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THREE NEW GENERA OF THE SUBFAMILY AGATHIDINAE (HYMENOPTERA: BRACONIDAE)

by

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Achterberg, C. van: Three new genera of the subfamily Agathidinae (Hymenoptera: Braconidae).

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Key words: Braconidae; Agathidinae; *Monophrys*; *Phleocephala*; *Protroticus*; *Troticus*; Afrotropical; Palaearctic; Oriental.

Three new genera and two new species of Agathidinae (Braconidae) are described and fully illustrated. *Monophrys* (type-species: *Disophrys manifesta* Kokujev from S.USSR), *Phleocephala* (type-species: *P. liefincki* spec. nov. from Indonesia (Sulawesi)) and *Protroticus* (type-species: *P. nigripennis* spec. nov. from Malawi). The genus *Troticus* Brullé, 1846 is redescribed and compared with the new genus *Protroticus*.

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INTRODUCTION

The new taxa described in this paper were discovered during my study of the genera of the Braconidae. The type-species of the genus *Phleocephala* was recently collected and possesses two aberrant character-states: the very deep depressions of the frons (fig. 14) and the tubercle of the stemmaticum (fig. 2). The genus *Monophrys* has hitherto been included in *Disophrys* Foerster, 1862 but differs by the absence of carinae on the frons (except medio-anteriorly; fig. 18) and the rounded apex of the antenna (fig. 22). Finally *Protroticus* has been known as *Troticus* Brullé, 1846 although the type of the type-species of *Troticus* (*T. ovatus* Brullé) could not be found and its interpretation was problematical. Because recently a type-specimen of *T. ovatus* turned up in the Spinola Collection (Turin) it could be shown that *Protroticus* is a different genus with less derived characters than *Troticus*. For instance *Protroticus* lacks

the hump on the lateral mesoscutal lobe, and the fore tarsal segments and the palpi are normal. The biology of the above genera is unknown except in the case of *Protroticus*, which has been reared from pupae of Lasiocampidae. All Agathidinae are, as far as known, parasites of lepidopterous larvae. For the terminology used in this paper, see Van Achterberg (1979: 242-249).

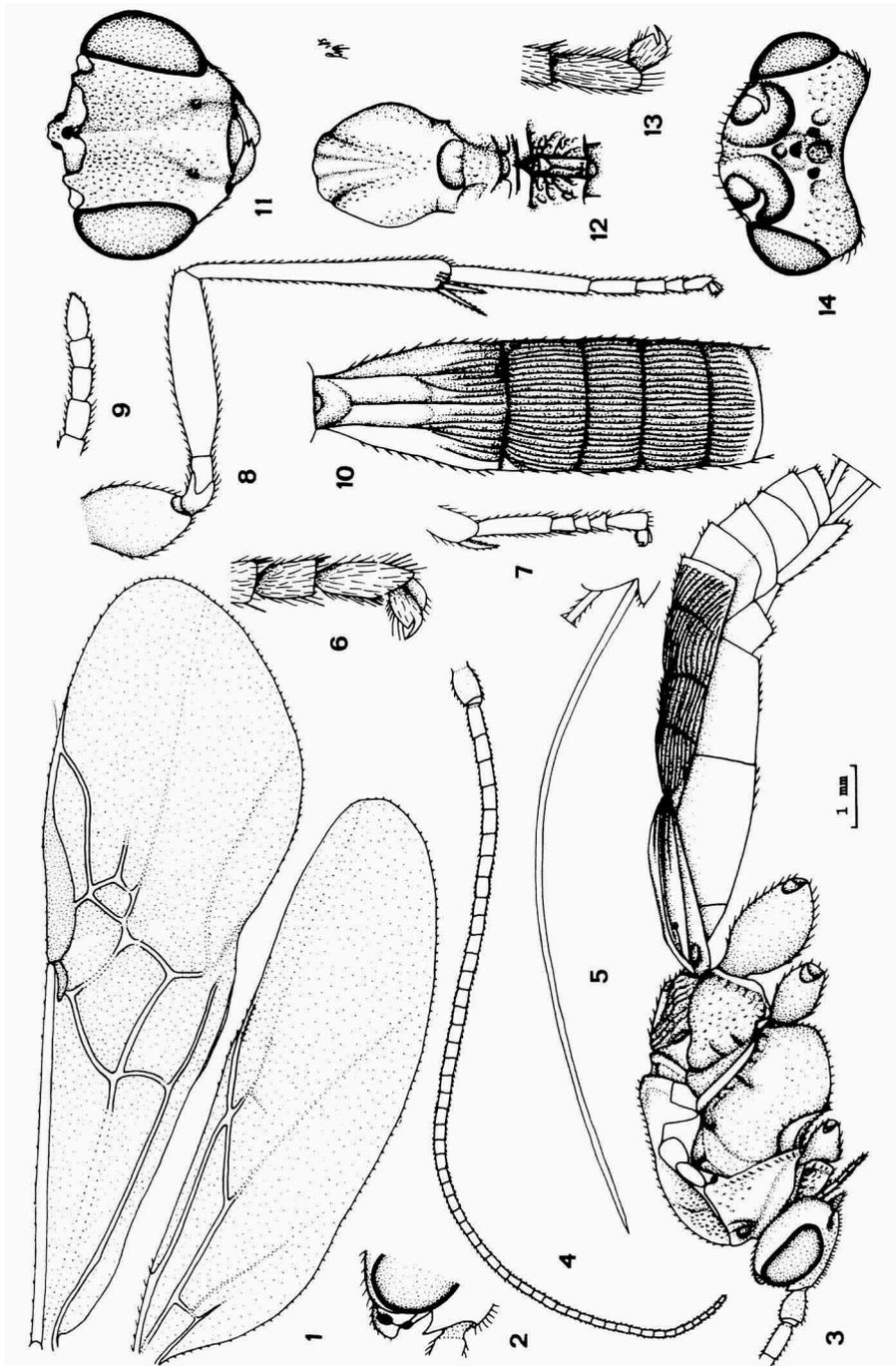
DESCRIPTIONS

Pholeocephala gen. nov.

Type-species: *Pholeocephala lieftincki* spec. nov.

