Description of four new genera and nine new species of Doryctinae (Hymenoptera: Braconidae) from French Guyana

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Keys to the species of the genera Achterbergia Marsh, Aphelopsia Marsh, Nervellius Roman, Lamquetia gen. nov., Dapsilitas gen. nov. and Ptesimogastroides Braet & van Achterberg are given.

Introduction

The subfamily Doryctinae, especially in the tropics, is undoubtedly one of the most diverse groups of the family Braconidae, with about 140 valid described genera (Marsh, 1993; Belokobylskij 1994a, b, 1995). Since the publication of the manual for identification of New World Braconidae (Wharton et al., 1997), several new genera have been discovered (Barbalho et al., 1999; Braet & van Achterberg, 2001) and in the future this number will increase with the development of our knowledge of the Neotropical fauna. For several years Malaise traps in French Guyana have been used by the first author and it has resulted in the discovery of many new taxa of Doryctinae, which are partly described below together with some new data on some known species. The hosts of the species treated in this paper are unknown, but related species are idiobiont ectoparasitoids of beetle larvae.

For identification of the subfamilies of Braconidae, we refer to van Achterberg (1990, 1993, 1997) and Wharton et al. (1997). The terminology used in this paper, especially for the wing venation, follows van Achterberg (1988, 1994). The examined specimens are deposited in the following collections: Faculté Universitaire des Sciences
Agronomiques, Gembloux, Belgium (FUSAGx) and Nationaal Natuurhistorisch Museum, Leiden, Netherlands (RMNH). New records for a country are indicated by an asterisk.

Systematic account

Subfamily Doryctinae Foerster, 1862

Achterbergia Marsh, 1993
(figs 1-8)

Notes.— Recently, Marsh (2002) synonymized the Neotropical genus *Achterbergia* Marsh, 1993, with the mainly Palaeotropical *Aivalykus* Nixon, 1938, because specimens with intermediately shaped scapus has been found. Dr S.A. Belokobylskij (pers. comm.) considers both genera different and prefers to treat them as separate genera. Therefore, in this paper we treat *Achterbergia* Marsh, 1993, provisionally as a valid genus, but future research may indicate that it has to be included (e.g. as a subgenus) in the genus *Aivalykus*. The key below is for species with a distinct double rim at the apex of the scapus (= *Achterbergia* Marsh s.s.). The two species described from Costa Rica by Marsh (2002) belong to the genus *Aivalykus* Nixon in the traditional sense with the double rim at the apex of the scapus weakly developed or absent, the third metasomal tergite smooth and the first tergite about as long as wide apically. The biology is unknown, but members of the genus *Aivalykus* are parasitoids of Scolytidae (Marsh, 1997).

Key to species of the genus *Achterbergia* Marsh

1. Hind coxa without baso-ventral tubercle; vein cu-a of fore wing distinctly postfurcal; length of body 5-8 mm; pterostigma of fore wing completely dark brown; temple ventrally pale yellowish to whitish; (Costa Rica, Ecuador, *French Guyana, Perú, Suriname) ................................................................. *A. arawak* Marsh, 1993

   - Hind coxa with baso-ventral tubercle (fig. 2); vein cu-a of fore wing shortly postfurcal (fig. 5); length of body about 4 mm; pterostigma of fore wing narrowly brownish-yellow basally and apically; temple ventrally brownish-yellow; (*French Guyana) ................................................................. *A. cornicoxa* Braet & Barbalho, spec. nov.

*Achterbergia cornicoxa* Braet & Barbalho, spec. nov.
(figs 1-3, 5-8)


Holotype, ♂, length of body 3.9 mm, of fore wing 2.8 mm, and of ovipositor sheath 4.3 mm.

Head.— Antenna incomplete, with 24 remaining segments, scapus and pedicellus distinctly granulate; length of third segment 0.7 times fourth segment, length of third
Figs 1-3, *Achterbergia cornicoxa* spec. nov., holotype, ♀; fig. 4, *A*. spec., ♂. French Guyana. 1, head, dorso-lateral aspect; 2, mesosoma, lateral aspect; 3, propodeum and basal half of metasoma, subdorsal aspect; 4, hind leg, lateral aspect; 5, wings; 6, head, frontal aspect; 7, head, dorsal aspect; 8, fore tibia, anterior aspect.
and fourth segments 9.3 and 13.0 times their maximum width, respectively; flagellomeres with sparse short setae (fig. 1); length of maxillary palp 1.3 times height of head; in dorsal view length of eye 2.2 times temple (fig. 7); POL:OD:OOL = 8:2:5; face setose, finely granulate and with a weak medio-longitudinal elevation; frons weakly concave, finely striate; vertex and upper part of temples transversally striate; temples smooth medially and ventrally; malar suture absent; occipital carina remain separated from hypostomal carina.

Mesosoma.— Length of mesosoma 1.9 times its maximum height; lateral sides of pronotum finely rugose-coriaceous, with a carinate medio-longitudinal groove; propodeuron convex and smooth; medio-ventral part of mesopleuron smooth and glabrous, medio-dorsal part coriaceous-granulate and setose; precoxal sulcus impressed and nearly smooth, absent anteriorly, with some fine carinae medially (fig. 2); lateral lobes of mesoscutum and scutellum aciculate to finely granulate, lateral lobes more granulate near notauli (fig. 3); median lobe of mesoscutum finely granulate, and anteriorly vertical in lateral view; notauli largely crenulate anteriorly and meeting near middle of mesoscutum in an irregularly rugose area; scutellar sulcus with several carinae; metapleural flange absent (fig. 2); metapleuron coriaceous-alveolate; anterior half of propodeum coriaceous-granulate and with a medio-longitudinal carina, posteriorly rugose-reticulate (fig. 3).

Wings (fig. 5).— Fore wing: r:2-SR:3-SR+SR1 = 7:18:70; vein 2-M long; veins 2-SR+M and r-m absent; cu-a shortly postfurcal; vein CU1a at level of vein 2-CU1; membrane completely setose. Hind wing: subbasal cell open and small, vein cu-a obsolescent; membrane completely setose; vein m+CU very short (fig. 5).

Legs.— Fore femur with a row of 5-6 pegs; hind coxa finely aciculate dorsally with an acute tubercle ventro-anteriorly; femur, tibia and basitarsus of hind leg 4.1, 11.4 and 8.5 times their width, respectively; length of hind spurs 0.3 times hind basitarsus.

Metasoma.— Length of first tergite 1.6 times its apical width, basally 0.8 times as wide as apically its surface longitudinally rugose-recticate (fig. 3); second metasomal suture indistinct, second and third tergites not differentiated and their surface finely rugose anteriorly, aciculate-rugulose medially and smooth apically; following tergites smooth; combined length of second and third tergites 2.8 times their maximum width; ovipositor sheath as long as mesosoma and metasoma combined, with sparse setae, glabrous and spatulated apically and 1.54 times fore wing.

Colour.— Blackish-brown; head near eyes, face, clypeus, scapus and pedicellus, fourth and fifth tergites (except basally) brownish-yellow; vertex medially, mesoscutum, fourth and fifth tergites basally, sixth and following tergites, large subapical patch on hind coxa and on middle and hind femora more or less dark brown; palpi, remainder of coxae, hind femur and tibia, fore and middle legs (but telotarsi dark brown) yellowish; wings hyaline, veins brown; pterostigma dark brown medially and narrowly brownish-yellow basally and apically.

Distribution.— French Guyana.

Remarks.— We have examined a male (FUSAGx) from French Guyana with strongly inflated hind femora, which differs from A. cornicoxa spec. nov. It has no tubercle on the hind coxa ventrally, the fourth tergite smooth basally, the notauli obsolescent and meeting in a coriaceous area, a short third antennal segment, the scapus and the pedicellus with indistinctly developed sculpture and a mainly yellowish body colour. It differs
also from the description and females specimens of *A. arawak* by its colour, the number of pegs on the fore tibia and the metasoma which is not lengthened as described by Marsh (1993). It belongs probably to another new species and we prefer to postpone its description until the discovery of the female. Peculiar is the blackish and strongly sclerotized and alveolate-reticulate structure ventrally on the inflated hind femur (fig. 4), the area is strongly contrasting with the brown-yellowish remainder of the femur. Its function remains unknown; it may be involved in releasing pheromones.

