NOTE XXIX.

CONTRIBUTIONS TO THE KNOWLEDGE OF THE FAMILY BRENTHIDÆ

BY

Dr. A. SENNA.

VIII 1).

Enumeration of the species known as yet from Java.

In the following paper I intend to give descriptions of several new species, which Mr. Ritsema, very kindly, sent to me for examination and description, from the collections of the Leyden Museum. These species 2) have been for the greater part presented by Mr. J. D. Pasteur and, though few in number, they are of great interest and add considerably to our knowledge of the Brenthid-fauna of western Java where they were collected. At the same time I shall add the names of those species already described but not yet known as living in Java, and finally the names of the species indicated by authors from this island, so as to bring at once under the eye all that is at present known about Javanese Brenthidæ.

¹⁾ See for the 1st to 5th Contributions: Bullettino d. Soc. Entom. Italiana, Anno XXI, pp. 33-38 and 101-109; for the 6th: Notes from the Leyden Museum, Vol. XIII, pp. 161-166, and for the 7th: Annali del Mus. civ di Stor. Nat. di Genova, Ser. 2a, Vol. XII, pp. 429-494. 1892.

²⁾ They are signed with an asterisk.

Subfam. TRACHELIZINÆ.

Gen. Cerobates Schönherr.

1. C. tristriatus Lund, Skrivt. af naturhist. selskab. V, 2, p. 66. 1802.

Appears to be generally distributed in the Indian- and Indo-Malayan subregions. Mr. Fea, the well-known naturalist and traveler of the Genoa Museum, has collected it recently in Burmah and Karennee, at elevations varying from 900 to 1100 meters. — Several specimens from Java in my collection.

2. C. sexsulcatus Motschulsky, Etud. entomol. VII, p. 95. 1858.

This species occurs in Ceylon, India, Burmah and the Sunda Islands. — It was found by Mr. Fea in Karennee at a height of 900—1100 meters. — I have examples from Java.

Var. glaberrima Senna, Ann. Mus. Civ. Genova, Ser. 2a, Vol. XII, p. 450. 1892.

This variety has the posterior angles of the head more rounded and the elytra very glossy and shining at the sides. Specimens from Burmah, Karennee and Tenasserim in the Genoa Museum; from Java and Gilolo in my collection.

Gen. Truchelizus Schönherr.

3. T. bisulcatus Lund, Skrivt. af naturhist. selskab. V, 2, p. 6. 1802.

This species is very common and generally distributed through India, Tenasserim, Karennee, Burmah, China, Japan, the Sunda Islands, the Malayan subregion and Australia.

4. T. puncticollis Bohem., in Schönh. Genera et Spec. Curcul. V, p. 494. 1840.

It is indicated from and apparently confined to Java, but it is not contained in the present collection.

5. T. scrobicollis Gylh., in Schönh. Genera et Spec. Curcul. I, p. 331, and V, p. 494. 1840.

This species has been recorded from Java and Borneo; I possess a specimen from Sumatra.

*6. T. insularis, nov. spec.

Elongatus, ferrugineo-rufus, nitidus: capite supra canaliculato, fere bilobato, basi in medio inciso et utrinque calloso, lateribus bituberculato, parce squamoso; rostro sulcato, apici dilatato; antennarum articulis apicalibus majoribus; thorace sulcato undique punctato, punctis squamosis; elytris sulcato-punctatis, subparallelis, declivitati apicali margine explanato, apici rotundatis.

Long. $9^{1/2}$ —13 mm.; lat. max. prothor. $1^{1/2}$ — $2^{1/3}$ mm.

Ferruginous-reddish, shining: the elytra a little paler, the rostrum at the apex, the antennæ, the two protuberances in the middle of the head, anterior and posterior margin of the prothorax, sutural line, basal portion of the thighs, the knees and the tarsi darker or blackish. The head in the od is broader than long, narrower in front than behind, notched and scaled at the base, with two callosities in the middle and two protuberances on each side at the hinder angles; furrowed above, the sides of the channel very convex, elevated, scarcely punctured, shining. Eyes slightly prominent, brownish. Rostrum elongate, furrowed from the base up to the apex, about as long as 31/2 the head; the basal portion a little shorter than the apical one, conical, slightly broader and elevated where it receives the antennæ; the anterior part narrow at the base and widened at the apex: beneath the rostrum at the base glabrous, shining; between the antennæ and in the apical part with a carina and the lateral margin slightly elevated. In the female the head is similarly shaped and scattered with scales; the rostrum at the base is shorter but broader and slightly furrowed, beyond the antennæ filiform with a distinct furrow in the middle. Antennæ short, equal in length to the rostrum, a little thickened towards the extremity: the 1st joint stout, clavate, as long as the 2nd.

3rd and 4th taken together; the 2nd curved externally, the 3rd narrow at the base, the 4th—8th joints transverse and slightly differing from one another in length; 9th and 10th scarcely longer, the apical one is pointed at the tip.

Prothorax oblong, equal in length to the antennæ, at the apical margin slightly narrower than at the base where it is limited by an elevated and sinuate border; behind the middle broader and moderately curved at the lateral margins, with a furrow above and scaled punctures; the punctures are posteriorly more numerous and wanting towards the apex at the sides. In the female the prothorax is broader and more robust than in the male.

The elytra are as long as twice the prothorax and of the same broadness; they have the base notched, the humeral angles rounded and scarcely callous, the sides subparallel, the apical declivity and the apex with explanate and moderately upturned edge (in the Q simply explanate): above uniformly and deeply sulcato-punctate; the 1st furrow near the suture narrower and superficially punctured; the interstices raised, the sutural line of a darker color than the rest.

