ZOOLOGISCHE MEDEDELINGEN

UITGEGEVEN DOOR HET

RIJKSMUSEUM VAN NATUURLIJKE HISTORIE TE LEIDEN (MINISTERIE VAN WELZIJN, VOLKSGEZONDHEID EN CULTUUR)

Deel 57 no. 2 6 september 1983

NEW SPECIES OF THE AUSTRALASIAN GENUS ISCHIOPSOPHA GESTRO (COLEOPTERA: CETONIIDAE)

by

J. KRIKKEN

Rijksmuseum van Natuurlijke Historie, Leiden

With 26 text-figures

ABSTRACT

Four new species of *Ischiopsopha* Gestro are described and illustrated: *I. erratica* (Northwest Australia), *meeki* (Goodenough Island), *uliasica* (Moluccas), and *utakwa* (West New Guinea).

Introduction

Ischiopsopha Gestro is an Australasian genus of ca. 50 known species, most of them occurring on New Guinea. All have typically lomapterine features, i.e. a strongly expanded pronotal base and a deeply excised clypeus. The generic features of Ischiopsopha include the presence of stridulatory areas on the sides of the abdominal venter (but see uliasica sp. nov., below), the absence of elytral striae, and the symmetrically arcuate shape of the parameres. Many of the species are heavily in demand as collectors' items, being large and brilliantly coloured. The available information on the genus has, however, remained excessively scanty, the reports on most species being based on very few specimens. New species continue to be described and the present paper includes four of them, coming from New Guinea and nearby Goodenough Island, from Northwest Australia, and from a small island near Ceram. Because nearly all the species of Ischiopsopha are represented in the collection of the Leiden museum, I had ample opportunity to compare the novelties with the known species. The genus Ischiopsopha was revised by Mikšić (1978); more recently Krikken (1980) included Homoeopsopha Schürhoff as a subgenus in Ischiopsopha and reviewed its species. The four new species described hereafter all belong to the nominate subgenus.

DESCRIPTIONS

Ischiopsopha utakwa sp. nov.

(figs. 1-6)

Holotype (male). — Length ca. 27.5 mm. Colour shiny, vitreous green; underside cupreous green. Clypeus and frons with dense, distinct primary punctation; secondary punctation (magnif. \times 50) vague; clypeolateral ridge distinct; clypeolateral area broadly distinct from above. Pronotum with thickly marginate lateral borders; derm with fine, sparse punctures, changing laterad to arcuate striolae; secondary punctation (\times 50) vague; apex of basomedian lobe deeply excised. Elytron with deepest point of posthumeral emargination above metepisternum; disc evenly rounded to lateral declivity; discal punctation sparse, very fine, postdiscal surface with several arcuate striolae; distomarginal area densely, braidedly striolate.

Sides of pectus striolate; metasternal disc minutely punctate. Mesometasternal projection tapering, recurved, apex rounded off. Abdominal sternites 3-5 laterally with well-defined stridulatory area; venter medially impressed; ventrodorsal transition ridged; sternites 3-6 with numerous long, semierect setae. Pygidium with transverse crest (dorso-ventral angle in profile ca. 90°); derm strongly striolate throughout. Fore tibia with 2 external denticles; terminal spur long, acuminate, reaching to base of tarsal segment 3. Middle and hind tibiae unmodified; apex sharply bidentate inferiorly. Posterolateral angle of hind coxa produced, acute. Pilosity pale reddish-brown.

Parameres, fig. 6.

Measurements in mm. Clypeal width 3.7, width of head (including eyes) 5.3. Pronotal median length 9.5, maximum width 11.4. Sutural length of elytra 12.2, maximum (longitudinal) length 15.4, maximum width (combined) 12.0.