Etymology.— *Cornicosa* because of the presence of a ventral tubercle on the hind coxa.

*A. arawak* Marsh, 1993

*Achterbergia arawak* Marsh, 1993: 5.


*Aphelopsia* Marsh, 1993

(key to species of the genus *Aphelopsia* Marsh)

1. Face smooth; mesonotum smooth or slightly coriaceus, without distinct rugae; (Costa Rica, Ecuador, *French Guyana, Panama) ........ *A. annulicornis* Marsh, 1993
- Face reticulate; mesonotum weakly aciculate-coriaceous with several longitudinal rugae posteriorly (fig. 12); (*French Guyana). *A. striata* Braet & Barbalho, spec. nov.

*Aphelopsia striata* Braet & Barbalho, spec. nov.

(figs 9-14)


Holotype, ♀ , length of body 3.2 mm, of fore wing 2.1 mm, of ovipositor sheath 1.5 mm.

Head.— Antenna incomplete, remaining segments 14, length of third segment 1.3 times fourth segment, length of third and fourth segments 7.5 and 6.0 times their maximum width, respectively; length of maxillary palp equal to height of head; in dorsal view length of eye 2.2 times temple; POL:OD:OOL = 4:2:5; face with some long setae laterally, glabrous medially, reticulate (fig. 9); frons weakly concave, finely coriaceous-aciculate; vertex and temples smooth; malar suture absent; occipital carina meeting hypostomal carina.

Mesosoma.— Length of mesosoma twice its maximum height; pronotum smooth, except a longitudinal ruga laterally, transversally striate dorsally, convex in lateral view; propleuron convex and smooth; mesopleuron smooth and glabrous; precoxal sulcus smooth and distinctly impressed (fig. 11); mesoscutum finely acculate-coriacea-
ceous, with several longitudinal rugae near scutellar sulcus; scutellum smooth; notauli present and anteriorly largely crenulate, finely so near middle of mesoscutum; scutellar sulcus with several carinae; metapleural flange minute and acute (fig. 11); metapleuron rugose-reticulate; propodeum with longitudinal rugae anteriorly, with pair of smooth areas anteriorly, rugose-areolate posteriorly (fig. 12).


Figs 9-14, *Aphelopsia striata* spec. nov., holotype, ?, 9, head, frontal aspect; 10, fore tibia, frontal aspect; 11, head and mesosoma, lateral aspect; 12, mesosoma, dorsal aspect; 13, wings; 14, head, dorsal aspect.
short; vein 1-SR+M weakly curved; vein cu-a largely postfurcal; first subdiscal cell open, vein CU1b absent. Hind wing: vein cu-a redivious and rather long; vein m-cu weakly antefurcal; vein M+CU distinctly longer than vein 1-M (fig. 15).

Legs.—Fore femur with a row of 8 robust pegs, and 6 small apical pegs (fig. 10); hind coxa smooth, with a smooth tubercle ventro-anteriorly; femur, tibia and basitarsus of hind leg 3.5, 8.3 and 7.3 times their width, respectively; length of hind spurs 0.18 and 0.22 times hind basitarsus.

Metasoma.—Length of first tergite 1.3 times its apical width, its median part raised part reticulate-rugose, and longitudinally reticulate posteriorly; second tergite longitudinally striate anteriorly; second metasomal suture absent; third and following tergites smooth; combined length of second and third tergites 1.4 times their maximum width; ovipositor sheath as long as metasoma and 0.71 times fore wing.

Colour.—Rather dark brown; pronotum, second tergite, and apex of metasoma brownish-yellow; tarsi (except telotarsi), first-sixth flagellomeres honey yellowish; wing membrane subhyaline, with a pair of wide dark brown bands separated by a narrow whitish band below base of pterostigma; pterostigma dark brown, but basal quarter of pterostigma and parastigma white.

Distribution.—French Guyana.

Etymology.—Named after the fine longitudinal striation at the junction of the notauli.

Note.—The paratype has the pronotum coarsely and regularly transversely striate dorsally.

**Aphelopsia annulicornis** Marsh, 1993


Remark.—This is the first record of this species for French Guyana.

**Nervellius** Roman, 1924
(figs 15-23)

Note.—The genus Nervellius Roman, 1924, has been revised by Marsh (1988) and recently, Penteado-Dias (1996) has described an additional species. The known species are together with the new species included in the following key.

**Key to species of the genus Nervellius Roman**

1. Veins of fore wing completely and pterostigma brown, evenly coloured .............. 2
   - Veins of fore wing partly and at least part of pterostigma yellowish, more or less contrasting with dark brown parts .................................................. 3

2. Head, mesosoma ventrally and legs black; metasoma and dorsally mesosoma yellow; (Costa Rica) ................................................................. **N. costaricensis** Marsh, 1988
- Entire body dark brown to black; (Ecuador-Galapagos Islands) ...............................................
  N. darwini Marsh, 1988

3. Fore wing with dark brown band; vein m-cu of hind wing antefurcal in respect to vein 1r-m ................................................. 4
  - Fore wing unicoloured, without dark band; vein m-cu of hind wing interstitial in respect to vein 1r-m ............................................. 5

4. Antero-dorsally pronotum convex and with distinct groove posteriorly (in front of mesoscutum); hind femur and mesoscutum yellowish-brown; first marginal cell of hind wing with small dark brown patch medially and medially setose; body tricoloured (black or dark brown, reddish-, and yellowish-brown); vein r of fore wing 0.6-0.8 times length of vein 2-SR; (Panama, Venezuela) ...........................................
  N. tricoloratus Marsh, 1988

  - Antero-dorsally pronotum flattened and without distinct groove posteriorly; hind femur dark brown; mesoscutum black; first marginal cell of hind wing subhyaline and glabrous medially; body bicoloured (black and yellowish-brown); vein r of fore wing about 0.9 times vein 2-SR; (*French Guyana) ...........................................
  N. exquisitus Braet & Barbalho, spec. nov.

5. Mesosoma (except dark prothorax) largely reddish; mesopleuron with a wide glabrous area; metasomal tergites densely setose medially; (Brazil) ...............................................
  N. subdivisus Roman, 1924

  - Mesosoma largely black (but mesoscutum medially, metanotum and propodeum reddish); mesopleuron and medially tergites sparsely setose; (Brazil) ...............................................
  N. paulista Penteado-Dias, 1996

Nervellius exquisitus Braet & Barbalho, spec. nov. (figs 15-23)

Material.— Holotype, ♀ (FUSAGx), "Guyane française, Montagnes de Kaw, Relais Patawa, x.2000, Malaise trap, 52°09'09.19"W-4°32'42.20''N, AEI guyane - J. Cerda legs".
Holotype, ♂, length of body 10.8 mm, of fore wing 9.6 mm, of ovipositor sheath 5.0 mm.

Head.—Antennal segments 58, third segment about as long as fourth segment, length of third, fourth, penultimate and apical segments 2.5, 2.3, 2.5 and 3.3 times their maximum width, respectively; apical segment with spine; length of maxillary palp 1.3 times height of head; in dorsal view length of eye 2.6 times temple (fig. 18); POL:OD:OOL = 6:6:4; face and clypeus convex in lateral view; face with sparse setae laterally and smooth medially, laterally rugose (but partly reticulate), finely punctate-granulate between rugae and medially; clypeus punctate-reticulate and with long setae; frons weakly concave, smooth with a medio-longitudinal carina nearly reaching stemmaticum; temple smooth; malar suture absent; malar space subequal to basal width of mandibles; mandibles longitudinally striate basally; occipital carina remain separated from hypostomal carina, absent ventrally.
Mesosoma.— Length of mesosoma 1.9 times its maximum height; mesosoma sparsely setose; antero-dorsally pronotum flattened and without distinct groove posteriorly, anteriorly transversely striate-rugose, laterally with a large weakly crenulate groove; propodeuron convex and smooth, with some setiferous punctures; mesopleuron smooth and sparsely setose; precoxal sulcus fine and smooth, weakly impressed; subalar groove present and crenulate; mesoscutum mainly smooth except for rugose-recticulate area at junction of notaui (fig. 15); notaui smooth; scutellum punctate laterally and rugose-punctate medio-posteriorly; scutellar sulcus with five carinae; metapleural flange small; metapleuron smooth and punctate dorsally, weakly scrobicolate ventrally; propodeum areolate dorsally and laterally, smooth near base of each side of medio-longitudinal carina.

