

A REVIEW OF THE GENUS *APROSTOMA* GUÉRIN-MÉNEVILLE (COLEOPTERA: COLYDIIDAE)

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Abstract. — The world species of *Aprostoma* Guérin-Méneville are described, keyed and illustrated. The genus currently includes 8 species distributed in the tropical part of Central and West Africa and Madagascar. The occurrence on Sri Lanka is questioned and is postulated to be based on an introduction or a mislabelled specimen. *Aprostoma mroczkowskii* sp. nov. is described from Cameroon. *Aprostoma lineare* Grouvelle, 1908 is synonymized with *A. planifrons* Westwood, 1869, syn. nov. Lectotype is designated for *Eumecidium glabriceps* Kolbe, 1898.



Key words. — Coleoptera, Colydiidae, Gempylodini, *Aprostoma*, taxonomic revision, Afrotropics, Madagascar.

INTRODUCTION

This paper is the first part of the species-level revision of the colydiid tribe Gempylodini, which will follow in two more parts. The next part will include a review of the largest genus, *Mecedanum* Erichson, and the third one will contain a review of the remaining four genera with a phylogeny of the group. The limits of the tribe and the concepts of the genera are as those given by Lawrence (1980) and Ivie and Ślipiński (1990).

Apparently there was confusion in late 19th Century literature about the identity of the genera *Mecedanum* Erichson (1845) and *Aprostoma* Guérin-Méneville (1839). Erichson's original diagnosis of *Mecedanum* (footnote on p. 274) states among other characters "Die Fühler ... vom 5ten Gliede an die Kanten mit feinem dichten Haarfilz bekleidet. Das erste Fussglied sehr verlängert, um die Hälfte länger als die Schiene." Both characters clearly refer to the genus currently known as *Aprostoma*, which was unknown to Erichson, probably because it was originally placed in Brentidae. This synonymy was rightly pointed out by both Fairmaire (1868, p. 780) and Reitter (1878, p. 120) but it was overlooked or ignored by Sharp (1893, p. 257) and all subsequent authors to date.

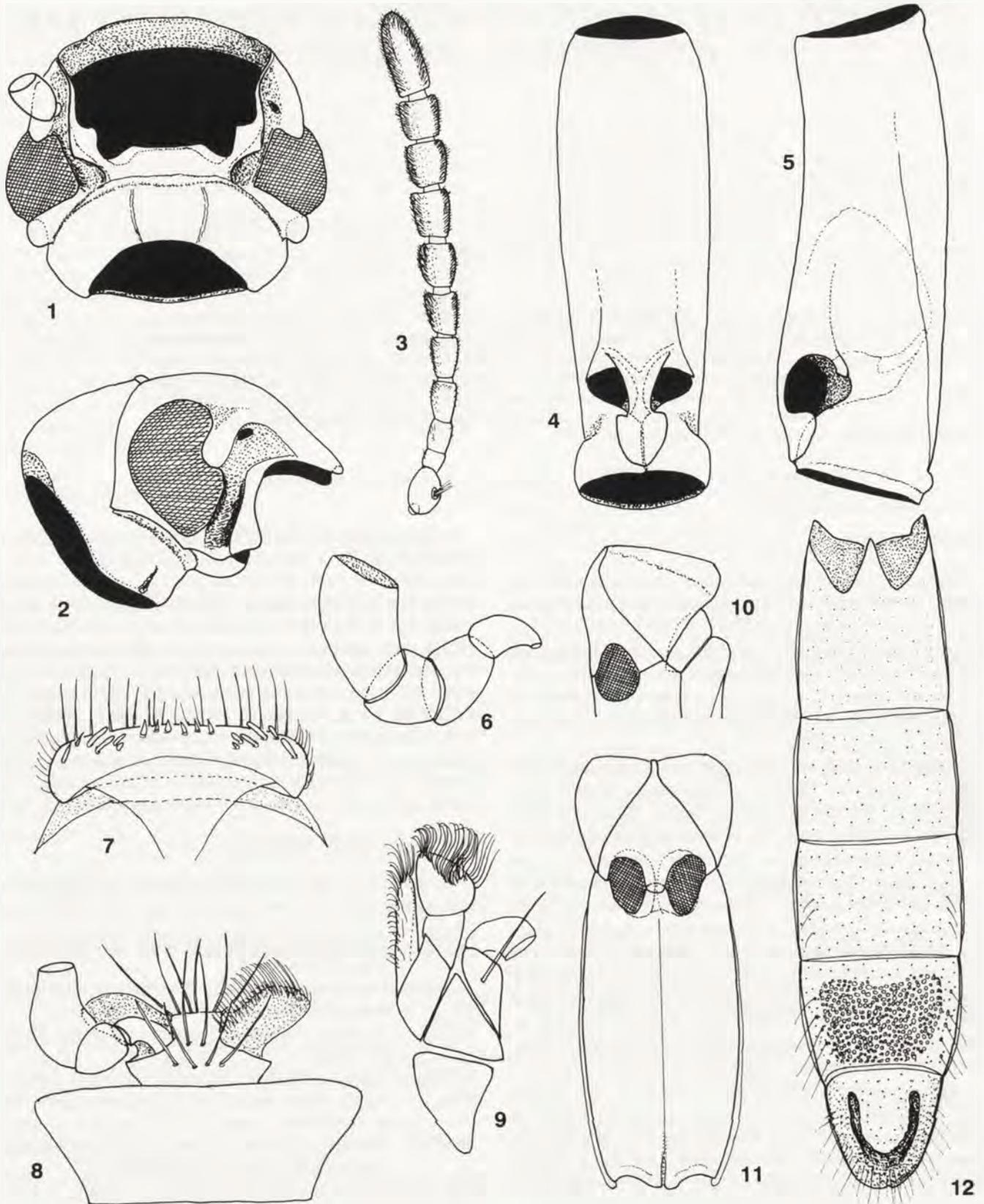
This confusion in part is due to Erichson who did not include named species in his genus, mentioning only an undescribed species from Madagascar. The first species placed in *Mecedanum* was *M. erichsoni* Sharp (1893). Sharp in his postscript note commented on the identity of *Aprostoma* and Reitter's (1878) synonymy of *Aprostoma* with *Mecedanum*, and concluded (rightly!) that if Reitter had been right, his species was a type of another genus.

According to the current rules of nomenclature Sharp's (1893) species (*M. erichsoni*) is the type species (by subsequent monotypy) of *Mecedanum*, and therefore its characters should be interpreted as "generic characters" making this genus distinct from *Aprostoma* of Guérin-Méneville (1839). Such agreement does not require further changes in the generic concepts and names, and serves the best to stabilize the nomenclature of the group. The contrary action would require questioning the validity of Sharp's designation referring this case to the ICZN, consequently putting *Mecedanum* (sensu Erichson 1845) as a synonym of *Aprostoma*, and to use for that genus its almost forgotten junior synonym – *Stematosoma* Fairmaire (1899).

MATERIALS AND METHODS

Material from the following institutions and collections was borrowed or examined in situ during this study:

- BMNH – The Natural History Museum, London (R.D. Pope, M.D. Kerley);
- DEI – Deutsches Entomologisches Institut, Eberswalde (L. Zerche);
- MNHN – Muséum National d'Histoire Naturelle, Paris (N. Berti);
- MHNG – Muséum d'Histoire Naturelle, Genève (I. Löbl);
- MRAC – Musée Royal de l'Afrique Centrale, Tervuren (J. Decelle);
- MZPW – Muzeum i Instytut Zoologii PAN (=Muzeum Zoologicum Polonicum), Warszawa;
- NHMV – Naturhistorisches Museum, Wien (H. Schönmann);
- ZMB – Zoologisches Museum, Humboldt-Universität, Berlin (M. Uhlig).



Figures 1–12. *Aptostoma planifrons*, male. (1) head, ventral; (2) head, lateral; (3) antenna; (4) prothorax, ventral; (5) prothorax, lateral; (6) maxillary palp; (7) labrum, ventral; (8) labium, ventral; (9) maxilla, ventral; (10) mesothorax, lateral; (11) pterothorax, ventral; (12) abdomen, ventral.

Measurements were made using a filar micrometer as follows: length – from anterior margin of clypeus to apex of elytra; pronotal length – from anterior to posterior margin of pronotum; pronotal width – across widest part; elytral length – along suture; elytral width – across widest part of both elytra. Measurements of male genitalia and abdomen were done in glycerine. When available measurements were taken from a selection of 6 specimens representing both sexes and exhibiting maximum range of size.

Outline drawings were taken from pinned specimens with the aid of a camera lucida or square eyepiece (elytra, pronota and antenna) attached to Citoval Zeiss or Olympus SZH10 dissecting microscope. The remaining structures were drawn from glycerine slides with a camera lucida attached to an Olympus BX50 microscope.

