

New taxa of the subfamily Doryctinae Foerster (Hymenoptera: Braconidae) from French Guiana and Brazil

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Key words: Braconidae; Doryctinae; *Caingangia*; *Leptodoryctes*; *Heterospathius*; *Ptesimogaster*; *Dicarinoryctes*; *Ptesimogastroides*; *Pseudorhopstrocentrus*; *Curtisella*; new species; new genus; Neotropical; French Guiana; Brazil; U.S.A.; Mexico; distribution; keys.

Three genera of the subfamily Doryctinae Foerster, 1862 (Hymenoptera: Braconidae) are treated and keyed: *Ptesimogaster* Marsh, 1965, *Caingangia* Marsh, 1993, and *Leptodoryctes* Barbalho & Penteado-Dias, 1999. The latter genus is characterised by the presence of an apical setal comb on the hind tibia. Two new genera are described: *Ptesimogastroides* gen. nov. (type species: *P. cerdai* spec. nov. from French Guiana and Brazil) and *Dicarinoryctes* gen. nov. (type species: *D. apicalis* spec. nov. from French Guiana). A further three new species are described: *Caingangia delicata* spec. nov. from French Guiana, *Leptodoryctes barbalhoae* spec. nov. from French Guiana, and *Ptesimogaster lemkoi* spec. nov. from Brazil. *Pseudorhopstrocentrus platyfemur* (Marsh, 1993) is a new combination.

Introduction

For Braconidae, French Guiana is mainly a white spot on the map. It was not surprising to find among the specimens recently collected several new taxa and species not recorded before. French Guiana is located on the South-East of the Guianas shield, a precambrian massif running from Venezuela through the Guianas and northern Brazil. The vegetation of French Guiana is related to the dense Amazonian rainforests of Brazil, but some savannas, marshy areas and mangroves exist along the coast.

The subfamily Doryctinae Foerster, 1862 (Hymenoptera: Braconidae) is one of the most speciose groups in the Neotropical region and we are starting to discover its diversity (Marsh, 1993, 1997 (in Wharton et al.); Barbalho et al., 1999). In this paper two monotypic new genera are described: *Ptesimogastroides* gen. nov. (type species: *P. cerdai* spec. nov. from French Guiana and Brazil) and *Dicarinoryctes* gen. nov. (type species: *D. apicalis* spec. nov. from French Guiana). Three new species are described, belonging to the genera *Ptesimogaster* Marsh, 1965, *Caingangia* Marsh, 1993, and *Leptodoryctes* Barbalho & Penteado-Dias, 1999, respectively, from French Guiana and Brazil. Additional data are given for some other species of Doryctinae extending considerably their known distributions. An asterisk indicates a new record for the country.

For the identification of Braconidae subfamilies, see van Achterberg (1990, 1993) and Wharton et al. (1997). The terminology used in this paper, especially of wing venation, is according to van Achterberg (1988, 1994).

The examined specimens are housed in the following institutes: American Entomological Institute, Gainesville, U.S.A. (AEIG); Faculté Universitaire des Sciences Agronomiques de Gembloux, Gembloux, Belgium (FUSAGX); Nationaal Natuurhis-

torisch Museum, Leiden, Netherlands (RMNH); and U.S. National Museum, Smithsonian Institution, Washington, U.S.A. (USNM).

Subfamily Doryctinae Foerster, 1862

The two new genera described in this paper could be included in couplet 43 of the key to the New World Doryctinae by Marsh (in Wharton et al., 1997) as follows:

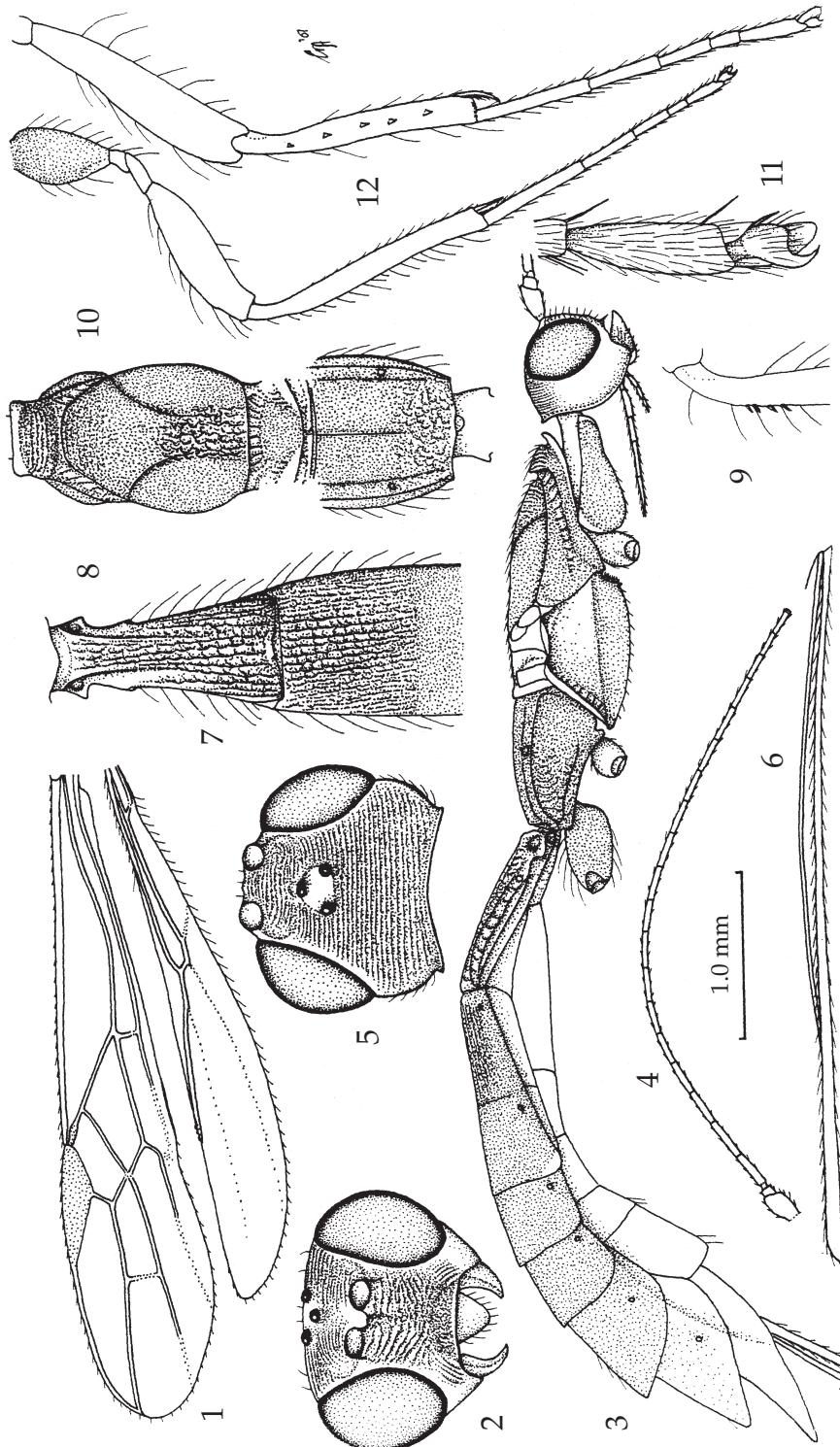
43. Vein CU1b of fore wing present, resulting in a closed first subbasal cell of fore wing (fig. 13); vein M+CU of hind wing about as long as vein 1-M (fig. 13); vein 1r-m of hind wing long (fig. 13); second metasomal tergite with pair of carinae basally (figs 23, 24) *Dicarinoryctes* gen. nov.
- Vein CU1b of fore wing absent, resulting in a narrowly open first subbasal cell of fore wing (fig. 1); vein M+CU of hind wing much shorter than vein 1-M (fig. 1); vein 1r-m of hind wing very short (fig. 1); second tergite without pair of carinae basally (figs 7, 38) 43a
- 43a. Ovipositor sheath densely covered with long setae; second metasomal tergite distinctly depressed laterally *Sharkeyella* Marsh, 1993
- Ovipositor sheath sparsely setose, setae thin and short; second tergite hardly or not depressed laterally (figs 7, 38) 43b
- 43b. First metasomal tergite closed ventrally behind spiracles, tube-shaped, and dorso-basally without lateral flanges and dorsope absent; vein r of fore wing comparatively short; vein m-cu of hind wing obsolescent *Notiospathius* Matthews & Marsh, 1973
- First tergite open ventrally behind spiracles, not tube-shaped, and dorso-basally with lateral flanges ("wings") and dorsope present (fig. 7); vein r of fore wing comparatively long (fig. 1); vein m-cu of hind wing distinct (fig. 1) *Ptesimogastroides* gen. nov.