Etymology. — From “pholeos” (Greek for “hole”) and “kephale” (Greek for “head”) because of the extremely deep depression of the frons. Gender: feminine.

Diagnosis. — Head normal (fig. 11); apex of antenna acute apically (fig. 9); eye without subocular groove; clypeus normal, wide (fig. 11); labio-maxillary complex not enlarged (fig. 3); whole frons extremely deeply excavated (down to about half height of eyes) and with medial ridge, without carinae and with small depressions in front of anterior ocellus (fig. 14); stemmaticum with tubercle (fig. 2); antennal sockets with high outer lamella (figs. 11, 14) and with single protuberance antero-medially (fig. 11); malar suture absent; length of malar space about 1.4 times basal width of mandible; pronope absent; a deep subpronope and double epomia present (fig. 3); prepectal carina present, complete and evenly curved; precoxal sulcus absent; metapleural flange medium-sized and obtuse (fig. 3); middle lobe of mesoscutum with pair of shallow, posteriorly converging, grooves (fig. 12); notauli absent (figs. 3, 12); scutellum indistinctly elevated posteriorly; propodeum with irregular depressions, without distinct medial carina and with a long areola (fig. 12); propodeal spiracle large and elliptical (fig. 3); vein 1-SR+M of fore wing largely unsclerotized but present as a completely pigmented trace (fig. 1); second submarginal cell with long ramulus (fig. 1); vein 1-M of fore wing distinctly longer than vein m-cu (fig. 1); vein 2-CU of hind wing present (fig. 1); marginal cell of hind wing parallel-sided; vein M+CU of hind wing distinctly shorter than vein 1-M; length of fore tibial spur 0.6 times fore basitarsus (fig. 7), without long apical spine; outer ventral margin of trochantellus without carina; tarsal claws with wide lamella and without inner tooth (figs. 6, 13); inner and outer hind claw similar; hind tibia with cluster of pegs (fig. 8); length of first metasomal tergite about 1.4 times its apical width; second and third tergites with acute lateral crease, dorsally strongly costate and both with crenulate transverse groove;



Figs. 1-14. *Phleocephala liefincki* gen. et spec. nov., female, holotype. 1, wings; 2, stemmaticum, latero-dorsal aspect; 3, habitus, lateral aspect; 4, antenna; 5, ovipositor; 6, outer hind claw; 7, fore tarsus; 8, hind leg; 9, apex of antenna; 10, first-third metasomal tergites, dorsal aspect; 11, head, frontal aspect; 12, mesosoma, dorsal aspect; 13, inner hind claw; 14, head, dorsal aspect. 1, 3-5, 8, 10, 12: scale-line (=1 ×); 2, 7:2 ×; 6, 13:4 ×; 9:5 ×; 11, 14:1.5 ×.

length of ovipositor sheath about 0.9 times fore wing; hypopygium comparatively large and subtruncate apically (fig. 3).

Distribution. — Oriental: one species.

Note. — Belongs to the Palaeotropical *Braunsia*-group because of the costate metasoma, the elliptical propodeal spiracle, the presence of epomia and subpronope, and the claws with wide lobe. However, it is very easy to separate because of the deeply excavated frons and the protruding stemmaticum and antennal sockets. The only other genus of the Agathidinae with deep depressions of the frons is the genus *Hemiogaster* Enderlein, 1920. In *Hemiogaster* the depressions are much smaller, the antennal sockets and the stemmaticum are different, the ramulus of the second submarginal cell of the fore wing is absent, vein cu-a of the fore wing is straight, the subpronope is shallow, and the third metasomal tergite is without a transverse depression.

***Phleocephala lieftincki* spec. nov.**
(figs. 1-14)

Material. — Holotype, female, (Rijksmuseum van Natuurlijke Historie, Leiden): "SW. Celebes, 1100 m, Mt. Lompobatang area, Malino, 10.VI.1982, M. A. Lieftinck".

Holotype, female, length of body 14.5 mm, of fore wing 12.5 mm.

Head. — Antennal segments 56, length of third segment 1.1 times fourth segment, length of third, fourth and penultimate segments 2.2, 2.1 and 1.2 times their width, respectively (figs. 4, 9); length of maxillary palp 0.6 times height of head; length of eye in dorsal view 3.0 times temple (fig. 14); vertex punctate (fig. 14); POL: diameter of ocellus: OOL = 6:2:11; clypeus punctate laterally, and largely smooth medially (fig. 11); face punctate, but laterally comparatively sparsely so (fig. 11); occipital flange narrow (fig. 3).

Mesosoma. — Length of mesosoma 1.5 times its height; pronotal sides punctate dorsally, crenulate postero-ventrally, and remainder smooth (fig. 3); pronotum somewhat emarginate anteriorly; side of mesoscutum densely punctate; mesopleuron finely punctate, but smooth medially (fig. 3); pleural sulcus distinctly but sparsely crenulate; episternal scrobe elliptical; metapleuron punctate and posteriorly crenulate (fig. 3); mesoscutal lobes rather convex, glabrous only medially, laterally punctate and especially along imaginary notaulic courses (fig. 12); scutellar sulcus without carinae, only with some obsolescent crenulae; scutellum moderately convex and finely punctate; propodeum without depression medio-anteriorly.

Wings. — Fore wing: Second submarginal cell pentagonal with long

ramulus (fig. 1); r : SR1=7:58 (and 3-SR very short); SR1 distinctly curved posteriad (fig. 1); 2-SR:r-m=8:5+4; cu-a curved and postfurcal; 1-SR sclerotized but very short (fig. 1). Hind wing: M+CU:1-M=12:22; SR hardly curved basally and with stub of 2r-m (fig. 15); 2-CU present but unsclerotized.

Legs. — Hind coxa punctulate; length of femur, tibia and basitarsus of hind leg 4.0, 7.5 and 9.0 times their width, respectively; length of hind tibial spurs 0.3 and 0.4 times their basitarsus; hind basitarsus slender basally (fig. 8).

Metasoma. — Length of first tergite 1.4 times its apical width, its basal 0.6 of surface smooth, remainder strongly costate (fig. 10), dorsal carinae complete and strong, and with a complete medial carina; second and third tergites strongly costate, but third tergite apically smooth (fig. 10); remainder of metasoma smooth; length of ovipositor sheath 0.86 times fore wing.