ACKNOWLEDGEMENTS

We would like to thank all the above mentioned curators and their institutions for allowing us to use specimens in our study. Most of them also showed immense help and hospitality to one of us (SAŚ) during his visits to their institutions and laboratories. The Secretary, Ministry of Environment and Forests, Government of India and the Director of the Zoological Survey of India are sincerely acknowledged for supporting the trip of T.K. Pal to Poland, which allowed us to work on this project. We thank J.F. Lawrence (Canberra), J. Pakaluk (Washington, DC) and R.D. Pope (London) for reading and commenting upon a draft of this paper.

TAXONOMY

Aprostoma Guérin-Ménéville

Aprostoma Guérin-Ménéville, 1839: 171. Type species, by monotypy: *A. filum* Guérin-Ménéville, 1839.

Leptosomatium Kraatz, 1895: 154. Type species, designated by Ivie and Ślipiński 1990: 4: *L. reitteri* Kraatz, 1895. Synonymized by Fairmaire 1895: cclxxxii.

Eumecidium Kolbe, 1898: 110. Type species, by monotypy: *E. glabriceps* Kolbe, 1898: 110. Synonymized by Pope 1955: 244.

Diagnosis. This genus is distinctly separated from all other genera of Gempylodini in having a deep antennal groove on ventral side of head (Figs 1, 2), the prosternal process abruptly broadened behind coxae and the antennae without traces of antennal club (Fig. 3).

Description. Body elongate, almost cylindrical (Fig. 58); vestiture apparently absent or consists of minute, barely visible hairs.

Head small, usually inclined ventrally with shortened and distinctly concave gular region. Clypeus broad, truncate or weakly emarginate. Labrum strongly transverse (Fig. 7), lightly sclerotized, largely concealed under clypeus with sparse setae along anterior margin. Maxilla (Figs 6, 9) with terminal palpomere subtruncate; lacinia without terminal hook, both densely hairy apically.

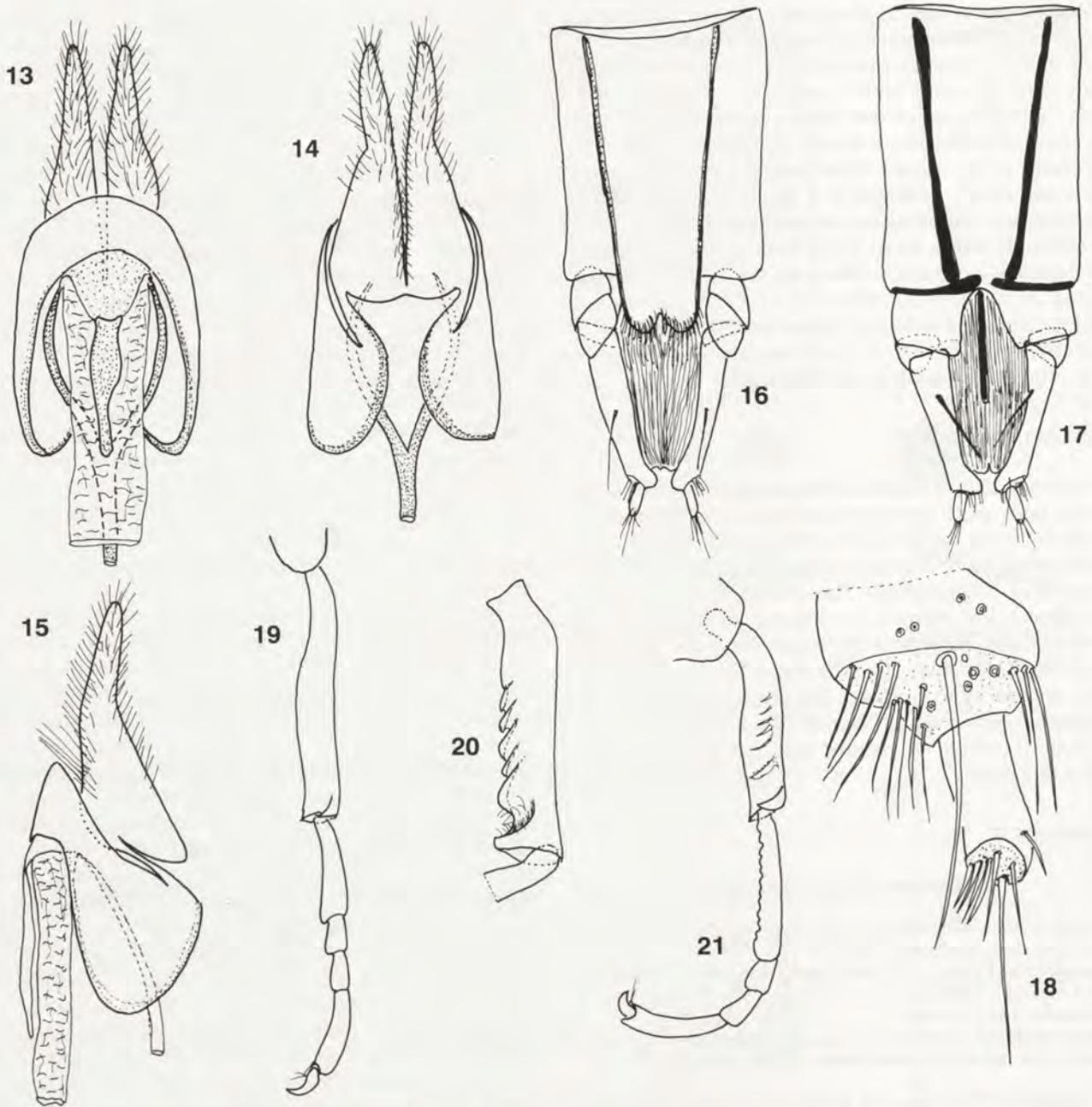
Mandible stout, with single blunt tooth at apex. Mentum trapezoidal (Fig. 8); ligula laterally produced into membranous, setose lobes. Antenna 11-segmented without club (Fig. 3); scape with a setose sensory area on dorsal side; at least antennomeres 6–11 with longitudinal bands of sensory hairs on each side; terminal antennomere always elongate. Eyes large, reaching far on ventral side, anteriorly divided by a genal projection; interfacetal setae very short, simple. Antennal groove between inner margin of eye and frontal ridge deep and well limited laterally (Figs 1, 2); the genal ridge extends to clypeus entirely separating mouth cavity from antennal insertion (incomplete in *A. glabriceps*, Fig. 49). Frons almost always with supraorbital ridges; vertical transverse ridge usually present.

Prothorax (Figs 4–5) cylindrical, about 3 as long as wide, with lateral edges partially obsolete anteriorly; distinctly constricted before base. Disc with median impressed line or groove. Procoxa somewhat projecting with long internal extensions fixed dorsolaterally to body walls. Intercostal process moderately broad, flat, abruptly expanded behind coxae (Fig. 4). Procoxal cavities broadly closed behind by notal projections meeting above the prosternal process.

Pterothorax (Fig. 11). Mesosternum elongate in front of coxae, anteriorly forming very narrow process limited laterally by mesepisterna. Elytra more than 5 times as long as wide; weak costae developed only near shallow apical declivity; apicosutural angle rounded or shallowly emarginate; stria punctures fine to almost obsolete, placed in impressed lines. Mesocoxae separated by less than coxal diameter; meso-metasternal junction with single metasternal knob; mesocoxal cavity externally closed; mesepimeron very lightly sclerotized, vertical (Fig. 10) and not visible from ventral side, entirely concealed under elytron. Metasternum very long, with almost complete median impressed line. Metepisterna narrow and almost entirely concealed by elytral epipleura. Wing with apical part greatly reduced; radial cell triangular; subcubital fleck present; wedge cell narrow.

Legs relatively long and slender (Figs 19–21). Protibia always with hook on outer-apical angle and a transverse sharp process along inner-apical margin; the process or carina is bordered above by a deep setose groove; in most species inner surface of protibia bears 3–7 oblique ridges (Fig. 20); protarsus usually almost as long as tibia and ventrally crenulate or denticulate. All tarsomeres sparsely setose on ventral side; claws simple; empodium small, bisetose.

Abdomen (Fig. 12) ventrally convex, sparsely punctate; with distinct laterosternites; ventrites 3–5 or 4–5 with sparse, yellowish setae along edges; last ventrite with deep U-shaped groove which is distinctly separated from the apical edge. In all males penultimate ventrite entirely or at median part with deep coarse punctures (in *A. glabriceps* these punctures are visible only on cleared abdomen), which are always coarser and denser than those of ventrite 3.