Ptesimogastroides Braet & van Achterberg, gen. nov. (figs 1-12, 30, 38)

Type species: *Ptesimogastroides cerdai* spec. nov.

Etymology.— From the genus name *Ptesimogaster* with the suffix "oides", because of the similarity of the first tergite of both genera. Gender: masculine.

Description.— Face setose, and finely granulate; scapus distinctly shorter than third antennal segment (fig. 4); frons and vertex finely transversely striate (fig. 6); malar suture absent; occipital carina meeting hypostomal carina far above level of mandibular base; temples striate dorsally and smooth elsewhere; mesosoma strongly depressed, pronotum, mesoscutum, scutellum and propodeum at about same level (fig. 3); mesopleuron finely punctulate anteriorly and glabrous except ventro-posteriorly; precoxal sulcus complete; antescutal depression distinct (fig. 3); notauli narrow and shallow; metapleural flange absent; surface of propodeum finely granulate, with a median carina anteriorly and medially; vein m-cu of fore wing meeting vein 2-SR of fore wing, vein 2-SR+M absent; vein CU1b of fore wing absent; vein 3-CU1 long and oblique (fig. 1); subbasal blister of fore and middle



Figs 1-12, *Ptesimogastroides cerdai* gen. nov & spec., ♀, holotype. 1, wings; 2, head, frontal aspect; 3, habitus, lateral aspect; 4, antenna; 5, ovipositor sheath; 6, head, dorsal aspect; 7, first and second metasomal tergites, dorsal aspect; 8, mesosoma, dorsal aspect; 9, base of middle tibia, dorsal aspect; 10, hind leg; 11, outer hind claw; 12, fore leg. 1-5, 10: scale-line (= 1 x); 2, 6, 12: 2.0 x; 7, 8: 1.3 x; 9: 1.9 x; 11: 5.0 x.

femora obsolescent; fore femur with a row of 5 spines (fig. 12); hind coxa antero-ventrally angularly rounded and without ventro-basal tubercle (fig. 10); hind tarsal claws with basal spine (fig. 11), middle tibia with subbasal comb of teeth (fig. 9); hind tibia with comb at inner side apically; first tergite trapezoid basally, with a keeled and more or less differentiated and strongly sclerotised sternite extending just behind level of spiracles; surface of first and second tergites longitudinally striate, striae hardly or not converging (figs 7, 38), following tergites finely granulate; length of ovipositor sheath 1.2 times fore wing; wings weakly infuscate and nearly completely setose.

Remarks.— This genus can be easily distinguished from other Neotropical genera by the presence of the wing-like flanges of the first metasomal segment combined with the absence of the antero-ventral tubercle of the hind coxa, the normal setosity of the ovipositor sheath and the open first subdiscal cell of the fore wing. Several other Neotropical specimens have been examined, which have also more or less wing-like protuberances at the base of the first tergite, but these share several characters with the genus *Trigonophasmus* Enderlein, 1912.

Ptesimogastroides cerdai Braet, spec. nov.
(figs 1-12, 30, 38)

Material.— Holotype, ♀ (FUSAGx), "Guyane française, Montagne de Kaw, Route de Kaw, Relais Patawa, 52°10'W-4°32'N, iii.1999, Malaise trap, A.E.I. guyane-J. Cerdá". Paratypes (1 ♀ + 1 ♂): 1 ♂ (FUSAGx), "Guyane française, Sinnamary, barrage de Petit-Saut, 22.x.1989, Fauchage sous-bois forêt primaire, CIRAD"; 1 ♀ (USNM), "Brazil, Parana, Rondon, 9.x.1952, F. Plaumann", "Collection R.D. Shenefelt".

Etymology.— Named in honour of Jean Aimé Cerdá, interested in the taxonomy of Neotropical Ctenuchidae.