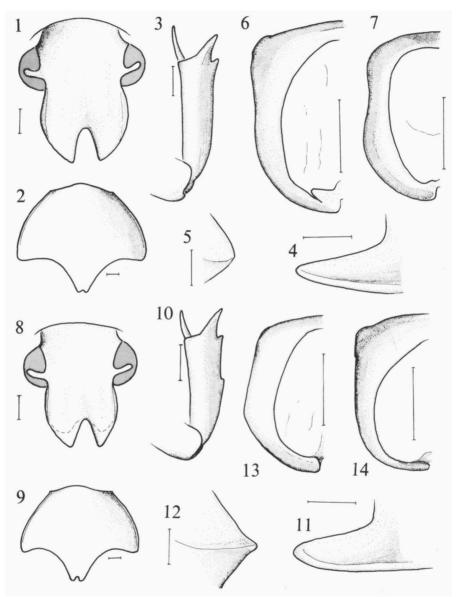
Identification. — L. utakwa belongs in the concinna species-group, standing close to scheini Schürhoff, from which it differs, inter alia, by the parameral shape (compare figs. 6, 7).

Material examined. — Holotype (Leiden Museum) from "nr. Oetakwa R./Snow Mts. 3000". / D. New Guinea // A. S. Meek / Oct.-Dec. 1910" (cf. Meek, 1913), ex collection Valck Lucassen-Janson.

Ischiopsopha meeki sp. nov.

(figs. 8-13)

Holotype (male). — Length ca. 24.5 mm. Colour metallic green, very shiny; legs distinctly cupreous brown; abdominal venter and tips of clypeus subcupreous. Clypeus with dense, fine but distinct primary punctation; frons with abundant primary punctation; intervening spaces with abundant, very fine secondary punctation (magnif. × 25); clypeolateral ridge distinct; clypeolateral area narrowly distinct from above. Pronotum with thickly marginate lateral borders; disc with abundant, very distinct primary punctation, changing laterad



Figs. 1-6. Ischiopsopha utakwa, holotype. Contours of: 1, head, full-face; 2, pronotum; 3, right fore tibia; 4, mesometasternal projection, in profile; 5, pygidial apex, in profile; 6, left paramere. — Fig. 7. I. scheini, type, Cape York, left paramere. — Scale lines are 1 mm.

Figs. 8-13. Ischiopsopha meeki, holotype. Contours of: 8, head, full-face; 9, pronotum; 10, right fore tibia; 11, mesometasternal projection, in profile; 12, pygidial apex, in profile; 13, left paramere. — Fig. 14. I. aurora, Tami River, left paramere. — Scale lines are 1 mm.

to short striolae; secondary punctation (\times 50) abundant, very fine; apex of basomedian lobe deeply excised. Elytron with deepest point of posthumeral emargination above hind coxa; disc evenly rounded to steep lateral declivity; discal surface abundantly arcuate-punctate in front, arcuate-striolate behind, laterally with some superficial depressions; micropunctation (\times 50) abundant, vague; distomarginal area densely braidedly striolate.

Sides of pro-and mesopectus as well as impressions of metasternal wings densely striolate; metasternal disc minutely punctate. Mesometasternal projection tapering, very slightly recurved, apex rounded off. Abdominal sternites 3-5 laterally with well-defined stridulatory area; venter medially impressed; ventro-dorsal transition ridged; sternites with sparse, long, semierect setae. Pygidium transversely carinate, with very sharp transverse crest; derm strongly striolate throughout. Fore tibia with 3 external denticles; terminal spur long, acuminate, reaching to base of tarsal segment 3. Middle and hind tibiae unmodified; apex sharply bidentate inferiorly. Posterolateral angle of hind coxa produced, acute. Pilosity yellow-brown.

Parameres, fig. 13.

Measurements in mm. Clypeal width 3.1, width of head (including eyes) 4.9. Pronotal median length 8.5, maximum width 10.5. Sutural length of elytra 10.3, maximum (longitudinal) length 13.1, maximum width (combined) 11.1.

Variation. — Length 24.5-27 mm. Females, as usual, without the impression of the abdominal venter; their fore tibia broader than that of male. Otherwise very similar.

Identification. — I. meeki stands very close to aurora Kraatz, but differs in the shape of the parameres (compare figs. 13, 14) and the pygidial crest (less sharp in aurora).