Figures 13–21. *Aprostoma* spp. 13–18, 20–21. *A. planifrons*; 19. *A. glabriceps*. 13–15. Male terminalia: (13) dorsal; (14) ventral; (15) lateral. 16–18. Ovipositor: (16) dorsal; (17) ventral; (18) stylus, ventral. 19–21. Front leg: (19) tibia and tarsus; (20) protibia, dorsal; (21) tibia and tarsus, lateral.

Male terminalia very peculiar (Figs 13–15): sternite 8 forms paired, setose paramera-like processes; sternite and tergite 9 strongly reduced, former bearing elongate spiculum gastrale. Aedeagus elongate and partially sclerotized with ventral tegmen; apical piece of tegmen shorter than the basal one which bears long, medially sclerotized process; median lobe with lateral sclerotized rods and complicated structures in internal sac.

Female terminalia typical for the group; sternite 8 with long, articulated spiculum ventrale; ovipositor short and stout (Figs 16–18) with styli displaced laterally and bear-

ing numerous setae (Fig. 18); spermatheca small, curved and lightly sclerotized.

Distribution. Madagascar; Central and West tropical Africa.

Biology. *Aprostoma glabriceps* (Kolbe) and *A. planifrons* Westwood were recorded by Schedl (1963) from platypodid galleries but without detailed observations. Due to the extremely narrow and cylindrical body all species of this genus can easily penetrate the galleries of ambrosia beetles, and their larvae probably are either facultative predators or commensals feeding on decayed wood and fungal hyphae.

Comments. Except for *Aprostoma glabriceps* (Kraatz) this genus is very homogenous in the sculpture of head, pronotum and elytra. *A. glabriceps* departs from the remaining species by its head not bearing supraorbital carinae, anterior margin of clypeus setose, the carina separating antennal insertion from mandibular articulation incomplete, protibia smooth at outer surfaces, and many other minor details including male and female terminalia. However, the form of antennal sensilla, antennal groove, sexual dimorphism (less apparent) and all other characters mentioned in the generic description clearly place this species in *Aprostoma*.

Key to the species of *Aprostoma* of the World

1. Head with raised median longitudinal carina (Fig. 23).
..... *carinata* Dajoz
- Head without median carina. 2.
2. Head without traces of supraorbital ridges (Fig. 25).
Anterior clypeal margin with long yellowish setae.
Protibia with outer surfaces smooth, at least 2 as long
as tarsomere 1 (Fig. 19). Median longitudinal groove on
pronotum marked as very fine line, and only at middle
with elongated pit (Fig. 25) *glabriceps* (Kolbe)
- Head always with supraorbital ridges. Anterior clypeal
margin without setae (these may project anterad from
labrum hidden beneath clypeus). Protibia always with
oblique ridges (Fig. 20), at most 1.5 as long as tar-
somere 1 (Fig. 21). Median longitudinal groove on
pronotum distinct and broad from anterior to posterior
part (Figs 22–24) 3.
3. Anterior margin of pronotum raised medially in form of
a carina (Fig. 24). Supraorbital ridges strongly raised
and broad, leaving moderately wide groove which at
middle is about as wide as the ridge (Fig. 24)
..... *filum* Guérin-Ménéville
- Anterior margin of pronotum not raised. Supraorbital
ridges feebly or prominently raised but never broad and
intermediate part of vertex and frons between ridges
not grooved. 4.
4. Supraorbital ridges strongly raised and angulate in lat-
eral aspect (Figs 32, 45). Lower margin of tarsomere 1
of front leg strongly denticulate. 5.
- Supraorbital ridges feebly raised (Fig. 48). Lower mar-
gin of tarsomere 1 of front leg apparently smooth or
crenulate. 6.
5. Supraorbital ridges strongly raised and obtusely angu-
late at middle (Fig. 45), not distinctly separated from
lateral margins *reitteri* Kraatz
- Supraorbital ridges moderately strongly raised, wavy
and double angulate (Fig. 32); converging anteriorly
and becoming distinctly separated from lateral mar-
gins. *anguliceps* Pope
6. Head without transverse occipital ridge (Fig. 42); supra-
orbital carinae very weak and not continuing anterad
along clypeal margin. *pulawskii* Ślipiński

- Head with transverse occipital ridge (Fig. 41), continu-
ing anteriorly along anterior margin of clypeus
(Fig. 48). 7.
- 7. Dorsum of head between occipital ridge and clypeus
almost flat, little deflexed anteriorly and appears hard-
ly convex in lateral view (Fig. 47); transverse occipital
ridge distinctly projected backwards (Fig. 41)
..... *mroczkowskii* sp. nov.
- Dorsum of head between occipital ridge and clypeus
moderately convex and appears distinctly bent anterad
(Fig. 48); transverse occipital ridge almost always
straight (Fig. 43) *planifrons* Westwood

Aprostoma anguliceps Pope (Figs 22, 26–28, 32)

Aprostoma anguliceps Pope, 1953: 14. Holotype ♂: Zaire, Yangambi;
MRAC, examined.

Diagnosis. The best characters which serve to distinguish this species from all the remaining *Aprostoma* lie on its head. The supraorbital carinae are double angulate in lateral view (Fig. 32) and are distinctly converging anteriorly which is unlike any other species of the genus.

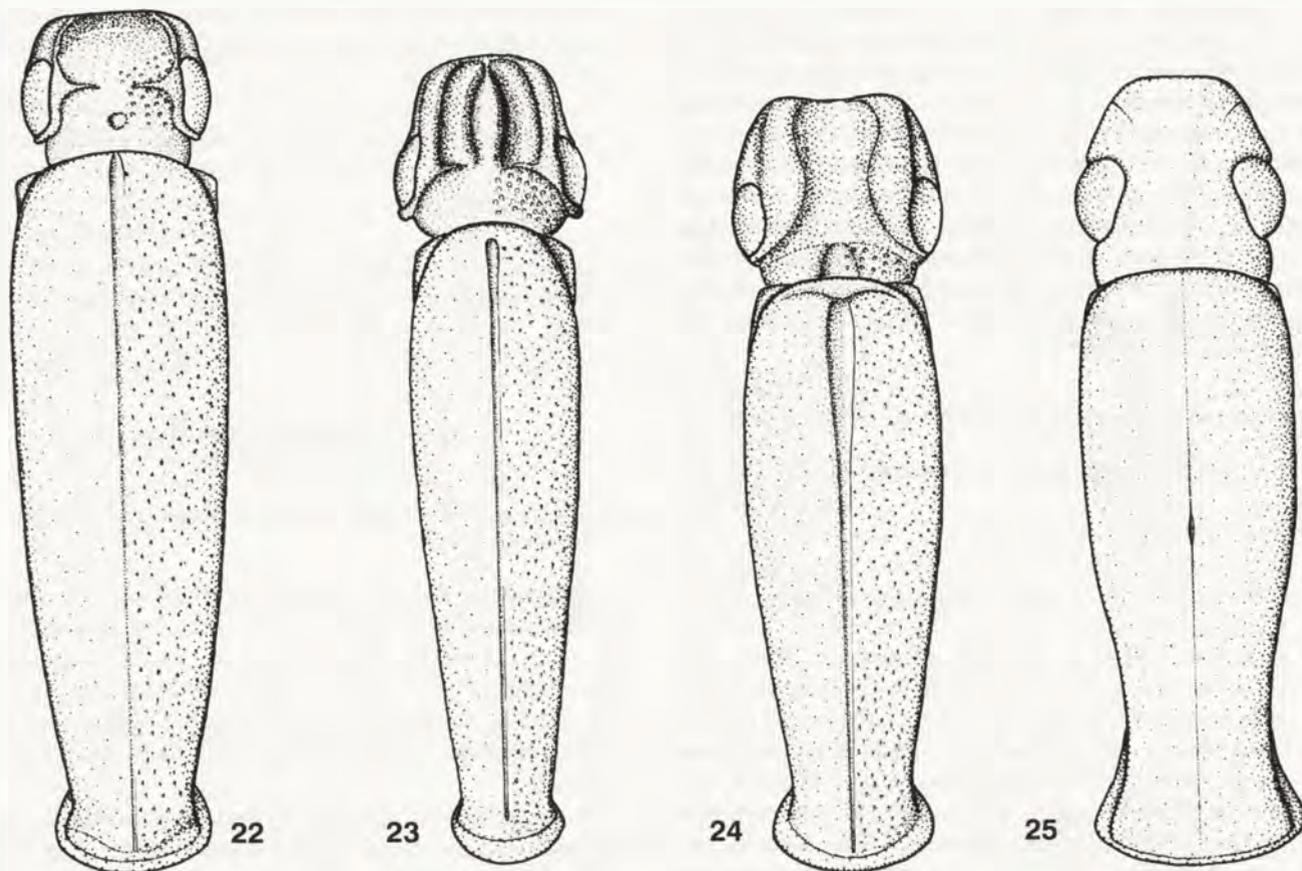
Description. Length: 11 mm. Body dark brown, shiny, glabrous.