Colour. — Black; head, scapus, pedicellus, pro- and mesothorax, fore and middle legs rather dark yellowish-brown; remainder of antenna dark brown; baso-ventral half of metasoma ivory; wing membrane dark brown but below base of pterostigma with some elongate subhyaline patches (fig. 1).

Distribution. — Oriental: Indonesia (Sulawesi).

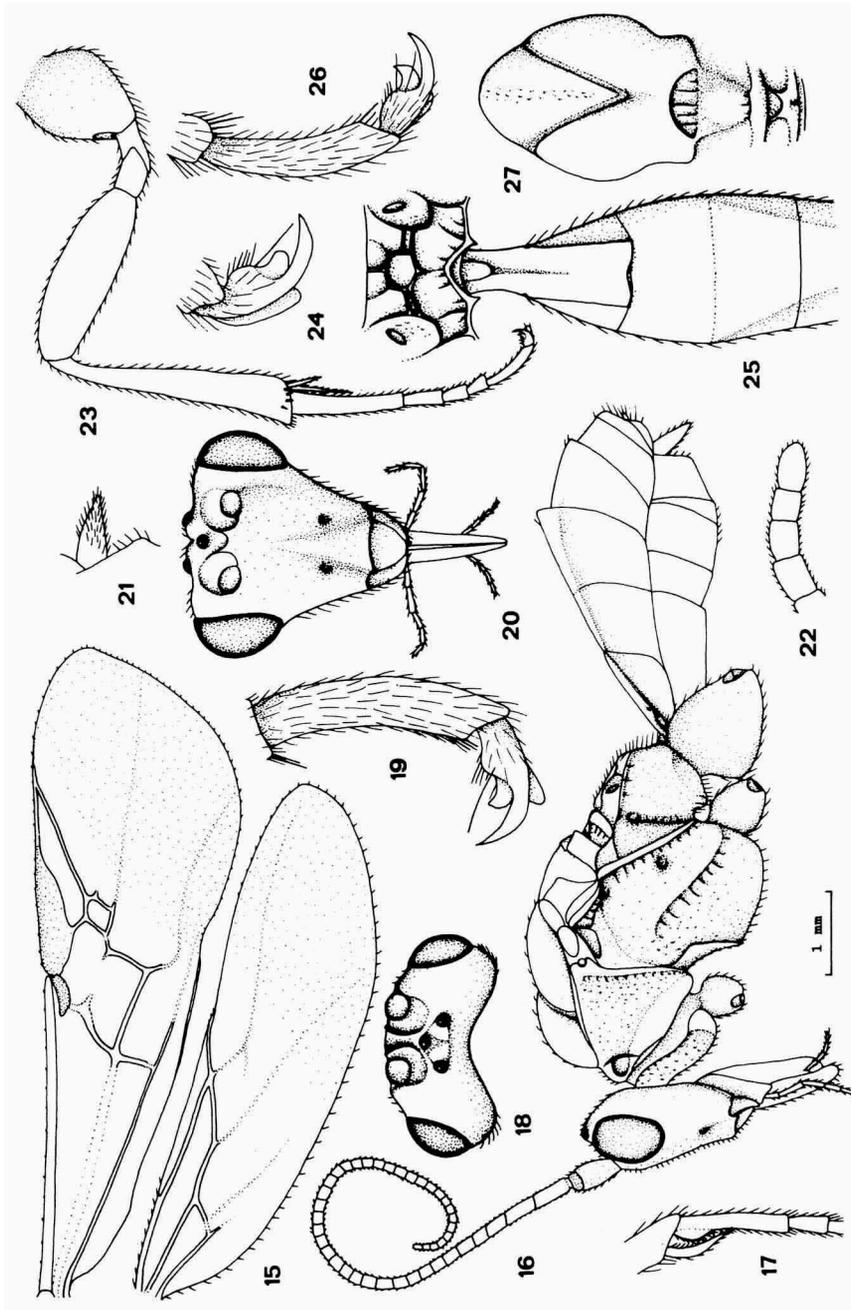
Note. — It is a pleasure to name this species after its collector, the late Dr. M. A. Lieftinck (1904-1985), the well-known specialist of Odonata and Apidae.

Monophrys gen. nov.

Type-species: *Disophrys manifesta* Kokujev, 1903.

Etymology. — From “monos” (Greek for “one, single”) and “ophrys” (Greek for “eye brow”; because of the single pair of carinae on the frons). Gender: feminine.

Diagnosis. — Head elongate (fig. 20); apex of antenna rounded and without spine (fig. 22); eye without subocular groove posteriorly; clypeus slender (fig. 20), without tubercle; labio-maxillary complex strongly enlarged, about 0.8 times height of head (fig. 16); frons normal, without lateral carinae (fig. 18), but between antennal sockets with a pair of protuberances connected by short carinae (fig. 20); antennal sockets not protruding; malar suture absent; length of malar space about three times basal width of mandible (fig. 16); epomia and subpronope present (fig. 16); pronope absent; prepectal carina strong, complete and angular laterally (fig. 16); precoxal sulcus present, crenulate, but anteriorly only punctate (fig. 16); middle mesoscutal lobe without pair of longitudinal depressions; metapleural flange rather small (fig. 16); notauli deep and smooth; scutellum with weak transverse crest subposteriorly (fig.



Figs. 15-27. *Monophrys manifesta* (Kokujev), female, USSR, Tschardschui. 15, wings; 16, habitus, lateral aspect; 17, fore tibial spur; 18, head, dorsal aspect; 19, inner hind claw; 20, head, frontal aspect; 21, ovipositor sheath, lateral aspect; 22, apex of antenna; 23, hind claw; 24, outer hind claw; 25, propodeum, first-third metasomal tergites, dorsal aspect; 26, inner middle claw; 27, thorax, dorsal aspect. 15, 16, 23: scale-line (= 1 ×); 17, 19, 24, 26:5 ×; 18, 20, 21, 25, 27:1.3 ×.