The under surface of the body reddish and shining; metasternum furrowed, with distinct punctures only at the sides, the central part and the two basal segments of the abdomen very finely punctured, the 1st slightly excavated; the apical margin of the 2nd, 3rd and 4th segment with a transverse row of punctures and sometimes scaled; the apical segment is punctured. Legs regular and of the same color as the body.

This species belongs to the group of *T. scrobicollis* Gylh. and *T. puncticollis* Boh. which have the prothorax punctured and furrowed, but it is easily distinguished especially by the head and elytra which are of a different shape.

Hab. Java. — A single female collected by Dr. S. Müller (Leyden Museum) and a male in my collection. — I have also another male and two females from Penang.

* 7. T. modestus, nov. spec.

Præcedenti afinis sed differt (3) colore obscuriore, antennis robustioribus, rostro base trisulcato, squamoso; capite similiter conformato at sulco profundiore et supra magis bilobato, evidenter punctato; prothorace magis punctato; punctis squamosis; elytris sulcato-punctatis, sulcis latioribus, punctis squamulis ferentibus, apici margine minus explanato: Q capite brevi, magis punctato et sulcato, rostro post antennas non canaliculato; elytris apici brevi margine terminatis.

Long. 6-8 mm.; lat. max. prothor. $1^3/4$ -2 mm.

Allied to the foregoing species but certainly distinct. — Chestnut-reddish, the elvtra brown-reddish with the sutural line darker in the basal half and two blackish spots behind the middle. The antennæ are more robust, the three apical joints broader. Rostrum at the base trisulcate, and furrowed also at the sides, scattered with minute scales; the median furrow does not extend to the apex which is finely punctured; beneath the rostrum has a carina along the middle and the lateral margins are raised: in the female the apical portion is filiform, more slender, not furrowed. The head is similarly shaped as in T. insularis but above it is punctured, distinctly bilobed and deeply furrowed; the furrow scaled like the basal and lateral notches; the notch in the middle is broader. The prothorax has the punctures at the sides more numerous than in T. insularis. The elytra are sulcato-punctate, the furrows broader and the interstices more raised, the suture is broad, the first furrow narrow and impunctate, the apex with the edge less explanate. Body beneath and legs as in the foregoing species, but the 2nd abdominal segment slightly depressed.

Hab. Java. — A male and a female collected by Dr. S. Müller (Leyden Museum).

* 8. T. mæstus, nov. spec.

Parum elongatus, nigro-brunneus, elytris minus saturatis. Caput supra punctatum, bilobatum, medio sulcatum et basi bituberculatum, lateribus tuberculis 2 instructum; an-

tennæ modice clavatæ, articulis apicalibus majoribus, perfoliatis; rostrum basi canaliculatum, post antennas (Q) filiforme; prothorax pone medium ampliatus et rotundatus, supra punctatus et sulcatus; elytra subparallela, declivitati apicali attenuata, apici obtuse rotundata, sutura leviter incisa, in dorso profunde sulcato-punctata, interstitiis elevatis.

Long. 11 mm.; lat. max. prothor. 2 mm. Q.

Certainly of the same group as the foregoing species, but easily distinguished by some characters and by its different facies. Antennæ distinctly thicker at the extremity; the joints similar in shape to those of the other Trachelizus here described. The head deeply separate by the neck, twice broader than long, furrowed above and bilobed, notched at the base but not scaled, scattered with punctures, with the front depressed. The rostrum sulcate at the base, filiform beyond the antennæ. Prothorax as long as the rostrum, much narrower anteriorly than at the base, behind the middle broader and rounded, above strongly furrowed and punctured. Elytra about as long as twice the prothorax and of the same broadness, notched at the base, parallel at the sides, with the shoulders callous and the apical edge scarcely prominent and turned upward; above deeply sulcato-punctate, the furrows broad; the first furrow near the suture narrower and impunctate. the interstices narrow and raised, the 2nd more elevated at the apical declivity than the others. Metasternum sulcate in the middle; the abdomen as in the foregoing species. Legs regular and robust.

Hab. Eastern Java. — A single female captured on. Mt. Ardjuno by Mr. Hekmeyer (Leyden Museum).

Gen. Miolispa Pascoe.

Sectio 1s. Prothorax non sulcatus, impunctatus.

*9. M. suturalis Pascoe, Journal of Entomology, Vol. I, p. 393. 1862.

Of this species I possess in my collection two specimens
Notes from the Leyden Museum, Vol. XIV.

from Java where it appears to be uncommon. I several times have had specimens from Amboina, Batchian, Halmaheira and Penang. The rufous or fulvous yellow color varies in intensity, being in some specimens paler, in others cinnamon rufous or dark rufous: the sutural region is sometimes glossy black.

*10. M. javanica, nov. spec.

Elongata, robusta, capite, rostro (apice excepto), antennis elytrorum apice, pedibusque rufo-brunneis; prothorace castaneo-piceo vel brunneo-castaneo plus minusve saturato, elytris piceis vel piceo-castaneis, vitta suturali pone medium interrupta lineolisque flavo-ferrugineis. Caput oblongum, basi emarginatum et in medio incisum; rostrum breve, modice sulcatum, apici divisum; prothorax levis, nitidissimus; elytra medio ampliata, apici truncata, sulcato-punctata, interstitiis angustis, elevatis.

