

A Generic Key to the South American *Strombocerina* Group (Hym., Tenthred.).

By

RENÉ MALAISE.

In 1942, Ent. Tidskrift 63, p. 91, the present author published a key to the genera of the South American group *Strombocerina* m. (*Stromboceros* Konow 1885 nec Gemminger & Harold 1871). Five genera could not then be interpreted and were accordingly left out of consideration. In 1951 the author had an opportunity to visit Paris, and owing to the courtesy of Mr. L. Berland of the Musée National the holotypes of the genera *Tioloma* Strand and *Neoanapeptamena* Strand could be studied conveniently like the holotype of *Waldheimia orbignyana* Brullé. For the latter species a new genus *Brulléana* was erected in honour of the prominent French entomologist Aug. Brullé, who was active a century ago. In 1949, Arkiv f. Zoologi, 42 A, Nr. 9, p. 19, it was possible to prove that an error had occurred in Jørgensen's original generic description of *Peterseniana* and in the course of the actual revision it turned out that *Peterseniana* may be considered to be a synonym of the older generic name *Prostromboceros* Rohwer. There remain accordingly as uninterpreted the genera *Stromboceridea* Rohwer 1911 and *Proselandria* Rohwer 1912, both erected on single specimens from Mexico and Panama respectively. From the very incomplete descriptions it seems questionable if *Proselandria* belongs to the *Strombocerina* group at all, but *Stromboceridea* may be guessed to come close to either of the multiform genera *Adiaclema* Enderlein 1919 or *Plaumanniana* - *Caribia* m. 1942. The form of the mandibles and of labrum would be decisive.

As types are not lent out from the North American museums, a request was sent to C. F. W. Muesebeck in charge of the Division of Insect Identification at Washington for a description of the mouthparts of *Stromboceros* (*Stromboceridea*) *pilosulus* Rohwer, the type species of *Stromboceridea*. Dr. B. D. Burks, working on *Symphyta*, was then kind enough to prepare the sketches reproduced in Fig. 6, B and C. From these sketches it is evident that *Stromboceridea pilosulus* Rohwer belongs in either of my genera *Plaumanniana* or *Caribia*. Rohwer's statement in the original description, "Claws cleft, the

inner tooth shorter", indicates that Rohwer probably never noticed the basal lobe of the claws and that the name *Caribia* m. must be replaced by the older *Stromboceridea* Rohwer.

Textfigures 1-5 are reproduced from Malaise, Ent. Tidskr. 63, 1942.

Generic Key to the South American *Strombocerina*-Group.

1. Both mandibles simple without any subapical tooth (Fig. 1 A, 3 A, 3 B). Claws cleft without basal lobe, the two teeth almost equally long and placed apically of the middle (Fig. 2 E). Labrum

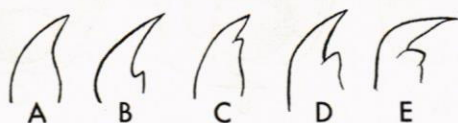


Fig. 1. Mandible of: A. *Adiaclema pilicornis* (Cam.), B. *Bolivius absonus* (Knw), C. *Dochmioglene soleatus* (Knw), D. *Romaniola* sp., E. *Plaumanniana aemulus* (Knw) (*ochreithorax* (Enderlein)).

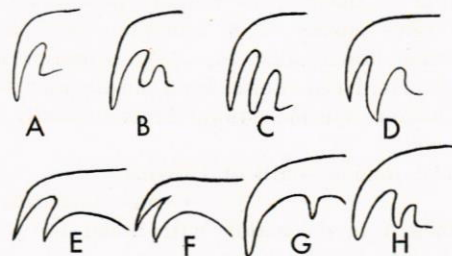


Fig. 2. Tarsal claws of: A. *Goniocerus abilabris* (Knw), B. *Prostromboceros leucostomus* (Rhw.), C. *Stromboceridea picticornis* (Cam.), D. *Plaumanniana trigemmis* (Knw), E. *Adiaclema maculipennis* (Cam.), F. *Belea nigripennis* (Knw), G. *Romaniola* sp., H. *Inea pusilla* Malaise.

strongly convex. Pedicellus (2nd antennal joint) longer than it is broad at the apex; flagellum of the antennae long and gradually tapering towards the apex, more rarely very faintly incrassated in the middle. Head not carinated behind the eyes. General direction of the inner margins of the eyes faintly converging downwards. Praesterna of the mesopleura not convex and sometimes separated only by a very fine or even indistinct furrow. 2

- Mandibles with a subapical tooth (Fig. 1 B-E). 3

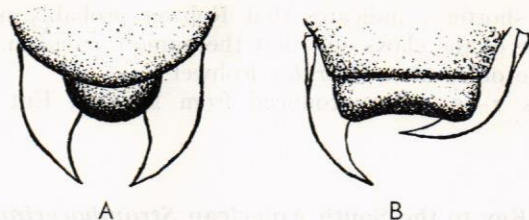


Fig. 3. Clypeus and labrum of: A. *Adiaclema nigripictus* (Enderlein), B. *Labrina plaumanni* Malaise.