27); propodeum areolate (fig. 25), smooth between carinae and its medial carina short; propodeal spiracle elliptical and large (fig. 25); vein 1-SR+M of fore wing largely absent (fig. 15); vein 2-CU of hind wing faintly developed; vein 1-M of fore wing about as long as vein M-CU (fig. 15); marginal cell of hind wing parallel-sided apically; vein M+CU of hind wing distinctly longer than vein 1-M (fig. 15); length of fore tibial spur about 0.7 times fore basitarsus (fig. 17), without long apical spine; outer ventral margin of hind trochantellus without carina; tarsal claws bifurcate and with inner tooth large (fig. 26); inner and outer hind claws similar; apex of hind tibia with pegs (fig. 23); length of first metasomal tergite about twice its apical width; second and third tergites without lateral crease, smooth and without transverse depressions (fig. 25); second metasomal suture obsolescent; ovipositor sheath acute apically (fig. 21) and its length about 0.1 times fore wing; hypopygium truncate apically.

Distribution. — South Palaearctic: one species.

Note. — Closely related to *Disophrys* Foerster, 1862 but differs by the absence of the lateral carinae on the frons, the rounded apex of the antenna, the comparatively small anterior tentorial pits, the robust inner tooth of the claws (slender in *Disophrys*), the basally somewhat widened hind basitarsus (fig. 23), the lack of a pair of shallow depressions in the middle mesoscutal lobe and the comparatively small metapleural flange.

***Monophrys manifesta* (Kokujev) comb. nov.**

(figs. 15-27)

Disophrys manifesta Kokujev, 1903:246; Shenefelt, 1970:399; Tobias, 1986:279.

Disophrys obliterata Shestakov, 1928:277; Shenefelt, 1970:400; Tobias, 1986:279.

Disophrys sculpturata Shestakov, 1928:226; Shenefelt, 1970:402; Tobias, 1986:279.

Material. — Holotype, female, (Zoological Institute, Leningrad): "Peski, bl. Gjauars, 3.v.(18)89, A. Semenov", "D. manifesta (changed from "noscibilis") Kok., n.sp., Typ!". With a golden coloured round label; 1 male, (id.): "Chiva, AK-Mege, 24.v. (1)927, V. Gussakovskij", "K. Tesmakova", "Disophrys manifesta Kok., A. Shestakov det."; 2 females + 1 male, (Rijksmuseum van Natuurlijke Historie, Leiden): "Centraal-Azië, Tschardschui, G. von Renenkampff".

Redescription after a female from Tschardschui which was compared with the damaged holotype; length of body 9.5 mm, of fore wing 7.6 mm.

Head. — Antennal segments 45, with many blackish tyloids, length of third segment 1.5 times fourth segment, length of third, fourth and penultimate segments 2.6, 1.7 and 1.2 times their width, respectively (figs. 16, 22); length of maxillary palp 0.5 times height of head; length of eye in dorsal view 2.7 times temple (fig. 18); POL: diameter of ocellus: OOL=7:3:10; frons concave

behind antennal sockets (fig. 18); clypeus and face finely punctate; occipital flange narrow (fig. 16).

Mesosoma. — Length of mesosoma 1.5 times its height; pronotal sides crenulate posteriorly, smooth ventrally, and remainder punctate; side of mesoscutum smooth; surroundings of precoxal sulcus punctulate; pleural sulcus distinctly crenulate (fig. 16); episternal scrobe round; metapleuron sparsely punctate; middle lobe of mesoscutum punctate and setose medially (fig. 27), remainder smooth and glabrous; scutellar sulcus with four longitudinal carinae; scutellum moderately convex and setose (fig. 16); propodeum with depression antero-medially (fig. 25).

Wings. — Fore wing: Second submarginal cell quadrangular and with short stub (fig. 15); $r:3-SR:SR1 = 3:4:24$; SR1 straight; $2-SR : 3-SR:r-m = 10:8:11$; cu-a slightly antefurcal and vertical; 1-SR not sclerotized. Hind wing: $M+CU:1-M=15:9$; SR distinctly curved basally and with short stub of 2r-m (fig. 15); 2-CU present as yellowish stripe.

Legs. — Hind coxa largely smooth; length of femur, tibia and basitarsus of hind leg 6.5, 5.2 and 5.6 times their width, respectively; length of hind tibial spurs 0.3 and 0.6 times hind basitarsus; hind basitarsus rather flattened and whitish setose.

Metasoma. — Length of first tergite 2.0 times its apical width, its surface smooth and rather flat, its dorsal carinae absent; remainder of metasoma smooth; length of ovipositor sheath 0.07 times fore wing.

Colour. — Brownish-yellow; stemmaticum, antenna (except scapus and pedicellus), mesosternum and ovipositor sheath dark brown; tegulae, veins and pterostigma (except brownish-yellow anterior margin) (pale) yellow; wing membrane yellowish, but apical 0.4 slightly infuscated.

Variation. — Length of fore wing 7.5-7.6 mm, of body 8.9-9.5 mm; antennal segments 45-46; vein 1-M of hind wing partly or completely sclerotized; propodeal areola distinct (female) or obsolescent (male) and medio-basal depression may be absent; largely yellow, but prothorax largely, middle lobe of mesoscutum, mesosternum, middle of frons and of vertex, hind coxa dorso-basally and metasoma may be infuscated.

Distribution. — South Palaeartic: Central Asia.

Protroticus gen. nov.

Type-species: *Protroticus nigripennis* spec. nov.