Long. 8—12 mm.; lat. prothor. 1^{1}_{3} —2 mm.; lat. elytr. med. 1^{1}_{2} — 2^{1}_{3} mm. \bigcirc , \bigcirc .

The head is longer than broad, convex above, shining, without punctures and furrow; the front with a very minute ditch, the base is emarginate, scarcely narrower, notched in the middle; the sides slightly curved, the hinder angles subacute: beneath shining with scattered punctures hardly perceptible: in the female the head is similarly shaped but nearly square. Rostrum robust, as long as 11/3 the head, moderately curved, the basal portion shorter than the apical one, subcylindrical and excavated at the sides, furrowed above, but the furrow not touching the base: between the antennæ scarcely elevated, beyond them the rostrum is a little narrower and furrowed in the 1st half, towards the apex widened and at the extremity divided in the middle: the mandibles are exserted, including an empty space: in the female the basal portion is shorter than the head and elevated near the antennæ, the apical part is filiform and slightly furrowed in the basal half. Antennae clavate, about as long as twice the head: the 1st joint robust, clavate, longer than the 2nd and

3rd taken together; the remainder (the apical one excepted) differing but little in length from one another, the 2rd curved externally, the 3rd obconic, the 4th and 5th moniliform, the others almost obconic; the apical joints more robust and perfoliate, the 9th and 10th rounded, the 11th less long than the two preceding ones and acuminate at the tip; the apical joints are hairy and pubescent, the others simply hairy.

The prothorax is as long as $1\frac{1}{2}$ the head, ovate, narrower anteriorly than at the base where it has an elevate margin, impunctate above, without any furrow and very shining.

The elytra are scarcely longer than twice the prothorax; the base is emarginate, the shoulders raised and angulate, the sides moderately curved and broader than the thorax, the apex almost truncate with the hinder angles rounded; above sulcato-punctate; the punctures contiguous, the 1st furrow impunctate, the interstices narrow and raised, the 2nd broader with an interrupted yellow line.

Body beneath pitchy-brown, metasternum furrowed at the apex and scattered with very minute punctures, the basal segments of the abdomen not furrowed, the apical margin and the other segments with a transversal row of punctures. Legs robust, unarmed; femora and tibiæ broad; tarsi of the same length and pubescent.

The color in this species varies in intensity. The head, rostrum, antennæ and legs are reddish brown; the apical margin of the rostrum, the median and basal portion of the thighs, and the knees are darker, but sometimes the head too is duskish: the prothorax is uniformly chestnut-pitchy or with the basal and apical margin brown-reddish: the elytra are piceous or pitchy-chestnut, except the apical declivity this being reddish-brown, more or less infuscate; a sutural black spot is sometimes perceptible behind the middle: the yellow line of the 2nd interstice is interrupted or not and frequently only infuscate behind the middle; in some specimens two short lines are also visible at the base and

two others before the middle, and finally, the portion along the suture and the 2nd interstice is sometimes fulvous or ferruginous.

Hab. Western Java. — Several specimens, males and a female, collected by Mr. J. D. Pasteur (Leyden Museum).

Sectio 2ª. Prothorax non sulcatus vel obsoletissime canaliculatus, crebre punctatus.

* 11. M. metallica, nov. spec.

Capite æneo, basi subtruncato, in medio profunde inciso, supra crebre punctato, lateribus bituberculato; rostro cylindrico basi vix incrassato, parce canaliculato, brunneo vel brunneo-æneo, apici ampliato, punctulato; antennis validis, clavatis, articulo apicali longiore; prothorace æneo, pone medium rotundato, creberrime punctato; elytris brunneo-ferrugineis vel brunneo-æneis, apice rufo, linea flava pone medium interrupta; in dorso sulcato-punctatis, humeris rotundatis et paullatim elevatis, lateribus modice ampliatis, apici emarginatis angulisque externis rotundatis.

Long. 8— $12^{1}/_{2}$ mm.; lat. prothor. $1^{1}/_{3}$ —2 mm.; lat. elytr. med. $1^{1}/_{3}$ — $2^{1}/_{3}$ mm.

Head a little longer than broad, parallel at the sides, distinctly notched at the base, with 2 minute tubercles on each side at the hinder angles, above moderately convex, densely punctate, sometimes with an obsolete furrow; the sides shining, rarely punctured; beneath scattered with very fine punctures and sometimes slightly furrowed in the middle. Rostrum scarcely as long as twice the head; the basal part shorter than the apical one and hardly thicker, slightly trisulcate, excavated at the sides, slightly raised at the antennæ; the anterior portion widened at the apex and punctured, furrowed above and excavate at the sides in the 1st half; beneath keeled in the middle: in the female the head is as long as broad; the basal portion of the rostrum shorter than the head, the apical part longer, filiform and hardly curved upward; beneath the rostrum

is keeled at the base and between the antennæ. The latter are clavate, shorter than the head and rostrum together: the basal joint stout, as long as the 2nd and 3rd taken together, the 2nd and the 3rd as in the foregoing species, the 4th—8th transverse, of the same length but very slightly differing in broadness; the apical joints hairy, longer, more perfoliate, the 9th and 10th transverse, the 11th conical and as long as the two preceding ones: in the female the last joint is shorter.

Prothorax longer than broad, almost as long as the rostrum, subovate, narrower anteriorly than at the base, behind the middle broader and rounded, the base with an elevate margin; above deeply punctate and sometimes with a very obsolete furrow; the sides towards the apex almost impunctate, shining; at the base scattered with remote punctures.

