterior parts of the sides. Setigerous punctures as in the male.

Prosternum.— Carina less convex in lateral view, sides of carinal disc margined only with carinal striae in the posterior half, disc not impressed along anterior margin.

Variation.— Holotype: PE-length 1.88 mm, width: 0.62 mm, height: 0.59 mm. PE-length males: 1.66-1.75 mm, females: 1.82-1.92 mm. Most specimens have the reddish brown colour, obviously by immaturity; only few specimens are more piceous brown. The lateral mesosternal striae are more distinct in a few specimens, in others they are obsolete. Rarely oblique lateral striae on the first sternite are indicated by a few aligned punctures. The fine rim along the anterior margin of the male prosternal carina is sometimes very indistinct near the anterolateral angles. The carinal striae in the females are sometimes a little longer.

Etymology.— This species is named after my granddaughter Sanne Annemarije van der Bijl, in appreciation of her interest in my hobby, and keeping my promise made when I had dedicated a species to my wife.

Trypeticus sauteri Bickhardt, 1913
(figs 232-236)

Trypeticus sauteri Bickhardt, 1913: 167.

Material.— **Taiwan**: Lectotype, ♂ (ZMHB), [white label, printed:] "7.vi."; [white label, printed:] "Kosempo/Formosa/H. Sauter 1912"; [red label, hand-written:] "Type"; [white label, hand-written:] "Sauteri/Bickh."; [white label, printed:] "Zool. Mus./Berlin"; [red label, printed and hand-written:]

"LECTOTYPUS/*Trypeticus/sauteri*/Bickhardt 1913/P. Kanaar des. 1998" (present designation); 3 ♂♂ (DEIC), same data as lectotype (paralectotypes, present designation); 1 ♂, 1 ♀ (DEIC, ZMHB), Sokutsu, Banshoryo Distr., 22.vi.1912, H. Sauter (paralectotypes, present designation); 1 ♂ (ZMHB), Kosempo, ii.1910, H. Sauter S. G.; 1 ♂ (ZMHB), Formosa, Sauter S.; 2 ♂♂ (CHSM), Formosa, Suisharyo, x.1911, H. Sauter; 1 ♂ (ZMHB), Banshoryo-Distr., Sokutsu, 1912, H. Sauter. **China:** 1 ♂ (CHSM), Fukien, Kuatun, 27°40'N, 127°40'E, 2300 m, 4.iv.1938, J. Klapperich (with doubt).

Male.— Length (without head and abdominal tergites) 2.8 mm, width 1.2 mm, height 1.1 mm. Cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in lateral view sinuous, with slightly elevated rostral tip. Rostrum in frontal view broadly rounded anteriorly, apical margin with two paramedian tubercles (fig. 235). Frons faintly concave, vaguely elevated along the median line. Frons and rostrum with small punctures, interstices with a dense linear microsculpture, mainly in oblique-longitudinal direction. Transition between frons and vertex arcuate and rather gradual.

Pronotum.— In dorsal view nearly 1.2 times longer than wide (fig. 232) with parallel sides in the basal half, very slightly divergent in the anterior half, rounded in front, thence rather straight towards the anterior pronotal angles, convex in transversal direction, in profile convex over its entire length, progressively so anteriorly. Marginal striae fine, rather distant from the lateral margin in the anterior pronotal half, ending in the barely impressed anterior angles. Pronotal disc not very densely covered with moderate, distinct punctures of slightly unequal size, slightly irregularly dispersed, punctures along the anterior margin and especially near the anterior angles more closely set and smaller, mixed with very small punctures. Interspaces smooth. An impunctate median band is present in the posterior two-thirds, without an antescutellar median stria.

Elytra.— Along the suture about as long as pronotum (fig. 232) with rounded apices, slightly depressed near scutellum, convex in transversal direction, in profile slightly convex, progressively so towards apex. Elytra, with the exception of the scutellar area and the anterior margin, more finely punctate than pronotum, punctures rather irregularly dispersed and slightly elongate, near the suture more closely set. A narrow band along the slightly raised suture is impunctate. Interspaces smooth. Epipleura punctulate with a fine linear microsculpture. Marginal stria fine in posterior half, obsolete in front.

Propygidium.— Barely concave in longitudinal direction, with an oblique stria and a faint impression at the sides. Punctuation double, interstices smooth.

Pygidium.— Rather triangular in outline with broadly rounded apex, slightly convex in both directions, slightly impressed near the anterolateral angles. Punctuation double, larger punctures of moderate size, with a very short bristle. Interstices smooth.

Prosternum.— Carina broad with parallel sides (fig. 234), nearly straight in lateral view, margined at the sides and in front by a narrow elevated rim, at the lateral sides accompanied by an indistinct carinal stria. Carinal disc with rather large shallow primary punctures and very small secondary punctures, interspaces with distinct linear microsculpture.

Mesosternum.— Between procoxae faintly impressed. Lateral striae rather broad and sulciform, ill-delimited at the inner side, almost parallel, ending close behind the procoxae (fig. 234). Mesosternal disc not very densely punctate with distinct, slightly

elongate primary punctures and very small secondary punctures. Interspaces smooth. Meso-metasternal suture fine, angulate backwards.

Metasternum.— Median suture distinct, sulciform, not quite reaching the posterior metasternal margin. Lateral striae rather fine, divergent posteriorly (fig. 234), slightly curved inwards at their posterior end, about reaching the posterior metasternal third. Metasternal disc about equally punctate as mesosternum. A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc more densely and more finely punctate than metasternum. Oblique lateral striae short, rudimentary.

Legs.— Protibiae with six, mesotibiae with five teeth on the outer margin. Outer margins of hindtibiae with spines and with a few small teeth on the distal third.

The female differs from the male as follows:

Head.— Face faintly concave in profile, bordered at the lateral sides by a distinct oblique, slightly bisinuous elevated ridge (fig. 236), delimited at the inner side by a shallow groove; at the outer side of these ridges the lateral parts of the rostrum slope steeply down towards the lateral rostral margins. In front these rims end in the barely elevated pointed tip of the rostrum. The posterior part of the frons has a median boss and a faint impression at either side; before the boss the frons is rather strongly impressed. Frons and vertex separated by a transverse keel, that is slightly curved forwards, well-delimited behind, at the sides continuous with the oblique lateral ridges. Frons and rostrum with small punctures, interstices with a very fine microsculpture, giving a rather dull appearance, with the exception of the frontal boss. Vertex with distinct punctures and a shallow median fovea, interstices with dense linear microsculpture.

Pronotum.— Nearly 1.4 times longer than wide, slightly narrowed in the middle, obliquely truncate between anterior and broadly rounded anterolateral angles (fig. 233). Superior side in anterior fifth with a rather faint median ridge, that is most distinct at its posterior end and that fades away towards the slightly angulate anterior margin. Disc about equally punctate as in the male, but punctures more distinctly different in size; near the anterior margin the punctures gradually becoming elongate, more closely set and rugosely confluent. A fine antescutellar median stria is present.

Pygidium.— Parabolic in outline, convex, with distinct double punctation, the primary punctures with a short yellowish hair.

Prosternum.— Carinal striae more distinct, ending a little behind the anterior angles. Behind the middle of the anterior margin the prosternal disc has a slight transversal impression (always?).

Variation.— PE-length lectotype: 2.8 mm, other males 2.7-2.9(-3.1) mm. PE-length female: 3.0 mm. The frontal impression is shallower in some males and the very faint median elevation in the frontal concavity is sometimes wanting. The very short bristles on the male pygidium are sometimes almost invisible (rubbed off?). In the lectotype they are well visible.

Remarks.— The specimen from China is somewhat larger (PE-length 3.1 mm) than the specimens from Taiwan, in dorsal view the pronotum is not widened anteriorly and is a little more broadly rounded anterolaterally. As it was sent for identification after the termination of this study comparison with specimens from Taiwan was not

possible. Like all older authors Bickhardt misinterpreted the sexes. He described first the male, though he thought that it was a female. So a male has been chosen as lectotype.

Trypeticus schawalleri spec. nov.
(figs 323-327)

Material.— **Malaysia:** Holotype, ♀ (SMNS), right mesotarsus missing, [white label, printed:] “♀”; [yellow label, printed:] “BORNEO: Sarawak/Belaga/14.-16.iii.1990/leg. A. RIEDEL”; [white label, hand-written and printed:] “*Trypeticus*/sp./det. S. Mazur”; [red label, printed:] “HOLOTYPUS/*Trypeticus/schawalleri* sp. n./P. Kanaar des. 2000”; 1 ♂, 1 ♀ (SMNS, CHPK), same data as holotype (paratypes); 1 ♂ (SMNS), Sabah, Kinabalu N. P., Poring, 500 m, 15-16.xi.1996, W. Schawaller (paratype); 1 ♂ (USNM), Sabah, Mt. Kinabalu N. P., Poring Hot Springs, 486 m, 18.viii.1988, on large fallen tree, D.E. Bright (with doubt).

Male.— Length (without head and abdominal tergites) 2.4 mm, width 0.9 mm, height 0.9 mm. Cylindrical, shiny, piceous brown-black, antennae and legs rufous.

Head.— Face nearly straight in profile with elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two paramedian tubercles, rather widely separated (fig. 326). Frons distinctly concave, rostrum with faint impressions along the sides and at the apex between the tubercles. From the eyes fine sinuous lateral ridges run to the rostrum, most distinct near the antennal insertions, gradually fading away on the rostrum, ending near the apical tubercles. Outside these ridges the rostrum slopes steeply down towards the lateral edge. Frons and rostrum with small punctures, interstices with indistinct microsculpture. Transition between frons and vertex arcuate and rather gradual. Vertex punctate as frons.

Pronotum.— About 1.3 times longer than wide in dorsal view, with nearly parallel sides (fig. 323), broadly rounded in front towards the anterior angles, strongly convex in transversal direction, in profile nearly straight and a little sloping down anteriorly in the posterior two-thirds, thence slightly convex towards anterior margin. Marginal striae distinct, distinctly curved upward at their posterior end, in front ending at some distance from the anterior angles, that have a small but distinct fovea. Pronotal disc densely punctate, punctures very coarse and deep, of unequal size, mixed with small punctures, the primary punctures a little smaller in the anterior part of the pronotum, still smaller and very closely set behind the anterior emargination for the head and in the anterior angles. Interspaces smooth. No distinct impunctate median band or antescutellar stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 323), faintly impressed near the anterior margin, strongly convex in transversal direction, in profile slightly convex over its entire length, progressively so towards apex. Elytral punctation much finer than on pronotum, punctures deep and of unequal size. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture and a marginal epipleural stria in the posterior half.

Propygidium.— Slightly impressed along the anterior margin, densely punctate, punctures rather coarse, of unequal size, along the posterior margin smaller, interstices smooth. Oblique lateral striae wanting.

Pygidium.— Triangular with broadly rounded apex, faintly convex in profile and in

transversal direction. Punctuation as on propygidium, along sides and apex finer, larger punctures with a very short bristle. Interstices with indistinct linear microsculpture.

Prosternum.— Carina in lateral view almost straight in posterior half, slightly convex in anterior half. Carinal disc broad, sides nearly parallel, slightly divergent in front (fig. 325), margined at the lateral sides and in front by a narrow elevated rim, at the sides accompanied by a shallow carinal stria, ill-delimited at their inner side, in front indistinctly continuous with a distinct transversal impression along the anterior marginal rim. Disc rather densely punctate, punctures slightly elongate. Interspaces with some indistinct linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae distinct, broad, sulciform, well-delimited at both sides, slightly sinuous and divergent anteriorly, in front ending behind the procoxae (fig. 325). Mesosternal disc with dense punctuation, the punctures elongate and of unequal size. Interspaces smooth. Meso-metasternal suture fine, faintly angulate backwards.

Metasternum.— Lateral striae distinct, in front sulciform, divergent posteriorly, about reaching the metasternal middle (fig. 325). Disc densely punctate, punctures elongate and of unequal size. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform.

First visible sternite.— In front faintly impressed along the median line, densely punctate, punctures smaller towards posterior margin. Interstices smooth. Oblique lateral striae present, rather short.

Legs.— Pro- and mesotibiae with five teeth on the outer margin and an additional small apical tooth. Outer margin of hindtibiae with hairs and with some small teeth on the distal half.

The female differs from the male as follows:

Head.— Face in lateral view very faintly sinuous with slightly elevated rostral tip. Vertex and frons separated by a smooth, little elevated transverse ridge, rather well-delimited at the posterior side, barely so to the frons. Frons and rostrum delimited at the sides by a distinct, slightly sinuous ridge (fig. 327), continuous with the transverse ridge at the posterior end, in front fading away near the slightly elevated, bluntly acuminate apex. At the medial side each lateral ridge is accompanied by a shallow sulcus, narrower anteriorly; at the lateral side of the ridges the rostrum slopes steeply down to its edge. Rostrum and anterior part of frons with a shallow median impression. Frons and rostrum with distinct small punctures, decreasing in size towards rostrum. Interstices with indistinct microsculpture. Vertex with a slight transverse impression behind the transverse ridge and a distinct median fovea; punctuation dense, interstices with dense microsculpture.

Pronotum.— About 1.5 times longer than wide with nearly parallel sides, a little tapering anteriorly in the anterior half (fig. 324). Disc a little less coarsely and less densely punctate than in the male. Behind the anterior emargination for the head there is a faint and smooth median ridge. Along the anterior margin the punctures are very closely set, slightly elongate and a little rugosely confluent. A narrow impunctate median band is present in the posterior half, with a fine antescutellar median stria.

Pygidium.— More convex, apex more broadly rounded, densely punctate, larger punctures in the apical half with a rather short pale-yellow hair.

Prosternum.— Carinal disc not margined or transversely impressed in front, the carinal striae abbreviated at some distance from the anterior margin. Disc faintly impressed in the anterior half.

Variation.— PE-length of holotype: 2.6 mm, other male: 2.3 mm, other female: 2.6 mm. The intensity of the punctation and the colour are a little variable. The lateral mesosternal striae are a little more sinuous in one specimen; the lateral metasternal striae are longer, with an inward curved posterior end, in one specimen, and a little shorter in another specimen. The male that has been attributed with doubt to this species is less coarsely punctate, the face is a little longer, with less sinuous lateral ridges. Therefore, it has not been given paratype status.

Etymology.— This species is dedicated to Dr Wolfgang Schawaller (Museum of Stuttgart), in appreciation of his full co-operation.

Trypeticus silvicola Schmidt, 1897
(figs 304-308)

Trypeticus silvicola Schmidt, 1897: 298-299.

Trypeticus mustelinus Lewis, 1897: 363-364. **New synonym.**

Trypeticus dispar Schmidt, in litteris.