Etymology. — From “pro” (Latin for “before”) and the generic name *Troticus* because the new genus is closely related to the genus *Troticus* Brullé

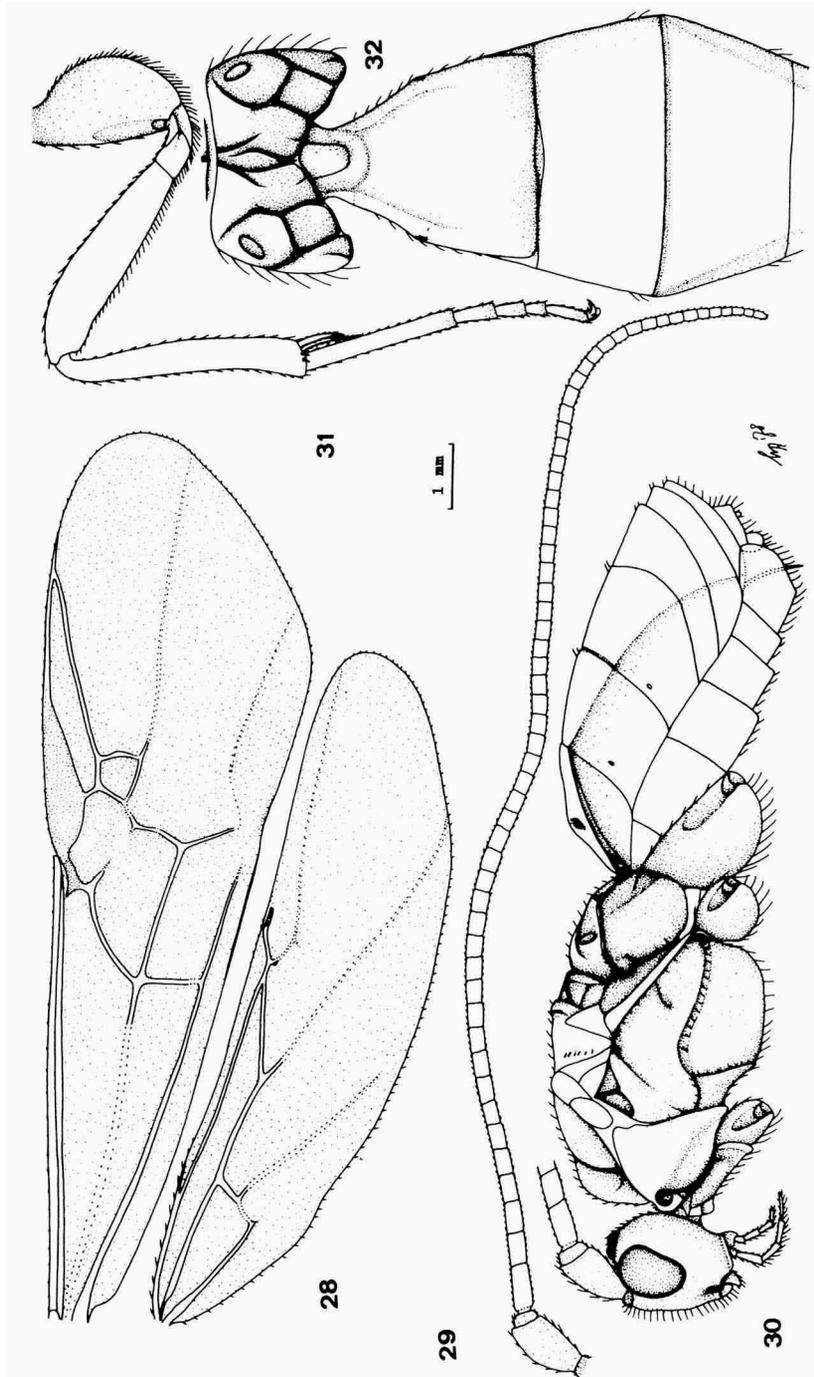
but lacks several of its derived character states. Gender: masculine.

Diagnosis. — Head somewhat elongate (fig. 33); scapus encloses part of pedicellus (fig. 29); apex of antenna rather acute (fig. 40); eye without subocular groove; clypeus normal, wide (fig. 33); labio-maxillary palp not enlarged (fig. 30); frons largely concave and this part surrounded by a ridge connecting stemmaticum and a lamella extending from antennal sockets (fig. 34), with pair of carinae antero-medially and sulcate between the carinae (figs. 33, 34); stemmaticum normal; antennal sockets slightly protruding; malar suture absent; length of malar space about twice basal width of mandible; pronope absent; single epomia and deep subpronope present (fig. 30); precoxal sulcus present; metapleural flange absent (fig. 30); middle lobe of mesoscutum truncate, without depressions (fig. 35) and lateral lobes without hump; notauli deep and complete; scutellum rather flat, with cushion-shaped elevation subposteriorly (fig. 35); propodeum coarsely areolate, with an anterior and a posterior pair of carinae diverging medially (fig. 32), with antero-medial carina more or less developed and areola incomplete, depression between propodeum and metanotum rather wide; propodeal spiracle large and elliptical (fig. 32); vein 1-SR+M of fore wing absent medially (fig. 28); vein 1-M of fore wing distinctly longer than vein M-CU (fig. 28); second submarginal cell quadrangular and without ramulus or very short; vein 2-CU of hind wing distinct (fig. 28), pigmented only; marginal cell of hind wing narrowed apically (fig. 28); base of vein SR of hind wing with appendage (fig. 42); vein M+CU of hind wing longer than or subequal to vein 1-M; length of fore tibial spur about 0.6 times basitarsus (fig. 41) and without long apical spine; outer ventral margin of trochantellus without carina, but rather angled (fig. 35); fore tarsus normal (fig. 36); tarsal claws without lobe, bifurcate and the inner tooth slender (figs. 38, 39, 43); inner and outer hind claw similar; hind tibia with two spines; length of first metasomal tergite about equal to its apical width; second and third tergites smooth, without lateral crease; second suture deep and straight; length of ovipositor sheath 0.01 times fore wing, subquadrate and truncate apically (fig. 30); hypopygium medium-sized and truncate apically (fig. 30).

Distribution. — Afrotropical: one species.

Biology. — Parasites of Lasiocampidae; cocoon large, spindle-shaped and covered with dense silk.

Note. — Easy to separate from *Troticus* Brullé, 1846 because *Protroticus* lacks the depressions of the middle mesoscutal lobe and the hump on the lateral mesoscutal lobes, the fore tarsal segments are normal, the palpi are slender, the scutellum is normally convex, the metapleural flange is absent, the marginal cell of the hind wing is narrowed apically, the scapus encloses only



Figs. 28-32. *Protroticus nigripennis* gen. et spec. nov., female, holotype. 28, wings; 29, antenna; 30, habitus, lateral aspect; 31, hind leg; 32, propodeum and first-third metasomal tergites, dorsal aspect. 28-31: scale-line (=1 ×); 32:1.5 ×.

part of the pedicellus and the head is less emarginate posteriorly. Synapomorphies of *Troticus* and *Protroticus* are the angulate prepectal carina, the truncate middle lobe of the mesoscutum, and the quadrangular second submarginal cell of the fore wing without a ramulus or with a very short one.