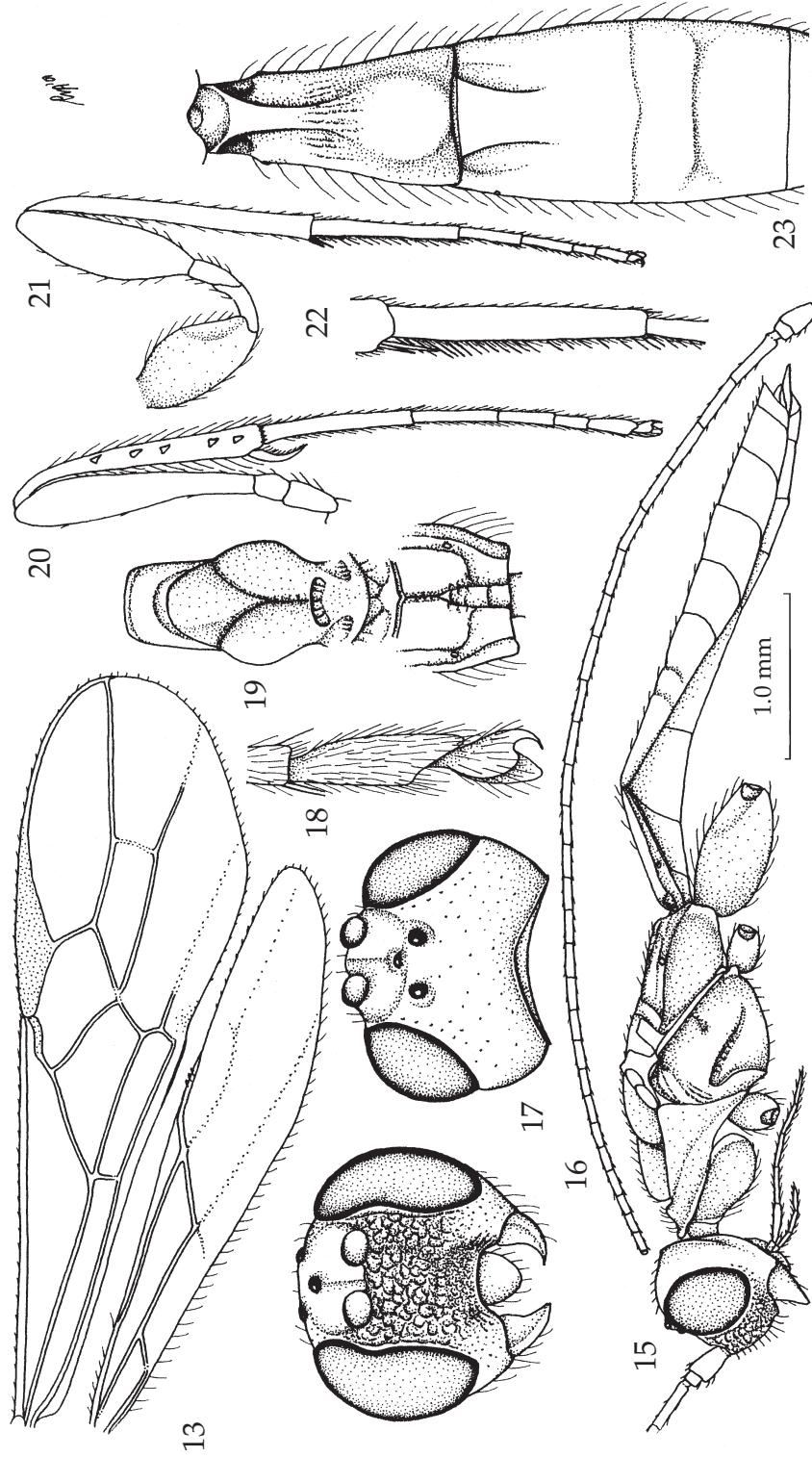
Holotype, ♀, length of body 7.5 mm, of fore wing 3.8 mm.

Head.— Antenna broken, remaining antennal segments 21, third segment as long as fourth segment, length of third and fourth segments 5.0 and 5.0 times their width, respectively; length of maxillary palp 1.4 times height of head; in dorsal view length of eye 1.7 times temple; POL:OD:OOL = 5:3:6; face setose, largely transversely rugose (fig. 2).

Mesosoma.— Length of mesosoma 2.8 times its height (3.2 times including pronotum; fig. 3); side of pronotum largely granulate and with an oblique crenulate groove; mesopleuron finely granulate anteriorly and antero-dorsally largely smooth, glabrous except ventro-posteriorly; precoxal sulcus complete, narrow; mesoscutum and scutellum sparsely setose and finely granulate (but middle lobe of mesoscutum indistinctly transversely striate anteriorly, and lateral lobes at junction of notaui coarsely and densely reticulate-rugose (fig. 8)); metapleural flange small, robust; surface of propodeum finely granulate, with long median carina (fig. 8).

Wings.— Fore wing: r:3-SR:SR1 = 3:10:21; 2-SR:2-M:r-m = 6:16:4; 2-SR+M absent; cu-a slightly postfurcal (fig. 1). Hind wing: M+CU:1-M:1r-m = 5:21:1.

Legs.— Hind coxa finely granulate-coriaceous, somewhat striate dorsally; femur, tibia and basitarsus of hind leg 4.1, 10.5 and 9.6 times their width, respectively (fig. 10); hind tibia with 5 spines apically; length of hind tibial spurs 0.2 and



Figs 13-23, *Dicarinoryctes apicalis* gen. nov. & spec. nov., ♂, holotype, but fig. 20 of paratype. 13, wings; 14, head, frontal aspect; 15, head, dorsal aspect; 16, antenna; 17, head, dorsal aspect; 18, inner hind claw; 19, mesosoma, dorsal aspect; 20, fore leg; 21, hind leg; 22, hind basitarsus; 23, first-third metasomal tergites, dorsal aspect. 13, 15, 16, 21: scale-line (= 1.0 x); 14, 17, 20, 22, 23: 2.0 x; 18: 5.0 x; 19: 1.3 x.

0.1 times hind basitarsus, outer spur thin, reduced.

Metasoma.— Length of first tergite 1.9 times its apical width, its surface coarsely reticulate-rugose (fig. 7); second tergite longitudinally rugose medially, laterally rugulose-granulate, and 1.1 times as long as third tergite; following tergites densely granulate, but seventh tergite weakly so and eighth tergite smooth; length of ovipositor sheath 1.13 times fore wing.

Colour.— Blackish; antenna, palpi, fore and middle legs, small area of hind femur dorsally, hind tibia (except basally) and hind tarsus yellowish-brown; remainder of hind femur, temple, face, and some posterior lateral patches of second tergite brownish; wing membrane weakly infuscate; pterostigma blackish.

Distribution.— Brazil, French Guiana.

Host.— Unknown.

Remarks.— The male paratype has the length of the body 5.5 mm and the length of fore wing 2.9 mm; the colour is similar except that the second tergite is brownish-red laterally and posteriorly.