The elytra are as long as the thorax, head and rostrum taken together; the base is a little emarginate and of the width of the thorax, the shoulders are rounded and slightly raised, the sides broader than the base, the apex emarginate with the outer angles rounded; above sulcato-punctate, the interstices raised, callous at the base; the 2nd broader, more raised at the apical declivity and with a yellow line interrupted behind the middle; the 1st furrow is impunctate.

The undersurface of the body very shining; the apical portion of the metasternum and the basal segments of the abdomen slightly excavate in the middle and punctured, in the female without any furrow; the last segment finely punctate. Legs stout, scattered with minute punctures; anterior coxe contiguous, femora clubshaped, tibiæ almost straight, tarsi robust and subequal.

This species varies also in coloration: the rostrum is reddish brown, more or less infuscate, in some specimens the apical portion is slightly metallic; the antennæ and the neck are red-brown, the last joints sometimes duskish; the head and thorax are, for the greater part, cupreous

and very shining at the sides, except the posterior margin which is reddish brown; in some individuals the metallic tint is wanting and the thorax is dark brown or brownred; the elytra have the apex rufous or brown-red, above they are pitchy brown, more or less cupreous, rarely bluish, sometimes brown-red or chestnut ferruginous; in the specimens of the last color the suture and the lateral margins are darker and behind the middle near the suture a duskish spot is visible. In the individuals here described only the 2nd interstice has a yellow line. Body beneath brownred, more or less infuscate and cupreous, rarely with a metallic bluish color. Coxæ, basal portion of femora, tibiæ and tarsi red-brown; the club of the thighs darker and sometimes slightly metallic.

Hab. Western Java. — Several specimens, males and females, collected by Mr. J. D. Pasteur (Leyden Museum); Borneo (Genoa Museum).

Sectio 3a. Prothorax distincte canaliculatus vel sulcatus, crebre punctatus.

*12. M. nupta, nov. spec.

of. Capite, prothorace, antennis, pedibusque castaneo-rufis vel rubro-brunneis; elytris nigris, apice (sutura excepta) et fascia media a basi usque ad declivitatem apicalem ferrugineis. Caput quadratum, basi incisum et lateribus bituberculatum, supra canaliculatum ac punctatum; rostrum basi trisulcatum, lateribus excavatum, post antennas canaliculatum; antennæ articulis apicalibus longioribus et majoribus; prothorax brevis, crebre rugoso-punctatus, in dorso canaliculatus, canali longitudinali integro; elytra profunde sulcato-punctata, apici emarginata, angulis externis rotundatis. — Q. Capite, rostro, antennis, pedibusque rubro-brunneis; elytris nigris in singulo fascia dorsali a basi usque ad medium, macula pone medium et apice (sutura excepta) ferrugineis; præterea differt a mare capite et rostro basi brevioribus, parte apicali longiore, filiformi; antennarum articulo apicali minus elongato.

Long. 7—11 mm.; lat. prothor. $1\frac{1}{3}$ —2 mm.

This species is remarkable by the elytra differently spotted according to the sex, and it is allied (judging from description) to *M. ceylonica* Desbroch. 1). In both the sexes the head, rostrum, antennæ, prothorax and legs are chestnut-rufous or brown-red and the elytra black; in the male each elytron has a longitudinal large ferruginous or yellow-ferruginous band, taking its rise from the base, finishing before the apical declivity and not touching the lateral margin, nor the suture; moreover the apex and the apical declivity (except the suture) are of the same color: sometimes the band is not interrupted, but simply narrower at the apical declivity. In the female each elytron has a basal band interrupted towards the middle and at the apical declivity; but, like in the male, sometimes the band is simply narrower in the two indicate parts.

Head in male square, furrowed and punctate above, notched at the base with two minute tubercles at the hinder angles: in the female it is shorter, but similarly shaped. Rostrum in of as long as 21/2 the head and moderately curved; the basal portion shorter than the apical one and hardly thicker, with three furrows above and an excavation at the sides, the central furrow is a little narrower than the lateral ones; widened and rounded at the insertion of the antennæ: the apical part is furrowed at the base, hardly enlarged at the extremity and punctured: in the female the basal portion of the rostrum is equal in length to the head and conical, beyond the antennæ filiform and moderately curved, furrowed at the base, as long as 11/2 the head and basal portion together: beneath the rostrum in both sexes is as in M. metallica. Antennæ almost of the same length as the rostrum and head taken together, similarly shaped as in the preceding species, but the joints less robust, the apical ones narrower, the 9th

¹⁾ Desbrochers des Loges, Description de Curculionides et de Brenthides inédits du Musée Indien de Calcutta, in: Jonrn. Asiat. Soc. Bengal, Vol. 59, part 2, p. 223, 1890.

and 10th almost rounded: the 11th joint in the female is shorter.

Prothorax longer than broad and as long as the rostrum, narrower anteriorly than at the base, enlarged behind the middle and rounded, with a raised margin at the base; rugoso-punctate above and furrowed, the punctures are less numerous above and wanting at the sides towards the apex; the furrow extending up to the apex and impunctate. In several specimens, of and Q, the prothorax is chestnut in the middle, with the basal margin and a ring towards the apex reddish; the apical extremity is duskish.

Elytra as long as the thorax, head and rostrum together: the base is truncate, the shoulders are rounded, the sides subparallel, the apex emarginate and the outer angles rounded; above sulcato-punctate, the punctures regular and deeper in some individuals; the 1st furrow narrower than the others and impunctate, the interstices moderately raised.