***Protroticus nigripennis* spec. nov.**

(figs. 28-43)

Material. — Holotype, female, (British Museum, Natural History, London); "B 87, dissected ex pupae of *Pachymeta robusta* (failed to emerge), Nyasaland, M.H. Breese, 25.ii.50", "Comm. Inst. Ent. Coll. No. 116 55", "*Troticus ovatus* Br., G. Nixon det. 1950". Paratypes: 3 females; 1 female, (id.): "Waterval Buder, A. Ross" [?= South Africa], "Distant Coll., 1911-383"; 2 females, (id., and Rijksmuseum van Natuurlijke Historie, Leiden): "Sierra Leone, Njala, XII.1935, E. Hargreaves", "Ex pupa *Pachypasa howdenii* Dew."

Holotype, female, length of body 12.0 mm, of fore wing 13.5 mm.

Head. — Antennal segments 61, length of third segment 1.4 times fourth segment, length of third, fourth and penultimate segments 2.7, 1.9 and 1.4 times their width, respectively (figs. 29,40); length of maxillary palp 0.8 times height of head; length of eye in dorsal view 1.3 times temple (fig. 34); POL: diameter of ocellus: OOL=15:7:28; frons and vertex smooth; face and clypeus punctulate (fig. 33); occipital flange distinct and subhorizontal (fig. 30).

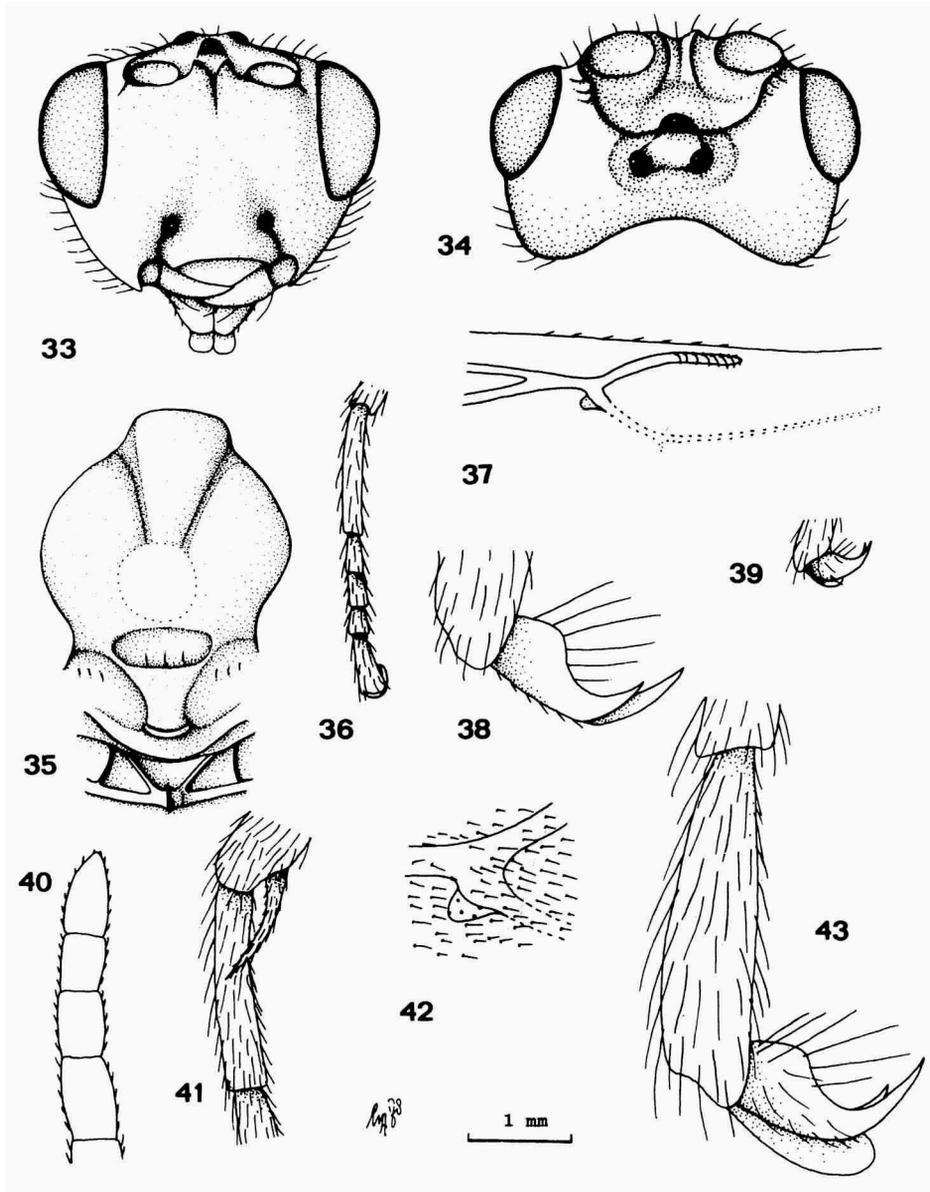
Mesosoma. — Length of mesosoma 1.5 times its height; pronotal sides smooth, except for some fine punctures; side of mesoscutum smooth; mesopleuron punctulate and precoxal sulcus narrow and crenulate (fig. 30); pleural sulcus crenulate and rather shallow; episternal scrobe narrow and elliptical (fig. 30); metapleuron punctulate and rather flat; mesoscutal lobes rather convex and punctulate; scutellar sulcus with three very short carinae (fig. 35); scutellum punctulate; antero-medial carina of propodeum obsolescent.

Wings. — Fore wing: Second submarginal cell quadrate (fig. 28); r:3-SR:SR1 = 9:16:110; SR1 straight; 2-SR:3-SR:r-m = 17:16:22; cu-a straight and just postfurcal (fig. 28); 1-SR present (fig. 28). Hind wing: M+CU:1-M = 20:16; SR curved basally (fig. 37), with short stub; 2-CU only pigmented.