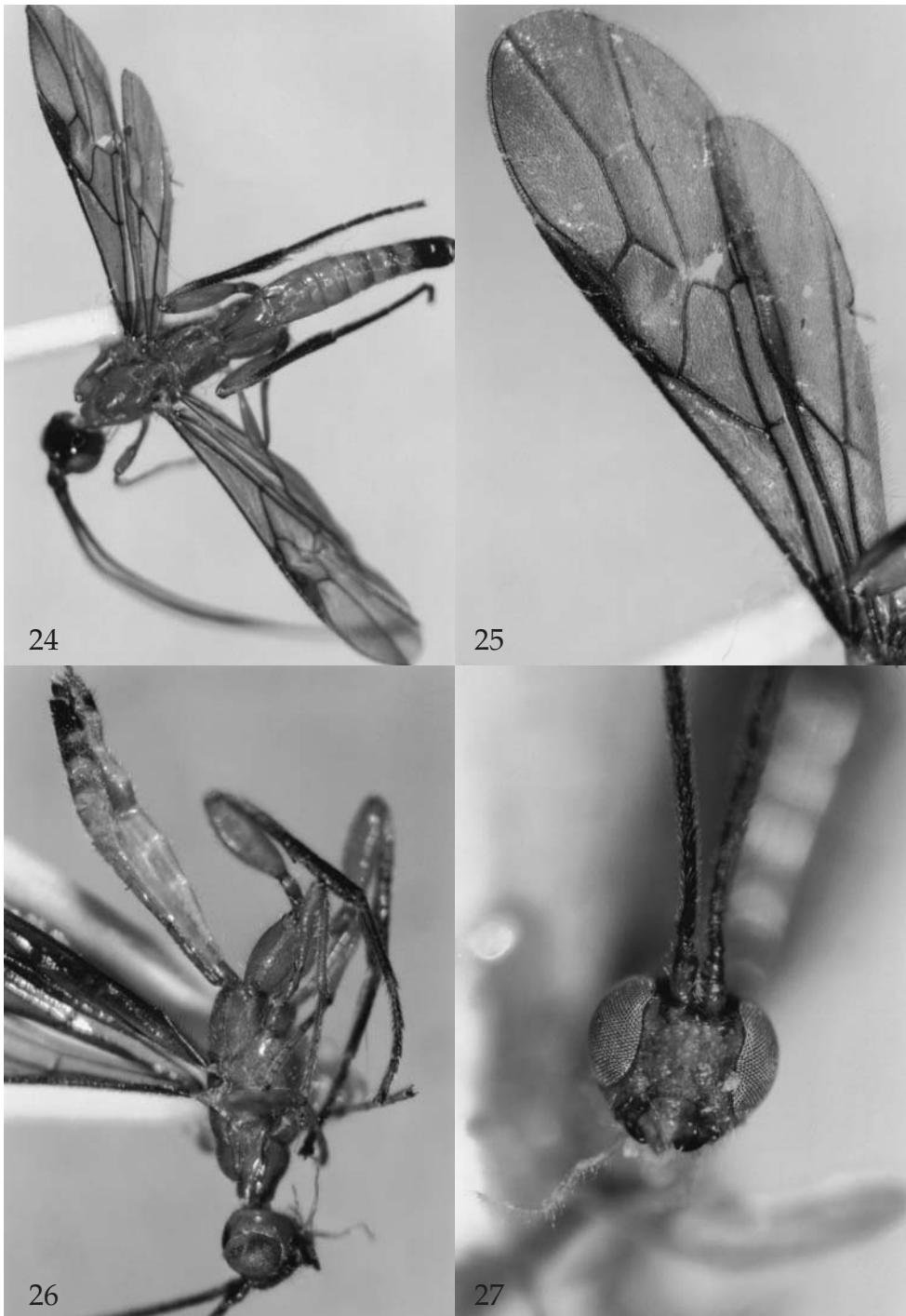
***Dicarinoryctes* Braet & van Achterberg, gen. nov.**
(figs 13-27)

Type species: *Dicarinoryctes apicalis* spec. nov.

Etymology.— From the combination of the Greek prefix “di” (meaning “two”), the word “carin[a]” and the genus name “[D]oryctes”. The second tergite has two longitudinal carinae basally and this genus resembles the genus *Doryctes* Haliday, 1836. Gender: masculine.

Description.— Head normal in frontal view (fig. 14); scapus shorter than third segment (fig. 16); eyes medially weakly emarginate (fig. 14); face reticulate (fig. 14); frons and vertex largely smooth; malar suture absent (fig. 15); anterior ocellus in anterior plane and posterior ocelli in dorsal plane of head (figs 14, 17); temples smooth and sparsely setose; occipital carina not meeting hypostomal carina; mesosoma strongly depressed, pronotum somewhat lower than mesoscutum, mesoscutum, scutellum and propodeum at same level (fig. 15); mesopleuron smooth; pre-coxal sulcus present anteriorly and medially, but absent posteriorly (fig. 15); mesoscutum and scutellum sparsely setose and more or less punctate; notauli present, punctate anteriorly, meeting near middle of mesoscutum, with a ruga up to scutellar sulcus; metapleural flange minute; propodeum with triangular areola and short median carina (fig. 19); vein m-cu meeting vein 2-SR of fore wing (interstitial: figs 13, 25), vein 2-SR+M absent; vein CU1b of fore wing present and first subdiscal cell closed apically (fig. 13); fore femur with a row of 5 spines (fig. 20); inner side of hind basitarsus long bristly setose (fig. 22); hind coxa without antero-ventral tubercle (fig. 21); surface of first and second tergites smooth with two longitudinal carinae basally (figs 23, 24); following tergites smooth; wing membrane weakly infuscate and entirely setose.

Remarks.— Despite the lack of female specimens, we describe here this new genus because the genus is distinctive enough to be recognised. It runs to *Notiospathius* in the couplet 43 of the identification key by Marsh (1997, in Wharton et al.) and can be separated as indicated above.



Figs 24-27, *Dicarinoryctes apicalis* gen. nov. & spec. nov., ♂, holotype. 24, habitus, dorsal aspect; 25, wings; 26, habitus, lateral aspect; 27, head, frontal aspect.

Dicarinoryctes apicalis Braet & van Achterberg, spec. nov.
(figs 13-27)

Material.— Holotype, ♂ (FUSAGx), “Guyane française, Montagne de Kaw, ix.1999, Malaise trap, A.E.I. guyane-J. Cerdá”. Paratype: 1 ♂ (RMNH), topotypic, but v.1999.

Etymology.— Named “apicalis” because this species has the apex of the metasoma dark brown or blackish, contrasting with the remainder of the metasoma.

Holotype, ♂, length of body 4.7 mm, of fore wing 4.5 mm.

Head.—Antenna broken, remaining antennal segments 29, third segment 1.1 times as long as fourth segment, length of third and fourth segments 5.4 and 4.8 times their width, respectively; length of maxillary palp 1.4 times height of head; length of eye in dorsal view 1.7 times temple; POL:OD:OOL = 7:4:5; face sparsely setose, and irregularly rugose-reticulate (fig. 14); frons and vertex smooth; malar space punctate.

Mesosoma.— Length of mesosoma 2.0 times its height (including pronotum 2.2 times); mesopleuron smooth with sparse long setae; prepectal carina removed from anterior margin of mesopleuron and reaching to half-height of side of pronotum (fig. 15); precoxal sulcus finely crenulate anteriorly and smooth medially; mesoscutum largely smooth, sparsely punctate and setose; scutellum distinctly punctate and setose; median carina of metanotum rounded and protruding posteriorly; metapleuron largely smooth, sparsely punctate, and distinctly convex; propodeum largely smooth except for carinae (fig. 19).

Wings.— Fore wing: r:3-SR:SR1 = 5:12:21; 2-SR:2-M:r-m = 7:17:4; cu-a slightly postfurcal (fig. 13). Hind wing: M+CU:1-M:1r-m = 17:24:13.

Legs.— Hind coxa largely smooth, sparsely punctate; femur, tibia and basitarsus of hind leg 3.2, 10.1 and 9.0 times their maximum width, respectively (fig. 21); length of hind tibial spurs 0.15 and 0.25 times hind basitarsus.