Head transverse; anterior clypeal margin truncate with obtusely rounded lateral angles. Lateral ridges moderately raised, distinctly convergent from above eyes towards clypeal margin, at broadest point about as wide as 4 eye facets, biangulate in lateral view (Fig. 32); biarcuate transverse occipital ridge little above middle of eye. Dorsum of head between occipital ridge and a point above antennal insertions weakly concave and then obliquely declivous from this point to anterior margin; a small round median fovea present behind occipital ridge. Declivous anterior part with fine punctures, punctures on concavity and behind occipital ridge distinctly coarser; separated by 1.5–2.5 diameters. Antennomeres 3 onwards elongate, the terminal one 2.3 × as long as wide.

Pronotum (Fig. 22) 3.5–3.6 × as long as wide, widest at anterior one-third to little above middle. Median longitudinal sulcus narrow, complete from anterior to hind margin, slightly widened anteriorly. Discal punctures of two sizes, little coarse elongate punctures separated by 1–4 diameter, interspaces with minute punctures.

Scutellum small elongate-elliptical and very finely punctate.

Elytra 5.0–5.5 × as long as wide, 1.6–1.8 × as long as prothorax, widest just above posterior fifth; apical margin rounded with notched apico-sutural angle, apical declivity moderately marked, striato-punctate. Alternate intervals raised in posterior third, intervals I and III continued to apical margin, V and VII terminate independently little above apex, interval IX joins interval III at apical margin.



Figures 22–25. *Aprostoma* spp., head and pronotum. (22) *A. anguliceps*; (23) *A. carinata*; (24) *A. filum*; (25) *A. glabriceps*.

Legs: protibia with 4 oblique ridges on posterior face; tarsomere 1 about $0.9 \times$ as long as protibia, crenulate ventrally.

Aedeagus (Figs 26–28, 32) $0.6 \times$ as long as abdomen; basal part of tegmen $2.6 \times$ as long as apical one; median lobe $1.1 \times$ tegmen length.

Types. “Congo, Yangambi, 1951, C. Donis” (holotype and 6 paratypes, MRAC, BMNH, MZPW).

Other material examined. (19 ex.) Same locality as holotype (MRAC, BMNH, MZPW).

Distribution. Known only from Zaire.

Aprostoma carinata Dajoz
(Figs 23, 29–31)

Aprostoma carinata Dajoz, 1980: 10. Syntypes: Madagascar, Mahatsinjo; MNHN, examined.

Diagnosis. The median carina along head (Fig. 23) is a unique character for this species.

Description. Length: 10.2–11.6 mm. Body feebly shiny, black, apparently glabrous.

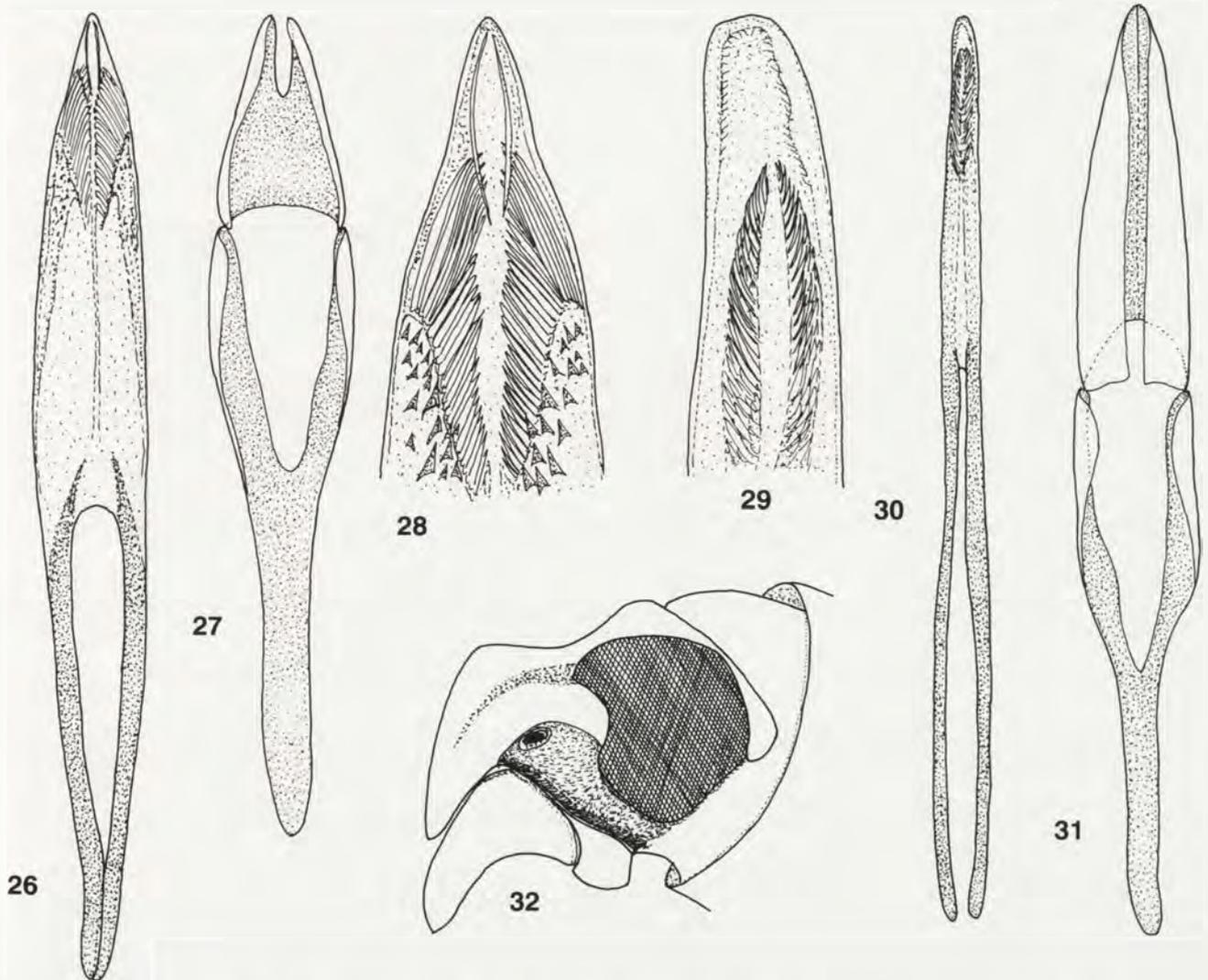
Head subquadrate to weakly transverse; anterior clypeal margin truncate with obtusely rounded lateral angles; lateral ridges distinctly raised, little convergent

from above eyes towards clypeal margin. Median longitudinal carina raised from almost front margin of clypeus to a level of middle of eye, at least thrice as elevated as lateral ridges. Declivous anterior portion of head and lateral ridges only with fine punctures; vertex behind median carina moderately coarsely and densely punctate, interspaces about 1.0–1.5 of puncture diameter. Antennomeres 8, 9 subquadrate, terminal one $2 \times$ as long as wide.

Pronotum (Fig. 23) $3.5\text{--}3.6$ as long as wide, anterior margin arcuate, widest at anterior one-fifth or little above middle. Median longitudinal sulcus narrow, extends from below anterior margin to almost hind margin, slightly widened anteriorly. Punctuation on pronotum fine, punctures almost circular to slightly elongate, rather sparse on top and denser towards lateral borders, punctures distinctly finer than those on hind part of vertex; interspaces feebly reticulate and micropunctate.

Scutellum small, elongate-elliptical, impunctate.

Elytra $5.6\text{--}5.9 \times$ as long as wide, and, about twice as long as prothorax, widest above posterior fifth; apical margin rounded with notched apico-sutural angle, apical declivity weak, striato-punctate; alternate intervals raised in posterior third, intervals I and III raised and continued to apical margin, intervals V and VII terminate indepen-



Figures 26–32. *Aprostoma* spp. 26–31, 32. *A. anguliceps*. 29–31 *A. carinata*: (26, 30) median lobe, ventral; (27, 31) tegmen, ventral; (28–29) apical part of median lobe; (32) outline of head, lateral.

dently little before apex, interval IX joins interval III at apical margin.

Legs: protibia with 3 oblique ridges on posterior face; tarsomere 1 about as long as protibia, crenulate ventrally.

Aedeagus (Figs 29–31) $0.46 \times$ as long as abdomen; basal part of tegmen $1.29 \times$ as long as apical one; median lobe $0.95 \times$ tegmen length.