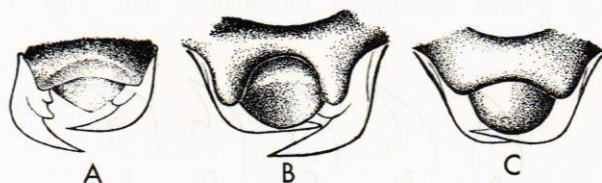


Fig. 4. Clypeus and labrum of: A. *Plaumanniana trigemmis* (Knw), B. *Arcoclypea opiparus* (Knw), C. *Liliacina carinifrons* Malaise.

2. Anterior margin of the clypeus roundly protruding more or less broadly and seems mostly to be somewhat incrassated owing to a faint deflection downwards (Fig. 3 A). Anterior margin of labrum rounded. The basal cubital bend mostly incrassated and frequently with a short spurious stump directed basally. (*A. calvescens* Enderlein 1919.)

The Neotropical Region south of Panama.

Genus *Adiaclema* Enderlein 1919.

- a) Labrum incised in the middle with broad and rounded lateral teeth. (*Stromboceros tarsalis* Konow 1899.)

South Brazil.

Subgenus *Clemina* Malaise 1942.

- Clypeus truncate anteriorly, hardly or not at all deflexed. Anterior margin of labrum emarginate and strongly deflexed downwards (Fig. 3 B). (*L. plaumanni* Malaise 1942.)

South Brazil, Paraguay.

Genus *Labrina* Malaise 1942.

3. Head distinctly carinated behind the eyes. Clypeus mostly transversally convex medially and the anterior margin distinctly emarginate (mostly somewhat angulately) and running out close to the labrum (Fig. 4 A). Pedicellus longer than it is broad. Mandibles roundly bent, more or less close to a right angle and with a large subapical tooth near the base (Fig. 1 E and 4 A). Tarsal claws sturdy, shorter than the slender end-tooth, this latter tooth much longer than the subapical one (Fig. 2 A, B). Basalis and the 1st

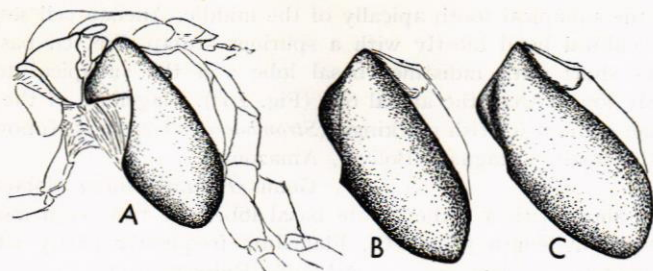


Fig. 5. Mesopleural episterna with praesterna of: A. *Romaniola*, B. *Bolivius*, C. *Plaumanniana*.

recurrent vein distinctly converging. The anellan cell in the hind wings mostly sessile. Praesterna strongly convex and separated from the mesopleura by deep furrows (Fig. 5 C) 4
 — The hind orbits never carinated behind 5
 4. The subapical tooth of the claws replaced by a triangular basal lobe (Fig. 2 A). (*Stromboceros albilabris* Konow 1885.)
 Bolivia, Ecuador, Columbia, Costa Rica, Mexico.

Genus *Gonioceros* Malaise 1942.

— Claws with an erect subapical tooth before the basal lobe (Fig. 2 B). (*Stromboceros*/*Eustromboceros*/*leucostomus* Rohwer 1912.)
 Mexico, Costa Rica, Bolivia, Argentina.

Genus *Prostromboceros* Rohwer 1912.

(*Peterseniana* Jörgensen 1913) New synonym.