Wings.— Fore wing (fig. 17): r:3-SR:SR1 = 8:22:48; 2-SR:2-M:r-m = 12:30:9; 2-SR+M present; vein 3-M present; vein 1-SR+M weakly sinuate; vein cu-a postfurcal; first sub-discal cell closed, vein CU1b distinct. Hind wing: vein cu-a present; first marginal cell largely glabrous medially, without dark patch.

Legs.— Fore femur with a row of 5 pegs (fig. 23); hind coxa largely smooth, sparsely punctate, without ventral tubercle; femur, tibia and basitarsus of hind leg 2.8, 2.5 and 4.5 times their width, respectively (fig. 21); length of hind spurs 0.2 times hind basitarsus.

Metasoma.— Length of first tergite 0.9 times its apical width, its surface shiny, with a raised area very weakly areolate laterally; second tergite and following tergites smooth and setose (fig. 16); length of second tergite 0.5 times length of third tergite; combined length of second and third tergites 0.6 times their maximum width; ovipositor sheath slightly shorter than metasoma and 0.52 times fore wing.

Colour.— Black; metanotum, propodeum, metasoma (except last two dark brown tergites) yellowish-brown; palpi, fore leg (except telotarsus), middle trochanter, trochantellus, base of middle femur, tibia and middle tarsi (except telotarsus) brownish-yellow; ventral side of hind tibia brown; telotarsi dark brown; fore wing pale yellowish, with a wide dark brown band below parastigma and wing apically infuscate; pterostigma yellowish, but its basal third and anteriorly, as well as parastigma dark brown; apical half of hind wing completely infuscate.

Distribution.— French Guyana.

Etymology.— From the Latin word “exquisitus” meaning “elaborate” because of its exquisite appearance.

Lamquetia gen. nov.
(figs 24-43, 96-100)

Type species: Lamquetia rufa spec. nov.

Description.— Antennal segments 38-56; length of maxillary palp 1.2 times height of head or more; in dorsal view length of eye more than 3 times temple (figs 28, 42); eyes distinctly emarginate at inner side (fig. 26); face densely setose, densely rugose, finely granulate or coriaceous between rugae, with or without a pair of longitudinal depressions (fig. 38); clypeus rather flat to convex in lateral view, finely coriaceous-granulate, with ventral margin thin and upcurved, and a row of setae close to it; frons with a medio-longitudinal carina, more or less excavated (fig. 28) and narrowly rugose laterally; temple and vertex smooth; malar suture absent;
Figs 24-37, *Lamquetia rufa* gen. nov. & spec. nov., holotype, ♀. 24, wings; 25, mesosoma, dorsal aspect; 26, head, frontal aspect; 27, hind leg; 28, head, dorsal aspect; 29, first-third metasomal tergites, dorsal aspect; 30, hind tibial spurs; 31, fore tibia and tarsus, frontal aspect; 32, antenna; 33, ovipositor; 34, apex of antenna; 35, habitus, lateral aspect; 36, base of antenna; 37, outer hind claw. 24, 27, 32, 33, 35: scale-line (= 1.0 ×); 25, 26, 28: 2.0 ×; 29, 31: 1.5 ×; 30, 34, 36, 37: 2.8 ×.
occipital carina meeting hypostomal carina or reduced ventrally; length of mesosoma twice its maximum height or more; pronotum with a long crenulate groove medially, largely densely setose (figs 40, 42) or only near fore coxa; propleuron convex; posterior flange of propleuron hardly differentiated (figs 35, 40); mesopleuron largely smooth near precoxal sulcus; prepectal carina present and remain separated.
from anterior margin of mesopleuron; precoxal sulcus shallow (figs 35, 40); metabupleuron large smooth and with long setae; middle lobe of mesoscutum vertical anteriorly in lateral view (fig. 42); mesoscutum largely smooth, but with a large reticulate-rugose area medio-posteriorly (figs 25, 39, 43); notauli largely crenulate or punctate anteriorly and meeting at reticulate area; mesoscutal disk densely setose, especially near anterior part of notauli; scutellum smooth to punctate; metapleural flange acute (fig. 35); surface of propodeum smooth or mainly coarsely punctate (figs 25, 39), with a short or rather long medio-longitudinal carina (figs 25, 43), with distinct areola posteriorly; vein m-cu of fore wing narrowly antefurcal and parallel with vein 1-M posteriorly (fig. 24); vein 1-SR of fore wing distinctly widened (figs 24, 96); vein 3-M of fore wing short to long; vein 1-SR+M more or less sinuate; first subdiscal cell closed, vein CU9b distinct (fig. 24); vein M+CU of hind wing much shorter than vein 1-M (fig. 24); hind coxa smooth, sparsely setose dorsally, baso-ventral tooth present (fig. 27); hind tibia with row of setae or only with some setae apically; tarsal claws simple, without basal bristle (fig. 37); apical width of first tergite subequal to basal width; basal half of surface of first tergite largely smooth and punctate-reticulate or longitudinally rugose apically, dorsal carinae distinct, only apically converging (fig. 29), reaching at least middle of tergite, and with pair of small flanges (figs 29, 39, 43); second tergite longitudinally striate laterally, reticulate-striate medially, but a largely smooth triangular area basally, second metasomal suture sinuate and crenulate (fig. 29); third tergite medially with a more or less developed transverse impression, striose but smooth apically; third tergite slightly wider than second tergite; second-fifth tergites with sharp lateral crease; body more or less dark brown or black.

Distribution.— French Guyana.

Etymology.— An arbitrary combination of letters. Gender: feminine.

Notes.— The new genus runs in the key by Marsh (1997) to the genus Acanthorhogas Szépligeti, 1906, from which it can be separated as follows:

79. Frons excavated and with distinct median carina or ridge (fig. 28); first metasomal tergite subparallel-sided (fig. 29) ................................................................................................ 79a
- Frons hardly or not excavated and without median carina; first tergite distinctly widened posteriorly ......................................................................................................................... 80

79aSecond metasomal suture straight; mesoscutal lobes densely punctate; vein 1-M of fore wing slender basally ........................................................... Acanthorhogas Szépligeti
- Second metasomal suture sinuate (fig. 29); mesoscutal lobes smooth; vein 1-M of fore wing somewhat widened basally (fig. 24) ............................... Lamquetia gen. nov.

**Key to species of the genus Lamquetia nov.**

1. Metapleuron and propodeum orange brown or reddish, contrasting with black remainder of mesosoma; head and mesosoma sparsely setose; scutellum densely and finely punctate; occipital carina meeting hypostomal carina; frons very deeply excavate; antenna with 46-56 segments; length of ovipositor sheath 0.9-1.0 times fore wing; temple near eyes black ........................................................................... L. rufa Braet & van Achterberg, spec. nov.
- Metapleuron and propodeum more or less dark brown, weakly contrasting with brownish remainder of mesosoma; head and mesosoma laterally densely setose;

Lamquetia marshi Braet & Barbalho, spec. nov.
(figs 42, 43, 96-100)


Holotype, ♂, length of body 4.5 mm, of fore wing 4 mm, of ovipositor sheath 2.4 mm.

Head.—Antennal segments 38 (right antenna missing), length of third segment 1.2 times fourth segment, length of third, fourth, penultimate and ultimate segments 7.7, 6.7, 4.0 and 4.0 times their maximum width, respectively; length of maxillary palp 1.2 times height of head; in dorsal view length of eye 3.3 times temple; POL:OD:OOL = 5:4:10; face densely rugose and setose, finely granulate and no longitudinal depressions; clypeus rather flat in lateral view, finely coriaceous-granulate, ventral margin thin, and a row of setae beyond ventral carina; frons with a short medio-longitudinal carina (fig. 100), weakly concave and largely finely transversally striate; temple and vertex smooth except some punctuation; malar suture absent, malar space 0.6 times basal width of mandible; occipital carina close to but not meeting hypostomal carina.