Types. “Madagascar, Mathsinjo, Muséum Paris coll. générale, type” (2 syntypes, MNHN)

Other material examined. “Madagascar, ex coll. Kraatz, *A. casarius* sp. n., det. E. Heinze, 1943” (1, DEI); “Madagascar, Forêts de Fito, Perrot Freres, vi–vii. 1897” (1, MNHN).

Distribution. Madagascar.

Remarks. The two specimens recovered by SAŠ in 1985 at the MNHN Paris, apparently constitute a type series of *A. carinata* Dajoz, but none of them was originally labelled by R. Dajoz with his identification or type label. Since a

holotype was not labelled by the author and both specimens come from the same locality no holotype can be recognized.

Aprostoma filum Guérin-Méneville
(Figs 24, 33–35)

Aprostoma filum Guérin-Méneville, 1839: 172. Syntypes: Madagascar; MNHN?, not examined. – Fairmaire 1868: 780; Dajoz 1980: 10.

Diagnosis. This species can be recognized from all its congeners by the pronotum transversely impressed behind the anterior margin which is raised to form a blunt carina (Fig. 24).

Description. Length: 12–13 mm. Body feebly shiny, dark brown to black, glabrous.

Head subquadrate; anterior clypeal margin shallowly emarginate with obtuse lateral angles; lateral ridges dis-

tinctly raised, markedly broad with tops somewhat sloping outward, widest a little above eyes leaving intermediate part of head as wide groove. Declivous anterior and middle portion of head with moderately sparse fine punctures, punctures coarser behind transverse occipital impression, punctures on lateral ridges microscopic. Antennomeres 7–9 subquadrate to weakly transverse; terminal antennomere 2.0–2.2 × as long as wide.

Pronotum (Fig. 24) 3.2–3.4 times as long as wide, anterior margin raised medially forming a blunt carina; pronotum widest at anterior one-third. Median longitudinal sulcus narrow, extending from little below front margin to hind margin, slightly widened anteriorly. Punctures on disc coarse, separated by 2–3 diameters, interspaces reticulate with finer micropunctures.

Scutellum small, elongate-elliptical, impunctate.

Elytra 5.3–6.6 times as long as wide, about twice as long as prothorax, widest above posterior fifth; apical margin rounded with notched apico-sutural angle; apical declivity moderately marked, striato-punctate. Alternate intervals raised in posterior third, intervals I and III raised and continued to apical margin, intervals V and VII termi-

nate independently little above apex, interval IX joins interval III at apical margin.

Legs: protibia with 5–6 oblique ridges on posterior face; tarsomere 1 about as long as protibia, distinctly crenulate ventrally.

Aedeagus (Figs 33–35) 0.95 × as long as abdomen; basal part of tegmen 1.9–2.0 × as long as apical one; median lobe 1.4–1.5 × tegmen length.

Material examined. (63 ex.) Madagascar: Diégo-Suarez; Baie d'Antongil; Maroansetra; Atsianaka (BMNH, DEI, MNHN, MHNG, MRAC, NHMV, ZMB, MZPW).

Distribution. Madagascar.

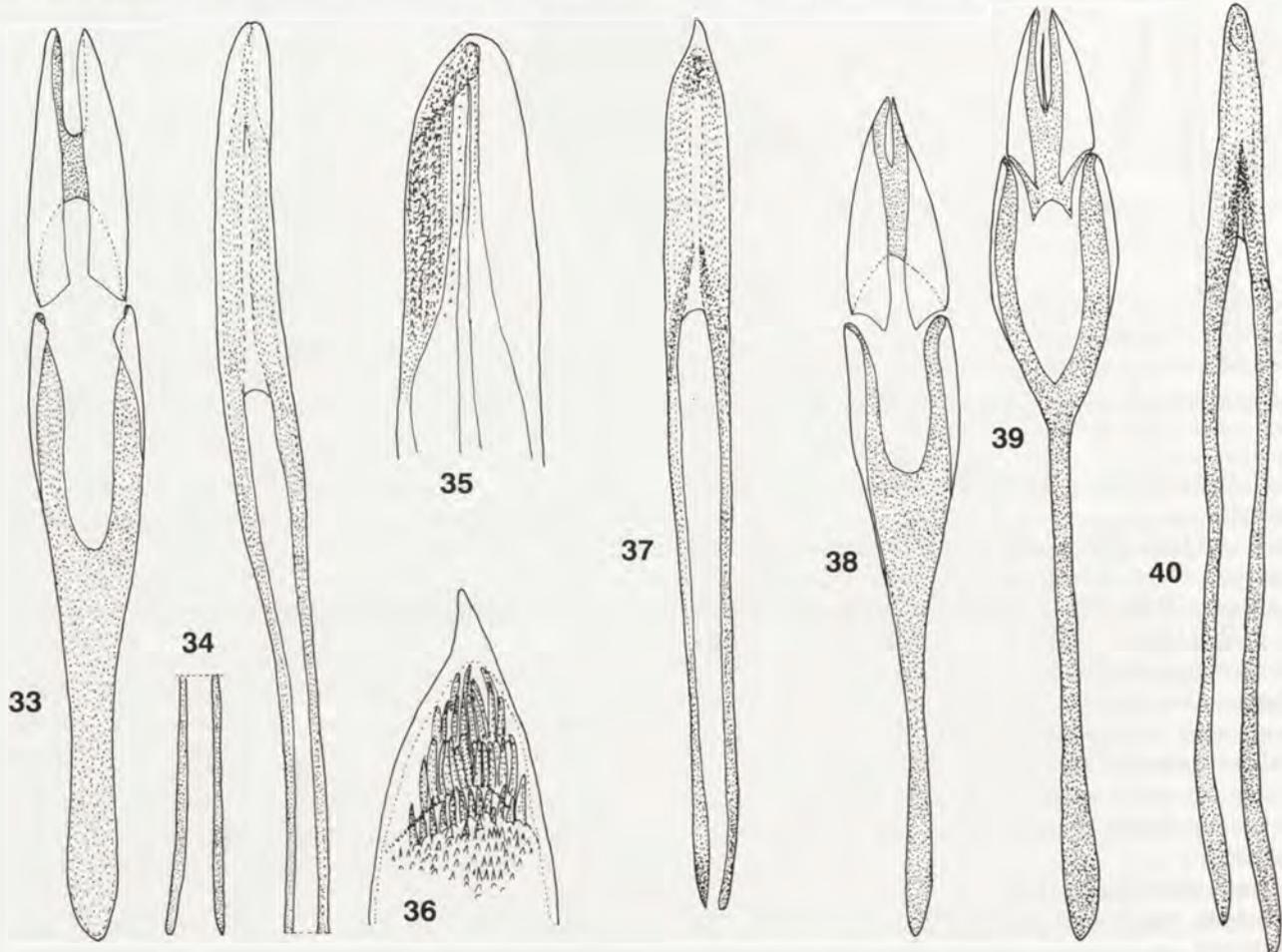
Aprostoma glabriceps (Kolbe)

(Figs 19, 25, 39–40, 49)

Eumecidium glabriceps Kolbe, 1898: 110. Lectotype, here designated: Usambara; ZMB, examined. – In *Aprostoma*: Pope 1955: 244.

Aprostoma simplex Grouvelle, 1914: 135. Holotype: Zaire, Mawambi-Ukaika; MRAC, examined. Synonymy by Pope 1955: 244.

Diagnosis. This species is distinguished from the remaining *Aprostoma* by the absence of supraorbital cari-



Figures 33–40. *Aprostoma* spp. 33–35. *A. filum*. 36–37. *A. mroczkowski*. 38–40. *A. glabriceps*: (33, 38, 39) tegmen, ventral; (34, 37, 40) median lobe, ventral; (35, 36) apical part of median lobe.

nae, the protibia smooth at outer surface and the clypeus bearing long yellowish setae along margin.

Description. Length: 7.2–19.0 mm. Body feebly shiny, reddish brown to brown, apparently glabrous.

Head subquadrate; anterior clypeal margin truncate with obtuse lateral angles, densely setose; lateral margins including inner border of eyes not raised (Fig. 49); dorsum of head feebly convex, uniform and devoid of any elevation. Punctures fine, moderately sparse, little denser towards clypeus; interspaces very feebly reticulate and micropunctate. Eyes shorter than half as long as head, reaching far on dorsal and ventral sides (Fig. 25). Antennomeres 8, 9 weakly transverse, the terminal one 1.6–1.9 × as long as wide.

Pronotum (Fig. 25) 3.0–3.5 × as long as wide, widest at anterior one-fourth or little above middle. Median longitudinal sulcus represented by an impressed line, except elongated pit little above middle. Puncturation similar to that on vertex but interspaces more apparently reticulate and micropunctate.

Scutellum small, elongate-elliptical, impunctate.