Body beneath chestnut-red, more or less infuscate and distinctly punctured; the punctures more numerous at the sides: metasternum furrowed, the basal segments of the abdomen hardly depressed in the middle. Anterior coxæ contiguous, legs somewhat stout, femora clubshaped and punctured, tibiæ sinuate inwardly and punctured, tarsi as in *M. metallica*.

Hab. Western Java. — Thirteen males and ten females collected by Mr. J. D. Pasteur; a o by S. Müller (Leyden Museum).

*13. M. exarata (Dejean) Desbrochers des Loges, Journ. Asiat. Soc. Bengal, Vol. 59, part 2, p. 223. 1890.

This species is indicated in Dejean's Catalogue as Ceocephalus exaratus Dej. from Java, but was not described: only recently Mr. Desbrochers des Loges has referred it to Miolispa (fide Power) and characterized it briefly. I ascribe to this species five individuals from the Leyden Museum and several others from the Genoa Museum, originating from the above named island, and I believe it

useful to give here a complete description, because Mr. Desbrochers does not speak of some of its characters.

Head nearly square, slightly narrower at the apex, with the base emarginate, the hinder angles subacute, channeled above and punctate, sometimes the furrow obsolete or wanting, the sides with a few hairs: beneath it is deeply punctured. Rostrum short, the basal portion as long as the head, furrowed above and excavate at the sides: the apical part of the same length or hardly longer, briefly or not furrowed and almost not enlarged at the apex. Antennæ moderately long and equal in length to the thorax and head taken together: the 1st joint is clavate and longer than the 2nd and 3rd together; the 2nd subquadrate, the 3rd obconic, the remainder transverse and equal; the three apical joints perfoliate, as long as the preceding ones taken together (except the basal joint); the 9th and 10th subcylindrical, the 11th of the same length as the 9th and 10th taken together and obtusely acuminate at the tip. Neck robust, deeply separated from the head.

Prothorax as long as the head and rostrum united, narrower at the apex, enlarged towards the middle and subparallel at the sides; the base has a raised margin; above it is channeled and rugoso-punctate.

Elytra of the same length as the thorax, head and rostrum together, with the base slightly emarginate, the shoulders rounded, the sides subparallel, the apical declivity narrower, the apex emarginate and the outer angles rounded; above deeply sulcato-punctate, the punctures regular, the interstices narrower and raised, the 1st and 2nd furrow from the suture impunctate.

Metasternum and the two basal abdominal segments punctured and excavate in the middle; the sides of the body, except those of the apical segments, are clothed with a band of very minute and densely set yellowish or whitish scales. Legs moderately robust, scattered with a few hairs.

The color of the head, rostrum, antennæ, prothorax and legs is red-brown or chestnut; the thorax and the median portion of the thighs are always darker than the rest; the elytra are black or duskish with a ferruginous or yellow-ferruginous band along the middle of each elytron from the base to the apex.

Length 8—11 mm.; broadn. of the prothor. 1½—2 mm. Hab. Western Java. — Five individuals obtained by Mr. J. D. Pasteur (Leyden Museum); Tjibodas (Java), several specimens collected by Mr. Beccari (Genoa Museum); New Guinea (Desbrochers' collection).

*14. M. conformis, nov. spec.

Robusta, capite, rostro, antennis pedibusque brunneorufis, prothorace obscuriore, elytrorum sutura, margine laterali, maculisque duobus prope suturam pone medium obscuris, ceterum brunneo-ferrugineis. Caput subquadratum, punctatum, supra convexum in medio impressum unde fere bilobatum; rostrum breve, profunde sulcatum; antennæ ut in specie præcedente; prothorax canaliculatus, creberrime rugoso-punctatus; elytra profunde sulcato-punctata, interstitiis angustis, elevatis.

Long. 10 mm.; lat. prothor. 2 mm.

Allied to *M. exarata* but easily distinguished by the different punctation of the prothorax and elytra and by the body beneath being not scaled at the sides. Head almost bilobed above, punctate, slightly impressed in the middle; rostrum furrowed up to the apex, the margin of the furrow raised, the apical extremity hardly a little enlarged. Antennæ as in *M. exarata*; prothorax with the furrow narrower and obsolete towards the apex, above deeply rugoso-punctate. Elytra strongly sulcato-punctate, the interstices raised, narrower; the 1st furrow near the suture only impunctate. Metasternum and basal segments of the abdomen slightly excavated in the middle, scattered with punctures at the sides, but wanting the scaled band.

Hab. Western Java. — A single male specimen taken by Mr. J. D. Pasteur (Leyden Museum).

Subfam. AMORPHOCEPHALINÆ.

Gen. Amorphocephalus Schönherr.

*15. A. lævis Power, Annales de la Société Entom. de France, 5° Sér. Vol. VIII, p. 486. 1878.

Mr. Power has indicated this species from India, Mr. J. D. Pasteur captured a male specimen in Western Java, and recently a specimen has been collected by Mr. Fea in Karennee.

The coloration of the body is variable being more or less dark: sometimes superficial punctures are visible in the furrows on the elytra.

Subfam. ARRHENODINÆ.

Gen. Prophthalmus Lacordaire.

*16. P. versicolor Senna, Annali del Museo Civico di Storia Naturale di Genova, Ser. 2a, Vol. XII, p. 466. 1892.

I refer to this species two females captured in Western Java by Mr. J. D. Pasteur. The types are in the Genoa Museum and were taken by Mr. Fea in Karennee. This species varies in general color, in maculation of the elytra and in having sometimes the 1st furrow near the suture punctured.