Metasoma.— Length of first tergite 1.7 times its apical width, its surface weakly longitudinally striate laterally, dorsal carinae distinct basally (fig. 23); second tergite smooth with two somewhat converging carinae basally and a weak smooth transversal groove subapically (fig. 23); second tergite twice as long as third tergite; length of second tergite 1.2 times its apical width; following tergites smooth.

Colour.— Yellowish; antenna (except scapus and pedicellus), vertex, frons, apex of mandible, hind tibia (except basally), hind tarsus (except telotarsus) and seventh tergite blackish; temple dorsally, scapus, pedicellus, hind trochanter, and fourth-sixth tergites apically, dark-brown or blackish to brownish; wing membrane rather infuscate; pterostigma dark brown.

Distribution.— French Guiana.

Host.— Unknown.

Remarks.— The paratype has 43 antennal segments and the apical antennal segment twice as long as its maximal width.



Figs 28-29, *Ptesimogaster lemkoi* spec. nov., ♀, holotype; fig. 30, *Ptesimogastroides cerdai* gen. nov. & spec. nov., ♀, holotype; fig. 31, *Leptodorycytes barbalhoae* spec. nov., ♀, holotype. 28, habitus, lateral aspect; 29-31, habitus, dorsal aspect.

***Caingangia* Marsh, 1993**
(figs 33, 37)

Type species (by original designation): *Caingangia flavokolos* Marsh, 1993.

The type species, which is so far the only described species, occurs in Brazil. No biological data are available for the genus.

Key to species of the genus *Caingangia* Marsh

1. Second metasomal suture and transverse groove of third tergite widely crenulate (fig. 11, in Marsh, 1993); basal two thirds of third tergite finely reticulate-rugose; ovipositor sheath about 0.9 times body; scutellum weakly coriaceous, sometimes smooth medially; tarsi and femora yellow; southern Brazil
..... *C. flavokolos* Marsh, 1993
- Second metasomal suture and transverse groove of third tergite narrowly and finely crenulate (fig. 37); basal two thirds of third tergite (except for its transverse groove) smooth and strongly shiny (fig. 37); ovipositor sheath slightly longer than body; scutellum largely smooth and sparsely punctate; tarsi and middle of middle and hind femora infuscate; French Guyana *C. delicata* spec. nov.

Caingangia delicata Braet & van Achterberg, spec. nov.
(figs 33, 37)

Material.— Holotype, ♀ (FUSAGX). “Guyane française, Montagne de Kaw, route de Kaw, Relais Patawa, 52°10'W-4°32'N, iii.1999, Malaise trap, A.E.I. guyane-J. Cerda”. Paratypes: 3 ♀♀ (FUSAGX, RMNH), topotypic, but v.1999, vii.1999, and iii.2000.

Etymology.— Named “*delicata*” because of the comparatively fine sculpture of the third metasomal tergite.

Holotype, ♀, length of body 4.8 mm, of fore wing 3.6 mm.

Head.—Antenna broken, remaining antennal segments 24, length of third segment 1.8 times fourth segment, length of third and fourth segments 6.0 and 3.3 times their maximum width, respectively; third and following segments short and densely setose; length of maxillary palp 1.4 times height of head; in dorsal view length of eye 2.5 times temple; POL:OD:OOL = 2:2:3; face laterally finely transversely striate and setose, medially glabrous and smooth; frons weakly concave, finely striate anteriorly and medially, smooth laterally (except near eyes); vertex transversely striate; upper part of temple longitudinally striate posteriorly and smooth near eyes; malar suture absent; occipital carina not meeting hypostomal carina.

Mesosoma.— Length of mesosoma 1.7 times its maximum height; pronotum smooth with deep crenulate groove anteriorly; propleuron convex and smooth; mesopleuron smooth and glabrous; precoxal sulcus smooth, deep only medially; mesoscutum and scutellum smooth and shortly setose; notauli coarsely crenulate anteriorly, obsolescent near middle of mesoscutum; mesoscutum widely longitudinally rugose in front of scutellar sulcus; scutellar sulcus with several carinae; scutellum largely smooth, sparsely punctate; metapleural flange small and anteriorly acute; metapleuron with several coarse and curved parallel costae; propodeum anteriorly with medi-