Material examined. — Holotype (Leiden Musem) from "Goodenough / N. Guinea // 3000 ft. 1-5.1913 / A. S. Meek"; three female paratypes with the same data (Leiden Museum); all ex collection Valck Lucassen-Janson.

Ischiopsopha erratica sp. nov. (figs. 15-20)

Holotype (male). — Length ca. 31 mm. Colour a soft, shiny, vitreous green; clypeal tips, underside and legs with brown coming through. Clypeus with abundant fine, evenly distributed primary punctures, mostly separated by 2-4 times their diameters; secondary punctation (magnif. \times 25) dense on entire head; primary punctation on frons less abundant than on clypeus; clypeolateral ridge vague; clypeolateral area distinct from above. Pronotum with lateral borders thickly marginate, in dorsal view subangulate halfway their length; derm of pronotum with dense secondary punctation (\times 40), primary punctation fine, sparse, confined to lateral surface. Elytron with deepest point of posthumeral emargination above metepimeron; disco-lateral transition gradual; micropunctation (\times 50) dense, vague; other punctures sparse; distomarginal area densely, braidedly striolate.

Sides of pro- and mesopectus striolate, remainder of pectus virtually smooth. Mesometasternal projection slightly tapering, apex blunted, recurved. Abdominal sternites 3-5 laterally with stridulatory area; venter medially impressed; ventro-dorsal transition subabrupt, not distinctly ridged. Pygidium with transverse crest (dorso-ventral angle in profile ca. 90°); derm striolate throughout. Fore tibia with 2 external denticles; terminal spur long, acuminate, reaching to halfway tarsal segment 3. Middle and hind tibiae unmodified, apex sharply bidentate inferiorly. Posterolateral angle of hind coxa produced, acute. Pilosity mainly blackish-brown.

Parameres, fig. 20.

Measurements in mm. Clypeal width 4.3, width of head (including eyes) 6.1. Pronotal median length 11.0, maximum width 13.1. Sutural length of elytra 13.0, maximum (longitudinal) length 18.5, maximum width (combined) 14.8.

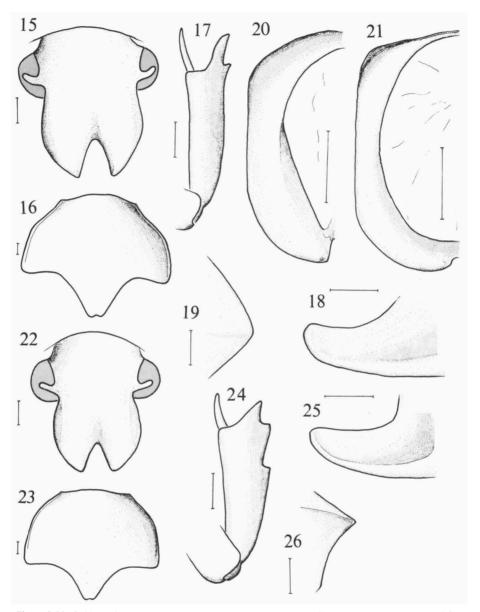
Identification. — This species stands close to *I. wallacei* (J. Thomson) and its relatives; it differs in the shape of the parameres (less broad and with narrow interior declivity in *wallacei*, compare figs. 20, 21), in the fore tibial dentation (3 external denticles in *wallacei*), in the shape of the mesometasternal projection (tip not recurved in *wallacei*), in the shape of the pronotum (lateral borders evenly arcuate in *wallacei*), and in the clypeolateral ridges (which are distinct in *wallacei*).

Material examined. — Holotype (Leiden Museum) from "Nikol Bay / N.W. Australia // from C. French" (in Janson's handwriting), ex collection Valck Lucassen-Janson. This locality is well outside the range of *Ischiopsopha* as hitherto known. Janson described various Cetoniinae from Nickol Bay, W. of Roebourne, apparently obtained from C. French (1840-1933); the actual collector of the material may have been G. J. Bostock of Fremantle (1833-1883), who collected in the area and may have given his insects to French in Melbourne (I thank my colleague G. F. Mees for providing this information).