Mesosoma.—Length of mesosoma 2.1 times its maximum height; pronotum densely setose, with a large crenulate groove medially, rather smooth ventrally, sparsely punctate dorsally; propodeon convex and smooth; mesopleuron largely smooth below precoxal sulcus and its surroundings, punctate and crenulate antero-dorsally, with numerous setae near tegulae; precoxal sulcus finely crenulate; meta-pleuron smooth, with long setae; middle lobe of mesoscutum vertical anteriorly in lateral view; lobes of mesoscutum largely smooth, but lateral lobes punctate; posteriorly with a large reticulate-rugose area (fig. 43); notauli largely crenulate anteriorly and meeting at reticulate area; mesoscutal disk densely setose especially anteriorly near notauli, but glabrous and shiny medio-anteriorly; scutellum smooth, laterally setose; scutellar sulcus with three carinae; metapleural flange acute (fig. 42); dorsal surface of propodeum largely smooth, but with a medio-longitudinal carina anteriorly (fig. 42), posteriorly with areola and reticulate-rugose.


Legs.—Fore femur with a row of 6 stout spines (fig. 98); hind coxa smooth, sparsely setose dorsally; femur, tibia and basitarsus of hind leg 3.6, 8.0 and 6.7 times their width, respectively (fig. 97); hind tibia with row of setae apically; length of hind spurs 0.17 and 0.12 times hind basitarsus.
Metasoma.— Length of first tergite 0.8 times its apical width, apically slightly wider than basally; basal half of first tergite smooth, and apical half punctate-reticulate, dorsal carinae weakly converging, reaching middle of tergite (fig. 43), enclosing an oval area; second tergite longitudinally strigose laterally, reticulate-strigose medio-anteriorly; second metasomal suture sinuate and crenulate (fig. 43); third tergite medi ally with a smooth triangular area, longitudinally rugose-punctate anteriorly, medially with a wide and more or less impressed transverse crenulate groove, apically smooth but with some punctures laterally; fourth tergite finely aciculate-punctate anteriorly, remainder smooth; fifth tergite finely punctate basally and remainder smooth; following tergites smooth; combined length of second and third tergites 0.7 times their maximum width; third tergite 1.1 times wider than second tergite; length of ovipositor sheath 0.6 times fore wing; ovipositor sheath with sparse short setae and oblique apically.

Colour.— Dark brownish; fore and middle coxae, legs (except dark patches), palpi, tegulae, and second-sixth tergites antero-laterally pale yellowish; head near eyes, temple largely, fore tibia and tarsus light brownish; patches of femora, and of hind coxa dark brown; middle lobe of mesoscutum anteriorly, scutellum, mesopleuron near precoxal sulcus, and center of metapleuron brown-orange; setae of body white; wings subhyaline; veins brown.

Distribution.— French Guyana.

Etymology.— In honour of Dr P.M. Marsh, the eminent entomologist and specialist of the subfamily Doryctinae.

Remark.— This species resembles the genus *Pedinotus* Szépligeti, 1902, because it lacks the pair of longitudinal depressions of the face and has also a very short vein M+CU of the hind wing. It is included in *Lamquetia* because it shares with the type species the widened and short vein 1-SR of the fore wing (slender and medium-sized in *Pedinotus*), the presence of a median carina of the frons (absent in *Pedinotus*), vein 1-SR+M of fore wing sinuate (straight), pterostigma wide triangular and vein r emitted submedially (elliptical and vein r emitted before middle of pterostigma) and the long dorsal carinae of the first tergite (in *Pedinotus* much shorter, absent in posterior half of tergite).

*Lamquetia rufa* Braet & van Achterberg, spec. nov.
(figs 24-41)


Paratype, 1 ♂ (RMNH), same data.

Holotype, ♂, length of body 8.7 mm, of fore wing 5.9 mm, of ovipositor sheath 5.3 mm.

Head.— Antennal segments 56, length of third segment 1.2 times fourth segment, length of third, fourth, penultimate and ultimate segments 5.0, 4.2, 3.3 and 4.7 times their maximum width, respectively (figs 32, 34, 36); length of maxillary palp 1.1 times height of head; in dorsal view length of eye 3.4 times temple (fig. 28); POL:OD:OOL = 3:2:7, face laterally with transverse rugae, convex and coriaceous-granulate medially, separated by pair of longitudinal crenulate grooves (fig. 26),
with numerous setae laterally; clypeus convex in lateral view, finely coriaceous-granulate, ventral margin thin, upcurved, and with a row of setae near it; frons deeply concave, with a strong medio-longitudinal carina, and with rugae laterally; temple and vertex smooth; malar suture absent, malar space 1.2 times basal width of mandible; occipital carina meeting hypostomal carina.

Mesosoma.— Length of mesosoma 1.8 times its maximum height; pronotum with a large crenulate groove medially, finely and densely punctate ventrally, sparsely punctate dorsally (fig. 35), with some setae near fore coxa; propleuron convex and laterally punctate, remainder smooth; mesopleuron largely smooth and glabrous except rugose area antero-dorsally (fig. 35); precoxal sulcus only faintly impressed and largely smooth; metapleuron smooth, but punctate ventrally, and with long setae; middle lobe of mesoscutum vertical in lateral view; lobes of mesoscutum largely smooth, with sparse setae, but more setose at large reticulate-rugose medio-posterior area; notauli crenulate anteriorly and meeting at reticulate-rugose area; scutellum densely and finely punctate and with numerous setae; scutellar sulcus with 3 carinae; metapleural flange acute; dorsal face of propodeum largely reticulate-punctate, with long medio-longitudinal carina (figs 25, 39), posteriorly with distinct pentagonal areola.

Wings.— Fore wing (figs 24, 41): r:3-SR:SR1 = 6:13:41; 2-SR:2-M:r-m = 9:20:9; vein 3-M rather long (figs 24, 41); vein 1-SR+M sinuate; vein cu-a narrowly postfurcal. Hind wing: vein cu-a shortly developed, vein m-cu straight and subvertical (fig. 24).

Legs.— Fore femur with a row of 8 pegs (fig. 31); hind coxa smooth, sparsely punctate and with some setae dorsally, and baso-ventral tooth present (fig. 27); femur, tibia and basitarsus of hind leg 3.6, 8.0 and 6.4 times their width, respectively; hind tibia with some setae apically; hind basitarsus robust; length of hind tibial spurs 0.3 times hind basitarsus.

Metasoma.— Length of first tergite 0.9 times its apical width, its apical width subequal to basal width; surface of first tergite smooth basally, and remainder punctate-creticate, dorsal carinae long, up to apex (figs 29, 39); second tergite longitudinally strigose laterally, reticulate-strigose medially, with medio-basal area (fig. 29); second suture sinuate and crenulate, connected with sublateral depression of tergite (fig. 29); third tergite longitudinally rugose, and finely reticulate between rugae, apically finely punctate; fourth tergite with some weak longitudinal rugae basally and punctate apically, smooth medially; fifth tergite finely punctate basally; following tergites smooth; combined length of second and third tergites 0.7 times their maximum width; third tergite 1.1 times wider than second tergite; length of ovipositor sheath 0.90 times fore wing; ovipositor sheath with sparse short setae and acute and somewhat widened apically (fig. 33).

Colour.— Blackish; ventral margin of clypeus and temple ventrally brownish; propodeum, metapleuron, metanotum dorsally, first-fourth metasomal tergites and base of fifth tergite orange-reddish; palpi, fore coxa mainly, fore trochanter and stripe on fore femur ivory; fore trochantellus brown; tegulum pale yellowish, contrasting with dark brown humeral plate; pterostigma, parastigma and veins dark brown; wing membrane infuscate, somewhat yellowish basally.

Distribution.— French Guiana.

Etymology.— Rufa because of the partly reddish body.

Remark.— The paratype is very similar to the holotype, but has larger yellowish
patches on the fore femur and bases of tibiae more or less ivory, antenna with 46 segments and ovipositor sheath 0.96 times fore wing.