Elytra 5.2–5.7 × as long as wide, 1.9–2.2 × as long as pronotum, widest just before middle; apical margin rounded with notched apico-sutural angle, no prominent apical declivity; elytron faintly striato-punctate, alternate intervals slightly raised in posterior fifth, intervals I and III continued to apical margin, interval VII joins interval V and jointly continues to apical margin.

Legs: protibia without oblique ridges on posterior face (Fig. 19); 1st tarsomere 0.6–0.7 × as long as protibia, smooth ventrally.

Aedeagus (Figs 39, 40) 0.6 × as long as abdomen; basal part of tegmen 5.4 × as long as apical one; median lobe 0.98 × tegmen length.

Types. "Usambara, Derema, 850 m, Dezember, Conradt, L., Holotype" (Lectotype of *E. glabriceps* Kolbe, ZMB, here designated); same data as lectotype but "paratype" (2, ZMB, paralectotypes). "Mawambi-Ukaika, Grauer, Nov. Dez. 10 (MRAC, holotype of *A. simplex* Grouv.).

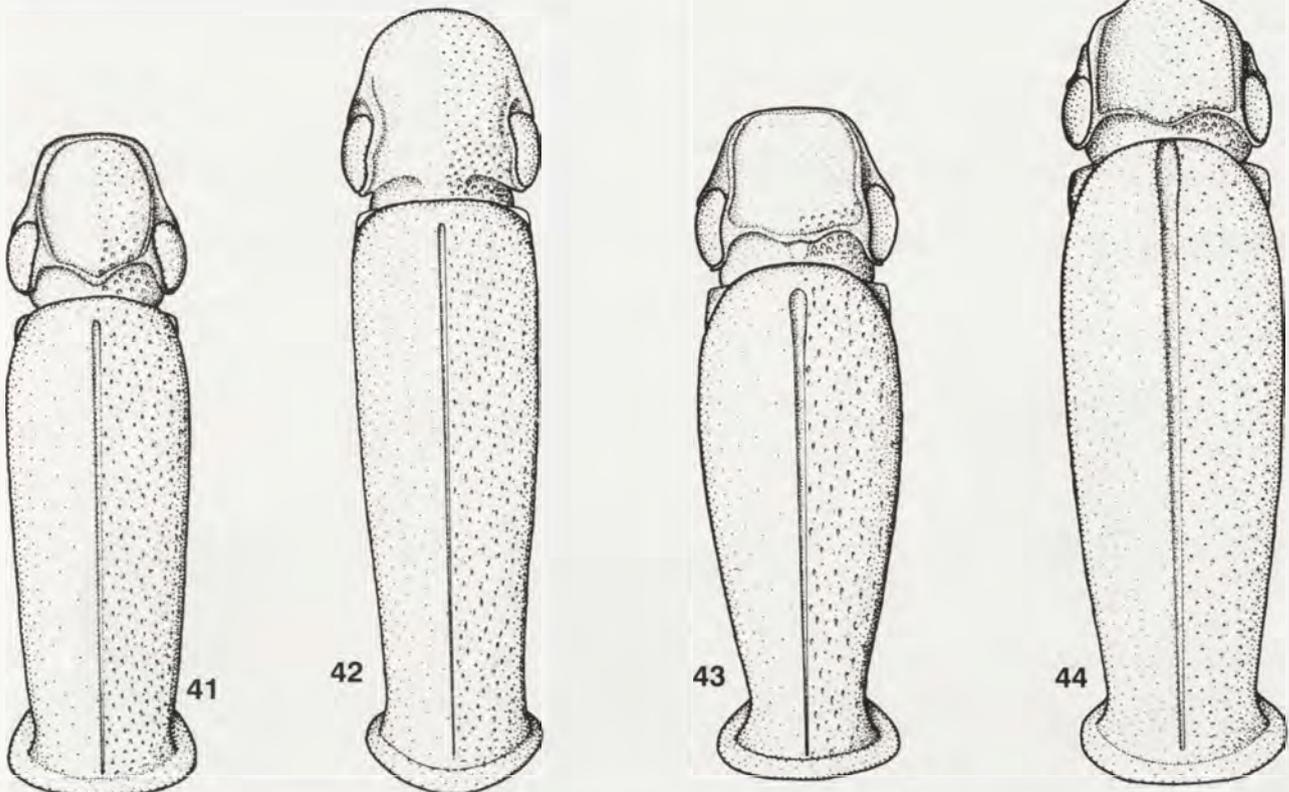
Other material examined. (25 ex.) Zaire: Parc Nat. Albert; Yangambi; Haut-Uelé; Hembe-Bitale; Mawambi-Ukaika (BMNH, MRAC, MZPW, NHMV; MHNG); Togo: Bismarckburg (ZMB); Cameroon (DEI, ZMB).

Distribution. Tanganyika, Zaire, Cameroon, Togo.

Aprostoma mroczkowskii sp. nov.
(Figs 36–38, 41)

Etymology. This species is named after Prof. Dr. Maciej Mroczkowski, to whom the present paper is dedicated on his 70th Birthday.

Diagnosis. This species is very similar to *Aprostoma planifrons* in having the supraorbital ridges of head not angulate or converging anteriorly combined with weakly



Figures 41–44. *Aprostoma* spp., head and pronotum. (41) *A. mroczkowskii*; (42) *A. pulawskii*; (43) *A. planifrons*; (25) *A. reitteri*.

serrate lower surface of the first protarsomere which is only slightly shorter than the protibia. Both species are easily separated by the form of the male genitalia. Also head of *A. mroczkowskii* is less inclined ventrally (Figs 47, 48) and bears the occipital ridge distinctly projected backwards.

Description. Length: 8.4 mm. Body feebly shiny, blackish, glabrous.

Head (Fig. 41) subquadrate; anterior clypeal margin truncate with obtusely rounded lateral angles. Lateral ridges moderately raised, well margined and continued along the anterior clypeal margin, about as wide as 2–2.5 eye facets; occipital ridge complete and angulate at middle. Dorsum of head almost flat, slightly concave laterally behind occipital ridge. Front and middle part of head with fine elongate punctures separated by at least 3–5 diameters, punctures in front and behind occipital ridge coarser, separated in front of ridge by 2–2.5 diameters and behind ridge hardly by their diameter. Antennomeres 3–9 elongate, 10 subquadrate, the terminal one 2.6 × as long as wide (Fig.).

Pronotum (Fig. 41) 3.5 × as long as wide, widest at anterior one-fifth. Median longitudinal sulcus narrow, extending from little below anterior margin to hind margin, slightly widened anteriorly. Punctures on disc of two sizes, little coarse elongate punctures separated by 2–4 diameters, interspaces with finer round punctures.

Scutellum small, elongate-elliptical and very finely punctate.

Elytra 5.4 × as long as wide, and 1.9 × as long as prothorax, widest about posterior fifth; apical margin rounded with notched apico-sutural angle, apical declivity moderately marked, striato-punctate. Alternate intervals raised in posterior third, intervals I and III continued to apical margin, V and VII terminate independently little above apex, interval IX joins interval III at apical margin.

Legs: protibia with 5 oblique ridges on posterior face; 1st tarsomere about 0.7 × as long as protibia, weakly crenulate ventrally.

Aedeagus (Figs 36–38) 0.65 × as long as abdomen; basal part of tegmen 2.6 × as long as apical one; median lobe 1.1 × tegmen length.

Types. Holotype ♂: "Kamerun, Conradt/ *Aprostoma kraatzi* Grouv/ MS name R.D. Pope, 1965/ Museum Paris 1917, coll. Grouvelle" (MNHN)

Distribution. Cameroon.

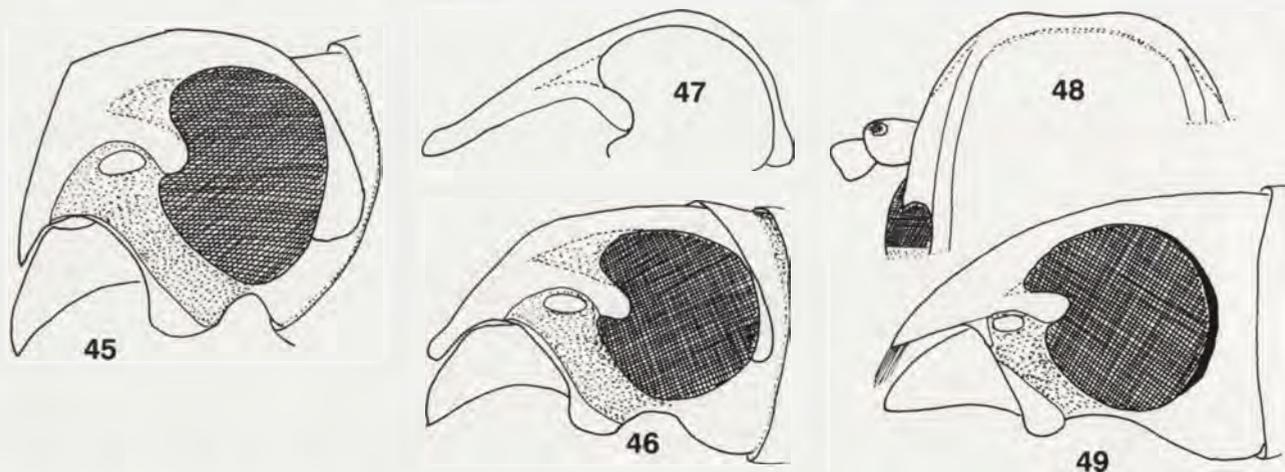
Aprostoma pulawskii Ślipiński
(Figs 42, 52, 53)

Aprostoma pulawskii Ślipiński, 1982: 618. Holotype: Ivory Coast, Adiopodoumé; MHNG, examined.