Material.— **Indonesia:** Lectotype, ♂ (ZMHB), [white label, hand-written:] “♀”; [white label, hand-written:] “Sumatra/Si Rambé”; [red label, printed:] “Type”; [white label, printed:] “coll. J. Schmidt”; [white label with black and yellow margin, hand-written:] “*Silvicola*/Schm.”; [white label, printed:] “Zool. Mus./Berlin”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/silvicola*/ Schmidt 1897/P. Kanaar des. 1998” (present designation); 1 ♂ (ZMHB), Sumatra, Si-Rambé, xii.1890-iii.1891, E. Modigliani (paralectotype, present designation); 3 ♂♂ (MCSN, BMNH, MCSN), Sumatra, Si-Rambé, xii.1890-iii.1891, E. Modigliani; 1 ♀ (BMNH, lectotype of *T. mustelinus* Lewis), four segments of left protarsus, three segments of right mesotarsus and left metatarsus missing, [white label, printed:] “♀”; [original mounting cardboard, hand-written:] “♂”; [white round label with red margin, printed:] “Type”; [white label, hand-written:] “Sumatra”; [white label, printed:] “George Lewis Coll./B.M.1926-369.”; [white label, hand-written:] “*Trypeticus/mustelinus*/Type ♂ Lewis”; [rose label, printed:] “298”; [small pale-green label without text]; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/mustelinus*/Lewis, 1897/P. Kanaar des. 2001 (present designation); [white label, hand-written and printed:] “Synonymous/with/*T. silvicola* Schmidt/P. Kanaar det. 2001”; 1 ♀ (BMNH), Sumatra (paralectotype of *T. mustelinus* Lewis); 1 ♂, 1 ♀ (ZMHB), Sumatra, Grouvelle (*T. dispar* Schmidt in litt.); 1 ♀ (BMNH), Sumatra, Palembang; 1 ♀ (ZMAN), Java, Banjoeangi, 1910, Mac Gillavry; 1 ♀ (RMNH), Java, 31.vii.1920, no. c780, L.G.E. Kalshoven; 1 ♂, 1 ♀ (RMNH), Java, Bantam, v.1928, ex *Hevea* ond. Pasirwar, no. 257k, L.G.E. Kalshoven; 1 ♀ (RMNH), Java, Japos, 30.vi.1932, L.G.E. Kalshoven; 7 ♂♂, 1 ♀ (RMNH, CHPK), Java, Mt Gedé, 800 m, Japos, no. 643, 1.i.1933, on dead tjaringin, L.G.E. Kalshoven; 3 ♂♂ (ZMAN), Java (?), Redjosari, iii.1950, C. van Nidek; 1 ♂ (BMNH), Java; 1 ♂ (MNHN), Lombok, Sapi, 2000’, iv.1896, H. Frühstorfer; 1 ♂ (MNHN), Tji Solak, Wijnkoopsbaai, Grelak; 1 ♂ (RMNH), N Sulawesi, Dumoga Bone NP, Base Camp, 210 m, cult area, dead tree, 9.v.1985, J. Huijbregts (with doubt). **Malaysia:** 1 ♀ (CHND), Tanah Rata, 3.viii.1974, G. Minet. **Thailand:** 1 ♀ (NHMW), NW Thailand, 19°19’N, 97°59’E, Mae Hong Son, Ban Huai Po, 1600-2000 m, 9-16.v.1991, I. Dembicky. **Laos:** 1 ♂ (MNHN), L. Prabang, Perrot; 1 ♂ (HNHM), Vientiane Prov., Vang Vieng, bank of Nam song river, 280 m, at light, No. 6, 21.iii.1998, O. Merkl & G. Csorba; 3 ♂♂, 2 ♀♀ (CHFP), Hua Phan prov., Phu Loei N. P., Ban Sakok, 20°10’ N. 103°12’ E, 23-26.v.2001, D. Hauck. **Vietnam:** 3 ♂♂, 1 ♀ (MNHN), Tonkin, Lac Thô, Hoa-Binh, A. de Cooman; 4 ♂♂ (MNHN), Hoa-Binh, Tonkin, A. de Cooman; 25 ♂♂, 17 ♀♀ (MNHN, CHPK), Hoa Binh, Tonkin, de Cooman; 6 ♂♂, 3 ♀♀ (MNHN), Tonkin, Lac Thô, Hoa-Binh; 1 ♂ (MNHN), Tonkin, Mt. Riec, R.P. de Cooman; 2 ♀♀ (MNHN), Tonkin, Hoa-Binh, ex Donckier 1922; 1 ♀ (MNHN), Tam Bao, Tonkin, H. Per-

rot; 2 ♀♀ (NHMW), 14 km SW Bao Loc, 16-29.v.1994, Pacholatko & Dembicky; 1 ♂ (MHNG), Bavi, Tonkin, H. Perrot; 1 ♀ (MHNG), Hoa Binh, Tonkin, H. Perrot. **Philippines:** 1 ♂, 1 ♀ (ZMHB), N.-Luzon, Imugan (?), 23.vi.1917 (with doubt); 1 ♂ (ZMHB), Masbate, Aroroy, 24.viii.1917 (with doubt); 1 ♂ (ZMHB), N.-Luzon, Ilocos(?)-Norte, i.1918 (with doubt); 1 ♂ (MNHN), S. Palawan, Waterstraet (with doubt); 1 ♂ (CHSM), Mindanao, 30 km W. of Maramag, 1600 m, 28-30.xii.1990, Bolm (with doubt). **India:** 1 ♂ (FMNH), Assam, Longai Res., Sylhet, B: Sen Gupta, ii.1925 (with doubt).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.1 mm, height 1.0 mm. Cylindrical, shiny, piceous-brown, antennae and legs rufous.

Head.— Face almost straight in profile with barely elevated rostral tip. Rostrum broadly truncate in front, tip with two small paramedian tubercles (fig. 307). Frons distinctly concave, rostrum with an additional faint impression. At each side an oblique ridge runs from the eye anteromedially, fading away and ending on the rostrum. Outside this ridge the rostrum slopes down towards the lateral edges. Frons and rostrum with small punctures, interstices at the sides with indistinct microsculpture, elsewhere smooth. Transition between frons and vertex arcuate and rather gradual. Vertex with a small median fovea and more densely punctate than frons, with interstitial microsculpture.

Pronotum.— About 1.3 times longer than wide, slightly widening in front (fig. 304), thence broadly rounded and oblique towards the anterior angles, strongly convex in transversal direction, in profile faintly convex in posterior two-thirds, thence moderately convex towards anterior margin. Marginal striae distinct, slightly turned upwards at its posterior end, at a rather great distance from the edge in the anterior half, ending at the slightly impressed anterior angles. Pronotal disc densely covered with coarse punctures of unequal size, the punctures large and cribriform in the posterior third, smaller anteriorly, the punctures along the anterior emargination for the head still smaller and very closely set. Interspaces smooth. No impunctate median band or antescutellar median stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 304), faintly impressed near the scutellum, strongly convex in transversal direction, in profile almost straight in anterior third, thence slightly and progressively convex towards apex. Elytral punctation finer than on pronotum, punctures of unequal size, near the scutellum rather large, smaller towards apex, punctures along the suture slightly more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura finely punctulate with linear microsculpture; an indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Impressed in the middle, more distinctly so towards sides. No oblique lateral striae. Punctation dense, punctures of unequal size and smaller along posterior margin, some punctures with very short hairs, interstices smooth.

Pygidium.— Triangular with broadly rounded apex, slightly impressed near the base, elsewhere slightly convex. Punctation as on propygidium, punctures of unequal size, along margins finer, punctures with a short yellow hair. Interstices smooth.

Prosternum.— Carina rectangular, rather broad, sides nearly parallel (fig. 306), in lateral view nearly straight in the posterior two-thirds, convex in front, margined at the sides and in front by a narrow elevated rim, at the lateral sides accompanied by a distinct carinal stria, slightly curved outward in front and passing into a distinct transversal impression behind the anterior rim. Carinal disc slightly impressed along the median

line, with moderate punctures. Interspaces with indistinct linear microsculpture, shiny.

Mesosternum.— Faintly impressed between the procoxae. Lateral striae deep, broad and sulciform, almost parallel, ending behind the procoxae (fig. 306). Mesosternal disc with elongate punctures of unequal size, with small punctures between. Interspaces smooth. Meso-metasternal suture fine, mainly marked by a depression between meso- and metasternum, slightly angulate backwards.

Metasternum.— Lateral striae distinct, slightly sulciform, divergent posteriorly, slightly sinuous and curved inwards posteriorly, well reaching the posterior metasternal third (fig. 306). Disc about equally punctate as mesosternum, punctures elongate and rather unequally dispersed in the posterior half. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly sulciform.

First visible sternite.— Slightly impressed along the median line. Punctuation rather dense, distinct, punctures of unequal size, smaller along the posterior margin. Interstices smooth. Oblique lateral striae distinct, sulciform, limited to the medial side of the metacoxae.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal half.

The female differs from the male as follows:

Head.— Face in profile slightly bisinuous with distinctly elevated rostral tip. Frons and vertex separated by a smooth, slightly arcuate transverse ridge, well-delimited behind, ill-delimited to the frons. Frons and rostrum delimited at the lateral sides by a distinct oblique ridge, slightly arcuate along the eye (fig. 308), at the inner side accompanied by a distinct, well-delimited groove. In front these ridges pass into the sides of the strongly elevated triangular rostral apex. The triangular underside of the elevated apex is slightly convex. Frons faintly crosswise concave, rostrum with an additional crosswise concavity behind the elevated tip. Frons and rostrum rather densely punctate, punctures small, distinct, slightly elongate, of slightly unequal size; interstices smooth. Vertex with a distinct crosswise impression behind the transverse ridge, small punctures of unequal size and a median fovea, interstices with linear microsculpture.

Pronotum.— Nearly 1.5 times longer than wide, in dorsal view a little wider in front, thence slightly rounded anteriorly, and again abruptly rounded and oblique towards the distinctly impressed anterior angles (fig. 305). Marginal striae interrupted near the abrupt anterior curvature. A median ridge is present behind the emargination for the head, more distinct posteriorly, pronotum at either side of this ridge flattened off. Punctuation on the posterior third of the pronotal disc a little less coarse than that of the male; behind the emargination for the head the punctures are flaccid and slightly elongate, closely set, but interstices without distinct microsculpture. A short, distinct antescutellar median stria is present.

Pygidium.— The larger punctures on the posterior half with a yellowish-white short hair.

Prosternum.— Carinal disc not impressed along the median line, not margined in front. Carinal striae abbreviated at a short distance from the anterior margin.

Variation.— PE-length males: 2.2-2.9 mm, females: 2.7-3.3 mm. The colour of the paralectotype of *T. silvicola* is lighter, probably by immaturity; in this specimen an

indistinct impunctate median band caused by a greater distance between the punctures is visible before the scutellum. The study of this species-complex is very complicated by the presence of many variations on the nominate form. Obviously there are many local races or subspecies. Outside Sumatra and Java the females have not the bluntly acuminate rostral apex, but a finely bifid or even trapezoid rostral apex, sometimes less turned up than in the nominate form. The pronotal outline just laterally from the anterior angles is more transverse, and the fovea in the anterior pronotal angles more distinct. The punctation varies considerably, especially so at the underside; in some specimens the coarse punctation on the posterior part of the pronotum is less striking and the intermixed secondary punctures not as small as in the nominate forms. This makes a proper attribution of the males to the closely related species in this group extremely difficult if they are not accompanied by females. More material from more regions is necessary to assess the true taxonomical consequences of the noticed differences. For the time being they are considered as variations within the *T. silvicola*-complex. The fine ciliation of the male pygidium is sometimes obsolete, possibly rubbed off. The median suture of the metasternum is less sulciform in some specimens. As usual the length of the lateral metasternal striae and the expression of the lateral striae on the first sternite are a little variable.

Remarks.— Schmidt described the male of this species as *T. silvicola* and Lewis described the female as *T. mustelinus*. Both descriptions appeared in a same year. The publication of Schmidt appeared at the end of January 1897, that of Lewis in October 1897, so the name "*silvicola*" has priority. In the original descriptions no holotypes have been designated. Therefore, in this paper lectotypes have been designated. Like all older authors Schmidt and Lewis have misinterpreted the sex of their specimens. The specimen from Si-Rambé in the Lewis-collection (BMNH) has a label "*Tr. andaiensis* Gestro co-type". It is an enigma why this label has been added. Gestro does not mention a specimen from Sumatra in the description of his species.

Trypeticus smetanai spec. nov.
(figs 263-265)

Material.— **Nepal**: Holotype, ♂ (MHNG), left antennal flagellum and club missing, left foreleg missing, [white label, printed:] "♂"; [white label, printed:] "NEPAL (Prov. Bagmati)/Malemchi, 2800 m/17.iv.[19]81/Löbl & Smetana"/[reverse side, hand-written:] "27"; [white label, hand-written and printed:] "*Trypeticus*/sp./det. S. Mazur"; [red label, printed:] "HOLOTYPUS/*Trypeticus/smetanai* sp. n./P. Kanaar des. 2000".

Male.— Length (without head and abdominal tergites) 2.3 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, piceous brown, antennae and legs rufous.

Head.— Face in profile straight in the anterior half, with slightly elevated rostral tip, near the antennal insertions elevated and thence slightly convex over the eyes towards vertex. Rostrum in frontal view rounded-truncate anteriorly, with two small paramedian tubercles (fig. 265). Frons and rostrum distinctly concave, concavity subdivided in a frontal and a rostral part, at the sides not very sharply delimited. Medially from the antennal insertions there are distinct elevations. Sides of the rostrum rounded off towards the lateral margins. Frons and rostrum with small punctures, interstices but for some indistinct linear microsculpture near the eyes smooth, shiny. Transition

between the concave frons and the convex vertex arcuate, in the middle rather sharp. Vertex with a small median fovea and distinct double punctation, the primary punctures more closely set than on frons, interstices with linear microsculpture.

Pronotum.— About 1.1 times longer than wide, in dorsal view with parallel sides (fig. 263), in front broadly rounded towards anterior angles, strongly convex in transversal direction, in profile faintly convex in the posterior three-fourths, thence strongly convex towards anterior margin. Marginal striae fine, turned upwards at their posterior end, ending at a rather great distance from the slightly impressed anterior angles. Pronotal disc with rather fine and sparse punctation, the punctures of unequal size, irregularly scattered, mixed with very small punctures in the anterior third, more closely set along the anterior margin. Interspaces smooth. An ill-delimited impunctate median band without antescutellar median stria is present in the posterior half.

Elytra.— Along the suture slightly longer than pronotum (fig. 263), impressed near scutellum and anterior margin, strongly convex in transversal direction, in profile nearly straight and ascending posteriorly in the anterior third, thence convex, progressively so towards apex. Elytral punctation about equal to that of pronotum, punctures near the suture more closely set and slightly elongate. A narrow band along the suture and apex is impunctate. Interspaces smooth. Epipleura with linear microsculpture, marginal epipleural striae indicated by a very shallow impression, more distinct posteriorly.

Propygidium.— Distinctly impressed along anterior margin, with oblique lateral striae. Punctation distinct, rather dense, punctures of unequal size, interstices smooth.

Pygidium.— Triangular in outline with broadly rounded apex, convex in transversal direction, impressed at the sides. Punctation as on propygidium, punctures without hairs, smaller along the lateral and apical margins.

Prosternum.— Carina in lateral view almost straight, only near the anterior margin faintly convex. Carinal disc rather narrow, with slightly sinuous sides (fig. 264), margined at the sides by a very narrow and fine elevated rim, not distinctly accompanied by a carinal stria. On the sides of the prosternal carina the lateral prosternal striae are visible in ventral view (not shown in the figure). Carinal disc faintly impressed along the median line, more distinctly so in front, with punctures of unequal size. Interspaces with linear microsculpture.

Mesosternum.— Crosswise impressed in front. Lateral striae narrow and shallow, ill-delimited at their inner side, slightly curved outward and widening in front, ending behind the procoxae (fig. 264). Mesosternal disc with elongate punctures of unequal size. Interspaces smooth. Meso-metasternal suture indistinct, mainly indicated by an elevation, angulate backwards.

Metasternum.— Lateral striae fine, arcuate, about reaching the posterior metasternal third (fig. 264). Disc about equally punctate as mesosternum. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform, with the exception of the posterior end, with faint foveate impressions in front, in the middle and in the rear.

First visible sternite.— About equally punctate as metasternum, punctures wanting along the anterior margin, punctures along posterior margin smaller and more closely set, interstices smooth. Narrow and rather short oblique lateral striae present.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some very small teeth on the distal fourth.

The female is unknown.

Etymology.— This species is dedicated to one of the two collectors.

Trypeticus subobeliscus spec. nov.
(figs 365-369)

Material.— **Indonesia:** Holotype, ♀ (RMNH), left hindleg, mesotarsi and four segments of right metatarsus missing, [white label, printed:] “♀”; [discoloured white label, printed and hand-written:] “L.G.E. Kalshoven/Java 900 M./Mount Gedé/xi.1924. No....”; [white label, hand-written:] “f12 2”; [white label, printed:] “Museum Leiden/collectie/L. Kalshoven”; [red label, printed:] “HOLO-TYPUS/*Trypeticus/subobeliscus* sp. n./P. Kanaar des. 2001”; 1 ♂ (CHSM), Sumatra, Jambi, Gunung Kerinci, 1800-2100 m, 6-7.iii.1991, Bocák & Bocáková (with some doubt).