**Ondigus** gen. nov.
(figs 44-59)

Type species: *Ondigus bicolor* spec. nov. Gender: masculine.

Description.— Maxillary palp about as long as height of head; face sparsely with long setae, densely rugulose and somewhat coriaceous; ventral margin of clypeus thin, upcurved; frons transversally striate anteriorly, smooth posteriorly; temple and vertex largely smooth except for some punctures (figs 49, 54); labrum distinctly concave; malar suture absent; occipital carina meeting hypostomal carina; length of mesosoma about twice its maximum height; mesosoma largely coriaceous (fig. 54); pronotum with wide median groove (fig. 54); precoxal sulcus shallow; prepectal carina present and meeting anterior margin of mesopleuron; middle lobe of mesoscutum vertical in lateral view anteriorly; mesoscutum setose and micro-sculptured, with a large rugose area medio-posteriorly (figs 48, 58); notauli wide anteriorly and disappearing in rugose area (fig. 48); metapleural flange present; surface of propodeum finely granulate, with medium-sized medio-longitudinal carina anteriorly, with distinct pentagonal areola posteriorly (fig. 48); vein m-cu of fore wing interstitial or nearly so and diverging from vein 1-M posteriorly (fig. 44); vein 2-SR+M of fore wing absent (fig. 44); vein 3-M of fore wing rather long (fig. 44); vein 1-SR+M of fore wing sinuate; first subdiscal cell of fore wing slender, partly open apically (fig. 44), vein CU1b absent; vein M+CU of hind wing about as long as vein 1-M or somewhat longer (fig. 44); fore femur with subbasal protuberance (fig. 46); hind coxa granulate, with baso-ventral tooth, in front of it depressed and densely setose (fig. 52); tarsal claws distinctly widened basally and with curved basal bristle (fig. 43); middle tarsus shortened; apex of hind femur normal, without upcurved rim dorsally; hind tibia granulate and with ventral striae, sparsely setose, without distinct longitudinal groove and normally shaped (fig. 52); dorsal carinae of first tergite complete (figs 55, 59), area between carinae reticulate-rugose and laterally rugose (fig. 55), granulate between rugae; second tergite longitudinally and irregularly coarsely rugose and with pair of sublateral depressions (figs 55, 58); second metasomal suture weakly sinuate and crenulate; third tergite finely and densely longitudinally striate anteriorly and finely granulate and somewhat depressed posteriorly, with a shallow transverse groove (figs 55, 58); fourth tergite with striate basally and granulate posteriorly; following tergites superficially granulate, but seventh tergite enlarged and largely smooth; hypopygium of ♀ far retracted (fig. 54); wings subhyaline.

Etymology.— Ondigus is an arbitrary combination of letters.

Notes.— The new genus shares with the genus *Parallorhogas* Marsh, 1993, the thin vein 1-SR+M of the hind wing (much weaker than vein 1-M), the shortened middle tarsus, and sparsely setose hind tibia. It differs by having the tarsal claws with a curved bristle (fig. 45), the second submarginal cell more elongate, the seventh tergite enlarged (fig. 34), the hind femur and tibia with long erect setae and vein 1-SR of fore wing somewhat enlarged.

The new genus runs in the key by Marsh (1997) to the genus *Sericobracon* Shaw, 1985, it can be separated as follows:
Figs 44-55, *Ondigus bicolor* gen. nov. & spec. nov., holotype. 44, wings; 45, outer hind claw; 46, fore femur and tibia, frontal aspect; 47, antenna; 48, mesosoma, dorsal aspect; 49, head, dorsal aspect; 50, base of antenna; 51, head, frontal aspect; 52, hind leg; 53, ovipositor; 54, habitus, lateral aspect; 55, first-third metasomal tergites, dorsal aspect. 44, 47, 52-54: scale-line (≈ 1.0 ×); 45: 5.0 ×; 46, 49-51: 2.0 ×; 48, 55: 1.2 ×.
63. Third metasomal tergite with more or less heavily sculptured transverse groove; sculpture of third and following metasomal tergites variable ........................................ 63a

- Third tergite without transverse groove; all tergites sculptured, rugose or coriaceous ........................................................................................................................... 64

63a Fore tibia without distinct row of pegs; labrum flat; tarsal claws without curved basal bristle; third and following metasomal tergites smooth ... *Sericobracon* Shaw

- Fore tibia with distinct row of pegs (fig. 46); labrum distinctly concave; tarsal claws with curved basal bristle (fig. 45); third and following tergites largely granulate .............................................................. *Ondigus* gen. nov.

*Ondigus bicolor* spec. nov.
(figs 44-59)


Holotype, ♀, length of body 6.1 mm, of fore wing 4.3 mm, of ovipositor sheath 4.3 mm.
Head.— Antenna incomplete, remaining segments 23, length of third segment 1.8 times fourth segment, length of third and fourth segments 4.7 and 2.7 times their maximum width, respectively; length of maxillary palp 1.1 times height of head; length of eyes in dorsal view 2.9 times temple; POL:OD:OOL = 5:4:8; face with long sparse setae, coriaceous-rugulose; ventral margin of clypeus thin upcurved; malar suture absent; occipital carina meeting hypostomal carina.

Mesosoma.— Length of mesosoma 2.1 times its maximum height; pronotum with large median groove, with some irregular rugae near tegulae, and remainder coriaceous; propleuron convex and rather finely coriaceous; mesopleuron coriaceous and glabrous but with tuft of long setae posteriorly, dorsally epicnemial area with several rugae; precoxal sulcus shallow, only granulate, complete (fig. 73); metapleuron reticulate and coriaceous, with long setae; lobes of mesoscutum largely coriaceous with sparse punctures, sparsely setose, with a large reticulate-rugose area (figs 57, 58); notauli wide anteriorly, crenulate; scutellum sparsely punctate, finely coriaceous with some punctures; scutellar sulcus with 3 carinae; metapleural flange acute; surface of propodeum finely granulate-coriaceous, with medio-longitudinal carina medium-sized.

Wings.— Fore wing (figs 44): r:3-SR:SR1 = 8:20:44; 2-SR:2-M:r-m = 17:35:9; vein 2-SR+M absent; vein r-m unpigmented; vein 3-M long (fig. 44); vein 1-SR+M sinuate; vein cu-a far postfurcal; first subdiscal cell partly open (fig. 44). Hind wing: vein cu-a medium-sized, relictive (fig. 44), vein m-cu straight and somewhat relictive.

Legs.— Fore femur with a row of 6 pegs (fig. 46); hind coxa coriaceous; all legs long and sparsely setose; femur, tibia and basitarsus of hind leg 3.2, 9.1 and 5.0 times their width, respectively; length of hind spurs 0.2 and 0.3 times hind basitarsus.

Metasoma.— Length of first tergite 1.1 times its apical width, apically 1.1 times wider than basally; surface of first tergite coarsely rugose, with interspaces granulate (figs 55, 58); second tergite longitudinally rugose and interspaces granulate; third tergite finely longitudinally striate and posteriorly finely coriaceous; combined length of second and third tergites 0.9 times their maximum width; width of third tergite 1.1 times second tergite; length of ovipositor sheath 1.01 times fore wing; ovipositor sheath with short setae.

Colour.— Black; head and mesosoma (except black metanotum, propodeum and metapleuron) orange-brown; second tergite sublaterally, third-sixth tergites posteriorly and seventh tergite basally, brown; fore and middle telotarsi dark brown and remainder of tarsi infuscate; hind femur subapically, apical half of hind tibia largely and hind tarsus dark brown; palpi, remainder of legs and tegulae pale yellowish; pterostigma, parastigma and veins (but veins near base of wing yellowish) dark brown; wing membrane subhyaline.

Distribution.— French Guyana.

Etymology.— Bicolor because of the black and orange mesosoma of the type-species.

Neostaphius gen. nov.

Type species: Neostaphius striatus spec. nov. Gender: masculine.