Diagnosis. *Aprostoma pulawskii* is somewhat similar to *glabriceps* and *mroczkowskii* because of relatively flat head and short first tarsomere. Like *mroczkowskii* and unlike *glabriceps*, head bears fine supraorbital ridges and protibia is crenulate in *pulawskii*. It can be separated from *mroczkowskii* because of the supraorbital ridges very faintly developed and not connected by an occipital ridge, the protibia 1.7–2.4 × as long as tarsomere 1 (less than 1.4 in *mroczkowskii*) and a peculiar aedeagus bearing large denticles in the internal sac.

Description. Length: 7–11 mm. Body feebly shiny, dark brown to black, apparently glabrous.

Head subquadrate; anterior clypeal margin arcuate with obtusely rounded lateral angles; lateral ridges feebly raised from behind eyes to little above it, about as wide as 2 to 2.5 eye facets. Dorsum of head flat, regularly punctured, punctures somewhat coarser posteriorly from level of anterior third of eyes, interspaces about as wide as 2–4 puncture diameters. Antennomeres 3 onwards slightly elongate, rarely antennomeres 9 and 10 subquadrate; terminal one 2.5 × as long as wide.



Figures 45–49. *Aprostoma* spp., head. (45) *A. reitteri*, lateral; (46) *A. planifrons*, lateral; (47) *A. mroczkowskii*, lateral view of supraorbital carina and clypeus; (48) *A. planifrons*, anterior part showing margined clypeus; (49) *A. glabriceps*.

Pronotum (Fig. 42) 3.4–3.6 times as long as wide, widest at anterior one-fifth. Median longitudinal sulcus narrow, extending from little below front margin to almost hind margin, slightly widened anteriorly. Punctuation on disc fine, little elongate, separated by 1–3 diameters, punctures more closer towards lateral borders.

Scutellum small, elongate-elliptical, impunctate.

Elytra 5.0–5.4 × as long as wide, and about twice as long as prothorax, widest little above posterior fifth; apical margin rounded with notched apico-sutural angle; apical declivity moderately marked, striato-punctate. Alternate intervals raised in posterior third, intervals I and III continued to apical margin, V and VII terminate independently little above apex, interval IX joins interval III at apical margin.

Legs: protibia with 8 weak oblique ridges on posterior face, 1.7–2.4 × as long as tarsomere 1, which is indistinctly crenulate ventrally.

Aedeagus (Figs 52, 53) 0.4–0.5 × as long as abdomen; basal part of tegmen 1.7–1.8 × as long as apical one; median lobe 0.8 × tegmen length.

Types. "Côte d'Ivoire, Adiopodumé, 6.iii.77, I. Löbl" (holotype, MHNG).

Other material examined. (9 ex.) Zaire: Yangambi, C. Donis, coll. R. Mayné, 1951, ex *Pterygopodium oxyphylum* Harms. (MRAC; MZPW).

Distribution. Ivory Coast, Cameroon, Zaire.

Aprostoma planifrons Westwood

(Figs 1–18, 20–21, 43, 46, 48, 50–51, 54)

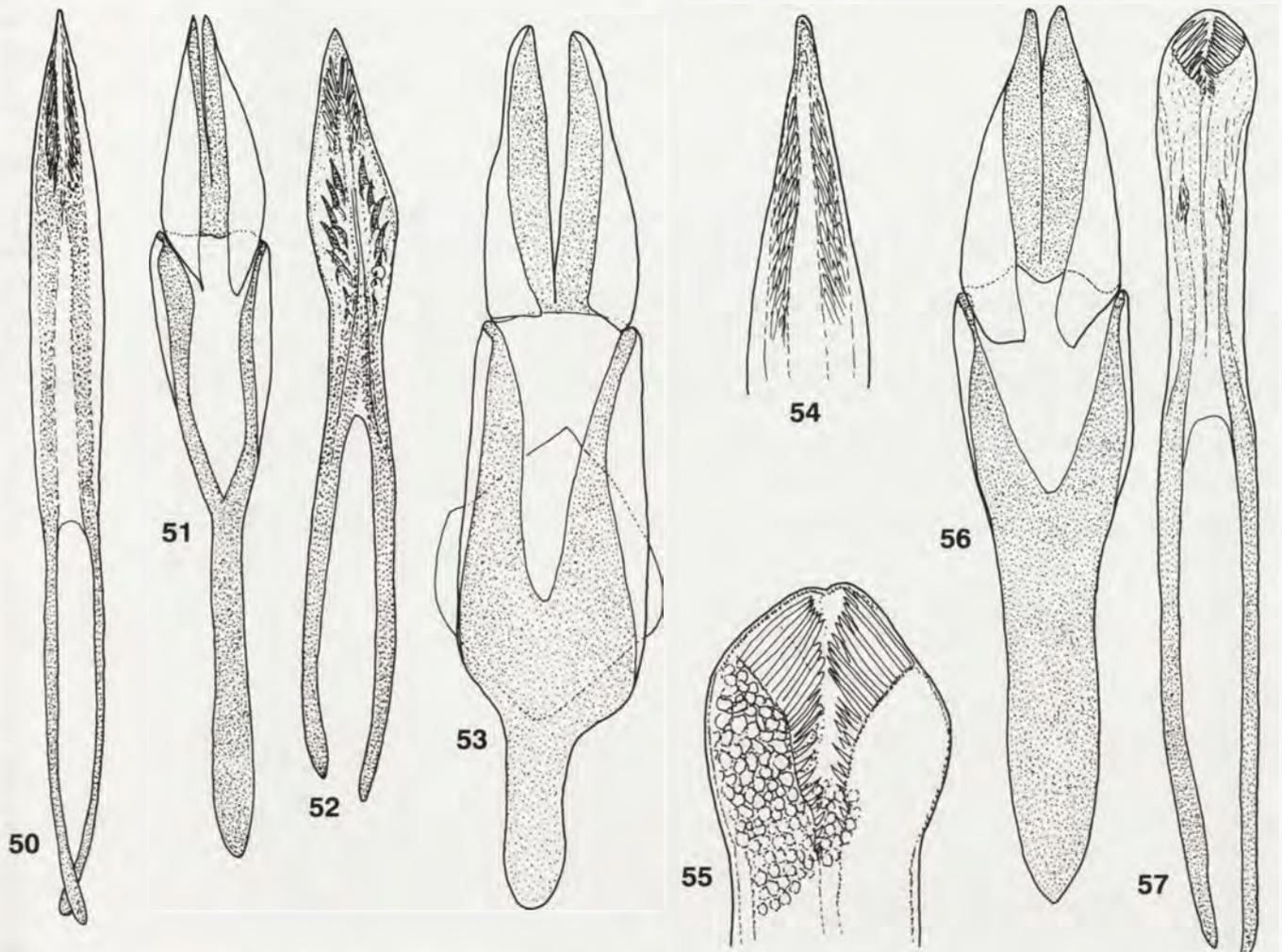
Aprostoma planifrons Westwood, 1869: 320. Syntypes: River Niger; location unknown, not examined.

Aprostoma integriceps Fairmaire, 1882: xii. Syntypes: Gabon; MNHN?, not examined. Synonymized by: Fairmaire 1895: cclxxxii.

Leptosomatium quadriceps Kraatz, 1895: 157. Syntypes: Togo; DEI, examined. Synonymized by: Fairmaire 1895: cclxxxii.

Aprostoma lineare Grouvelle, 1908: 413. Holotype: Ceylon; BMNH, examined. **New synonym.**

Diagnosis. Very similar to *Aprostoma mroczkowskii*, see that species for differences.