17. P. longirostris Gylh., in Schönh. Genera et Spec. Curcul. I, p. 323. 1840.

Occurs, but not frequently, in Java; it is more common in other Sunda Islands. I have it from Celebes and Perak.

18. P. tridentatus Lund, Skrivt. af naturhist. selskab. V, 2, p. 91. 1802.

This species, indicated from Java in Sturm's Catologue with the name of *P. macrocephalus*, lives also in the Moluccas. I have specimens from Borneo where it is abundant.

19. P. pugnator Power, Annales de la Soc. Ent. de France,
5º Sér. Vol. VIII, Bull. p. 44. 1878.

This species is unknown to me, but seems to be not rare in Java, because Mr. Power, in describing it, mentions several collections which contain it from this island.

Gen. Baryrrhynchus Lacordaire.

20. B. latirostris Gylh., in Schönh., Genera et Spec. Curcul. I, p. 323. 1840.

Common in Java and in Borneo.

21. B. dehiscens Gylh., in Schönh., l. c. p. 324.

This species is very abundant in Borneo, but occurs also in Java. I have a few examples of it.

Gen. Agriorrhynchus Power.

22. A. Borrei Power, Petites Nouvelles Entomolog. II, p. 241. 1878.

The habitat given for this insect is Java, and from this island the specimens of several collections originate; but it is not a local species, Mr. Fea having taken it at Thagatá in Tenasserim, and the Marquis Doria at Sarawak (Borneo).

Gen. Orychodes Pascoe.

- 23. O. cynnamomi Herbst, Füssl. Arch. IV, p. 76. 1783. A widely spread species in the Indo-Malayan subregion, probably not extending northward of Malacca, nor southward of Celebes. I have several individuals from Java, Borneo, Sumatra and Menado.
 - * 24. O. piliferus, nov. spec.
- J. Capite brevi, basi subtruncato, postice mutico, castaneo-rubro; rostro brevi, basi incrassato, profundeque sulcato,
 ante antennas cylindrico, supra lateribus denticulatis, rubrobrunneo; antennis rubris, articulo apicali duobus præcedentibus æquante; prothorace ovato, castaneo-piceo, nitidissimo;
 elytris rubro-brunneis, humeris rotundatis et breviter callosis,
 lateribus subrectis, apici emarginatis, in dorso convexis,

fortiter punctato-sulcatis, interstitiis convexis, elevatis, lineis punctis ferrugineis ornatis.

Long. 15 mm.; lat. prothor. 29/, mm.

Of the same group as O. lineolatus Kirsch and Ritsemæ Senna and allied to O. insignis Lewis but certainly distinct. The head is short and small comparably to the size of this species, the base is subtruncate and deeply separate from the neck, the hinder angles a little prominent but not spined, above with an obsolete channel in the middle and a few punctures. The basal portion of the rostrum is longer than the head and stoutish, deeply furrowed above and almost bilobed to the insertion of the antennæ; the apical part 11/2 as long as the base, cylindrical, the extreme margin is almost of the same broadness as the rest: smooth above, scattered with very minute tubercles and with a row of teeth at the sides: beneath the rostrum is depressed at the apex and scarcely keeled between the antennæ. These are as long the thorax, the head and the basal portion of the rostrum together; the 1st joint is clavate, equal in length to the 2nd and 3rd united; the 2nd curved externally at the base, the 3rd and 4th a little narrower at the base, the remainder almost cylindrical and equal in length, the apical obtusely pointed at the tip and as long as the two preceding ones: the joints are moderately perfoliate and hairy.

Prothorax ovate, curved at the sides, narrower anteriorly than at the base, where it is termined by a large collar transversely furrowed; convex above, very shining, without any furrow or punctures, but with a median notch at the base.

Elytra almost as long as twice the prothorax, with the base subtruncate, the shoulders slightly callous, the sides hardly broader than the base, the apex emarginate and a little explanate, the outer angles rounded; deeply punctato-sulcate above, the 1st furrow near the suture obsolete punctate, the interstices convex, raised, slightly curved at the base. The 2nd interstice from the suture has four

yellow-ferruginous lines (at the base, before and behind the middle and at the apical declivity), the 3rd has two lines (before and behind the middle), the 4th and 5th a singly line behind the middle; these lines before and behind the middle form two spots: the 7th and 8th interstices have a line before the middle, the 8th also another at the apical declivity. The elytra have a few very long and fine whitish hairs at the sides.

Body beneath shining, the basal margin of the prosternum impressed; metasternum finely punctured with a ditch at the apex, the two basal abdominal segments excavated in the middle and scattered with minute punctures, the apical segments pubescent laterally. Anterior coxe not contiguous, legs robust, femora clubshaped and spined, anterior tibiæ broader in the middle, tarsi long, the 1st joint elongate, the 3rd broad and deeply divided, beneath pubescent.

Hab. Western Java. — A single male specimen in the Leyden Museum, captured by Prof. A. A. W. Hubrecht at Telaga bodas, a crater near Garoet.

Subfam. EUTRACHELINÆ.

Gen. Eutrachelus Latreille.

*25. E. Temmincki Latreille, in Cuvier, Règne animal, p. 389. 1825.

This species, the giant of the family, seems to be a peculiar form of Java and Sumatra. It is not rare and varies in the dimensions and in having the elytral spots more or less evident.

Subfam. CEOCEPHALINÆ.

Gen. Hormocerus Schönherr.

26. II. reticulatus Lund, Skrivt. af naturhist. selskab. V, 2, p. 81. 1802.

The most common species of the genus and generally distributed throughout the Indo-Chinese, Indo-Malayan and Austro-Malayan subregions.