Description.— Face transversally rugose, with sparse long setae, smooth and shiny between rugae; ventral margin of clypeus thin, upcurved; frons transversally striate
medially; temple and vertex smooth; malar suture absent; occipital carina meeting hypostomal carina; pronotum with large median groove (fig. 69); mesopleuron smooth and glabrous, but with sparse long setae anteriorly, precoxal sulcus complete (fig. 69); prepectal carina present ventrally; lobes of mesoscutum largely smooth, with few setae, largely glabrous, with some longitudinal rugae, enclosing a sparsely rugose area (fig. 64); notauli wide and crenulate anteriorly and meeting at rugose area; scutellar sulcus wide (fig. 64); metapleural flange rather obtuse (fig. 69); surface of propodeum largely smooth anteriorly, finely punctate-rugose or reticulate areolate posteriorly with long medio-lon-
gitudinal carina, without distinct areola (fig. 64); vein m-cu of fore wing interstitial or nearly so and diverging from vein 1-M posteriorly (fig. 60); vein 3-M of fore wing long (fig. 60); vein 1-SR+M of fore wing slightly sinuate; first subdiscal cell open, vein CU1b absent; vein CU1a present basally; vein M+CU of hind wing much shorter than vein 1-M (fig. 60); vein 1r-m of hind wing about 0.2 times vein 1-M; hind coxa smooth, baso-ventral tooth present and depressed and densely setose behind it (fig. 63); tarsal claws distinctly widened basally and with curved basal bristle (fig. 67); apex of hind femur with upcurved rim dorsally (fig. 63); hind tibia with ventral striae and remainder largely smooth, with distinct longitudinal groove and widened submedially (fig. 63); first tergite rather elongate, about 1.8 times as long as apically wide (fig. 62), without basal flanges; dorsal carinae of first tergite present up to basal 0.7 (figs 62, 72), longitudinally striate as second tergite, second tergite with sublateral depressions (figs 62, 72); second metasomal suture sinuate and crenulate; third tergite with finely striate and densely punctate subapically and smooth apically, with a shallow transverse groove (figs 62, 72); fourth tergite with some striae and subapically, finely punctate and smooth apically; following tergites finely granulate basally and smooth apically; second-fifth tergites with sharp lateral crease; ovipositor sheath with long and sparse setae, its length about 1.4 times fore wing; hypopygium of ? ends near apex of metasoma (fig. 69); wings infuscate (fig. 72).

Etymology.—From an anagram of the generic name Spathius with the prefix Neo.

Notes.—The new genus runs in the key by Marsh (1997) to the genera Johnsonius Marsh, 1993 and Whitfieldiellus Marsh, 1997, it can be separated as follows:

72. Scapus notched at apex; fore wing with dark brown bands; vein 1r-m of hind wing longer than half length of 1-M; vein m-cu of hind wing curved apicad

72a Occipital carina not meeting hypostomal carina; second submarginal cell short; precoxal sulcus absent posteriorly; length of first metasomal tergite about equal to its apical width

- Occipital carina meeting hypostomal carina; second submarginal cell comparatively long (fig. 60); precoxal sulcus complete posteriorly (fig. 69); length of first tergite about 1.8 times its apical width

Neostaphius striatus spec. nov.
(figs 60-74)

Figs 60-71. *Neostaphius striatus* gen. nov. & spec. nov., holotype. 60, wings; 61, fore femur and tibia, frontal aspect; 62, first-third metasomal tergites, dorsal aspect; 63, hind leg; 64, mesosoma, dorsal aspect; 65, head, frontal aspect; 66, head, dorsal aspect; 67, outer hind claw; 68, antenna; 69, habitus, lateral aspect; 70, ovipositor; 71, base of antenna. 60, 63, 68-70: scale-line (= 1.0 mm); 61, 64-66: 2.0 mm; 62: 1.3 mm; 67: 5.0 mm; 71: 2.3 mm.
Holotype, ♀, length of body 6.8 mm, of fore wing 4.9 mm, of ovipositor sheath 7.0 mm.

Head.— Antenna incomplete, 20 segments remaining, length of third segment 1.1 times fourth segment, length of third and fourth segments 4.6 and 4.2 times their maximum width, respectively; length of maxillary palps 1.6 times the height of head; length of eyes in dorsal view 2.2 times temple; POL:OD:OOL = 3:3:6; face finely transversally rugose, smooth and shiny between rugae, striate latero-ventrally (fig. 65); frons nearly flat.

Mesosoma.— Length of mesosoma 2.3 times its maximum height; pronotum crenulate anteriorly; mesopleuron smooth and glabrous but with sparse long setae anteriorly, precoxal sulcus narrow, smooth; lobes of mesoscutum largely smooth, with some punctures, sparsely setose; notauli complete, narrowed posteriorly; scutellum sparsely punctate; scutellar sulcus with 6 carinae; surface of propodeum largely smooth anteriorly (fig. 64).


Legs.— Fore femur with a row of 5-6 stout pegs (fig. 69); hind coxa smooth; all legs
with sparse long setae; femur, tibia and basitarsus of hind leg 3.9, 10.4 and 8.4 times their width, respectively; length of hind spurs 0.15 and 0.20 times hind basitarsus.

Metasoma.— Length of first tergite 1.8 times its apical width, its apical width 1.1 times its basal width; surface longitudinally striate with fine interconnections; combined length of second and third tergites 1.2 times their maximum width; width of third tergite subequal the second tergite; length of ovipositor sheath 1.43 times fore wing; ovipositor sheath medium-sized and rather densely setose.

Colour.— Yellowish-brown; antenna, hind leg (but coxa yellowish and trochanter, trochantellus and dorsal patch of femur brown), third tergite antero-laterally and medio-posteriorly, fourth and fifth tergites (except laterally), sixth tergite basally and ovipositor sheath dark brown; metasoma ventrally, second-sixth tergites laterally, sixth tergite apically and seventh tergite ivory; palpi and tegulae brownish-yellow; pterostigma, parastigma and veins dark brown; wings infuscate but less so apically (fig. 74).

Notes.— We have examined a male from French Guiana (Montagnes de Kaw, Relais Patawa, ix.2000, Malaise trap, 4°32’42.20’’N-52°09’09.19’’W, AEI guyane-J. Cerda; (FUSAGX)) which could be conspecific. It is similar to the holotype, but it has a different colouration and sculpture. The hind femur and tibia are largely yellowish-brown, the metasoma is brownish-yellow except for a semicircular brown patch on the third-fifth tergites apically, the second and third tergites are more slender, and the subparallel depressions of the second tergite are weakly developed.

Distribution.— French Guiana.

Etymology.— Striatus because the first and second metasomal segments are striate.

**Dapsilitas gen. nov.**

(figs 76-95, 101-103)

Type species: *Dapsilitas bicolor* spec. nov.

Description.— Antenna probably whitish apically or with pale subapical band (antenna of types incomplete); face largely smooth; ventral margin of clypeus thin, upcurved; frons more or less transversally striate (figs 81, 95); malar suture absent; occipital carina remain separated from hypostomal carina; prepectal carina present and remaining removed from anterior margin of mesopleuron (fig. 81); mesopleuron smooth and glabrous but with sparse long setae ventrally (figs 88, 93); epicnemial depression present and foveolate (figs 88, 93); precoxal sulcus smooth, absent posteriorly (figs 88, 93); metapleuron sculptured; lobes of mesoscutum smooth with converging longitudinal striae or rugae medio-posteriorly (figs 83, 89, 95); notauli crenulate and moderately widened anteriorly (figs 86, 88); surface of propodeum smooth anteriorly, rugose or reticulate posteriorly, with short medio-longitudinal carina anteriorly (figs 83, 95); vein 2-SR of fore wing sclerotized anteriorly, remainder more or less desclerotized (figs 76, 102); sometimes sclerotized part very short; vein m-cu of fore wing interstitial or nearly so and diverging from vein 1-M posteriorly (figs 76, 102); vein 3-M medium-sized (fig. 76); first subdiscal cell partly open, vein CU1b present as a short stub and vein 2-1A reduced apically (figs 76, 102); veins cu-a and m-cu of hind wing short and vertical, straight; vein M+CU of hind wing distinctly shorter than vein 1-M; veins 1-M and 1r-m of hind wing distinctly widened (figs 76, 102), fore femur with numerous pegs (figs 82, 103); baso-ventral
Figs 76-87, *Dapsilitas bicolor* gen. nov. & spec. nov., holotype, ♀. 76, wings; 77, first-third metasomal tergites, dorsal aspect; 78, base of antenna; 79, head, frontal aspect; 80, hind leg; 81, head, dorsal aspect; 82, fore tibia, frontal aspect; 83, mesosoma, dorsal aspect; 84, outer hind claw; 85, antenna; 86, habitus, lateral aspect; 87, ovipositor. 76, 80, 85-87: scale-line (= 1.0 mm); 77, 83: 1.3 mm; 78, 79, 81, 82: 2.0 mm; 84: 5.0 mm.
tooth of hind coxa present, somewhat depressed behind it and densely setose (fig. 80); hind tibia with some ventral striae and widened submedially (fig. 80); tarsal claws distinctly widened and with ventral curved bristle (especially of hind claw; fig. 84); all legs with long and sparse setae; dorsal carinae of first tergite short (figs 77, 94); first and second tergites longitudinally rugose-striate; second tergite without sublateral longitudinal depression; second metasomal suture nearly straight and finely crenulate (figs 77, 94); third tergite more or less finely rugose-striate, but smooth apically; fourth tergite somewhat rugose or rugulose anteriorly and remainder smooth; fifth tergite partly granulate; sixth and following tergites finely coriaceous basally, smooth apically; third-fifth tergits latero-posteriorly convex and rather depressed medio-posteriorly (figs 77, 86, 94); combined length of second and third tergites subequal to their maximum width; third tergite hardly wider than second tergite (fig. 77); second-fifth tergites with sharp lateral crease; body more or less dark brown; wings weakly infuscate.