Female.— Length (without head and abdominal tergites) 2.2 mm, width 0.6 mm, height 0.6 mm. Very slender cylindrical, shiny, piceous black, antennae and legs rufous.

Head.— Face in lateral view almost straight in the posterior two-thirds, moderately elevated anteriorly towards rostral tip. Frons and vertex separated by a transverse ridge, well delimited behind, less so towards the frons. Frons and rostrum delimited at the sides by a narrow but distinct, slightly sinuous ridge, continuous with the transverse ridge at their posterior end, in front continued as a fine, indistinctly tuberculate elevated rim along the rostral apical margin, the latter broadly emarginate in frontal view (fig. 369). At their inner side the lateral ridges are accompanied by a sulcus, rather ill-delimited medially. At the lateral sides of the ridges the rostrum slopes steeply down to its lateral margin. Frons concave, mainly in longitudinal direction, rostrum strongly concave in longitudinal direction, especially behind the apical marginal rim. Frons and rostrum traversed by a shallow, ill-delimited longitudinal impression along the median line, a little encroaching upon the transverse ridge behind. Frons and rostrum with a fine punctation, interstices with a dense, very fine microsculpture producing an egg-shell lustre. Vertex with a distinct crosswise impression behind the transversal ridge, a small median fovea, fine punctation and a dense interstitial microsculpture.

Pronotum.— About 1.8 times longer than wide (fig. 365), in dorsal view with nearly parallel sides, slightly wider in the anterior half, in front rather abruptly angulate and thence slightly emarginate towards the anterior angles, strongly convex in transversal direction, in profile nearly straight in posterior half, thence gradually convex towards anterior margin. Marginal striae shallow, a little curved upwards at their posterior end, in the anterior half at a rather great distance from the emarginate lateral pronotal margin and ending at some distance from the anterolateral angles. Disc rather sparsely and finely punctate, punctures slightly elongate, rather irregularly dispersed and of unequal size, more closely set along the anterior margin. No anterior median ridge. An indistinct impunctate median band with a very fine median stria is present in the posterior half. Interspaces smooth.

Elytra.— Along the suture a little shorter than pronotum (fig. 365), broadest at the posterior third, apices rounded. Elytra strongly convex in transversal direction, in profile almost straight and raising posteriorly in the anterior three-fourths, a little convex towards apex and thence very abruptly and strongly convex towards apical margin. Elytra slightly impressed near scutellum and along the base, sparsely and slightly finer punctate than pronotum; a narrow band along the suture is impunctate, punc-

tures along this smooth band more closely set. Interspaces smooth. Epipleura impunctate with indistinct linear microsculpture. An indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Impressed along the anterior margin, more distinctly so at the sides. No oblique lateral striae. Punctuation rather dense, punctures of slightly unequal size, along the posterior margin and at the sides some punctures with a hair. Interstices with indistinct microsculpture.

Pygidium.— Broadly rounded in outline (fig. 365), slightly convex in both directions, with a slight and broad crosswise impression along the anterior margin. Pygidium punctate as propygidium, the larger punctures near the apex and sides with a rather long yellow hair. Interspaces with indistinct microsculpture.

Prosternum.— Carina in profile nearly straight. Carinal disc rather narrow (fig. 367), sides in the anterior half divergent anteriorly; distinct, nearly parallel carinal striae are present, slightly abbreviated in front. Carinal disc faintly impressed along the median line, with sparse, slightly elongate small punctures, interstices with linear microsculpture.

Mesosternum.— Impressed in front, mainly crosswise. Lateral striae slightly divergent anteriorly, sulciform, narrower posteriorly (fig. 367), ending in front behind the procoxae. Mesosternal disc not densely punctate, punctures elongate, of unequal size, interspaces smooth. Meso-metasternal suture fine, strongly angulate posteriorly.

Metasternum.— Median suture canaliform, more distinctly so anteriorly. Lateral striae fine, slightly divergent posteriorly (fig. 367), nearly reaching the anterior metasternal third. Metasternal disc less densely and more finely punctate than mesosternum, especially in the posterior half, A narrow band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Between the metacoxa slightly impressed along the median line. Oblique lateral striae present, fine. Disc finely punctate, punctures elongate, more closely set along the posterior margin.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Outer margin of the hindtibiae with some indistinct teeth on the distal third.

The supposed male differs from the female as follows:

PE-length 2.2 mm. Punctuation stronger, especially so at the upper side.

Head.— Face in profile slightly bisinuous, with slightly elevated rostral apical margin. Rostrum in frontal view broadly rounded-truncate, apex at either side with an indistinct tubercle at a rather great distance from the median line. Frons and rostrum distinctly concave, the concavity subdivided into a frontal and a rostral part and at the lateral sides sharply and ridgelike delimited, the lateral ridge bisinuous, ending in front near the apical tubercle (fig. 368). Frons and rostrum with small punctures of unequal size, interstices with some indistinct microsculpture, shiny. Transition between frons and vertex slightly arcuate, rather gradual, especially so in the middle. Vertex with a small median fovea, more distinctly punctate than frons, interstices with linear microsculpture, shiny.

Pronotum.— Nearly 1.4 times longer than wide, in front more broadly rounded towards the anterior angles (fig. 366). The irregularly delimited antescutellar impunctate median band has no stria.

Elytra.— Broader and less elongate than in the female.

Pygidium.— More triangular in outline with very broadly rounded convex tip, punctures not ciliate.

Prosternum.— Indistinctly margined by a faint rim along the anterior margin, with a slight impression just behind it.

Mesosternum.— Without the crosswise impression in front.

Metasternum.— Lateral metasternal striae longer, ending a little behind the metasternal middle.

Remarks.— There is some doubt about the matching of the two specimens. The male is larger, and especially the broader and less elongate elytra make the matching questionable. Therefore, the male has not been given paratype status.

Etymology.— The name refers to the close relationship with *T. obeliscus* Lewis.

Trypeticus sulcisternum spec. nov.

(figs 211-213)

Material.— **Indonesia**: Holotype, ♀ (RMNH), left antennal club with some segments of flagella loose, glued apart, three segments of left metatarsus missing, [white label, printed:] “♀”; [white label, printed:] “Neth. Ind.-American/New Guinea Exped./Araucaria Camp 800 m/iii.1939 L.J. Toxopaeus”; [red label, printed:] “HOLOTYPUS/*Trypeticus/sulcisternum* sp.n./P. Kanaar des. 2000”; 1 ♀ (CHSM), Irian Jaya, Nabire area, road Nabire-Iraga, 03°29'517"S 135°43'913"E, 750 m NN, x.1997, LEK, leg. M. Balke (paratype).

Female.— Length (without head and abdominal tergites) 3.5 mm, width 1.3 mm, height 1.2 mm. Cylindrical, very shiny, head (except antennae) and pronotum piceous black, elsewhere reddish brown.

Head.— Face in profile straight in posterior five-eighths, thence angulately bent upwards and straight towards apex. Rostral tip sharply pointed, obliquely directed upwards, in frontal view well protruding beyond the anterior rostral margin along the labrum (fig. 213), underside of the tip faintly impressed. Frons and vertex separated by a distinct transverse keel, rather sharply delimited at its posterior side, less so anteriorly. Frons and rostrum at either side delimited by a narrow, slightly sinuous ridge, continuous with the transversal ridge behind, in front ending on the pointed tip, close to its extremity. At their inner side the lateral ridges are accompanied by a shallow groove, ill-delimited at their inner side, fading away close to the tip. At the lateral sides of the sinuous ridges the rostrum slopes steeply down towards its broadly rounded lateral margins. Frons and posterior part of rostrum strongly concave, the concavity slightly encroaching upon the transversal keel. Frons and rostrum with rather sparse small punctures, interstices with indistinct microsculpture, shiny. Vertex with a faint crosswise impression behind the transverse keel and a distinct median fovea. Punctuation more distinct and more closely set than on frons, interstices with dense microsculpture.

Pronotum.— Amply 1.3 times longer than wide (fig. 211), sides in dorsal view slightly sinuous in the posterior half, widening in front, thence rather abruptly rounded inwards and nearly straight towards anterior angles. Pronotum convex in transversal direction, in profile faintly convex in the posterior two-thirds, thence progressively convex and a little sloping down towards anterior margin. A median ridge is present behind the anterior emargination. Marginal striae distinct, turned upwards at their pos-

terior end, shortly interrupted at the anterolateral angles, ending in the faintly impressed anterior angles. Pronotal disc rather sparsely punctate with moderate punctures of unequal size, mixed with very small punctures, especially in the anterior half; punctures behind the anterior emargination (aside of the median ridge) and near the anterior angles coarser, more closely set and rugosely confluent, with some indistinct interstitial microsculpture. Interstices outside this area smooth. A distinct but narrow impunctate median band is present, reaching from the pronotal base till close to the median ridge in front. A fine antescutellar median stria is present, in front passing into a longitudinal impression, widening in front and ending a little behind the median ridge.

Elytra.— Along the suture shorter than pronotum (fig. 211), distinctly impressed near scutellum and along anterior margin, convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation along the base rather coarse, elsewhere a little finer than on pronotum; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate with fine linear microsculpture. Marginal epipleural stria in the posterior half present as a shallow, ill-delimited sulcus.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present. Punctation rather dense, double, distinct, Interstices with linear microsculpture.

Pygidium.— Broadly rounded in outline, convex with ill-delimited anterolateral foveae. Punctation and microsculpture as on propygidium, punctures without hairs, along the margin smaller.

Prosternum.— Carina in lateral view faintly convex. Carinal disc broad, sides nearly parallel (fig. 212), margined at the sides and in front by a narrow elevated rim, at the inner side accompanied by a deep, well-delimited sulciform carinal stria, in front shortly interrupted at the left side (probably an individual aberration). Disc with rather sparse double punctation. Interspaces with fine linear microsculpture.

Mesosternum.— Impressed between the procoxae, crosswise impressed in the anterior third. Lateral striae broad, sulciform, nearly parallel, well-delimited at both sides, in front slightly bent inwards and ending behind the procoxae (fig. 212). Mesosternal disc with a rather sparse double punctation, the primary punctures elongate. Meso-metasternal suture fine, strongly angulate backwards. Interspaces smooth.

Metasternum.— Lateral striae distinct, sulciform, broad and short, at a rather great distance from the meso-metasternal suture and mesocoxae, slightly divergent posteriorly (fig. 212). Disc rather sparsely punctate, punctures elongate. In the median line a wide and deep sulcus is present, in front just encroaching upon the mesosternum, posteriorly ending at a short distance from the posterior margin. A narrow band along this median sulcus is impunctate. Interspaces smooth.

First visible sternite.— Punctation double, rather dense, primary punctures decreasing in size posteriorly, interstices along posterior margin at the sides with indistinct linear microsculpture, elsewhere smooth. Oblique lateral striae present, distinct, rather long.

Legs.— Pro- and mesotibiae with five teeth on the outer margin, the foretibiae with an additional small apical tooth. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The male is unknown.

Variation.— PE-length female paratype: 3.3 mm. The paratype is slightly more distinctly punctate, the frons a little less strongly concave. The impression along the pronotal antescutellar line is less distinct.

Etymology.— The name refers to the deep and broad median metasternal sulcus.

Trypeticus tabaciglicens Marseul, 1883
(figs 333-337)

Trypeticus tabaciglicens Marseul, 1883: lxviii.

Trypeticus grouvellei Marseul, 1883: lxviii-lxix. Synonymized by Lewis, 1891a: 402.

Trypeticus grouvellei (sic!); Lewis, 1902: 275.

Material.— **Indonesia:** Lectotype, ♀ (MNHN), right middle leg and many tarsal segments missing, [round yellow label, hand-written, partly illegible:] “*Trypeticus/tabaciglicens*/Sumatra/Grouv 82”; [white label, printed:] “MUSEUM PARIS/COLL. DE MARSEUL/2842-90”; [white label, printed in red:] “TYPE”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/tabaciglicens*/Marseul 1883 ♀/P. Kanaar des. 1999” (present designation); 1 ♂ (MNHN), [round yellow label, hand-written, partly illegible:] “*Trypeticus/grouvellei*/Sumatra/Grouv 82”; [white label, printed:] “MUSEUM PARIS/COLL. DE MARSEUL/2842-90”; [white label, printed in red:] “TYPE”; [red label, printed and hand-written:] “LECTOTYPUS/*Trypeticus/grouvellei*/Marseul 1883 ♂/P. Kanaar des. 1999” (present designation); 2 ♂♂, 3 ♀♀ (BMNH), Sumatra, Palembang; 2 ♂♂, 1 ♀ (BMNH), Sumatra, tabac; 9 ♂♂, 7 ♀♀ (ZMHB, MNHN, ZMAS, BMNH), Sumatra, Grouvelle; 1 ♀ (MCSN), Sumatra, Si-Rambé, xii.1890-iii.1891, E. Modigliani; 1 ♂, 1 ♀ (MCSN), Engano, Malaconni, vi.1891, Modigliani; 2 ♂♂ (MNHN), Sumatra, 1917, Grouvelle; 2 ♀♀ (BMNH), Sumatra, A. Gr.; 1 ♂ (BMNH), Sumatra, 1896; 7 ♂♂, 7 ♀♀ (BMNH, MNHN, MCSN), Sumatra; 2 ♂♂, 1 ♀ (BMNH), Nias I, 1892, J.W. Thomas; 7 ♂♂, 5 ♀♀ (MNHN), Central Nias, Lahago, 4.ii-10.iii.1896, I.Z. Kannegieter; 1 ♀ (MHNG), Sumatra, Aceh-selatan, Babahrot 100 m, vii-viii.1983; 2 ♂♂, 1 ♀ (NHMW, CHPK), W. Kalimantan, Nanga Sarawai, env. Tontang, 24.vii-2.viii.1993, Schneider; 1 ♂ (SMNS), Sulawesi, Kotamobagu, Modoinding, Gn. Ambang, 1200-1450 m, 12.xii.1999, A. Riedel. **Singapore:** 1 ♂ (BMNH), B. T. Rd. 8.25 m[iles], 3.ii.1923, bark, C.J. Saunders coll. **Malaysia:** 1 ♀ (BMNH), Malaya, Negeri Sembilan, xii.1921, P. Dickson; 1 ♂ (ZMAS), Hatan Tunggul F. R. (?), unidentified [tree], 14.iii.1933, F.G. Browne (with doubt); 1 ♂, 1 ♀ (BMNH), Kelantan K. K..ai ex., 22.ix.1939, gallery of *Platypus lepidus* in *Endospermum malaccense*, F.G. Browne; 1 ♂ (FRIM), Malaya, Selangor, F.R.I. Kepong, 20.xii.1960, on *Madhuca utilis*; 1 ♂ (MZLU), Sabah, Sipitang, Mendolung, 28.xi.1987, S. Adebratt; 1 ♂ (MZLU), idem, but 30.xi.1987; 8 ♂♂, 2 ♀♀ (MZLU, CHPK), idem, but 8.xii.1987; 1 ♂, 1 ♀ (MZLU, CHPK), idem, but 12.xii.1987; 4 ♂♂ (MZLU), idem, but 22.xii.1987; 1 ♂ (MZLU), idem, but 11.iv.1988; 1 ♀ (MZLU), idem, but 13.iv.1988; 1 ♀ (MZLU), idem, but 19.iv.1988; 1 ♂, 1 ♀ (CHPK), idem, but 25.iv.1988; 1 ♂ (MZLU), idem, but 28.iv.1988; 1 ♂ (MZLU), idem, but 4.v.1988; 1 ♂, 2 ♀♀ (MZLU, CHPK), idem, but 6.v.1988; 1 ♂ (MZLU), idem, but 11.v.1988; 1 ♂ (MZLU), idem, but 13.v.1988; 1 ♂ (CHPK), idem, but 24.ii.1989; 3 ♂♂, 4 ♀♀ (MZLU, CHPK), idem, but 2.iii.1989; 6 ♂♂, 7 ♀♀ (MZLU, CHPK), idem, but 8.iii.1989; 2 ♂♂ (MZLU), idem, but 10.iii.1989; 2 ♂♂ (CHSM, CHPK), idem, but 14.iii.1989; 3 ♂♂, 1 ♀ (MZLU, CHPK), idem, but 17.iii.1989; 1 ♂, 2 ♀♀ (MZLU), idem, but 20.iii.1989; 8 ♂♂, 8 ♀♀ (MZLU, CHPK, CHSM), idem but 31.iii.1989; 1 ♀ (BMNH), Sabah, Sandakan, Grum Grum, 21.v.1990, ex sticky trap *Gmelina arborea*; 1 ♂ (BMNH), idem, but 11.vi.1990, ex sticky trap No log (control); 1 ♂ (NHMW), Sarawak, Kelabit HL, 5 km E Bario Pa Ukak, ca 1000 m, 1.iii.1993, M. Jäch (17); 1 ♀ (CHND), Sabah, Taman Bunsit near Keningau, 13-14.iii.1993, T. Ueno; 1 ♂ (NHMW), Terengg. Tasik Kenyir, 26.vii-2.viii.1993, H. Forster; 1 ♂ (HNHM), Pahang, Cameron Highlands, Tanah Rata, foothills of Gunung Beremban, under bark, 29.iii.1995, O. Merkl & G. Csorba; 1 ♂ (CHOK), Sabah, Banjaran Crocker Mts, 16 km SW Gunung Alab, 790-850 m, 4-9.v.1996, M. Strba & R. Hergovits; 1 ♂ (CHFP), Sabah, W. Crocker Range, route Keningau-Papar, v.1999, M. Snizek; 1 ♀ (CHFP), W. Perak, 25 km NE of IPOH, 1200 m, Banjaran Titi Wangsa mts, Korbu mt, 27.i-2.ii.1999, P. Cechovsky; 32 ♂♂, 17 ♀♀ (CHFP, CHRP, CHPK), W. Sabah, Crocker Range E, W of Apin Apin, ii.2000, M. Snizak; 1 ♀ (CHFP), Perak, 25 km NE of IPOH, 1200 m, Banjaran Titi Wangsa mts.,