27. II. scrobicollis Bohem., in Schönh., Genera et Spec. Curcul. VIII, 2, p. 373. 1844.

I have in my collection a specimen labelled «Java», but it is not without doubt that I include it in this list. This species was described from the Phillippine Islands.

- 28. II. amænus Perroud, Ann. Soc. Linnéenne de Lyon, p. 423. 1853.
- 29. M. Dehaani Gylh., in Schönh., Genera et Spec. Curcul. I, p. 360. 1840.
 - 30. II. javanicus Perroud, l. c. p. 415.
 - 31. II. rufovittatus Perroud, l. c. p. 419.

I have not seen the last four species which have been indicated from Java.

Gen. Schizotrachelus Lacordaire.

*32. S. brevicaudatus Lacord., Genera des Coléoptères, VII, p. 455, nº. 2. 1866.

Of this species Mr. J. D. Pasteur has taken five individuals varying in size and one also in the color. They correspond with Lacordaire's description.

*33. S. consobrinus Lacord., l. c. p. 456.

The four specimens, obtained in Western Java by Mr. J. D. Pasteur and referred by me to this species, differ from Lacordaire's description in having the prothorax without punctures at the sides and the elytra hardly perceptibly punctured and not parum profunde punctato-striatis' as says Lacordaire. In the present state of our knowledge it seems to me that these differences do not oblige of establishing a new species or variety, because the species of this genus hitherto described show a considerable variation in size, color, punctuation of the thorax and elytra, and, sometimes, transitional forms between the different species.

Subfam. ITHYSTENINÆ.

Gen. Cediocera Pascoe.

*34. C. tristis, nov. spec.

Anguste elongata, capite, rostro, antennis pedibusque brunneo-rufis; prothorace plerumque magis saturato vel nigrofusco, interdum pruinoso; elytris nigro-fuscis, apice et appendiculis apicalibus brunneo-rufis; abdomine punctato et parce squamoso, segmento primo in medio in mare piloso.

♂. Long. 11—18 mm. et ultra (elytr. caud. excl.); lat. prothor. $1\frac{1}{2}$ —2 mm.; Q, long. 11—19 mm. (elytr. caud. excl.); lat. prothor. $1\frac{1}{2}$ —2 $\frac{1}{3}$ mm.

Closely allied to C. longicornis Pasc. but distinguished by the different color, by the head being beneath evidently punctured, and by the other characters above mentioned. Head long, narrower at the base, notched and tuberculate, deeply separated from the neck; above with a longitudinal groove and moderately convex towards the front. Rostrum with a shallow groove extending almost up to the apex: the basal part as long as twice the head and gradually narrower towards the antennæ, at the insertion of these a little widened, rounded and raised; the apical part very short, slightly broader, emarginate at the apex; beneath the portion of the rostrum towards the antennæ has a keel in the middle, the rest and the head are scattered with punctures. In the female the head is shorter than in the male, broader, with the base strongly notched; the basal part of the rostrum is longer than the head and excavated, the apical portion equal in length to the head and filiform: beneath the head and the base of the rostrum are punctured, the apical part glossy. Antennæ filiform, with the 1st joint stouter than the others and clavate, the 2nd to 8th cylindrical, of equal length, with the apex a little broader; the apical joints longer, the 11th is the longest and obtusely acuminate at the tip. In the female the antennæ are shorter than in the male, the three apical joints

equal in length to the preceding ones, with the exception of the basal joint.

Prothorax elongate, narrower anteriorly and a little broader behind the middle, channeled above and punctured, the punctures more numerous towards the base and sometimes scaled.

Elytra as long as the thorax, head and basal portion of the rostrum taken together, with the base emarginate, the shoulders a little raised, the sides narrower in the middle, the apex truncate and the outer angles terminating in a slender tail, which is provided at the tip with a few hairs; above punctato-striate, the apical declivity with a raised interstice: in the female the elytra are only spined at the apex.

Body beneath in of shining, piceous; metasternum convex, scattered with scaled punctures, more numerous at the sides: the two basal segments of the abdomen with similar punctures: the 1st with a hairy space in the middle, the 2nd scarcely depressed and scaled at the apical margin, the other segments are scaled and punctured: in the Q the metasternum and the abdomen are convex, shining, and covered with punctures and with a few scales. Legs as in C. longicornis.

A very polymorphous species: the length of the antennæ and of the tails is much variable; some specimens have the antennæ extending to the apex of the abdomen and the tails longer than $^2/_3$ of the length of the elytra or as long as these; in others the antennæ and the tails are more or less short and in some males the apex of the elytra is only spined.

Hab. Western Java. — Several specimens, of and Q (Leyden Museum), obtained from Mr. J. D. Pasteur and a of in my collection labelled *Heteroplites, espèce inédite de Lacordaire"; Sumatra (the longest specimens I have seen), collected by Dr. Elio Modigliani (Genoa Museum); Perak, some individuals in my collection; Sarawak (Borneo), a male captured by Marquis Doria (Genoa Museum).