Etymology.— “Dapsilitas” is Latin for “sumptuous”. Gender: feminine.

Notes.— The new genus runs in the key by Marsh (1997) to the genera Pioscelus Muesebeck & Walkley, 1951, and Heterospilus Haliday, 1836, and is similar to Jataiella Barbalho & Penteado-Dias, 1999 (Barbalho et al., 1999) from which it can be separated as follows:
25. Second metasomal tergite with pair of posteriorly converging grooves; hind coxa rounded basally, without basal tubercle .......................... *Pioscelus* Muesebeck & Walkley

- Second metasomal tergite without converging grooves; hind coxa with small baso-ventral tubercle (figs 80, 101) .............................................................................................. 25a

25a Body densely covered with long whitish setae; middle lobe of mesoscutum with weak medio-longitudinal groove; second submarginal cell of fore wing comparatively slender ................................................................. *Jataiella* Barbalho & Penteado-Dias

- Body normally setose, setae medium-sized and comparatively sparse (fig. 95); middle lobe of mesoscutum without medio-longitudinal groove (fig. 83), but sometimes shallowly and widely impressed antero-medially (fig. 95); second submarginal cell of fore wing less slender (fig. 76) ......................................................................................... 25b

25b Vein m-cu of fore wing subparallel to vein 1-M; tarsal claws slender basally and without distinct ventral bristle; vein 2-SR of fore wing absent or nebulous ................................................................. *Heterospilus* Haliday

- Vein m-cu of fore wing diverging from vein 1-M posteriorly (fig. 76); tarsal claws widened basally and with distinct ventral bristle (fig. 84); vein 2-SR of fore wing distinctly sclerotized anteriorly (fig. 76) ................................................................. *Dapsilitas* gen. nov.

*Dapsilitas* gen. nov. shares with *Ondigus* gen. nov. and *Neostaphius* gen. nov. several derived features: the widened tarsal claws with a ventral bristle, vein m-cu of fore wing diverging from vein 1-M posteriorly.
wing diverging from vein 1-M posteriorly, the ventral margin of clypeus upcurved and thin, the hind coxa with small and densely setose depression behind ventral protuberance, vein r-m of fore wing unsclerotized, hind wing with one subbasal bristle anteriorly (fig. 76), vein 1r-m of hind wing about as long as vein 2-SC+R, sublateral longitudinal depressions of second tergite more or less developed, hind tibia with ventral striae, and the tibia more or less widened submedially. This group can be separated as follows:

1. Second metasomal suture sinuate (figs 55, 62); notauli strongly widened anteriorly (figs 48, 54, 64, 69); second metasomal tergite with more or less impressed longitudinal depressions sublaterally (figs 55, 62); vein cu-a of hind wing reclivous (figs 44, 60); vein 2-SR of fore wing completely sclerotized; vein 1-M and 1r-m of hind wing slender (figs 44, 60); pterostigma slender (figs 44, 60) ............................................... 2

- Second metasomal suture straight (fig. 77); notauli moderately widened anteriorly (figs 83, 86); second tergite without longitudinal depressions sublaterally (figs 77, 89, 94); vein cu-a of hind wing vertical (figs 76, 102); vein 2-SR of fore wing at least partly desclerotized (fig. 76, 102); vein 1-M and 1r-m of hind wing more or less widened (figs 76, 102); pterostigma robust (figs 76, 102) .........................

............................................................................................................................... .......

Dapsilitas

2. Mesoscutum setose and micro-sculptured; vein M+CU of hind wing about as long as vein 1-M or somewhat longer (fig. 44); apex of hind femur normal, without upcurved rim dorsally; hind tibia more robust, not distinctly widened submedially, granulate and longitudinal groove obsolescent (fig. 52); hypopygium of ♀ far retracted (fig. 54); propodeum with distinct areola (fig. 48) ..............................

............................................................................................................................... .......

Ondigus

- Mesoscutum glabrous and largely smooth; vein M+CU of hind wing much shorter than vein 1-M (fig. 60); apex of hind femur with upcurved rim dorsally (fig. 63); hind tibia slender, distinctly widened submedially, largely smooth and longitudinal groove distinct (fig. 63); hypopygium of ♀ near apex of metasoma (fig. 69); propodeum without distinct areola (fig. 64) ................................ Neostaphius

Key to species of the genus Dapsilitas

1. Length of ovipositor sheath about 1.1 times fore wing and about 1.5 times length of metasoma; vertex and frons smooth (fig. 81); mesopleuron and mesoscutum largely smooth (figs 83, 86); notauli ending in a mainly smooth area posteriorly (fig. 83); hind basitarsus comparatively slender, about 7 times as long as wide (fig. 80); first metasomal tergite subparallel-sided and comparatively slender (fig. 77); third tergite evenly convex, without transverse depression (fig. 77); parastigma dark brown ........................................................................................................ D. bicolor spec. nov.

- Length of ovipositor sheath about 0.7 times fore wing and about 1.1 times length of metasoma; vertex and frons distinctly transversely striate (fig. 95); mesopleuron and mesoscutum largely granulate (figs 93, 95); notauli ending in a coarsely rugose area posteriorly (fig. 95); hind basitarsus comparatively robust, about 5 times as long as wide (fig. 103); first tergite distinctly widened apically and comparatively robust (fig. 94); third tergite with transverse depression subbasally (fig. 94); parastigma ivory .......................................................... D. robustisoma spec. nov.

Holotype, ♀, length of body 5.2 mm, of fore wing 3.7 mm, of ovipositor sheath 4.3 mm.

Head.— Antenna incomplete, with 31 remaining segments, length of third segment 1.4 times length fourth segment, length of third and fourth segments 6.0 and 4.2 times their maximum width, respectively; length of maxillary palp subequal to height of head; in dorsal view length of eye 3.4 times temple; POL:OD:OOL = 4:3:8; face with sparse long setae, smooth (except for some punctures and near clypeus with some striae: fig. 79) and shiny; frons transversally striate anteriorly, smooth posteriorly (fig. 81); temple and vertex smooth; length of malar space 0.7 times basal width of mandible.

Mesosoma.— Length of mesosoma 1.6 times its maximum height; pronotum with wide median groove, crenulate, remainder largely smooth; propleuron convex and smooth; mesoscutum largely smooth (except for some oblique striae posteriorly: fig. 83) and glabrous (with few setae), shiny; scutellum smooth; scutellar sulcus with 4 carinae; metapleural flange acute; surface of propodeum smooth anteriorly, reticulate-rugose posteriorly, with short medio-longitudinal carina anteriorly.