Legs. — Hind coxa punctulate; length of femur, tibia and basitarsus of hind leg 4.4, 6.2 and 7.6 times their width, respectively; length of hind tibial spurs 0.3 and 0.4 times hind basitarsus; hind basitarsus slender basally (fig. 31).

Metasoma. — Length of first tergite 0.9 times its apical width, its surface smooth, rather flat and dorsal carinae absent (fig. 32); second and following tergites smooth; length of ovipositor sheath 0.01 times fore wing.

Colour. — Reddish; head (except face medially, malar space ventrally, clypeus and labrum) and antenna blackish; hind tarsal segments somewhat



Figs. 33-43. *Protroticus nigripennis* gen. et spec. nov., female, holotype. 33, head, frontal aspect; 34, head, dorsal aspect; 35, thorax, dorsal aspect; 36, fore tarsus, dorsal aspect; 37, base of vein SR of hind wing; 38, outer hind claw, inner aspect; 39, outer fore claw; 40, apex of antenna; 41, fore tibial spur; 42, detail of base of vein SR of hind wing; 43, outer hind claw, outer aspect. 33:1.3 ×; 34-36: scale-line (=1 ×); 37, 39, 41:2 ×; 38, 40, 42, 43:5 ×.

infuscated apically; pterostigma mainly yellowish; wing membrane dark brown, except for some hyaline patches below pterostigma; parastigma dark brown.

Variation. — Length of body 12.0–13.7 mm, of fore wing 13.4–14.2 mm; length of malar space 2.0–2.2 times basal width of mandible; antennal segments 60(1), 61(2) or 62(1); malar space largely black or reddish; vein 2r-m of hind wing in one paratype distinctly longer than figured; vein 1-M of hind wing about as long as vein M+CU or somewhat shorter; paratypes have propodeum with a distinct short medial carina anteriorly, the costulae reaching the medial areola and latter with some transverse carinae, vein cu-a of fore wing interstitial, and base of vein SR of hind wing without appendage, but with a sensillum-like structure in the vein.

Biology. — Parasite of Lasiocampidae: *Pachymeta robusta* Aurivillius and *Pachypasa howdenii* Dew.

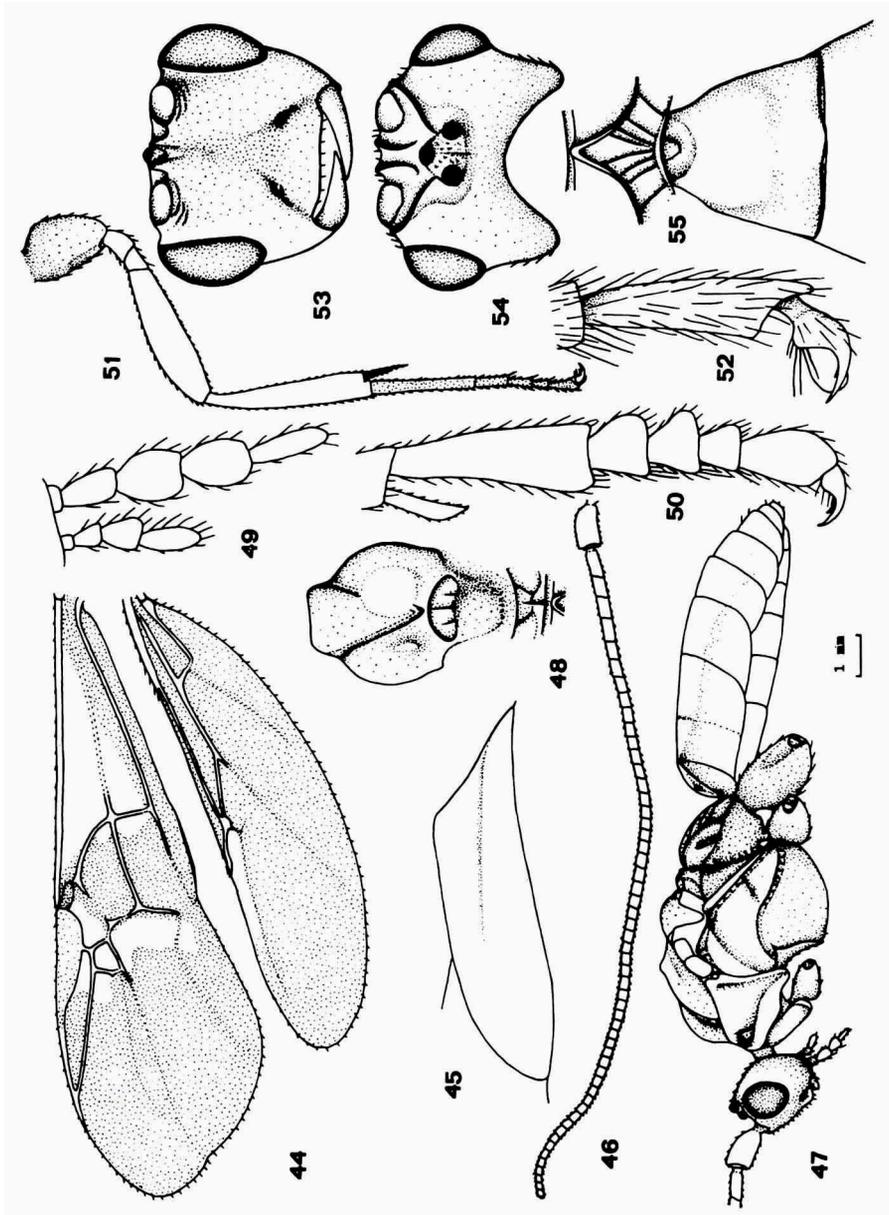
Distribution. — Afrotropical: Malawi, Sierra Leone, ? South Africa.

Troticus Brullé

Troticus Brullé, 1846:508-509; Shenefelt, 1970:424.

Type-species: *Troticus ovatus* Brullé, 1846 by monotypy.