Ischiopsopha uliasica sp. nov. (figs. 22-26)

Holotype (female). — Length ca. 28.5 mm. Colour shiny bluish-green, rather dark, with local tinge of violet. Clypeus densely, distinctly punctate to striolate-punctate; frons abundantly finely punctate; secondary punctation (magnif. \times 50) vague; clypeolateral ridge basally distinct, clypeolateral area broadly distinct from above. Pronotum with lateral borders distinctly marginate; disc with abundant double punctation, laterad changing through arcuate punctation to dense, more or less braided marginal striolation; tertiary punctation (\times 50) vague. Elytron with deepest point of posthumeral emargination above hind coxa; disc very feebly convex, gradually declivous laterad; posterior 0.7 of elytra entirely finely, densely braidedly, transversely striolate.

Pro- and mesopectus and metasternal wings finely striolate; metasternal disc virtually smooth. Mesometasternal projection tapering, recurved, apex rounded off. Abdominal sternites without stridulatory areas; venter feebly transversely



Figs. 15-20. Ischiopsopha erratica, holotype. Contours of: 15, head, full-face; 16, pronotum; 17, right fore tibia; 18, mesometasternal projection, in profile; 19, pygidial apex, in profile; 20, left paramere. — Fig. 21. I. wallacci, Dobo, Aru Islands, left paramere. — Scale lines are 1 mm. Figs. 22-26. Ischiopsopha uliasica, holotype. Contours of: 22, head, full-face; 23, pronotum; 24, right fore tibia; 25, mesometasternal projection, in profile; 26, pygidial apex, in profile. — Scale lines are 1 mm.

convex; ventro-dorsal transition distinctly ridged. Pygidium with very sharp transverse crest; derm striolate throughout. Fore tibia broad, with 3 external denticles; terminal spur long, acuminate, reaching to apex of tarsal segment 2. Middle and hind tibia unmodified; apex sharply bidentate inferiorly. Posterolateral angle of hind coxa produced, acute. Pilosity mainly dark brown.

Measurements in mm. Clypeal width 3.7, width of head (including eyes) 5.4. Median pronotal length 12.0, maximum width 9.5. Sutural length of elytra 13.4, maximum (longitudinal) length 17.0, maximum width (combined) 13.2.

Identification. — This species has no close relatives among the known species. Some outstanding characters are the bluish-green colour, the lack of abdominal stridulatory areas, the sharp pygidial crest, the upward ventro-dorsal abdominal ridge and the dense striolation on the elytral disc. The males are still unknown. Although the in *Ischiopsopha* usual stridulatory areas on the abdominal sternites are absent, nothing else would justify an inclusion in any of the other lomapterine genera.

Material examined. — Holotype (Leiden Museum) from the "Oeliasers / Noesa-Laut / Exp. Martin II. 92 // e. coll. v. d. Poll" (cf. Martin, 1894), ex collection Valck Lucassen-Janson.

ACKNOWLEDGEMENT

For the loan of material I am indebted to the Museum G. Frey, Tutzing (the Frey family, R. Kadlec).

References

KRIKKEN, J., 1980. Taxonomic review of the New Guinea subgenus Homoeopsopha Schürhoff of Ischiopsopha Gestro (Coleoptera: Cetoniidae). — Zool. Meded. Leiden, 56: 53-64, figs. 1-23, pl. 1.

MARTIN, K., 1894. Reisen in den Molukken: i-xviii, 1-404, figs.; atlas with 50 pls, 1 map. — Leiden. Meek, A. S., 1913. A naturalist in cannibal land: i-xviii, 1-231, many pls., 1 map. — London & Leipzig.

Miκšić, R., 1978. Revision der Gattung *Ischiopsopha* Gest. (Coleoptera, Scarabaeidae). — Ent. Abh. Mus. Tierk. Dresden, 41: 235-286, figs. 1-29.