Korbu mt., 6-12.v.2001, F. Cechovsky. **Brunei:** 1 ♂ (BMNH), Kuala Belalong FSC, 4.vii.1991, 260 m, aerial FIT, Dipterocarp forest, *Dryobalanops beccarii*, N. Mawdsley. **Thailand:** 19 ♂, 7 ♀♀ (CHTL, CHPK), S. Thailand, Betong, Yala distr., Gunung Cang dun vill., 25.iii-22.iv.1993, J. Horák; 9 ♂♂, 5 ♀♀ (NHMW, CHPK), S. Thailand, Betong, Yala distr., Gunung Cang dun vill., 26.iii-22.iv.1993, Horak & Strnack; 1 ♂, 1 ♀ (CHTL), Chumphon prov., Pha To env., 14-21.iii.1996, P. Prudek. **Vietnam:** 2 ♂♂ (MNHN), Lac Thô, Hoabinh, Tonkin (with doubt). **Burma:** 1 ♂ (MCSN), Tenasserim, Thagata, iv.1887, Fea.

Male.— Length (without head and abdominal tergites) 2.3 mm, width 0.9 mm, height 0.8 mm. Cylindrical, shiny, piceous brown-black, antennae and legs ferruginous.

Head.— Face faintly sinuous in profile with slightly elevated rostral tip. Rostrum broadly rounded-truncate anteriorly, tip with two small paramedian tubercles (fig. 336). Frons distinctly concave, rostrum with an additional impression. At either side a sinuous ridge runs from the eye anteromedially, rather abruptly ending on the rostrum. At the outer side of this ridge the rostrum slopes down towards the lateral edge. Frons and rostrum with rather sparse small punctures, interstices with indistinct microsculpture. Transition between frons and vertex arcuate and gradual. Vertex with a small median fovea and more distinctly punctate than frons, with interstitial microsculpture.

Pronotum.— Nearly 1.3 times longer than wide, slightly widening in front (fig. 333), thence broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile straight in posterior two-thirds, thence moderately convex towards anterior margin. Marginal striae distinct, slightly turned upwards at their posterior end, at a rather great distance from the edge in the anterior half, ending a little beyond the slightly impressed anterior angles. Pronotal disc very densely covered with coarse punctures of unequal size, the punctures very large and cribriform in the posterior third, smaller anteriorly, the punctures along the anterior emargination for the head still smaller and more closely set. Interspaces smooth. No impunctate median band or antescutellar median stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 333), faintly impressed near the scutellum, strongly convex in transversal direction, in profile straight in anterior half, thence progressively convex towards apex. Elytral punctation finer than on pronotum, punctures of unequal size and smaller towards apex, punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura finely punctulate with linear microsculpture; an indistinct marginal epipleural stria is present in the posterior half.

Propygidium.— Slightly impressed along anterior margin, more distinctly so towards sides. Punctation dense, punctures smaller towards posterior margin, interstices smooth.

Pygidium.— Triangular with rounded apex, slightly impressed near the anterolateral angles and near the apex. Punctation as on propygidium, punctures of unequal size, along margins finer, larger punctures with a short erected yellow bristle. Interspaces with indistinct linear microsculpture.

Prosternum.— Carina rather broad, sides nearly parallel (fig. 335), in lateral view faintly convex, margined at the sides and in front by a narrow elevated rim, at the lateral sides accompanied by a distinct carinal stria, in front passing into a distinct transversal impression behind the anterior rim. Carinal disc slightly impressed along the medi-

an line and posteriorly, with moderate punctures of unequal size. Interspaces smooth.

Mesosternum.— Faintly impressed between the procoxae. Lateral striae deep, broad and sulciform, slightly sinuous, rather ill-delimited at their inner side, ending behind the procoxae (fig. 335). Mesosternal disc with slightly elongate punctures of unequal size. Interspaces smooth. Meso-metasternal suture fine, mainly indicated by a distinct depression between meso- and metasternum, slightly angulate backwards.

Metasternum.— Lateral striae distinct, rather sulciform, divergent posteriorly, slightly sinuous and curved inwards posteriorly, about reaching the posterior metasternal third (fig. 335). Disc about equally punctate as mesosternum, punctures slightly elongate and rather unequally dispersed in the posterior half. A narrow band along the median suture is impunctate. Interspaces smooth. Median suture distinctly sulciform.

First visible sternite.— Impressed along median line. Punctuation dense, punctures smaller than on metasternum. Interstices smooth. Oblique lateral striae distinct, limited to the medial side of the metacoxae.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The female differs from the male as follows:

Head.— Vertex and frons separated by an indistinct, slightly arcuate transverse ridge, ill-delimited posteriorly and near the median line anteriorly. Face slightly bisinuous in lateral view with slightly elevated rostral apex, the latter strongly asymmetrical and bifid, the left lobe being much larger than the right lobe (fig. 337). Frons and rostrum delimited at the sides by a distinct ridge, continuous with the transverse ridge behind, in front ending near the apical lobes of the rostrum. The ridges have a slightly asymmetrical course anteriorly. At the medial side each ridge is accompanied by a sulcus, deep and broad near the eyes and the antennal insertions, narrower and shallower towards the rostral apex. At the lateral sides of the ridges the rostrum slopes steeply down to its edge. Frons moderately concave, especially at the sides, rostrum before the level of the antennal insertions with an additional strong impression. Frons and rostrum with small punctures. Interstices with dense and fine microsculpture, causing a rather dull appearance, with the exception of the lateral grooves. Vertex with a small median fovea, distinct small punctures and dense interstitial microsculpture.

Pronotum.— Amply 1.4 times longer than wide, slightly wider in anterior half (fig. 334). Disc less coarsely punctate than in the male. Behind the anterior emargination for the head the pronotum has a faint smooth median ridge; at either side of this ridge the punctures are more closely set and a little rugosely confluent, with some indistinct interstitial microsculpture; interspaces elsewhere smooth. The anterior angles are much more deeply and largely impressed than in the male. A narrow impunctate band with a fine antescutellar median stria is present in the posterior half.

Pygidium.— Slightly convex, tip broadly rounded, densely punctate, the punctures with a short yellow hair.

Prosternum.— Carinal disc not margined along the anterior margin, without an impression in front or along the median line; carinal striae slightly abbreviated in front.

Variation.— PE-length males 1.8-2.4 mm, females 2.1-2.6 mm. In some specimens an additional small proximal tooth is present on the pro- and mesotibiae. As usual the intensity of the punctuation, the length of the lateral metasternal striae and the length

of the female carinal striae vary a little. The course of the lateral mesosternal striae is sometimes a little more sinuous. Exceptionally the carinal prosternal disc is not, or only very finely margined along the anterior edge in males. The typical asymmetric female rostral apex is also a little variable: in some specimens the small right apical lobe is almost obsolete.

Remarks.— Lewis (1891) has noticed the synonymy of *T. tabaciglescens* and *T. grouvellei*, correctly concluding that these names represented the two sexes of one species. The description of both species was printed on the same page, and the description of *tabaciglescens* preceded that of *grouvellei*. Lewis proposed to maintain the latter name as Marseul gave the female the precedence in his paper, and also because Marseul intended to dedicate a species to his friend from whom the specimens came. According to the rules of nomenclature these arguments are not valid, however, and the name *tabaciglescens* has priority. The type specimen of *tabaciglescens* was fallen from its card-board but could be refound at the bottom of the drawer. This has obviously resulted in damage. De Marseul does not mention the number of specimens on which he based his descriptions; therefore the specimens of *tabaciglescens* and *grouvellei* have been designated lectotypes. The specimens have been found by A. Grouvelle in Nice in tobacco from Sumatra. The short bristles on the male pygidium are only visible under strong magnification; in some specimens they are wanting, possibly worn.

Trypeticus therondi spec. nov.
(figs 168-170)

Material.— **Vietnam:** Holotype, ♂ (MNHN), left protarsus missing, [white label, printed:] “♂”; [white label with partial cadre, printed:] “Hoa-Binh (Tonkin)/(A. de Cooman)”; [discoloured white label, hand-written:] “97a”; [light-yellow label, printed:] “MUSÉUM PARIS/COLL. J. THEROND”; [red label, printed:] “HOLOTYPUS/*Trypeticus/therondi* sp. n./P. Kanaar des. 2000”; 1 ♂ (MNHN), same data as holotype (paratype).

Male.— Length (without head and abdominal tergites) 2.7 mm, width 1.2 mm, height 1.1 mm. Rather thick-set cylindrical, shiny, piceous brown, antennae and legs rufous.

Head.— Face in profile faintly bisinuous, with barely elevated rostral tip. Rostrum in frontal view rounded-truncate anteriorly, apical margin very little elevated, very indistinctly tuberculate (fig. 170). Frons moderately concave, concavity not sharply delimited at the anterolateral sides. In front of this concavity the rostrum slopes down towards the apical margin, with a faint median impression. Sides of the rostrum rounded towards the lateral rostral margins. Frons and rostrum with distinct small punctures mixed with very small punctures, interstices with some indistinct linear microsculpture, shiny. Transition between the concave frons and the convex vertex arcuate and gradual. Vertex with a small median fovea and double punctation, interstices with indistinct linear microsculpture.

Pronotum.— Nearly as wide as long, in dorsal view with parallel sides (fig. 168), in front broadly rounded towards anterior angles, strongly convex in transversal direction, in profile faintly convex in the posterior two-thirds, thence more convex towards anterior margin. Marginal striae fine, turned upwards at their posterior end, ending at some distance from the non-impressed anterior angles, with an indistinct appendix

near the latter. Pronotal disc rather densely punctate, punctures of moderate and slightly unequal size, mixed with very small punctures in the anterior half, punctures along the anterior margin more closely set. Interspaces smooth. A narrow impunctate median band without antescutellar stria is present in the posterior half.

Elytra.— Along the suture as long as pronotum (fig. 168), slightly impressed near scutellum and along anterior margin, strongly convex in transversal direction, in profile slightly sinuous behind the scutellum, thence progressively convex towards apex. Along the anterior margin a band of coarse punctures, elsewhere punctation a little finer and scantier than on pronotum, punctures near the suture more closely set. A narrow band along the suture and apex is impunctate. Interspaces smooth. Epipleura with linear microsculpture, marginal epipleural stria shallow, rather broad, present only in posterior half.

Propygidium.— Impressed along anterior margin, especially at the sides, with oblique lateral striae. Punctation as on elytra, interstices with some indistinct linear microsculpture, shiny.

Pygidium.— Broadly parabolic in outline, convex in transversal direction, less so in longitudinal direction, very faintly impressed near the anterolateral angles. Punctation and microsculpture as on propygidium, punctures without hairs, smaller along the lateral and apical margins.

Prosternum.— Carina in lateral view faintly convex. Carinal disc with slightly sinuous sides (fig. 169), margined at the sides by a narrow elevated rim, continuous with an indistinct rim along the anterior margin. Lateral rims accompanied by a carinal stria, a little indistinct near the anterior margin. Carinal disc with an ill-delimited, rather shallow crosswise impression behind the anterior rim and with punctures of unequal size, mixed with very small punctures. Interspaces with some indistinct linear microsculpture, shiny.

Mesosternum.— Slightly impressed in front. Lateral striae broad, deep, sulciform, well-delimited, slightly sinuous, ending behind the procoxae (fig. 169). Mesosternal disc with slightly elongate punctures of unequal size, mixed with very small punctures. Interspaces smooth. Meso-metasternal suture indistinct, mainly indicated by a depression, slightly angulate backwards.

Metasternum.— Lateral striae distinct, slightly bisinuous, slightly divergent posteriorly, ending a little beyond the metasternal middle (fig. 169). Disc about equally punctate as mesosternum, punctures a little smaller posteriorly. A band along the median suture is impunctate. Interspaces smooth. Median suture canaliform, with the exception of the posterior end.

First visible sternite.— About equally punctate as posterior part of metasternum, punctures along hindmargin smaller and more closely set, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with some small teeth on the distal third.

The female is unknown.

Variation.— PE-length of the other male: 2.5 mm. Punctation, especially at the underside, a little finer, lateral metasternal striae a little shorter, their posterior end not curved inwards.

Etymology.— This species is dedicated to the memory of Mr Jean Théron (Nîmes),

in grateful remembrance of his kind help and the generous gift of specimens when I started the study of the Histeridae.

Trypeticus trigonifrons spec. nov.
(figs 40-42)

Material.— **Indonesia:** Holotype, ♀ (SMNS), genitalia protruded, [white label, printed:] “♀”; [pale yellow label, printed:] “SULAWESI: Kotamobagu/Matalibaru, Torosik, Gn./Tongara, 8.xii.1999/leg. A. RIEDEL, 900-950 m”; [red label, printed:] “HOLOTYPUS/*Trypeticus/trigonifrons* sp. n./P. Kanaar des. 2000”; 2 ♀♀ (SMNS, CHPK), same data as holotype (paratypes).

Female.— Length (without head and abdominal tergites) 3.8 mm, width 1.6 mm, height 1.4 mm. Cylindrical, very shiny, piceous black, antennae and legs rufous.

Head.— Face in profile very faintly sinuous, with little elevated rostral tip, the latter in frontal view rather sharply pointed, protruding beyond the anterior rostral margin along the labrum (fig. 42), underside of the tip faintly convex. Frons and vertex separated by a distinct transverse keel, sharply delimited at its posterior side, less so anteriorly. Frons and rostrum at either side delimited by a distinct, slightly convex, almost straight ridge, continuous with the transversal ridge behind, in front confluent on the pointed, faintly tuberculate tip. The transverse ridge and the lateral ridges constitute an almost perfect isosceles triangle when seen in frontal view. At their inner side the lateral ridges are accompanied by a shallow groove, ill-delimited at their inner side. At the lateral sides of these ridges the sides of the rostrum are concave towards its broadly rounded lateral margins. Frons and rostrum slightly concave along the median line, more distinctly so on the frons. Frons and rostrum with rather sparse small punctures, larger and a little elongate on the posterior part of the frons; interstices with indistinct linear microsculpture, shiny. Vertex with a shallow, ill-delimited median fovea, rather sparse small punctures and dense interstitial microsculpture.