Diagnosis. — Head somewhat elongate, but wide ventrally (fig. 53); pedicellus largely enclosed by scapus (fig. 47); (apex of antenna missing in the only examined specimen); palpi strongly inflated (fig. 49); occiput deeply excavated posteriorly (fig. 54); eye without subocular groove; clypeus normal and wide (fig. 53); labio-maxillary complex not enlarged (fig. 47); frons slightly convex laterally, with a pair of carinae medio-anteriorly, and a pair of curved carinae to stemmaticum, surrounding a rather flat area (fig. 54); area between antennal sockets sulcate medially (fig. 53); antennal sockets and stemmaticum normal (fig. 54); malar suture absent; length of malar space about twice basal width of mandible (fig. 47); pronope absent; single epomia and deep subpronope present (fig. 47); prepectal carina complete and sharply angled dorsally (fig. 47); precoxal sulcus present; metapleural flange medium-sized (fig. 47); middle lobe of mesoscutum truncate anteriorly, without depressions, and lateral lobe with hump (figs. 45,48); notauli deep, complete and smooth; scutellum strongly convex (fig. 47) and without elevation subposteriorly, with only some small rugae (fig. 48); propodeum with bell-shaped and strongly raised carina anteriorly and with some longitudinal carinae posteriorly (fig. 55), medial carina absent and areola incomplete; propodeal spiracle long and narrow, elliptical (fig. 47); vein 1-SR+M of fore wing absent medially (fig. 44);



Figs. 44-55. *Troiticus ovatus* Brullé, male, lectotype. 44, wings; 45, lateral mesoscutal lobe, lateral aspect; 46, antenna; 47, habitus, lateral aspect; 48, mesosoma, dorsal aspect; 49, palpi; 50, fore tarsus, lateral aspect; 51, hind leg; 52, outer hind claw; 53, head, frontal view; 54, head, dorsal view; 55, propodeum and first metasomal tergite, dorsal aspect. 44, 46, 47, 51: scale-line (=1 ×); 45, 50:3.3 ×; 48:1.3 ×; 49:4.4 ×; 52:6.7 ×; 53-55:2.2 ×.

vein 1-M of fore wing distinctly longer than vein m-cu (fig. 44); second sub-marginal cell quadrangular and without ramulus (fig. 44); vein 2-CU of hind wing distinct, only pigmented; marginal cell of hind wing absent apically (fig. 44); base of vein SR of hind wing without appendage; vein M+CU of hind wing about as long as vein 1-M (fig. 44); fore tibial spur flat, wide and about 0.4 times fore basitarsus; fore tarsal segments inflated (fig. 50); outer ventral margin of trochantellus without any trace of a carina (fig. 51); tarsal claws without lobe, with slender inner tooth, that of hind claw inconspicuous but those of fore and middle claws larger (figs. 50, 52); inner and outer hind claw similar; hind tibia with two spines apically; length of first metasomal tergite nearly equal to its apical width (fig. 55); second and third tergites smooth, without lateral crease; second suture shallow, straight and narrow; (length of ovipositor sheath and shape of hypopygium of female unknown).

Distribution. — Afrotropical: one species.

***Troticus ovatus* Brullé**
(figs. 44-55)

Troticus ovatus Brullé, 1846:509; Shenefelt, 1970:424-425.

Material. — Lectotype here designated: male, (Spinola Collection, Turin): “♀”, “*ovatus*” and a recent label indicating that it stood under *ovatus* in the collection. It is considered to be one of the at least two syntypes because it agrees with the original description and it is known that at least part of the collection of Lepeletier de Saint Fargeau (including some Brullé material) was acquired by Spinola in 1845. The type locality is the Cape Town Area (South Africa). No other syntypes could be found in the Paris Museum.

Lectotype, male, length of body 16 mm, of fore wing 14.5 mm.

Head. — Remaining antennal segments 56, length of third segment 1.1 times fourth segment, length of third and fourth segments 1.8 and 1.6 times their width, respectively (fig. 46); length of maxillary palp 0.6 times height of head; length of eye in dorsal view 1.1 times temple (fig. 54); vertex punctulate; POL: diameter of ocellus:OOL = 6:4:13; frons smooth; face and clypeus finely punctate (fig. 53); occipital flange rather wide and long (fig. 47).

Mesosoma. — Length of mesosoma 1.5 times its height; pronotal sides smooth, except for some microsculpture posteriorly; side of mesoscutum largely smooth; mesopleuron below precoxal sulcus densely finely punctate and above precoxal sulcus smooth (fig. 47); precoxal sulcus smooth anteriorly and narrow crenulate posteriorly (fig. 47); pleural sulcus sparsely crenulate; episternal scrobe elongate (fig. 47); metapleuron punctate; mesoscutal lobes sparsely, finely punctate; scutellar sulcus with one strong and two weak carinae (fig. 48); scutellum with some punctures; propodeum without depres-

sion anteriorly and with some punctures anteriorly.

Wings. — Fore wing: Second submarginal cell rather trapezoid (fig. 44); $r:3-SR:SR1=1:4:26$; SR1 straight; $2-SR:3-SR:r-m=8:8:11$; cu-a straight and interstitial; 1-SR indistinct (fig. 44). Hind wing: Length of M+CU and 1-M equal; SR angled basally and with short stub of 2r-m (fig. 44); 2-CU present and only pigmented.

Legs. — Hind coxa finely punctate; length of femur, tibia and basitarsus of hind leg 4, 6.2 and 7 times their width, respectively; length of hind tibial spurs 0.3 and 0.45 times hind basitarsus; hind basitarsus slightly widened basally (fig. 51).

Metasoma. — Length of first tergite 0.8 times its apical width, its surface smooth and rather flat, its posterior fifth turned over (fig. 47) and its dorsal carinae absent; second and following tergites smooth.

Colour. — Reddish; head (but frons medially, area between antennal sockets, face medially, clypeus and malar space ventrally red) and antenna black; hind tarsus and metasoma beyond first tergite (partly), infuscated; pterostigma yellow; vein 1-R1 and parastigma dark brown; wing membrane dark brown, but basal half of marginal cell of hind wing, a long patch below pterostigma, and base-anterior part of fore wing yellowish (fig. 44).

Distribution. — Afrotropical: South Africa.

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