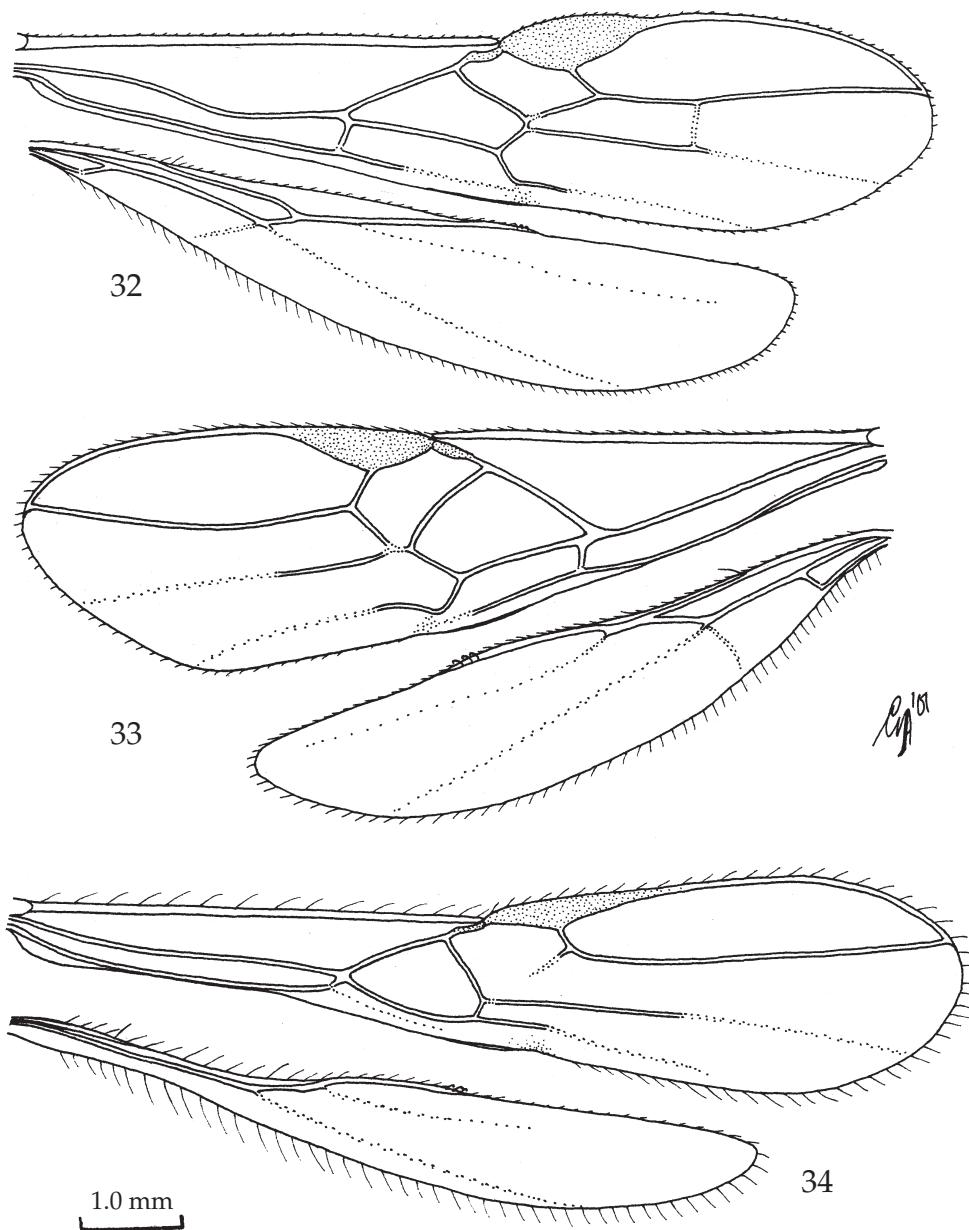


Fig. 32, *Ptesimogaster lemkoi* spec. nov., ♀, holotype; fig. 33, *Caingangia delicata* spec. nov., ♀, holotype; fig. 34, *Leptodoryctes barbalhoae* spec. nov., ♀, holotype. 32-34, wings. 32: scale-line (= 1.0 x); 33: 2.6 x; 34: 3.7 x.

an carina, posteriorly reticulate-rugose, shiny, with two small lateral tubercles.

Wings.— Fore wing: r:SR1 = 4:33; m-cu:2-SR = 6:7; 2-M, CU1b and r-m absent; cu-a weakly postfurcal (fig. 33); membrane completely setose. Hind wing: M+CU:1-M:cu-a:1r-m = 10:12:4:6; membrane completely setose.

Legs.— Fore femur with a row of 6 spines arranged in pairs; hind coxa weakly rugose dorsally with an acute tubercle antero-ventrally; femur, tibia and basitarsus of hind leg 4, 9 and 8 times their width, respectively; length of hind tibial spurs 0.2 and 0.3 times hind basitarsus.

Metasoma.— Length of first tergite 0.8 times its apical width, its surface shiny, with parallel rugae basally, rugose-reticulate apically, with dorsal carinae strong in basal half of tergite; second tergite with two crenulate converging grooves, its surface rugose (fig. 37); second metasomal suture coarsely impressed and finely crenulate; third tergite strongly shiny, smooth except for a finely crenulate transverse groove near its basal third (fig. 37); fourth tergite smooth and with a finely crenulate transverse groove basally; length of second tergite 1.1 times length of third tergite; combined length of second and third tergites equal to their maximum width; length of ovipositor sheath 1.78 times fore wing and 1.1 times as long as body; ovipositor sheath with sparse setae, and basally glabrous.

Colour.— Black; tarsi infuscate; several patches on legs light brownish; palpi, fore and middle coxae, apex of hind coxa, and remainder of legs yellowish.

Distribution.— French Guiana.

Host.— Unknown.

Variation.— Length of ovipositor sheath 1.78-1.98 times fore wing and 1.1-1.3 times as long as body.

***Leptodoryctes* Barbalho & Penteado-Dias, 1999**
(figs 31, 34, 36, 40, 41)

Type species (by original designation): *Leptodoryctes luizi* Barbalho & Penteado-Dias, 1999.

Remarks.— Runs in the key by Barbalho et al. (1999) to *Leptodoryctes* Barbalho & Penteado-Dias, 1999, because it has vein 2-SR of fore wing reduced, and vein r-m of fore wing and veins cu-a and m-cu of hind wing absent (fig. 34). The type species from Brazil is so far the only described species.

Key to species of the genus *Leptodoryctes* Barbalho & Penteado-Dias

1. First metasomal tergite slender, narrowed submedially, with dorsal carinae converging in basal half of tergite and after middle of tergite diverging (figs 34, 40); dorsope absent (fig. 36); median carina of propodeum long, distinct (fig. 40); French Guyana *L. barbalhoae* spec. nov.
- First tergite more robust, not narrowed submedially, with dorsal carinae not diverging (fig. 10 in Barbalho et al., 1999); dorsope superficially impressed; median carina of propodeum indistinct, short (id.); Brazil *L. luizi* Barbalho & Penteado-Dias, 1999

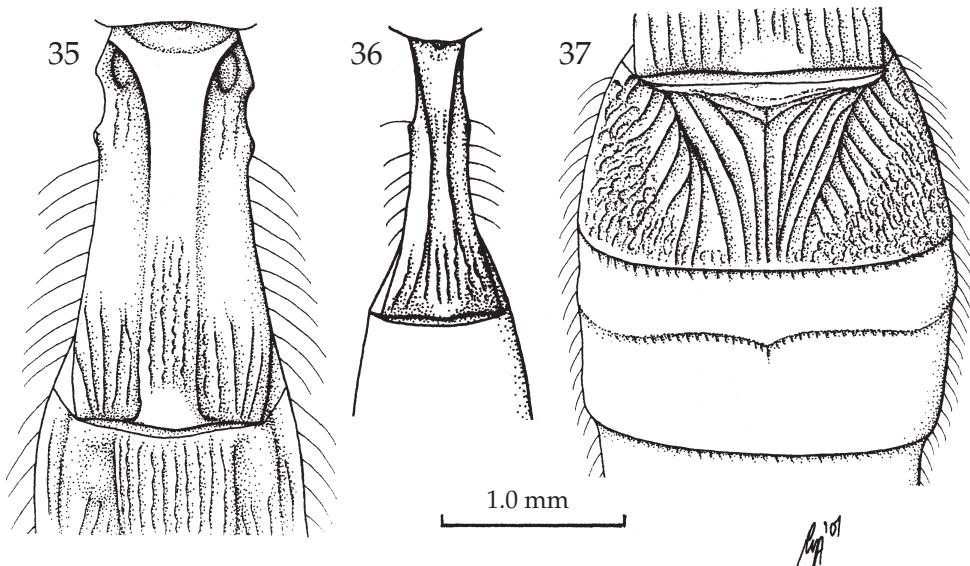


Fig. 35, *Ptesimogaster lemkoi* spec. nov., ♀, holotype; fig. 36, *Leptodoryctes barbalhoae* spec. nov., ♀, holotype; fig. 37, *Caingangia delicata* spec. nov., ♀, holotype. 35: scale-line (= 1.0 ×); 36: 2.5 ×; 37: 1.8 ×.

Leptodoryctes barbalhoae Braet & van Achterberg, spec. nov.
(figs 31, 34, 36, 40, 41)

Material.— Holotype, ♀ (FUSAGx), "Guyane française, Montagne de Kaw, Relais Patawa, v.1999, Malaise trap, A.E.I. guyane-J. Cerda". Paratypes: 2 ♀♀ (RMNH, FUSAGx), topotypic, but iii.1999 and vi.2000.