Figures 50–57. *Aprostoma* spp. 50, 51, 54. *A. planifrons*. 52–53. *A. pulawskii*. 55–57. *A. reitteri*: (50, 52, 57) median lobe, ventral; (51, 53, 56) tegmen, ventral; (54, 55) apical part of median lobe.

Description. Length: 8–13 mm. Body feebly shiny, dark brown to black, glabrous.

Head subquadrate; anterior clypeal margin truncate with obtusely rounded lateral angles. Lateral ridges moderately raised, well margined, little convergent from above eyes towards clypeus and faintly continued along clypeal margin, about as wide as 2.5–3.5 eye facets; occipital ridge complete, straight to weakly sinuate medially. Dorsum of head somewhat convex and strongly deflexed anteriorly (Fig. 46) from a point above antennal insertions, little depressed in front of occipital ridge and moderately concave laterally behind the ridge. Front and middle part of head with fine punctures separated by 2–4 diameters, punctures in front and behind occipital ridge coarser, separated in front of ridge by 2–2.5 diameters and behind ridge by less than their diameter. Antennomeres 3 onwards elongate with segments 9 and 10 tend to be subquadrate, the terminal one $2.2\text{--}2.5 \times$ as long as wide.

Pronotum (Fig. 43) $2.9\text{--}3.5 \times$ as long as wide, widest at about anterior third. Median longitudinal sulcus narrow, extending from below anterior margin and hind margin, slightly widened anteriorly. Punctures on disc of two sizes, little coarse elongate punctures separated by 2–4 diameters, interspaces with finer round punctures.

Scutellum small, elongate-elliptical and very finely punctate.

Elytra $5.3\text{--}6.7 \times$ as long as wide, $1.9\text{--}2.2 \times$ as long as prothorax and widest about posterior fifth; apical margin rounded with notched apico-sutural angle, apical declivity moderately marked, striato-punctate. Alternate intervals raised in posterior third; intervals I and III continued to apical margin, V and VII terminate independently little above apex, interval IX joins interval III at apical margin.

Legs: protibia with 4–5 oblique ridges on posterior face; tarsomere 1 about $0.7\text{--}0.8 \times$ as long as protibia, weakly crenulate ventrally.

Aedeagus (Figs 50, 51, 54) $0.7\text{--}0.8 \times$ as long as abdomen; basal part of tegmen $2.6\text{--}2.8 \times$ as long as apical one; median lobe $0.9\text{--}1.1 \times$ tegmen length.

Types. "Togo, Conradt, ex. coll. Kraatz" (3 syntypes of *L. quadraticeps* Kraatz, DEI); Ceylon, *A. lineare* Ty Grouv". (holotype of *A. lineare*, BMNH).

Other material examined. (236 ex.) Kenya: Nairobi; Nigeria: Ile-Ife; Zaire: Yangambi; Togo: Bismarcksburg; Cameroon: Barombi, Melyko, Albrechtshohe (BMNH, MNHN, MNHG, DEI, ZMB, MZPW)

Distribution. Sri Lanka?; Central and West Africa.

Remarks. The holotype of *Aprostoma lineare* comes from an old and poorly labelled material, and the occurrence of this species in Sri Lanka is uncertain. To date, no other material was seen to confirm this data.

***Aprostoma reitteri* (Kraatz)**

(Figs 44, 45, 55–58)

Leptosomatium Reitteri Kraatz, 1895: 157. Holotype: Togo; DEI, examined. – In *Aprostoma*: Grouvelle 1908: 443.

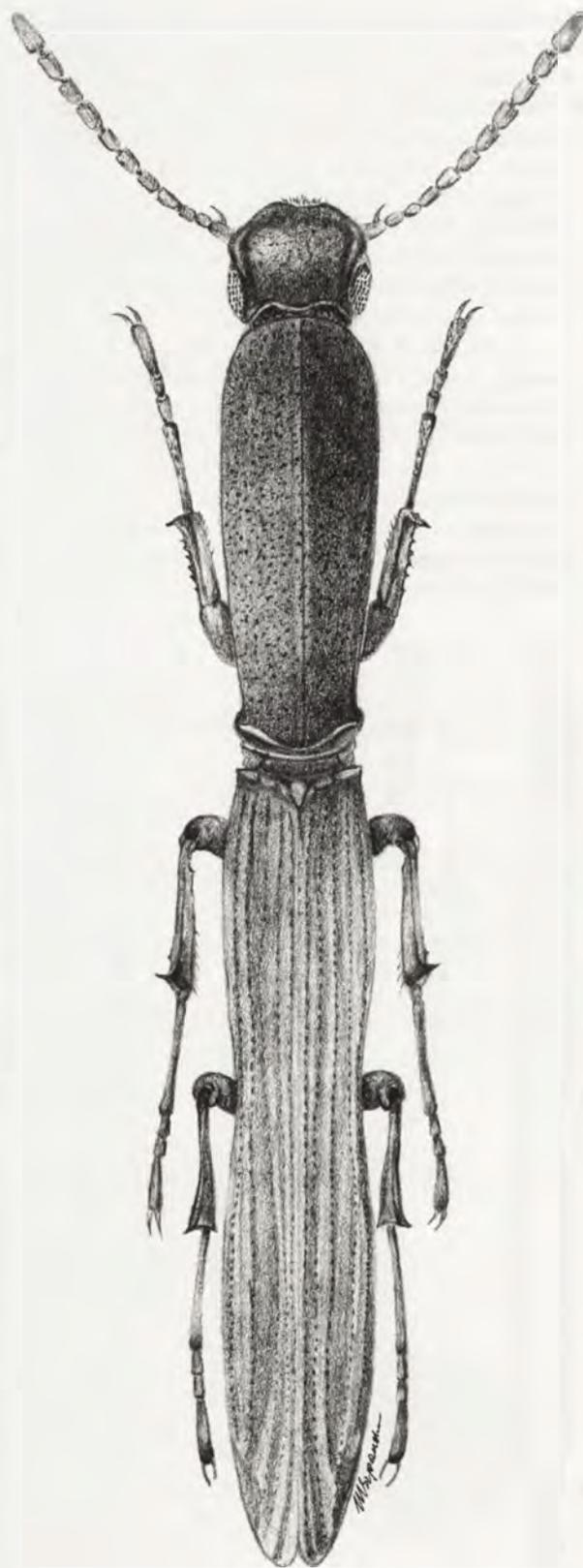


Figure 58. *Aprostoma reitteri* (Kraatz) by M. Szczepańska.

Diagnosis. This is the largest species of *Aprostoma*. It can immediately be recognized from all other species by a form of supraorbital carinae which are strongly raised and angulate (Fig. 45).

Description. Length 13–19 mm. Body dark brown to black, shiny.

Head transverse; anterior clypeal margin shallowly emarginate medially with obtuse lateral angles. Lateral ridges distinctly raised from behind eyes to little beyond antennal bases, about as wide as 4–5 eye facets; convex and distinctly angulate (Fig. 45); biarcuate transverse occipital ridge near middle of eyes. Dorsum of head flat medially with sides sloping upwards, densely punctured, punctures of two sizes, fine slightly elongate punctures separated by 2–4 diameters, interspaces with minute punctures. Antennomeres 3 onwards elongate, terminal antennomere 2.3–2.5 × as long as wide.

Pronotum (Fig. 44) about 3.0–3.3 × as long as wide, widest at anterior one-third. Median longitudinal sulcus narrow, complete from front to hind margin, slightly widened anteriorly. Punctures on disc of two sizes, little coarse and round punctures separated by 2–4 diameters, interspaces with minute punctures, primary punctures slightly coarser than those on vertex.

Scutellum small, elongate-elliptical and very finely punctate-pubescent.

Elytra (Fig. 58) 4.1–5.6 × as long as wide, and 1.7–1.9 × as long as prothorax, widest above posterior fifth; apical margin rounded with notched apico-sutural angle, apical declivity moderately marked, striato-punctate. Alternate intervals raised in posterior third, intervals I and III continued to apical margin, V and VII terminate independently little above apex, IX and III merge at apical margin.

Legs: protibia with 5–6 oblique ridges on posterior face; tarsomere 1 about as long as protibia, crenulate ventrally.

Aedeagus (Figs 55–57) 0.6 × as long as abdomen; basal part of tegmen 1.9 × as long as apical one; median lobe 0.95 × tegmen length.

Types. "Togo, Conradt, ex. coll. Kraatz" (holotype, DEI).

Other material examined. (23 ex.) Togo: Bismarckburg (ZMB). Cameroon (ZMB, MNHN, MZPW). Gabon: Lac Zonanghe (MZPW). Zaire: Yangambi; Mawambi-Ukaika (BMNH, MRAC, NHMV, MZPW).

Distribution. Zaire, Cameroon, Ivory Coast, Gabon, Togo.

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