Pronotum.— About 1.2 times longer than wide (fig. 40), sides in dorsal view faintly arcuate, in front rounded inwards towards the anterior angles. Pronotum moderately convex in transversal direction, in profile faintly convex, in front a little sloping down towards the anterior margin. In this sloping part an ill-delimited area (indicated by a dotted line in the figure) with interstitial microsculpture is present; the bottoms of the elongate punctures in this area are smooth. In the area a faint, ill-delimited median boss is present, most distinct near its posterior end. Marginal striae distinct, turned upwards at their posterior end, shortly interrupted at the anterolateral angles, ending in the faintly impressed anterior angles. Pronotal disc rather sparsely and irregularly punctate with moderate punctures of unequal size, mixed with very small punctures along the posterior margin; punctures behind the anterior emargination and near the anterior angles larger and more closely set, in the area with microsculpture elongate. Interstices outside this area smooth. A short antescutellar median stria is present, without a distinct impunctate median band.

Elytra.— Along the suture distinctly shorter than pronotum (fig. 40), distinctly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation along the base as on pronotum, elsewhere finer, mixed with very small punctures;

punctures near the suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with fine linear microsculpture. Marginal epipleural stria shallow, ill-delimited, obsolete anteriorly.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present. Punctuation rather dense, distinct, interstices with indistinct linear microsculpture.

Pygidium.— Broadly parabolic in outline, convex, with ill-delimited foveae a little medially from the anterolateral angles. Punctuation and microsculpture as on propygidium, punctures without hairs, along the lateral and apical margins smaller.

Prosternum.— Carina in lateral view slightly convex, especially in front. Carinal disc rather broad, its sides slightly divergent anteriorly (fig. 41), margined at the sides by a narrow elevated rim, at the inner side accompanied by a distinct carinal stria, slightly abbreviated in front. Disc with large punctures of unequal size, interspaces with linear microsculpture.

Mesosternum.— Distinctly impressed between the procoxae, the depression well-delimited, its margin continuous with the outer sides of the lateral mesosternal striae that are rather broad, sulciform, parallel, well-delimited at both sides, in front bent inwards and ending behind the procoxae (fig. 41). Mesosternal disc with distinct elongate punctures of unequal size. Interstices with indistinct linear microsculpture. Meso-metasternal suture indistinct, angulate backwards.

Metasternum.— Lateral striae fine, divergent posteriorly, about reaching the metasternal middle (fig. 41). Disc rather sparsely punctate, punctures smaller than on mesosternum, elongate, diminishing in size posteriorly. Median suture canaliform, in front a little depressed. A narrow band along the median suture is impunctate. Interspaces with indistinct linear microsculpture.

First visible sternite.— Punctuation rather dense, punctures in anterior half elongate, decreasing in size and rounded posteriorly, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The male is unknown.

Variation.— PE-length of the other females: 3.6 and 3.9 mm. The length of the prosternal carinal striae varies a little.

Remarks.— The holotype has a small pit in the left elytron, obviously by mutilation.

Etymology.— The name refers to the configuration of the transverse and lateral ridges on the head.

Trypeticus tuberculinotum spec. nov.
(figs 126-130)

Material.— **Malaysia:** Holotype ♀, [white label, printed:] “♀”; [white label, printed:] “Malaysia, SABAH/Sipitang, Mendolong/Leg. S. Adebratt” [reverse side, hand-written with pencil:] “1/12 1987”; [white label, hand-written in red:] “2318”; [blue label, reverse side white, printed:] “29/61”; [red label, printed:] “HOLOTYPUS/*Trypeticus/tuberculinotum* sp. n./P. Kanaar des. 2000”; 1 ♂ (MZLU), same locality, date and collector (paratype); 1 ♀ (CHPK), idem, but 28.xi.1987 (paratype); 1 ♀ (MZLU), idem, but 30.xi.1987 (paratype); 1 ♂ (CHPK), idem, but 8.xii.1987 (paratype); 1 ♂ (MZLU), idem, but 18.xii.1987 (paratype).

Female.— Length (without head and abdominal tergites) 3.3 mm, width 1.4 mm, height 1.2 mm. Rather broad cylindrical, shiny, castaneous, pronotum and sutures piceous black, antennae, legs and abdominal sternites rufous.

Head.— Vertex and frons separated by a transverse ridge, slightly curved forwards in the middle. Face slightly sinuous in lateral view. Rostrum in frontal view rounded-truncate anteriorly (fig. 130). Frons and rostrum bordered at the sides by a distinct, slightly sinuous ridge, this ridge highest well before the antennal insertions and posteriorly continuous with the transverse ridge; on the rostrum the lateral ridges are convergent anteriorly and end on the rostral apex with a small, slightly transverse paramedian tubercle. At their inner side the lateral ridges are accompanied by an ill-delimited broad, rather shallow sulcus, at the outer side of the ridges the rostrum slopes steeply down towards its margin. Frons and rostrum with a faint elongate median impression before the level of the antennal insertions and shallow lateral impressions on the frons. Frons and rostrum with fine punctation, ill-visible by a very dense interstitial microsculpture, giving a dull appearance. Vertex with a crosswise impression behind the transverse ridge and a very small shallow median fovea; punctation more distinct than on frons, interstices with dense microsculpture.

Pronotum.— Nearly 1.2 times longer than wide with nearly parallel sides (fig. 127), broadly rounded in front towards anterior angles, moderately convex in transversal direction, in profile nearly straight in the posterior two-thirds, thence sloping down to the anterior margin, the transition marked by a distinct elongate tubercle, well visible in lateral view. Behind the tubercle the pronotum is slightly impressed along the median line. From the tubercle a very faint median ridge runs anteriorly, fading away at some distance from the anterior margin. At the sides of this ridge the pronotum is very slightly impressed. Behind the anterior emargination for the head an ill-delimited triangular area (indicated by a dotted line in the figure) is rather dull by a dense interstitial microsculpture. Marginal striae distinct, slightly curved upwards at their posterior end, abbreviated in front at some distance from the barely impressed anterior angles, with a short appendix in the latter. Pronotal disc not very densely covered with moderate primary punctures of unequal size, with very small secondary punctures between, punctures along the anterior margin and in the anterior angles more closely set, in the area with interstitial microsculpture elongate and a little rugosely confluent. Interspaces outside this area smooth. An indistinct, ill-delimited impunctate median band is present in the posterior two-thirds, broadest behind the tubercle, with a distinct antescutellar stria.

Elytra.— Along the suture distinctly shorter than pronotum with rounded apices, distinctly impressed near scutellum and for some distance along anterior margin, moderately convex in transversal direction, in profile slightly sinuous, behind the scutellum a little lower than pronotum, towards apex progressively convex. Elytral punctation finer than that of pronotum, punctures along base and near suture a little more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura impunctate with linear microsculpture. Marginal epipleural stria present in posterior half.

Propygidium.— Slightly impressed along the anterior margin, more distinctly so at the sides, with fine oblique lateral striae, Punctation rather sparse, interstices with some indistinct interstitial microsculpture.

Pygidium.— Parabolic in outline, slightly convex, impressed along the base and especially so near the anterolateral angles, punctation as propygidium, at apex finer, punctures with barely visible short yellow hairs. Interstices with some indistinct interstitial microsculpture.

Prosternum.— Carina broad with nearly parallel sides, faintly convex in lateral view, margined at the sides by a carinal stria, abbreviated in front at about the anterior fourth. Carinal disc not impressed, punctation rather dense, interspaces with indistinct linear microsculpture.

Mesosternum.— Faintly impressed between the procoxae. Lateral striae distinct, sulciform, ill-delimited at the medial side, nearly parallel, curved inwards in front, ending close to the procoxae (fig. 128). Mesosternal disc not very densely punctate, the punctures a little elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae divergent posteriorly, well reaching the anterior metasternal third (fig. 128), curved inwards anteriorly, here deeper and very close to the mesocoxae. Metasternal disc about equally punctate as mesosternum, punctures a little decreasing in size posteriorly. Median suture finely canaliform. Interspaces smooth.

First visible sternite.— Disc with rather dense punctation, punctures elongate, of unequal size. Interstices with indistinct linear microsculpture along the posterior margin. Distinct oblique lateral striae wanting, though the sternite is faintly impressed along the metacoxae.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some small teeth on the distal third.

The male differs from the female as follows:

Head.— Face very faintly sinuous in profile. Rostrum in frontal view broadly rounded-truncate anteriorly, with two very small paramedian tubercles (fig. 129). Frons with a large, moderate median impression, delimited at the sides by a blunt oblique ridge running from the eye anteromedially, fading away on the rostrum. Between the apical tubercles the rostrum is slightly impressed and convex towards the apical margin. Frons and rostrum with fine punctation, interstices with indistinct linear microsculpture. Transition between frons and vertex arcuate, gradual. Vertex punctate with indistinct interstitial microsculpture and a small median fovea.

Pronotum.— Slightly longer than wide with nearly parallel sides (fig. 126), rounded in front towards anterior angles, in profile nearly straight in the posterior half, thence moderately convex towards anterior margin. Marginal striae not distinctly interrupted anteriorly. Pronotal disc without tubercle, anterior median ridge and area with dense interstitial microsculpture, about punctate as female pronotum, without elongate rugose punctures behind the anterior emargination, punctures along the anterior margin more closely set. Interspaces smooth. An indistinct, ill-delimited impunctate median band is present in the posterior half, without antescutellar stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 126).

Pygidium.— Rather triangular in outline with broadly rounded tip, punctures without hairs.

Prosternum.— Carina margined at the sides and in front by a narrow elevated

rim, at the sides accompanied by a shallow carinal stria, ill-delimited at the inner side (fig. 128). Carinal disc with a distinct transverse impression along the anterior marginal carina.

Variation.— PE-length males: 2.9-3.1 mm, females: 3.1-3.3 mm. The pronotal tubercle is a little smaller in one of the females. The anterior area with dense interstitial microsculpture is a little larger in another female.

Etymology.— The name refers to the tubercle on the female pronotum.

Trypeticus uhligi spec. nov.
(figs 147-149)

Material.— **Malaysia:** Holotype ♀ (MZLU), genitalia protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T6/R/20.iii.1989/leg. S. Adebratt”; [red label, printed:] “HOLOTYPUS/*Trypeticus/uhligi* sp. n./P. Kanaar des. 2000”.

Female.— Length (without head and abdominal tergites) 2.8 mm, width 1.3 mm, height 1.1 mm. Cylindrical, shiny, piceous black, antennae, legs and abdominal segments rufous.

Head.— Face nearly straight in profile. Frons and vertex separated by a sharp and smooth transverse ridge, well-delimited at its posterior side, less so anteriorly. Rostrum in frontal view rounded anteriorly (fig. 149). Frons and posterior part of rostrum moderately concave. Face margined at the sides and in front by a narrow elevated ridge, continuous with the sharp transverse ridge behind; the lateral ridges are accompanied at their inner side by a shallow, ill-delimited groove, narrower anteriorly. At the lateral sides of the ridges the rostrum slopes steeply down to its margin. Frons and rostrum with rather sparse small punctures, interstices with dense and fine microsculpture, producing an egg-shell lustre. Vertex with a faint transverse impression behind the transverse ridge, a small median fovea and a distinct double punctation, interstices with linear microsculpture.

Pronotum.— In dorsal view rather rectangular in outline, in the median line about 1.1 times longer than wide (fig. 147), with a short but strongly elevated anterior median ridge. Pronotum moderately convex in transversal direction, in profile faintly convex in the posterior two-thirds, in front sloping down towards the anterior margin, in this sloping area the anterior ridge strongly prominent in profile. Pronotum very faintly impressed at the sides of the anterior ridge; faint oblique impressions are present behind the anterior angles, these impressions a little divided in two parts. Marginal striae fine, turned upwards at their posterior end, in front ending a little behind the anterolateral angle; additional fine striae delimit in front the faint impressions in the anterior angles. Pronotal disc rather densely and coarsely punctate, punctures of subequal size in the posterior part, gradually passing into a double punctation anteriorly, punctures along the anterior margin more closely set and smaller. Interstices behind the anterior emargination with some indistinct microsculpture, elsewhere smooth. A narrow impunctate median band is present in the posterior half, with a distinct antescutellar stria.

Elytra.— Along the suture a little shorter than pronotum (fig. 147), slightly impressed near scutellum and along anterior margin, moderately convex in transversal direction, in profile faintly convex, progressively so towards apex. Elytral punctation about equal to that of posterior part of pronotum, finer towards apex, punctures near

suture more closely set. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura sparsely punctulate with fine linear microsculpture. Marginal epipleural stria indistinct, partly indicated by a shallow groove.

Propygidium.— Impressed along anterior margin, more distinctly so towards sides. Oblique lateral striae present (ill-visible by protruded alae). Punctuation distinct, rather dense, punctures of unequal size. Interstices smooth.

Pygidium.— Parabolic in outline, slightly convex towards apex, along the anterior margin slightly impressed, with distinct, large anterolateral impressions. Punctuation distinct, double, larger apical punctures with a short yellow hair.

Prosternum.— Carina in lateral view nearly straight. Carinal disc rather short and broad (fig. 148), margined at the sides by a narrow, well-delimited sulciform carinal stria, ending a little behind the anterior margin. A deep transverse impression is present in front, extending and fading away posteriorly along the median line. Carinal disc with double punctuation, the primary punctures slightly elongate, interspaces with indistinct linear microsculpture.

Mesosternum.— Slightly impressed between the procoxae. Lateral striae rather broad, sulciform, slightly divergent anteriorly (fig. 148). Mesosternal disc with large elongate punctures, mixed with small punctures, interspaces smooth. Meso-metasternal suture slightly impressed, fine, angulate backwards.

Metasternum.— Lateral striae distinct, divergent posteriorly, nearly reaching the posterior metasternal third (fig. 148). Disc punctate as mesosternum. A narrow band along the median line is impunctate. Interspaces smooth. Median suture distinctly sulciform anteriorly, narrower and shallower posteriorly.

First visible sternite.— Punctuation dense, double, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and with some teeth on the distal half.

The male is unknown.

Etymology.— This species is dedicated to Dr Manfred Uhlig (Museum of Berlin), in appreciation of the many years of co-operation.

Trypeticus valens spec. nov.
(figs 155-157)

Material.— **Indonesia**: Holotype, ♂ (NHMW), alae protruded, [white label, printed:] “♂”; [white label, printed:] “IRIAN JAYA: 6.x.1993/N Valentin Mts./Kono-Pinjii, 2550 m”; [white label, printed:] “ca. 139°47'E 04°19'S/leg. M. Balke (31)”; [red label, printed and hand-written:] “HOLOTYPUS/*Trypeticus/valens* sp. n./P. Kanaar des. 2000”.

Male.— Length (without head and abdominal tergites) 3.2 mm, width 1.3 mm, height 1.3 mm. Rather thick-set cylindrical, shiny, piceous brown-black with bronze metallic hue, antennae and legs rufous.

Head.— Face in lateral view sinuous with distinctly elevated rostral tip. Rostrum in frontal view broadly rounded-truncate anteriorly, barely emarginate in the middle, with two paramedian tubercles (fig. 157); underside of the elevated rostral tip slightly convex in longitudinal direction. Frons and rostrum bordered at the lateral sides by a fine sinuous ridge, indistinct along the eyes, in front ending near the tubercles and at

the inner side accompanied by an indistinct shallow groove; outside these ridges the lateral parts of the rostrum slope steeply down towards the lateral rostral margin. Frons and rostrum deeply concave, with a separate impression behind the anterior margin. Frons and rostrum with small punctures, interstices with indistinct linear microsculpture, shiny. Transition between frons and vertex slightly arcuate at the sides, rather transverse in the middle, rather gradual. Vertex not visible by retraction of the head into the pronotum.