Wings.— Fore wing (fig. 76): r:3-SR:SR1 = 4:15:36; 2-SR:2-M:r-m = 14:27:7; vein 2-SR of fore wing only anteriorly sclerotized; vein 3-M rather long; vein 1-SR+M straight; vein cu-a narrowly postfurcal; first subdiscal cell open, vein CU1b present at most as a short stub, vein 2-1A not reaching CU1b. Hind wing: M+CU:1-M = 9:19.

Legs.— Fore femur with about 20 pegs (fig. 82); hind coxa finely striate dorsally; all legs with long and rather sparse setae; femur, tibia and basitarsus of hind leg 3.6, 10.1 and 6.0 times their width, respectively; length of hind spurs 0.2 and 0.3 times hind basitarsus.

Metasoma.— Length of first tergite 1.4 times its apical width, without subbasal flanges, its apical width subequal to its basal width; its surface coarsely longitudinally rugose-striate and with fine interconnecting sculpture; second tergite coarsely longitudinally rugose-striate; third tergite with longitudinal rugae but smooth apically (figs 77, 89); fourth tergite with some longitudinal rugae medio-anteriorly and remainder smooth; following tergites smooth (except for coriaceous part of fifth tergite: fig. 86); combined length of second and third tergites 1.1 times their maximum width; length of ovipositor sheath 1.17 times fore wing.

Colour.— Black or blackish-brown; coxa, trochanters and trochantelli, base and apex of femora, apices of tibiae, second tergite (except medio-basally), metasoma ventrally, eighth tergite, propleuron posteriorly, malar space ventrally, palpi and tegulae ivory; clypeus, scapus and pedicellus largely brown; remainder of legs more or less dark brown; remainder of antenna, but at least one subapical segment ivory; pterostigma, parastigma and veins (but near base of wing yellowish) dark brown; wing membrane slightly infuscate, somewhat more near veins r and 1-M of fore wing (fig. 76).

Distribution.— French Guyana.

Etymology.— Bicolor because of the black and white colour pattern of the metasoma.
Dapsilitas robustisoma Braet & van Achterberg, spec. nov.
(figs 91-95, 101-103)


Holotype, ♀, length of body 4.0 mm, of fore wing 3.5 mm, of ovipositor sheath 2.6 mm.

Head.— Antenna incomplete, with 18 remaining segments, length of third segment 1.4 times the length of the fourth segment, length of third and fourth segments 6.0 and 4.2 times their maximum width, respectively; length of maxillary palp 1.3 times height of head; in dorsal view length of eyes 3.5 times temple; temple dorsally coriaceous and ventrally smooth, convex and directly narrowed; frons and vertex distinctly transversely striate; POL:OD:OOL = 3:2:5; face with rather long setae and setosity rather dense, surface smooth medially and rugulose laterally; clypeus with a thin upcurved ventral carina; malar suture absent; malar space 1.1 times basal width of mandible; occipital carina reduced ventrally, not meeting hypostomal carina.

Mesosoma.— Length of mesosoma 1.6 times its maximum height; pronotum with large median groove, anteriorly crenulate, remainder smooth or granulate; propleuron convex and superficially granulate; mesopleuron granulate, shiny and glabrous but with sparse long setae ventrally and posteriorly; precoxal sulcus smooth, absent posteriorly; prepectal carina present; metapectal carina mainly rugose but nearly smooth anteriorly; lobes of mesoscutum granulate, sparsely setose, medio-posteriorly with coarsely rugose area (fig. 95); notaulli distinctly crenulate; scutellum superficially granulate; scutellar sulcus with one carina; metapleural flange acute; surface of propodeum granulate anteriorly, remainder rugose-rectulate, with short medio-longitudinal ruga anteriorly.

Wings.— Fore wing: r:3-SR:SR1 = 4:9:30; 2-SR:2-M:r-m = 10:19:7; veins 2-SR and r-m of fore wing unsclerotized; vein 2-SR+M absent; vein 3-M sclerotized basally; vein 1-SR+M sinuate; vein cu-a just postfurcal; first subdiscal cell open, vein CU1b absent. Hind wing: veins cu-a and m-cu vertical (fig. 102); M+CU:1-M = 2.3.

Legs.— Fore femur with 13 slender pegs (figs 91, 103); hind coxa granulate, but finely striate dorsally, robust baso-ventral tooth present; legs with long and rather sparse setae; femur, tibia and basitarsus of hind leg 3.9, 9.6 and 4.8 times their width, respectively; length of hind spurs 0.2 and 0.3 times hind basitarsus; hind femur submedially somewhat widened, finely obliquely striate ventrally and slightly depressed medially.

Metasoma.— Length of first tergite equal to its apical width, apically distinctly wider than basally, its dorsal carinae nearly complete; surface of tergite longitudinally striate with fine interconnecting sculpture; second tergite longitudinally rugose-striate; second metasomal suture weakly sinuate and crenulate; third tergite subbasally distinctly transversely depressed and depression coarsely carinate, remainder granulate-rugulose anteriorly, smooth and flattened posteriorly (fig. 94); fourth tergite rugulose-granulate anteriorly and remainder smooth; fifth tergite with some weak granulation basally; sixth and following tergites smooth; combined length of second and third tergites 0.7 times their maximum width; length of ovipositor sheath 0.74 times fore wing and 1.1 times metasoma.
Colour.— Dark brown; head (except posteriorly), scapus, pedicellus, pronotum anteriorly, mesoscutum (but lobes partly infuscate), scutellum and propodeum antero-laterally yellowish-brown; palpi, tegulae, coxae, trochanters and trochantelli, metasoma ventrally partly and fifth-seventh tergites (but medially and posteriorly

Figs 96-100, *Lamquetia marshi* gen. nov. & spec. nov., holotype, ♂; figs 101-103, *Dapsilitas robustisoma* gen. nov. & spec. nov., holotype, ♀. 96, 102, wings; 97, 101, hind leg; 98, 103, fore tibia, frontal aspect; 99, head, frontal aspect; 100, head, dorsal aspect. 96, 102: scale-line (= 1.0×); 97: 0.8×; 98-100: 1.3×; 101, 103: 1.1×.
more or less dark brown) ivory; second tergite sublaterally, third tergite antero-laterally and posteriorly, and remainder of legs brownish-yellow; wing membrane faintly infuscate; pterostigma and veins dark brown, but parastigma and apex of pterostigma narrowly, pale yellowish.

Distribution.— French Guyana.

Etymology.— Robustisoma because of the more robust metasoma of this species.

**Ptesimogastroides** Braet & van Achterberg, 2001

*Ptesimogastroides* Braet & van Achterberg, 2001: 120-122, figs 1-12, 30, 38.

**Sharkeyelloides** Marsh, 2002: 20, 191.

*Syn. nov.*

Key to species of the genus *Ptesimogastroides* Braet & van Achterberg

1. Notauli narrow, shallow and largely smooth anteriorly (figs 3, 10 in Braet & van Achterberg, 2001); anterior lamella of pronotum reaching dorsal level of pronotum in lateral view and pronotum flattened medially (fig. 3 l.c.); hind coxa brownish; second metasomal tergite blackish with brownish patches; (Brazil, French Guyana)

   - Notauli wide, distinctly impressed and crenulate anteriorly (figs 471, 472 in Marsh, 2002); anterior lamella of pronotum distinctly below dorsal level of pronotum in lateral view and pronotum convex medially (fig. 472 l.c.); hind coxa more or less dark brown; second tergite dark brown, without patches; Costa Rica ........... 2

2. Ovipositor sheath densely covered with flattened spine-like bristles (fig. 475 l.c.); tegulae black .................................................. *P. hespenheidei* (Marsh, 2002) **comb. nov.**

   - Ovipositor sheath rather sparsely covered with hardly flattened bristly setae (fig. 477 l.c.); tegulae yellowish ............................. *P. vanderenti* (Marsh, 2002) **comb. nov.**

**Ptesimogastroides cerdai** Braet & van Achterberg, 2001

(fig. 75)

*Ptesimogastroides cerdai* Braet & van Achterberg, 2001: 122-124, figs 1-12, 30, 38.


Note.— We illustrate here for the first time the internal morphology of the ovipositor of this genus (fig. 75).

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