Observation. This species is labelled in some collections with the names of Heteroplites unicolor Power and Diurus unicolor Chevrolat, and it is the same insect which Lacordaire in his » Genera des Coléoptères" (Vol. VII, p. 471) says to be an undescribed species of Heteroplites from Java, as I find on the label of a specimen in my collection. This author in the above-named work writes: » J'en connais trois" (species of Heteroplites) » dont une seule (H. erythroderes Westw.), originaire des îles Philippines, est décrite en ce moment. Les deux autres sont de Java ou des Moluques"; and in the second note, speaking of the tails of the elytra, he adds: »l'une des deux espèces inédites les a aussi longues et aussi grêles que le Diurus"; and truly, in some specimens of Cediocera tristis the tails are very long, as long as the elvtra. C. longicornis Pasc. too has long tails, but this species is not from Java and seems to be a local form from the Andaman islands. Thus I state that my C. tristis is the species of Heteroplites mentioned but not described by Lacordaire. According to Lacordaire's description of Heteroplites, no doubt Cediocera tristis must be included in that genus, as well as C. longicornis Pasc., which is a very closely allied species. Nevertheless I refer the new species to the genus Cediocera because it corresponds perfectly with the generic description given by Pascoe, and I consider it to be a distinct genus because the characters of Heteroplites ought to be modified for the reception of some new species which, within a short time, will be described by me; but at the time Cediocera was established it was a doubtful genus, as Mr. Pascoe, in describing it in the Annals and Magazine of Natural History, 1887, p. 20. compared it with Diurus and indicated its differential characters, without saying, however, by what characters the new genus differs from Heteroplites. The differences between Diurus and Heteroplites are the same as those between Cediocera and Diurus, and I failed to find the distinctive characters by which Cediocera was differentiated from Heteroplites in the sense of Lacordaire.

Gen. Diurus Pascoe.

35. **D.** antennatus Ritsema, Notes from the Leyden Museum, Vol. IV, p. 214. 1882.

I have not seen this species; the type is a male in the Leyden Museum.

36. **D.** forcipatus Westwood, The Cabinet of Orient. Entom. p. 31. 1848.

This species occurs also in Borneo where it has been collected by Marquis Doria.

37. **D**. furcillatus Gylh., in Schönh., Genera et Spec. Curcul. I, p. 359. 1840.

This species inhabits Java and the other Sunda islands.

NOTE. In this list the whole number of Javanese species of Brenthidae, known to me at this moment, amounts to 37, belonging to 13 genera. The examination of these genera and species is instructive and gives the opportunity to make some general remarks.

Amongst the 9 families living in the Oriental Region, 6 are represented in Java, and of these that of the Trachelizinæ is the richest, containing 14 species; then follow the Arrhenodinæ, Ceocephalinæ, Ithysteninæ, Eutrachelinæ and Amorphocephalinæ. Very interesting is the want of the Taphroderinæ, Ephebocerinæ and Belophorinæ in this island.

The genus Cyphagogus f. i., of which the species are so numerous, extends in the Austro-Malayan, Indo-Chinese and Indo-Malayan subregions (Borneo) and has also a representative in Japan; the genus Zemioses inhabits Japan, Karennee, New-Guinea; these two genera seem not to be represented in Java.

The absence of Jonthocerus amongst the Ephebocerinæ and of Ectocemus amongst the Belophorinæ is also remarkable. The first mentioned genus is widely distributed and has been collected also in Sumatra and Borneo (Sarawak); the second extends to New-Guinea, Australia, Borneo, Sumatra, Malacca, Karennee and the Philippine Islands.

Amongst the genera belonging to the fauna of Java, we find that there are:

- 3 genera (Cerobates, Trachelizus, Amorphocephalus) of wide distribution in the Oriental region and inhabiting also other zoogeographical regions.
- 7 genera (Miolispa, Prophthalmus, Baryrrhynchus, Orychodes, Hormocerus, Schizotrachelus, Diurus) particularly distributed in the Indo-Malayan and Austro-Malayan subregions, some of them extending, however, also in other subregions.
- 2 genera (Agriorrhynchus and Cediocera) confined to the Indo-Malayan and Indo-Chinese subregions.
- 1 genus (Eutrachelus) peculiar to the Indo-Malayan subregion.

In examining the list of the species we see that there are 1):

- 4 species of wide geographical distribution, viz.: Cerobates tristriatus, C. sexsulcatus, Trachelizus bisulcatus, Hormocerus reticulatus.
- 5 species represented in the Indo-Malayan and Austro-Malayan subregions, viz.: Miolispa suturalis (also Penang), M. exarata, Prophthalmus longirostris, P. tridentatus, Orychodes cinnamomi.
- 4 species extended in the Indo-Malayan and Indo-Chinese subregions, viz.: Trachelizus insularis, Amorphocephalus lævis (also in India), Prophthalmus versicolor, Agriorrhynchus Borrei.
- 8 species confined to the Indo-Malayan subregion, viz.: Trachelizus scrobicollis, Miolispa metallica, Baryrrhynchus latirostris, B. dehiscens, Eutrachelus Temmincki, Cediocera tristis, Diurus forcipatus, D. furcillatus.
- 15 species up to this date peculiar to Java, viz.: Trachelizus puncticollis, T. modestus, T. mæstus, Miolispa javanica, M. nupta, M. conformis, Prophthalmus pugnator, Ory-
- 1) Hormocerus scrobicollis is not taken into consideration, its presence in Java being doubtful.

chodes piliferus, Hormocerus amænus, H. Dehaani, H. javanicus, H. rufovittatus, Schizotrachelus brevicaudatus, S. consobrinus, Diurus antennatus.

The number of the species characteristic at present of Java is very remarkable as is shown by the list, but I have no doubt that when it will be possible to explore diligently the Sunda islands, we shall find, if not the majority, certainly several of these species extended to them; on the other hand it seems that some species, inhabiting Borneo and Sumatra and collected also in other countries, are wanting in Java.

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