Pronotum.— Nearly 1.1 times longer than wide (fig. 155) with nearly parallel sides, in front rather abruptly rounded and oblique towards the anterior angles, strongly convex in transversal direction, in profile slightly convex over its entire length. Marginal striae rather fine, curved upwards at their posterior end, in front ending in the distinctly impressed anterior angles. Pronotal disc not very densely punctate, punctures rather coarse, of unequal size in the median posterior one-fourth, this punctation rapidly passing into a much finer and sparser double punctation towards sides and anteriorly, punctures irregularly dispersed, punctures along the anterior margin more closely set and again a little larger, mixed with small punctures. Interspaces smooth. A narrow impunctate median band is present in the posterior three-fourths, without a median stria, but with a shallow elongate impression along the median line in its anterior part.

Elytra.— Along the suture distinctly longer than pronotum (fig. 155) with faintly rounded apices, distinctly impressed near scutellum, convex in transversal direction, in profile faintly convex over its entire length, more distinctly so towards apex. Punctuation near scutellum and along the base still coarser than on the opposite side on the pronotal disc, elsewhere finer and sparser. Suture raised in the posterior half, a narrow band along the suture is impunctate. Interspaces smooth. Epipleura with a fine linear microsculpture. Marginal epipleural striae present, fine, interrupted in the middle.

Propygidium.— Faintly impressed along anterior margin, with an oblique stria at the sides. Punctuation fine, interstices with indistinct linear microsculpture, punctures at the outer side of the lateral striae with hairs.

Pygidium.— Triangular in outline with broadly rounded apex, faintly convex in transversal direction, with a shallow and wide impression in the anterolateral angles. Punctuation fine, punctures with a rather long thin white hair. Interstices with indistinct linear microsculpture.

Prosternum.— Carina in lateral view almost straight, only in front strongly convex. Carinal disc rather broad, sides slightly divergent anteriorly (fig. 156), fine lateral prosternal striae visible in ventral view (not shown in the figure). Carinal disc margined at the sides by a narrow elevated rim, at the inner side accompanied by a narrow sulciform carinal stria, in front nearly reaching the anterior margin. Carinal disc with a distinct longitudinal median impression and a double punctation; interspaces with indistinct linear microsculpture.

Mesosternum.— Rather short, impressed between procoxae. Lateral striae slightly arcuate, rather narrow and sulciform, in front ending a little behind the procoxae (fig. 156). Mesosternal disc not very densely punctate, punctuation double, primary punctures a little elongate, larger in front. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Median suture distinct, canaliform, broader posteriorly, only just

before the metasternal hindmargin not canaliform. Lateral striae slightly curved, almost parallel posteriorly (fig. 156). Metasternal disc about punctate as posterior part of mesosternum. A band along the median suture is impunctate. Interspaces smooth.

First visible sternite.— Disc with faint elongate median impression, more densely and more distinctly punctate than metasternum. Interstices smooth. Oblique lateral striae present, rather short.

Legs.— Pro- and mesotibiae with five larger teeth on the outer margin and an additional small apical tooth. Outer margins of hindtibiae with spines and with a few small teeth on the distal fourth.

The other sex is unknown.

Remarks.— The right lateral metasternal stria reaches more anteriorly than the left stria, that has some large punctures against its anterior end. This is probably due to an individual aberration. The sex of the specimen is not quite clear. Though the prosternal carinal disc of the single specimen is not margined in front I yet believe that it is a male, as typical female structures on head and pronotum are wanting. Also in the males of *T. gestroi* (Marseul) and other species from the island of New Guinea the prosternal carina is not margined along the anterior edge. Without a specimen of the other sex a certain attribution to sex cannot be made.

Etymology.— The name (meaning “strong”, “potent”) has been inspired by the name of the mountain where it has been found and refers also to the stout body form.

Trypeticus vanasseni spec. nov.
(figs 142-146)

Material.— **Malaysia:** Holotype, ♀ (MZLU), left ala and genitalia protruded, [white label, printed:] “♀”; [white label, printed:] “Malaysia: Sabah, Sipitang, /Mendolong, T2A/W/22.xii.1987/leg. S. Adebratt”; [pale-orange label, printed:] “14/01”; [red label, printed:] “HOLOTYPUS/*Trypeticus/vanasseni* sp. n./P. Kanaar des. 2000”; 1 ♀ (CHPK), same locality, date and collector, but other trap-code (paratype); 1 ♀ (MZLU), idem, but 3.v.1988 (paratype); 1 ♀ (MZLU), idem, but 8.iii.1989 (paratype); 1 ♂ (MZLU), idem, but 10.iii.1989 (paratype); 1 ♀ (MZLU), idem, but 28.iv.1989 (paratype).

Female.— Length (without head and abdominal tergites) 2.4 mm, width 1.0 mm, height 0.9 mm. Cylindrical, shiny, reddish brown with darker areas, especially along the sutures.

Head.— Face almost straight in profile. Frons and rostrum separated by a distinct, rather sharp smooth transverse ridge, well-delimited at its posterior side, ill-delimited to the frons. Rostrum in frontal view broadly rounded anteriorly, margined by a narrow elevated rim (fig. 146), this rim continuous with very blunt arcuate lateral ridges on frons and rostrum. At the inner side these lateral ridges are accompanied by a sulcus, almost parallel and broad along the eyes posteriorly, narrowing and curved inwards on the rostrum, indistinctly connected in front behind the apical rim. At their posterior end the sulci do not quite reach the transverse ridge; at the inner side the sulci are ill-delimited. Frons convex in the middle posteriorly, not delimited against the transverse ridge; at either side of this median boss the frons has a faint posterolateral impression. In the centre of the face a distinct, rather ill-delimited elongate median fovea is present. Rostrum faintly impressed at the sides. Outside the lateral ridges the sides of the rostrum are rounded off and sloping down towards the lateral margin.

Frons and rostrum finely punctate, interstices smooth. Vertex with a broad transversal impression behind the transverse ridge and a small median fovea. Punctuation more distinct than on frons, interstices with dense linear microsculpture.

Pronotum.— About 1.2 times longer than wide, in dorsal view with slightly sinuous sides (fig. 143), in front broadly rounded towards the anterior angles, strongly convex in transversal direction, in profile faintly convex, more distinctly so towards anterior margin. Behind the anterior emargination for the head the pronotum is slightly impressed at either side of the median line, thus producing a very faint, ill-delimited smooth median elevation. Marginal striae rather fine, strongly turned upwards at their posterior end, in front ending at a rather great distance from the non-impressed anterior angles. Pronotal disc not very densely punctate, punctures subequal, of moderate size, along the anterior margin and in the anterior angles very closely set, in the anterior paramedian impressions a little rugosely confluent. Interspaces smooth. A narrow impunctate median band is present over nearly the entire length, with a short antescutellar median stria.

Elytra.— Along the suture a little shorter than pronotum, slightly impressed near scutellum and anterior margin, strongly convex in transversal direction, in profile nearly straight in the anterior two-thirds, thence progressively convex towards apex. Elytral punctuation along the base equal to that of pronotum, elsewhere a little finer than on pronotal disc, punctures of slightly unequal size. A narrow band near the suture is impunctate. Interstices smooth. Epipleura with linear microsculpture and a shallow, rather broad marginal epipleural stria in the posterior half.

Propygidium.— Impressed along anterior margin and at the sides, without oblique lateral striae. Punctuation distinct, rather dense, interstices with linear microsculpture.

Pygidium.— Broadly parabolic in outline, faintly convex, flattened near the tip, a little impressed along the anterior margin and in the anterolateral angles. Punctuation and interstitial microsculpture as on propygidium, punctures smaller along the margin, near the apex with very short, barely visible bristles.

Prosternum.— Carina in lateral view nearly straight. Sides of carinal disc nearly parallel in the posterior half, curved outwards in front (fig. 144). Carinal disc rather broad, impressed along the median line, with a carinal stria at either side in the posterior half. On the sides of the prosternal carina ascending lateral prosternal striae are well visible in ventral view (not shown in the figure). Carinal disc with sparse double punctuation, interspaces with indistinct linear microsculpture.

Mesosternum.— Interprocoxal part slightly impressed. Lateral striae broad, sulciform, well-delimited, a little curved outwards posteriorly, in front almost parallel, ending behind the procoxae (fig. 144). Mesosternal disc with a rather sparse double punctuation, the primary punctures elongate. Interspaces smooth. Meso-metasternal suture fine, slightly angulate backwards.

Metasternum.— Lateral striae rather fine, slightly sinuous and divergent posteriorly (fig. 144), curved inwards near their posterior end, about reaching the posterior metasternal third, indistinctly prolonged by some aligned punctures. Disc about equally punctate as mesosternum, primary punctures in the posterior half smaller. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly canaliform.

First visible sternite.— Rather densely punctate, punctures rather small and of

unequal size, interstices smooth. Oblique lateral striae present, rather shallow.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The male differs from the female as follows:

Head.— Face for the greater part almost straight in profile, only faintly concave just behind the slightly elevated rostral tip. Rostrum in frontal view broadly rounded anteriorly, apex with a slight median impression between two paramedian tubercles (fig. 145). Frons distinctly concave, this concavity along the anterior part of the eyes and the antennal insertions rather sharply delimited, thus producing blunt oblique ridges. Sides of the rostrum rounded off and sloping down towards the lateral margin. Frons and rostrum finely and rather densely punctate, interstices smooth. Transition between frons and vertex arcuate and gradual. Vertex with a distinct median fovea and a more distinct double punctation, interstices smooth.

Pronotum.— About 1.1 times longer than wide (fig. 142), more strongly punctate than in the female, without anterior median ridge, impunctate median band or antescutellar stria.

Elytra.— More strongly punctate (fig. 142).

Propygidium.— Interstices without microsculpture.

Pygidium.— Narrower parabolic in outline, strongly impressed along sides and apex, thus producing an elevated marginal rim, punctures without bristles.

Prosternum.— Carinal disc margined at the sides and in front by a narrow elevated rim, at the sides accompanied by a shallow sulciform carinal stria, ill-delimited at their inner side. Disc more distinctly punctate.

Meso- and metasternum.— More distinctly punctate.

First visible sternite.— Impressed along the median line.

Variation.— PE-length male 2.4 mm, other females: 2.4-2.6 mm. The length of the carinal striae in the females varies a little. In some specimens the lateral mesosternal striae are a little more sinuous. The length of the lateral metasternal striae is a little variable, and sometimes they are a little less distinctly sinuous.

Remarks.— In the holotype the prosternum gives a little way to the mesosternum (fig. 144), and consequently the interprocoxal part seems a little longer than in the other specimens. The specimen has been chosen as holotype because the propygidium and pygidium are better exposed; in the other females they are rather concealed by the protruding alae.

Etymology.— This species is dedicated to Mr A. ("Fred") van Assen, collection manager of the department of insects of the Museum of Leiden, in appreciation of the thirty years of pleasant co-operation.

Trypeticus veda (Lewis), 1885
(figs 198-202)

Tryponaeus veda Lewis, 1885: 470.

Trypeticus veda Lewis, 1905: 8.

Material.— **Sri Lanka:** Lectotype, ♀ (BMNH), protarsi missing, [round white label with red margin, printed:] "Type"; [white label, hand-written:] "Hadley/Ceylon/(Lewis)"; [white label, printed:]

"George Lewis Coll./B.M.1926-369"; [white label, hand-written:] "*Tryponæus/veda* ♂ /Type Lewis"; [red label, printed and hand-written:] LECTOTYPUS/*Tryponæus/veda*/Lewis, 1885 ♀ / P. Kanaar des. 2000" (present designation); [white label, hand-written and printed:] "To genus/*Trypeticus*/det. P. Kanaar 2000"; 1 ♂ (BMNH), same data as lectotype, but "♀" on Lewis' written namelabel (paralectotype, present designation); 1 ♂ (MNHN), N. E. Distr., 11 km SE Nuwara Eliya, 2000 m, collected from limbs, 1.vi.1975, S.L. Wood.

Male.— Length (without head and abdominal tergites) 2.9 mm, width 1.2 mm, height 1.1 mm. Cylindrical, shiny, piceous black, mouthparts and legs rufous.

Head.— Face bisinuous in profile, rostral tip elevated. Rostrum rather short, in frontal view leaving the labrum for the greater part exposed, broadly rounded-truncate anteriorly, tip with two ill-delimited paramedian tubercles at some distance from the anterior margin (fig. 201). Frons and posterior part of rostrum distinctly concave, frons and rostrum delimited anterolaterally by short, distinctly elevated oblique ridges medially from the antennal insertions, ending rather abruptly in front in rather strongly elevated oblique bosses at some distance from the apical tubercles. Sides of the rostrum sloping down towards the lateral margin. Frons and rostrum with sparse rather small punctures, interstices with indistinct linear microsculpture, shiny. Transition between frons and vertex arcuate and gradual. Vertex with small punctures of unequal size, interstices with indistinct linear microsculpture.

Pronotum.— About 1.2 times longer than wide, with slightly convex sides in dorsal view (fig. 198), in front broadly rounded and convergent towards the anterior angles, moderately convex in transversal direction, in profile faintly convex. Marginal striae distinct, turned upwards at their posterior end, ending at a rather great distance from the non-impressed anterior angles. Pronotal disc with rather sparse fine punctation, the punctures a little larger anteriorly and along the anterior margin more closely set. Interspaces smooth. No distinct impunctate median band or antescutellar median stria.

Elytra.— Along the suture about as long as pronotum (fig. 198), slightly impressed near the scutellum, moderately convex in transversal direction, in profile faintly convex, more strongly so just at the apex. Elytral punctation as on posterior part of pronotum, punctures near the suture more closely set, slightly elongate. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with distinct linear microsculpture and a fine marginal epipleural stria in the posterior half.

Propygidium.— Distinctly impressed along anterior margin, more distinctly so at the sides. At either side a slight oblique ridge without a distinct lateral stria is present. Punctation distinct, not very dense, punctures larger than on elytra and of unequal size, interstices with indistinct linear microsculpture.

Pygidium.— Triangular with broadly rounded apex, convex in the central part, distinctly impressed in the anterolateral angles and before the apex. Punctation and microsculpture as on propygidium, punctures without hairs.

Prosternum.— Carina in lateral view faintly convex, more distinctly so to the front. Carinal disc faintly convergent anteriorly, rather broad (fig. 200), margined at the sides by a narrow elevated rim accompanied by a shallow and broad sulciform carinal stria at the inner side. Lateral prosternal striae visible in ventral view (not shown in the figure). Carinal disc faintly impressed behind the anterior margin and along the base, with rather sparse distinct punctures. Interspaces with linear microsculpture.

Mesosternum.— Faintly impressed in front. Lateral striae deep, sulciform, slightly

arcuate and convergent anteriorly, ending behind the procoxae (fig. 200). Mesosternal disc with rather sparse elongate punctures, mixed with small punctures. Interspaces with some indistinct microsculpture. Meso-metasternal suture fine, angulate backwards, at the sides bisinuous, adjacent parts of meso- and metasternum depressed.

Metasternum.— Lateral striae fine sulciform, slightly divergent posteriorly, slightly curved inwards at their posterior end, well passing the metasternal half (fig. 200). Disc about equally punctate as mesosternum. A band along the median suture is impunctate. Interspaces with some indistinct microsculpture. Median suture distinctly sulciform, with the exception of a short part at the rear end.

First visible sternite.— About equally punctate as metasternum, interstices with linear microsculpture. Oblique lateral striae present, rather long and curved.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some very small teeth on the distal third.