Etymology.— Named in honour of the hymenopterist Dr Sandra M. Barbalho for her contribution to our knowledge of the Neotropical Doryctinae.

Holotype, ♀, length of body 3.4 mm, of fore wing 2.6 mm.

Head.— Antennal segments 39, length of third segment 0.7 times fourth segment, length of third, fourth, penultimate and ultimate segments 5, 7, 2 and 3 times their maximum width, respectively; third and following segments with sparse and long setae; length of maxillary palp 0.8 times height of head; in dorsal view length of eye 0.7 times temple; POL:OD:OOL = 1:1:3; face sparsely setose, smooth; frons, temple and vertex smooth (figs 40, 41); malar suture absent; occipital carina not meeting hypostomal carina.

Mesosoma.— Length of mesosoma 1.9 times its maximal height; pronotum crenulate medially; propleuron convex and smooth; mesopleuron smooth and glabrous except ventro-posteriorly; precoxal sulcus complete, crenulate; mesoscutum and scutellum smooth and sparsely setose; notaui coarsely crenulate anteriorly, meeting near middle of mesoscutum (figs 31, 40), with long erect setae near junction of notaui; metapleural flange absent; surface of propodeum and metapleuron irregularly sculptured, with median carina and several small areolae posteriorly.

Wings.— Fore wing: r:SR1 = 2:25; 2-SR only anteriorly present as a small stub

(figs 31, 34); 2-M, and r-m absent; m-cu unpigmented; cu-a small and partly absent (fig. 34). Hind wing: 1-SC+R, cu-a and 1-1A absent.

Legs.— Fore femur with a row of 7 spines; hind coxa smooth; apex of hind tibia with well developed apical fringe on inner side; length of femur, tibia and basitarsus of hind leg 5, 14 and 12 times their width, respectively; middle and hind femora enlarged apically (figs 40, 41); length of hind tibial spurs 0.08 and 0.15 times hind basitarsus.

Metasoma.— Length of first tergite 2.5 times its apical width, its apical width twice its basal width, its surface irregularly sculptured, with some lateral carinae basally and several rugae apically (figs 36, 40), ventrally behind level of spiracles tergite open; second and following tergites smooth; second metasomal suture obsolescent; combined length of second and third tergites 1.5 times maximum width; length of ovipositor sheath 3.07 times fore wing; ovipositor sheath with sparse long setae.

Colour.— Brownish-yellow; antenna (except for scapus and apical 13 segments), stemmaticum, apex of telotarsi and ovipositor sheath basally and apical 0.05 dark brown; first tergite, apex of third tergite and following tergites brownish; palpi and apical half of ovipositor sheath (except apex) yellowish; apical 13 antennal segments whitish; wing membrane hyaline, but slightly infuscate near pterostigma, veins and pterostigma brownish.

Distribution.— French Guiana.

Host.— Unknown.

***Ptesimogaster* Marsh, 1965**

(figs 28, 29, 32, 35, 39)

Type species (by original designation): *Ptesimogaster parkeri* Marsh, 1965.

Remarks.— This genus is known to have a southern Nearctic and Caribbean distribution. The new species described below extends the known distribution to the heart of the Neotropical region.

Key to species of the genus *Ptesimogaster* Marsh

1. Second metasomal tergite without rectangular convex area basally, granulate or basally somewhat rugose or with furrows; mesoscutum sculptured; vertex striate or smooth; basal half of first tergite sculptured 2
- Second tergite with a rugose rectangular convex area basally, and remainder of tergite longitudinally striate (figs 29, 39); mesoscutum, vertex, and basal half of first tergite smooth (figs 28, 29, 32); Brazil *P. lemkoi* spec. nov.
2. Vertex striate; mesoscutum at least partly rugose-punctate or granulate; mesoscutum orange or reddish-brown 3
- Vertex smooth; mesoscutum completely coarsely and transversely rugose; mesoscutum dark-brown; Cuba *P. megischoides* (Cresson, 1865)
3. Temples weakly striate or smooth, mesoscutum evenly finely rugulose-punctate; Mexico, U.S.A. (Arizona, Baja California, Texas) *P. parkeri* Marsh, 1965
- Temples finely punctate; mesoscutum transversely striate antero-laterally and medio-posteriorly, remainder granulate to aciculate; Bahamas, Cayman Islands, Cuba, U.S.A. (Florida) *P. gundlachii* (Cresson, 1865)