The female differs from the male as follows:

Head.— Face almost straight in lateral view, with slightly elevated tip. Frons and vertex separated by a rather sharp transverse ridge, shiny, well-delimited posteriorly, less so towards the frons. Rostral tip bluntly acuminate in frontal view (fig. 202), slightly raised, little protruding over the broad labrum, slightly concave at its underside. Frons and rostrum delimited at the sides by a narrow bisinuous ridge, accompanied at its inner side by a shallow groove, ill-delimited medially. At their posterior ends the lateral ridges are continuous with the transverse ridge, on the rostrum they fade away, ending at a short distance from the rostral apex. Frons and posterior part of rostrum moderately concave, both rather densely punctate, punctures small and a little elongate, interstices with a fine and dense microsculpture, giving a rather dull appearance. Vertex with a median fovea, distinct punctures and a dense interstitial microsculpture.

Pronotum.— Amply 1.3 times longer than wide (fig. 199), with slightly sinuous sides, in front broadly rounded towards the anterior angles. Behind the anterior emargination for the head a dull area is present (indicated by the dotted line in the figure), caused by a very dense and fine interstitial microsculpture. In the posterior half of this dull area a faint smooth median ridge is present, more distinct at its posterior end and here abruptly ending, well visible in lateral view. Behind this ridge the pronotum is more or less impressed along the median line, especially posteriorly, without a distinct stria. Punctuation of the pronotal disc fine and sparse in the posterior two-thirds, punctures slightly elongate. In the anterior third the punctures are much larger and closely set, in the dull area they are very elongate.

Propygidium.— Punctures at the sides with a yellow hair.

Pygidium.— Broadly rounded in outline, convex, with a faint central and faint anterolateral impressions, punctures distinct, of unequal size, the larger punctures with a yellow hair.

Prosternum.— Carina almost straight in lateral view. Sides of the carina more parallel than in the male, with distinct parallel carinal striae, abbreviated a little behind the anterior margin. Disc not impressed, punctures distinct, mixed with smaller punctures behind the anterior margin. Interstices with linear microsculpture.

Mesosternum.— Lateral striae not curved, barely divergent anteriorly (almost parallel).

Metasternum.— A little finer punctate than in the male.

Variation.— PE-length female lectotype 2.9 mm, width 1.1 mm. PE-length male paralectotype 2.8 mm. In the paralectotype the oblique bosses on the rostrum at the end of the oblique lateral ridges are more distinct than in the depicted specimen, and the lateral metasternal striae are not curved inwards at their posterior end, about reaching the metasternal half.

Remarks.— Lewis described the female first, though he thought that it was a male. Therefore, the female has been chosen as lectotype. With the type specimens three specimens of their prey species are present in the Lewis' collection, identified as "*Minthea canaliculatus*" (Bostrychidae: Lyctinae).

Trypeticus venator (Lewis, 1884)
(figs 274-278)

Tryponaeus venator Lewis, 1884: 138-139.

Trypeticus venator; Lewis, 1905: 8.

Material.— **Japan**: Lectotype, ♀ (BMNH), [round white label with red margin, printed:] "Type"; [white label with orange-yellow line, printed:] "Japan./Lewis."; [white label, printed:] "George Lewis Coll./B.M.1926-369."; [white label, hand-written:] "Higo."; [white label, hand-written:] "Venator ♂/Lewis/Type"; [red label, printed and hand-written:] "LECTOTYPUS/*Tryponaeus/venator*/Lewis, 1884 ♀ / P. Kanaar des. 2000" (present designation); [white label, hand-written and printed:] "To genus/*Trypeticus*/det. P. Kanaar 2000"; 1 ♂ (BMNH), same data as lectotype, but "♀" on Lewis' written namelabel (paralectotype, present designation); 2 ♂♂ (ZMHB), "*venator*/ Lew. typ. Japan"; 1 ♂ (BMNH), Higo, 1881; 3 ♂♂ (BMNH), Higo, 1883; 1 ♂ (BMNH), Higo; 1 ♂ (MNHN), Japan, Lewis 1884; 1 ♂ (BMNH), Oyayama nr. Higo, Lewis.

Male.— Length (without head and abdominal tergites) 2.4 mm, width 0.9 mm, height 0.8 mm. Cylindrical, shiny, black, antennae and legs rufous.

Head.— Face very faintly sinuous in profile, rostral tip a little elevated. Rostrum in frontal view broadly rounded-truncate anteriorly, tip with two small paramedian tubercles (fig. 277). Frons with posterior part of rostrum distinctly concave, rostrum with an additional anterior impression. The frontal concavity is separated from the sloping lateral rostral sides by an oblique ill-delimited convex transitional area. Frons and rostrum with sparse small punctures, interstices with linear microsculpture, but still shiny. Transition between frons and vertex arcuate and rather gradual. Vertex with a small median fovea and small punctures, interstices with linear microsculpture.

Pronotum.— Amply 1.2 times longer than wide, with nearly parallel sides in dorsal view (fig. 274), thence broadly rounded and convergent towards the anterior angles, strongly convex in transversal direction, in profile nearly straight in posterior half, thence convex towards anterior margin. Marginal striae fine, slightly turned upwards at their posterior end, at a rather great distance from the edge in the anterior half, ending a little beyond the non-impressed anterior angles. Pronotal disc not very densely covered with rather small punctures of slightly unequal size, a little irregularly dispersed, the punctures along the anterior margin more closely set and mixed with very small punctures. Interspaces smooth. A narrow impunctate median band without antescutellar median stria is present in the posterior two-thirds.

Elytra.— Along the suture about as long as pronotum (fig. 274), distinctly impressed

behind scutellum and medial part of anterior margin, strongly convex in transversal direction, in profile faintly convex, more strongly so towards apex. Elytral punctation finer and scantier than on pronotum, punctures rather irregularly dispersed. A narrow band along the suture is impunctate. Interspaces smooth. Epipleura with distinct linear microsculpture and a distinct marginal epipleural stria in the posterior half.

Propygidium.— Faintly impressed at the sides. At either side an oblique, rather curved lateral stria is present. Punctation distinct, not very dense, punctures larger than on elytral apex, at the lateral sides with a very short, barely visible yellow bristle. Interstices smooth.

Pygidium.— Triangular with broadly rounded apex, convex. Punctation as on propygidium, punctures near the apex with a very short, barely visible yellow bristle. Interspaces smooth.

Prosternum.— Carina faintly divergent anteriorly, rather broad (fig. 276), in lateral view faintly convex. Carinal disc margined at the sides by a narrow elevated rim accompanied by a distinct carinal stria. A distinct transversal impression behind the median part of the anterior margin delimits a short anterior rim. Carinal disc slightly impressed along the base, and with rather sparse deep small punctures, mixed with some very small punctures. Interspaces with indistinct microsculpture, shiny.

Mesosternum.— Faintly impressed in front. Lateral striae deep, sulciform, almost parallel, slightly widening anteriorly, ending behind the procoxae (fig. 276). Mesosternal disc with rather sparse deep elongate punctures, mixed with small punctures. Interspaces smooth. Meso-metasternal suture fine, strongly angulate backwards, adjacent parts of meso- and metasternum depressed near the middle.

Metasternum.— Lateral striae fine sulciform, almost parallel, their posterior end slightly divergent, about reaching the metasternal half (fig. 276). Disc slightly finer punctate than mesosternum, punctures elongate. A band along the median suture is impunctate. Interspaces smooth. Median suture distinctly sulciform, with the exception of a short part in front and behind.

First visible sternite.— About equally punctate as posterior part of metasternum, interstices smooth. Oblique lateral striae wanting.

Legs.— Pro- and mesotibiae with five teeth on the outer margin. Outer margin of hindtibiae with hairs and some small teeth on the distal third.

The female differs from the male as follows:

Head.— Face in profile slightly sinuous with strongly raised tip. Frons and vertex separated by a faint transverse ridge, rather well-delimited behind. The frons just before this ridge is convex in longitudinal direction, only at some distance from the ridge the frons is moderately concave. Rostrum also concave, especially in the anterior part. Frons and rostrum bordered at the lateral sides by a distinct sinuous ridge (fig. 278), continuous with the transverse ridge at their posterior end and at their inner side accompanied by a shallow groove, this groove ill-delimited at their medial side. The lateral ridges are continuous with the strongly elevated apical margin of the rostrum, this margin strongly accentuated by the deep concavity of the rostrum just behind it. On this elevated apical margin a faint, ill-delimited transverse tubercle is visible at either side. Frons and rostrum with small punctures, interstices with dense linear microsculpture, causing a rather dull appearance, with the exception of the convex part of the frons just before the

transverse ridge, where the punctures are larger. Vertex with distinct punctures and a median fovea, interstices with dense linear microsculpture.

Pronotum.— Nearly 1.7 times longer than wide with parallel sides, slightly broader in the anterior half, in front broadly rounded towards the anterior angles (fig. 275). Superior side in anterior fourth sloping down towards anterior margin, with a faintly elevated, rather long median ridge, more distinct at its posterior end. Anterior angles very faintly impressed. An antescutellar median stria is present.

Propygidium.— The punctures at the sides of the propygidium have a yellow hair.

Pygidium.— Broadly rounded in outline, convex in both directions, the punctures in the apical half with a rather long yellowish-white hair.

Prosternum.— Almost straight in lateral view. Carinal striae fine, only present in the posterior half. Apical impression wanting, punctures smaller to the front.

Variation.— PE-length female lectotype 2.6 mm, PE-length males 2.3-2.5 mm. In some specimens the posterior end of the lateral metasternal striae is less divergent. The anterior margination of the prosternal carina is less distinct in some males.

Remarks.— Though Lewis had more specimens at his disposition for the description of this species he added only "Type" to the namelabels of two specimens, a female and a male. As Lewis himself has not given type status to the other specimens it seemed not appropriate to give them paralectotype status. However, these specimens with a namelabel in Lewis' handwriting have of course a same importance as paralectotypes. Lewis described the female first, though he thought that it was a male. Therefore, the female has been chosen as lectotype.

Trypeticus viennai spec. nov.
(figs 447-449)

Material.— **Malaysia:** Holotype, ♂ (MHNG), [white label, printed:] "♂"; [white label, printed:] "SABAH: Crocker Ra./1600 m, km 51 rte/Kota Kinabalu-/Tambunan, 18.v.87/Burckhardt-Löbl" [reverse side, hand-written with lead-pencil:] "309"; [white label, hand-written and printed:] "*Trypeticus*/sp. 3./det. S. Mazur"; [red label, printed:] "HOLOTYPUS/*Trypeticus/viennai* sp. n./P. Kanaar des. 2001".

Male.— Length (without head and abdominal tergites) 2.05 mm, width 0.93 mm, height 0.85 mm. Thick-set cylindrical, shiny, castaneous brown with darker sutures, anterior margin of pronotum, propygidium, pygidium and legs rufous.

Head.— Face in lateral view faintly sinuous. Rostrum in frontal view rounded-truncate anteriorly, at the sides and in front margined by a very fine rim (fig. 449), at its inner side accompanied by a very shallow sulcus, ill-delimited at the inner side. Frons and posterior part of rostrum moderately concave, along the antennal insertions distinctly elevated, anterior part of rostrum very faintly convex. Frons and rostrum with sparse small punctures, some punctures medially from the eyes a little larger, with a rather short erect hair. Interspaces with dense linear microsculpture. Transition between frons and vertex arcuate and gradual. Vertex covered by the pronotum.

Pronotum.— In dorsal view nearly as long as wide (fig. 447), strongly convex in transversal direction, in profile convex, slightly flattening down anteriorly, anterior angles strongly bent downward, barely visible in dorsal view. Disc not very closely punctate, punctures of moderate and slightly unequal size; an indistinct narrow median

band in the posterior half is impunctate, with a very fine and short antescutellar stria. Interspaces smooth. Marginal striae fine, slightly curved inward along the posterolateral angles, in front ending at some distance from the non-impressed anterior angles.

Elytra.— Around the scutellum and along the anterior margin impressed, along the suture in dorsal view distinctly longer than pronotum (fig. 447) with rounded apices, strongly convex in transversal direction, in profile convex, progressively so near apex, punctures along the anterior margin rather closely set, punctuation elsewhere about equal to that of pronotum; a narrow band along the suture is impunctate. Interspaces smooth. Epipleura punctulate with very indistinct interstitial microsculpture; a shallow marginal epipleural stria is present in the posterior half.

Propygidium.— Short, slightly concave in longitudinal direction, with small punctures. No oblique lateral striae.

Pygidium.— Broadly rounded in outline, distinctly concave, especially in the posterior part, the margin elevated. Pygidium not very densely punctate, punctures rather small, with a rather long pale yellow hair. Interspaces shiny.

Prosternum.— Carina in lateral view almost straight. Disc broad (fig. 448) with parallel sides, margined by a narrow elevated rim in front and at the sides. Carinal disc slightly concave in the anterior third, very slightly convex in the posterior two-thirds, rather sparsely punctate, interspaces with linear microsculpture.

Mesosternum.— Slightly crosswise impressed anteriorly. Lateral striae narrow, slightly sulciform, slightly curved inward anteriorly (fig. 448), ill-delimited at their inner side. Mesosternal disc not densely punctate, punctures small, shallow, slightly elongate, interspaces smooth. Meso-metasternal suture fine, slightly angulate backward.

Metasternum.— Lateral striae fine, slightly curved inwards in front, parallel posteriorly, not quite attaining the metasternal half (fig. 448). Metasternal disc slightly finer punctate than mesosternum; a narrow band along the finely canaliform median stria is impunctate. Interspaces smooth.

First visible sternite.— Shallow oblique lateral striae are present along the metacoxae. Disc finely punctate.

Legs.— Pro- and mesotibiae with five teeth on outer margin. Hindtibiae with spines and some very small distal teeth on the outer margin.

The female is unknown.

Etymology.— This species is dedicated to my friend and well-known histeridologist Pierpaolo Vienna (Venice), in appreciation of our long-standing co-operation.

Other material examined

In this chapter specimens are recorded that could not be attributed to one of the foregoing species. They came in for identification after the termination of this study, or they are singles without very distinctive characters. I prefer to mention their existence here for future students of this genus, rather than creating possible new synonymies for singles without distinctive characters.

Malaysia: 1 ♂ (CHRP), W. Sabah, Crocker Range E, W of Apin Apin, ii.2000, M. Snizak.

Close to *T. therondi* spec. nov., but punctuation finer, prosternal carinal disc strongly impressed anteriorly, lateral mesosternal striae almost obsolete.

Malaysia (?): 1 ♀ (BMNH), Borneo.

Close to *T. kalshoveni* spec. nov., but transverse ridge between frons and vertex indistinct, interstices on face without dense microsculpture and pronotum more convex anteriorly in lateral view.

Malaysia: 1 ♂ (BMNH), Sarawak, Daro F. R., 11.iv.1939, ex Ambrosia beetles galleries in *Gonystylus* sp., D.B. Steward.

Close to *T. lackneri* spec. nov., but prosternal carina longer, pronotum less convex behind the anterior emargination and lateral metasternal striae shorter.

Malaysia: 1 ♂ (CHSM), Sabah, Mt. Kinabalu Nat. Pk., HQ Liwagu River Tr., 1495m, 12.viii.1988, A. Smetana.

Close to *T. latisternum* spec. nov., but larger and broader, frons more strongly concave, elytra more distinctly punctate, pygidium less concave, lateral metasternal striae longer, widely curved.

Malaysia: 1 ♂ (USNM), Sabah, Mt. Kinabalu N. P., HQ Liwagu Trail, 1490 m, 12.viii.1988, D.E. Bright.

Close to *T. sanneae* spec. nov., but larger, face shorter, prosternal carinal disc slightly divergent anteriorly, punctuation denser.

Malaysia: 1 ♂ (MZLU), Sabah, Sipitang, Mendolong, 20.iii.1989, S. Adebratt.

Close to *T. hielkemaorum*, but smaller, finer punctate, anterolateral outline of pronotum less widely rounded.

Malaysia: 1 ♂ (MZLU), Sabah, Sipitang, Mendolong, 11.v.1988, S. Adebratt; 1 ♀ (MZLU), idem but 31.iii.1989.

Close to *T. loebli* spec. nov., but superior side finer punctate, underside more distinctly punctate, median metasternal suture distinctly canaliform, short lateral metasternal striae present. Pygidium in the male more densely fimbriate. It is not quite sure that these specimens are the two sexes of one species, as the prosternal carinal disc of the supposed female is a little wider.

Malaysia: 1 ♂ (MZLU), Sabah, Sipitang, Mendolong, 13.v.1988, S. Adebratt.

Close to *T. latilabris* spec. nov., but face narrower, shiny, pygidium less densely fimbriate, median metasternal suture canaliform, short lateral metasternal striae present.

Malaysia: 1 ♂ (MZLU), Sabah, Sipitang, Mendolong, 2.iii.1989, S. Adebratt.

Close to *T. penicillicauda* spec. nov., but body form slightly narrower, punctuation finer, pygidium less densely fimbriate.

Malaysia: 1 ♂ (CHFP), Perak, 30 km SE of IPOH, 900 m, Cameron Highlands, Ringlet, 25.iv-5.vi.2001, F. Cechovsky.

Close to *T. kalshoveni* spec. nov., but anterior pronotal angles more acute and lateral metasternal striae starting more laterally from the lateral mesosternal striae.

Malaysia: 1 ♂ (CHFP), Perak, 30 km SE of IPOH, 900 m, Cameron Highlands, Ringlet, 25.iv-5.v.2001, F. Cechovsky.

Close to *T. incilis* Lewis, but impression at the anterior pronotal margin lacking, marginal pronotal striae interrupted and large punctures on pygidial disc.

Laos: 1 ♂, 3 ♀♀ (CHFP), Hua Phan prov., Phu Loei N. P., Ban Sakok, 20°10' N. 103°12' E, 23-26.v.2001, D. Hauck.

Close to *T. nemorivagus* Lewis, but pronotum and prosternal carina a little wider and the anterolateral parts of the pronotum more widely rounded.

Laos: 1 ♂ (CHFP), Hua Phan prov., Phu Loei N. P., Ban Sakok, 20°10' N. 103°12' E, 23-26.v.2001, D. Hauck.

Close to *T. nepalensis* spec. nov., but narrower and much smaller. The upper side of the pygidium is very deeply and widely concave.

Indonesia: 1 ♂ (SMNS), Maluku, Morotai Isl., W. Daruba, Raja, 50-300m, 19.xi.1999, A. Riedel.

Close to *T. gilolous* (Marseul), but narrower body form.

Indonesia: 2 ♂♂ (SMNS), Maluku, Morotai Isl., W. Daruba, Raja, 100-300m, 15-16.xi.1999, A. Riedel.

Belonging to the *T. tabaciglicens*-group, near *T. silvicola*, but prosternal carinal disc wider, not margined along the anterior edge, mesosternum wider, coarse punctures on the posterior pronotal third not mixed with very small punctures.

Philippines: 1 ♀ (ZMHB), Luzon, Imugan, 23.vi.1917.

Very similar to *T. protractus* spec. nov., but the conspicuous anterolateral pronotal projections of the latter missing. The anterolateral outline of the pronotum is rather abruptly curved towards the well-marked anterior angles. The presence of a transverse keel between frons and vertex indicates that it is a female, and not the other sex of *T. protractus*.

Philippines: 1 ♀ (BMNH), Iligan, Mindanao, C.F. Baker; 1 ♀ (BMNH), "Phil. Isl."

Close to *T. arriagadai* spec. nov., but punctuation finer and denser, pronotum with an anterior dull area, anterior pronotal angles more extensively impressed, lateral mesosternal striae less sinuous.

Philippines: 1 ♀ (CHSM), Palawan Pr., Busuanga isl., 5 km NW Coron, Mabentangen For. Res., 1-7.ii.1999, H. Zettel.

Close to *T. cinctipygus* (Marseul), but smaller and more slender.

Papua New Guinea: 1 ♂ (CHND), Bulolo R., 850 m, 31.viii.1965.

Close to *T. tabaciglicens*, but pronotum slightly more elongate, the punctures on the posterior pronotal third not very coarse and mesosternum shorter.

Papua New Guinea: 1 ♂ (MCSN), S.E. New Guinea, Moroka, 1300 m, vii-xi.1893, Loria.

Close to *T. degallieri* spec. nov., but face and pronotum a little longer, the latter in dorsal view less widely curved towards the anterior angles, and the prosternal carinal disc a little wider.

Indonesia: 1 ♂ (CHSM), Irian Jaya, Nabire area, road Nabire-Illaga, 03°29'517"S 135°43'913"E, 750 m NN, x.1997, LEK, leg. M. Balke.

Rather thick-set, prosternal carina margined along anterior margin. The pronotum is very coarsely punctured posteriorly. At about the posterior pronotal two-fifths there is a deep arcuate impression, delimiting a strongly convex boss before it. Boss and anterior part of pronotum much more finer and more densely punctate.

Discussion

The present study has considerably extended the number of known species in this genus, and of many hitherto described species the other sex has been published for the first time. Yet it is quite sure that still many species do exist that are yet unknown to science. The work of Mr Adebratt in Sabah has shown that intensive collecting with flight interception traps in a limited area during relative short periods increases enormously the amount of new species. Especially the smaller species that are easily overlooked with other collecting methods can be captured in this way. Comparable sampling programs in other parts of the distribution area will undoubtedly give comparable results. Also in Africa and South-America the use of flight interception traps has led to the discovery of many apparently new species in the other genera of the subfamily.

The taxonomy within this genus, and especially the taxonomy around the species in the *T. tabaciglicens*-group, is very complicated by the presence of many specimens that on the one hand are undoubtedly very closely related to a given species, but on the other exhibit distinct differences that cannot be attributed to mere individual variability. Obviously there are many local races, subspecies or even closely related separate species in this group. No doubt the great number of islands and isolated mountains in the area, with their isolated populations, will have contributed to this diversification. Another factor may be strong specialisation. The great variety in body size and body form in this genus is an indication for this supposition. It is quite possible that each wood-boring beetle species has its own species or subspecies of *Trypeticus* feeding on it. Lewis (1884) observed already that each species preys, in fact, on an

insect of its own girth. It is clear that the larger species cannot enter the narrow burrows of the smaller wood-boring insects. On the contrary small and slender species can essentially enter the wide burrows of the larger prey species, but it is improbable that they will do so. With their small mandibles they cannot seize larvae that are much larger than their own size, even when their body-strength would be sufficient to overpower them. The more slender the body form, the more narrower the burrows that can be entered with maintenance of a same bodyvolume. On the contrary a very long body form prevents the animal to pass a sharp turn in a narrow burrow. A very short and thick-set body form like in *T. crassus* Schmidt (fig. 20) is no doubt more suited to overcome sharp turns. Such a body form is probably an adaptation to a burrow pattern of the prey animal with sharp angles, e.g. a mother burrow with larval side burrows at more or less right angles, like in the European *Ips typographicus* Linné.

The function of the large and convex eyes is rather questionable. Within the burrows they will be of little use. The amount of light that penetrates into the narrow burrows, already minimal, will nearly entirely be reduced to zero when the entering animal blocks the entrance with his body. Maybe the eyes permit the animals to find the entrances of the burrows in the dusk of the primeval forest. Within the burrows the olfactory sense and the tactile sense will be more important for the orientation. The antennal scapes can be laid forward along the rostrum (cf. fig. 29). They bear long hairs, that no doubt will have a tactile function.

In specimens in which the tergite before the propygidium protrudes sufficiently from the elytral apex it can be observed that they have at either side a bent shallow sulcus with a velvety yellow bottom (cf. fig. 113). Their aspect suggests that these sulci are glandular areas. Maybe they produce scents that inform a congener that a burrow is already occupied, or the scents may have a function to find a mating partner.

A remarkable high percentage of the specimens that have been caught in flight interception traps is not yet fully coloured. This phenomenon may be due to differences in flight activity between newly eclosed specimens and older specimens. It could be that newly eclosed specimens have a swarming period in search for suitable infested trees. Once such a tree has been found the need for further flight activity is greatly diminished, and the chance that a fully coloured specimen ends in a flight interception trap is accordingly smaller.

Conclusions

The present study has revealed the enormous biodiversity within this genus. The great number of new species and the very complicated taxonomical problems have embarrassed the author. Many taxonomical questions have been left unanswered, and must be left for future students who are more skilled in phylogenetical analysis than I am. However, the author hopes that with this work a solid base has been laid, not only for further studies on this genus, but also for urgently needed revisions of the other genera of the subfamily Trypanaeinae.

Maybe the remaining questions can be answered when more material from more localities throughout the area becomes available. The introduction of the flight interception trap offers good prospects to obtain that material. A systematical survey of forested areas with this device, either by forestry biologists or other entomologists is strongly recommended.

Acknowledgements

A study like this is impossible without the confidence and full co-operation of a great many people. The author is grateful that implicit confidence and co-operation have not failed to him. I am indebted to the following persons for the loan of type material and/or other specimens: Dr L. Behne (Eberswalde); Miss N. Berti (Paris); Mr M.J.D. Brendell (London); Mr B. Brugge (Amsterdam); Mr G. Cuccodoro (Geneva); Mr R. Danielsson (Lund); Dr N. Dégallier (Montpellier); Mr Y. Gomy (Nevers); Mr M. Hansent (Copenhagen); Mr S.J. Hine (London); Mrs G.N. House (Washington); Mr O. Jäger (Dresden); Mr O. Kapler (Prague); Dr L.G. Kirton (Kepong); Mr T. Lackner (Amsterdam); Dr I. Löbl (Geneva); Dr S. Mazur (Warsaw); Dr O. Merkl (Budapest); Mr G. Monteith (Brisbane); Mr P.P. Parrillo (Chicago); Dr F. Penati (Morbegno); Mr R. Peschel (Chemnitz); Dr R. Poggi (Genoa); Dr W. Schawaller (Stuttgart); Dr M. Uhlig (Berlin); Dr P. Vienna (Venice) and Dr T. Yélamos (Barcelona). I thank Mr J. Krikken (Leiden) for his valuable suggestions and for the critical reading of the manuscript. Thanks are due to Mr A. Tishechkin (Baton Rouge) for his mediation to get on loan the material from Washington and St. Petersburg, and to Mr R. Peschel (Chemnitz) for his mediation to get on loan the material from the Museum of Vienna.

References

- Arnett Jr., R.H., G.A. Samuelson & G.M. Nishida, 1993. The insect and spider collections of the world: 1-220.— Flora & Fauna Publications, Gainesville FL.
- Bickhardt, H., 1912. Die Histeriden aus H. Sauter's Formosaausbeute (11. Beitrag zur Kenntnis der Histeriden.— Ent. Bl. 8: 122-127.
- Bickhardt, H., 1913. H. Sauter's Formosa-Ausbeute. Histeridae II (Col.) (16. Beitrag zur Kenntnis der Histeriden).— Ent. Mitt. 2: 166-177.
- Bickhardt, H., 1916. Histeridae. In: P. Wytsman. Genera Insectorum, fasc. 166a: 1-112.— La Haye.
- Bickhardt, H., 1918. Neue exotische Histeriden und Notizen zu bekannten Arten (36. Beitrag zur Kenntnis der Histeriden).— Ent. Bl. 14: 233-244.
- Cooman, A. de, 1939. Coléoptères Histeridæ d'Extrême-Orient, principalement du Tonkin.— Not. Ent. Chin. 6: 61-73.
- Desbordes, H., 1922. Description de deux Histerides nouveaux de l'Inde (Col.).— Bull. Soc. ent. France 1922: 7-9.
- Gemminger, M. & E. Harold, 1868. Catalogus Coleopterorum hucusque descriptorum synonymicus et systematicus. Tom. III. Histeridae [.....] Lucanidae, 753-978 + [5] pp.— Monachii.
- Gestro, R., 1875. Descrizione di un nuovo genere e di alcune nuove specie di Coleotteri Papuani.— Ann. Mus. Stor. nat. Genova 7: 993-1033.
- Heller, K.M., 1915. Neue Käfer von den Philippinen. II.— Philippine J. Sci. 10 (D): 19-45.
- Kanaar, P., 1997. Revision of the genus *Paratropus* Gerstaecker (Coleoptera: Histeridae.— Zool. Verh. Leiden 315, 1-185.
- Lewis, G. 1884. On some Histeridae new to the Japanese fauna, and notes of others.— Ann. Mag. nat. Hist. (5) 13: 131-140.
- Lewis, G., 1885. New species of Histeridae, with synonymical notes.— Ann. Mag. nat. Hist. (5) 15: 456-473.
- Lewis, G., 1891a. On new species of Histeridae.— Ann. Mag. nat. Hist. (6) 8: 380-405.
- Lewis, G., 1891b. On some new Histeridae from Burmah.— Ent. monthly Mag. (2) 2: 186-188.
- Lewis, G., 1892. On some new species of Histeridae.— Ann. Mag. nat. Hist. (6) 9: 341-357.
- Lewis, G., 1893a. On new species of Histeridae and notes of others.— Ann. Mag. nat. Hist. (6) 11: 417-430.

- Lewis, G., 1893b. On some new Indian Histeridae and a note on *Hister rugistrius* Lew.— Ent. monthly Mag. (2) 4: 183-185.
- Lewis, G., 1897. On new species of Histeridae and notices of others.— Ann. Mag. nat. Hist. (6) 20: 356-364.
- Lewis, G., 1899. On new species of Histeridae and notices of others.— Ann. Mag. nat. Hist. (7) 4: 1-29.
- Lewis, G., 1902. On new species of Histeridae and notices of others.— Ann. Mag. nat. Hist. (7) 10: 265-278.
- Lewis, G., 1905. A systematic catalogue of Histeridae: i-vi + 1-81.— London.
- Lewis, G., 1911. On new species of Histeridae and notices of others.— Ann. Mag. nat. Hist. (8) 8: 73-90.
- Lewis, G., 1912. On new species of Histeridae and notices of others.— Ann. Mag. nat. Hist. (8) 10: 250-260.
- Marseul, S.A. de, 1864. Histerides de l'Archipel Malais ou Indo-Australien.— L'Abeille 1: 271-341.
- Marseul, S.A. de, 1879. Énumération des Histerides, rapportés de l'Archipel Malais, de la Nouvelle Guinée et de l'Australie boréale par MM. le Prof. O. Beccari et L.M. d'Albertis.— Ann. Mus. Stor. nat. Genova 14: 254-286.
- Marseul, S.A. de, 1883.trois nouvelles espèces de Coléoptères, trouvées à Nice dans les tabacs par M. Antoine Grouvelle.— Bull. Soc. ent. France 1883: lxxvii-lxix.
- Pal, T.K. & S. Biswas, 1985. Insecta: Coleoptera: Histeridae. Fauna of Namdapha: Arunachal Pradesh.— Rec. zool. Surv. India 1982 (1-4): 129-137.
- Schmidt, J., 1892. Neue Histeriden (Coleoptera).— Ent. Nachr. 18: 17-30.
- Schmidt, J., 1893. Viaggio di Lamberto Loria nella Papuasias Orientale. VIII. Histeridae.— Ann. Mus. Stor. nat. Genova (2) 13 (33): 231-240.
- Schmidt, J., 1894. Ueber einige Histeridae von Dr. E. Modigliani auf der Insel Engano gesammelt.— Ann. Mus. Stor. nat. Genova (2) 14 (34): 542-545.
- Schmidt, J., 1897. Histeridae auf Sumatra gesammelt von Dr. E. Modigliani.— Ann. Mus. Stor. nat. Genova (2) 17 (37): 285-300.
- Sharp, D. & F. Muir, 1912. The comparative anatomy of the male genital tube in Coleoptera.— Trans. ent. Soc. London 1912: 477-642 + 37 plates.
- Slipinski, S.A. & S. Mazur, 1999. *Epuraeosoma*, a new genus of Histerinae and phylogeny of the family Histeridae (Coleoptera, Histeroidea).— Annal. zool. (Warszawa) 49 (3): 209-230.

Received: 20.iii.2002

Accepted: 6.ii.2003

Edited: C. van Achterberg