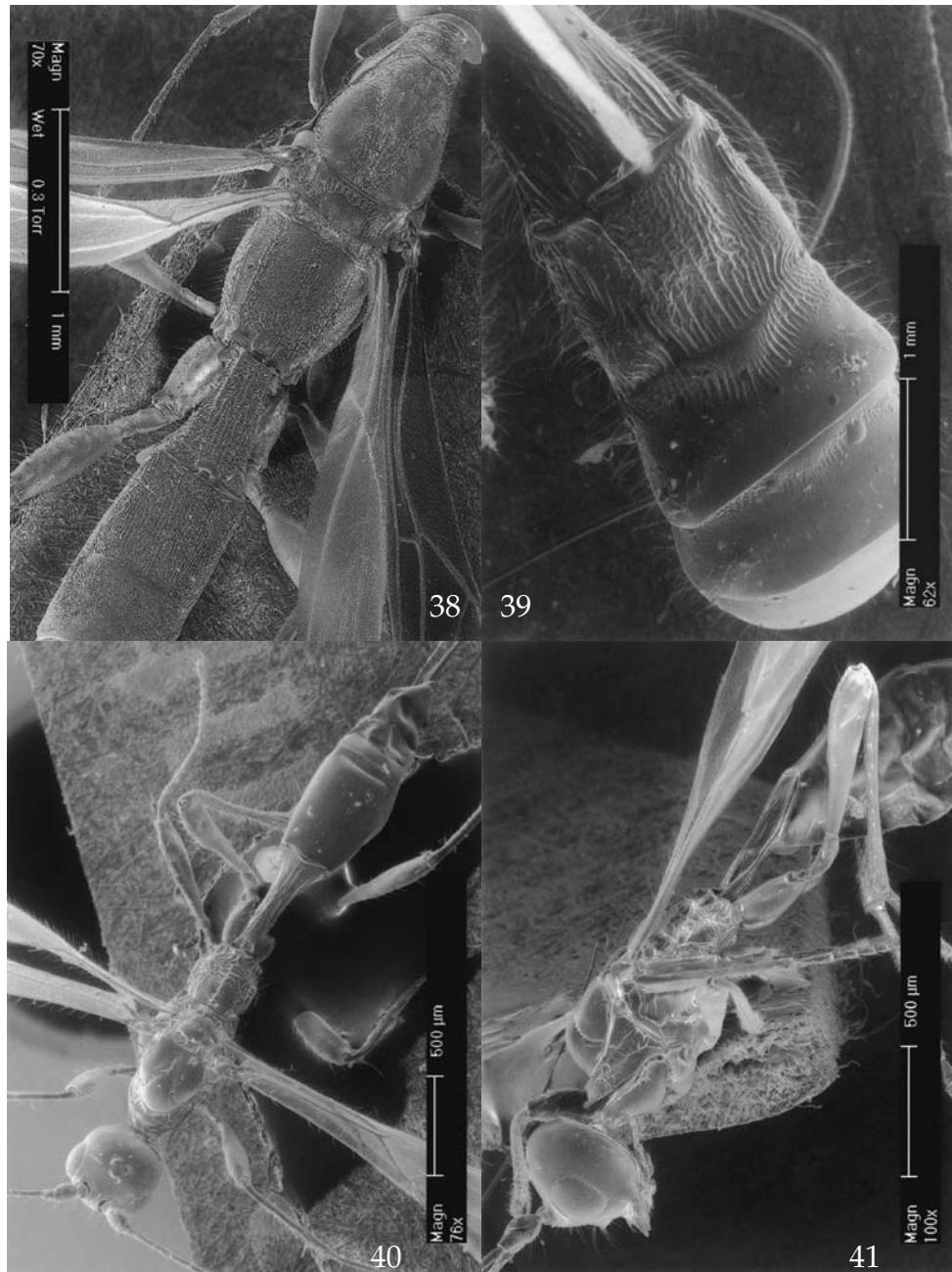


Fig. 38, *Ptesimogastroides cerdai* gen. nov. & spec. nov., ♀, holotype; fig. 39, *Ptesimogaster lemkoi* spec. nov., ♀, holotype; figs 40-41, *Leptodoryctes barbalhoae* spec. nov., ♀, holotype. 38, mesosoma and base of metasoma, dorsal aspect; 39, second and third metasomal tergites, dorsal aspect; 40, habitus, dorsal aspect; 41, habitus, lateral aspect.

Ptesimogaster lemkoi Braet, spec. nov.
(figs 28, 29, 32, 35, 39)

Material.— Holotype, ♀ (USNM), “Brasil, MG [= Matto Grosso], Serra Caraça, 1380 m, xi.[1]961, Kloss, Lemko, Martins & Silva”.

Etymology.— Named in honour of one of the collectors.

Holotype, ♀, length of body 15 mm, of fore wing 9 mm.

Head.— Antenna broken, remaining antennal segments 39, length of third segment 1.4 times fourth segment, length of third and fourth segments 4.7 and 3.3 times their width, respectively; length of maxillary palp 1.5 times height of head; in dorsal view length of eye 1.6 times temple; POL:OD:OOL = 1:1:3 (fig. 29); face with transverse rugae laterally, medially finely granulate and limited by 2 weak longitudinal rugae; frons, temples and vertex smooth with sparse long setae; anteriorly frons weakly depressed; malar suture absent.

Mesosoma.— Length of mesosoma 4.2 times its height; side of pronotum smooth with one short ruga medially; mesopleuron smooth and glabrous; precoxal sulcus smooth and only impressed posteriorly, reaching middle of mesopleuron; mesosternum, mesoscutum and scutellum sparsely setose, smooth; scutellar sulcus with 5 carinae; notauli smooth and indistinct, but anteriorly distinct and weakly crenulate; prepectal carina protruding ventro-laterally, with dense setae anteriorly; metapleuron smooth; metapleural flange present; surface of propodeum smooth, with one medio-longitudinal groove anteriorly and some weak longitudinal rugae posteriorly.

Wings.— Fore wing: r:3-SR:SR1 = 5:14:33; 2-SR:2-M:r-m = 10:23:6; 2-SR+M absent; cu-a slightly postfurcal. Hind wing: M+CU:1-M:1r-m = 9:24:5.

Legs.— Fore tibia with a row of 5 spines; apex of femora ending abruptly; hind coxa smooth with several sparse setae; femur, tibia and basitarsus of hind leg 5.0, 11.7 and 6.0 times their width, respectively; length of hind tibial spurs 0.2 and 0.3 times hind basitarsus.

Metasoma.— Length of first tergite 2.1 times its apical width, its surface largely smooth basally and medially, remainder sparsely longitudinally striate, dorsope large, and with small wing-like lateral projections (figs 29, 35); second tergite with a longitudinally rugose and rectangularly raised median area, delimited by wide grooves (figs 29, 39); third tergite longitudinally striate basally, smooth apically; length of second tergite 0.8 times its apical width, and 1.3 times as long as third tergite; following tergites smooth; length of ovipositor sheath 1.2 times fore wing.

Colour.— Reddish-brown; telotarsi blackish; antenna infuscate apically; maxillary palp brownish-yellow; wing membrane infuscate, pterostigma yellowish.

Distribution.— Brazil.

Host.— Unknown.

Remarks.— This species is the largest species of the genus.

New distributional records

Ptesimogaster parkeri Marsh, 1965

Material.— 1♀ (USNM), “**Mexico**, Sonora, Minas Nuevas, 7.viii.1952, C. & P. Vaurie”.

Distribution.— Mexico, U.S.A. (Arizona, California, Texas).

Ptesimogaster gundlachii (Cresson, 1865)

Material.— 1♀ (USNM), “**U.S.A.**, FA.[Florida], Up. Metakumbe Key, iv.[19]30, M. Bates”; 2♀♀ (USNM), FA.[Florida], Mud Keys, iv.[19]76, O. Simberloff, on red mangrove”.

Distribution.— Bahamas, Cayman Islands, Cuba, U.S.A. (Florida).

Heterospathius petiolatus Barbalho & Penteado-Dias, 1999

Material.— 2♀♀ (FUSAGx), “**Guyane française**, Montagne de Kaw, Relais Patawa, PK 37 Route de Kaw, vii.2000 & viii.2000, Malaise trap, A.E.I. guyane-J. Cerda”.

Distribution.— Brazil, French Guiana*.

Heterospathius belokobylskij Barbalho & Penteado-Dias, 1999

Material.— 1♀ (FUSAGx), “**Guyane française**, Montagne de Kaw, Relais Patawa, PK 37 Route de Kaw, vi.1999, Malaise trap, A.E.I. guyane-J. Cerda”.

Distribution.— Brazil, French Guiana*.

Curtisella pimploides Spinola, 1851

Material.— 1♂ (AEIG), “**Brazil**, Amazonas, ix.1979 (71°38'W-4°33'S, Alvarenga”: 2♀♀ (FUSAGx); “**French Guiana**, Montagne de Kaw, Relais Patawa, vi.1999 & vii.1999, Malaise, A.E.I. Guyane-J. Cerda”; 3♀♀ (AEIG), “**Peru**, Satipo, 6.i.1941, vii.1942 & iii.1945”.

Distribution.— Brazil, French Guiana*, Guyana; Peru*.

Pseudorhoptrontrus platyfemur (Marsh, 1993) comb. nov.

Rhoptrocentroides platyfemur Marsh, 1993: 31.

Material.— 1♀ (AEIG), “**Brazil**, Mato Grosso, Rio Caraguata, v.1953, F. Plaumann”.

Distribution.— Costa Rica, Brazil.

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