5. Mandibles roundly bent at almost a right angle and with a large subapical tooth near the base (Fig. 1 E and 4 A-C). The hind metatarsus mostly longer than the following tarsal joints combined. Basalis and the 1st recurrent vein almost parallel 6
 — Mandibles roundly bent, but less than at a right angle (Fig. 1 B-D). Clypeus subconvex, but more rarely transversally so; the anterior margin truncate or subemarginate. 9
 6. Clypeus transversally convex; the anterior margin edged and emarginated (Fig. 4 A). Praesterna mostly strongly convex and separated from the mesopleura by deep furrows (Fig. 5 C). Pedicellus at least twice as long as it is broad at the apex. Antennae long and slender. Anellan cell in the hind wings petiolate. Cubitus only slightly bent at the base and without spurious stump 7
 — Clypeus not transversally convex, the anterior margin incised and not edged (Fig. 4 B-C). Praesterna hardly or not at all convex, and separated from the mesopleura by very fine furrows (Fig. 5 B). Pedicellus as long as or only little longer than it is broad; flagellum somewhat incrassated in the middle. Claws cleft, without basal lobe,

- and the subapical tooth apically of the middle. Anellan cell sessile.
 The cubital bend mostly with a spurious stump directed basally 8
7. Claws short with indistinct basal lobe and the subapical tooth mostly longer than the apical one (Fig. 2 D). Flagellum of the antennae without whitish markings. (*Stromboceros trigemmis* Konow 1901.) South Brazil, Paraguay, Bolivia, Amazonas.
 Genus *Plaumanniiana* Malaise 1942.
- Claws short with a rather acute basal lobe, the two teeth mostly subequal in length (Fig. 2 C). Flagellum frequently partly white. (*Stromboceros (Stromboceridea) pilosulus* Rohwer 1911.) Central America, Peru. Genus *Stromboceridea* Rohwer 1911. (*Caribia* Malaise 1942) New synon.
8. Clypeus very deeply and broadly, semicircularly incised and with protruding lateral teeth (Fig. 4 B). Apical half of the labrum concave, the basal half with a bent transversal convexity. The subapical tooth of the claws longer than the apical one (Fig. 2 F). Malar space shorter than half the diameter of an ocellus. The pale markings not lilac-coloured. (*Stromboceros opiparus* Konow 1908.) South Brazil. Genus *Arcoclypea* Malaise 1942.
- Clypeus only shallowly incised without protruding lateral teeth (Fig. 4 C). Labrum convex. The subapical tooth of the claws somewhat shorter than the apical one. Malar space as long as or longer than half the diameter of an ocellus. The pale markings lilac-coloured, but may turn entirely into sordid whitish. (*L. carinifrons* Malaise 1942.) Mexico, Costa Rica, Peru, Bolivia, Argentina, South Brazil.
 Genus *Liliacina* Malaise 1942.
9. Pedicellus almost disk-like, at least twice as broad as it is long. Flagellum of the antennae extremely stout, almost uniformly thick, and not compressed, the middle joints only twice as long as they are broad. Claws without basal lobe, with a long and slender apical tooth and a minute subapical one closely basal to the middle (Fig. 2 G). Prasterna rather indistinctly separated from the mesopleura by a very fine and almost furrow-like seam (Fig. 5 B). Clypeus flat with truncate anterior margin. Malar space shorter than half the diameter of an ocellus. Cubitus and the 1st recurrent vein converging. (*Stromboceros melanopterus* Rohwer 1911.) Mexico, Arizona. Genus *Eustromboceros* Rohwer 1911.
- Pedicellus rarely shorter, mostly longer than it is broad. Flagellum slender, the middle joints more than three times as long as they are thick. 10
10. Eyes small with straight and hardly converging inner margins, the distance between the eyes below longer than one eye, as 4:3. Malar space as long as pedicellus, this latter one conical and about as long as it is broad at the apex, or faintly shorter; flagellum stoutly filiform. Clypeus subconvex, the anterior margin rather nar-

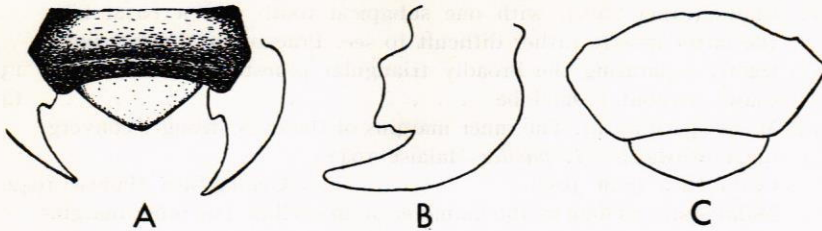


Fig. 6. A. Clypeus with labrum and mandibles of *Brulléana orbignyana* (Brullé). B. The left mandible of *Stromboceridea pilosulus* Rohwer (Sketch by B. D. Burks). C. Clypeus and labrum of *Stromboceridea pilosulus* Rohwer (Sketch by B. D. Burks).

rowly, quartercircularly incised. Head narrowing behind the eyes and covered by long and dense hair. The very poorly defined frontal area in a straight line (tangent) with the eyes. Praesterna distinctly separated from the mesopleural episterna, subconvex (Fig. 5 C). Claws without basal lobe, but with a long subapical tooth (Fig. 2 E). Cubitus angularly bend at the base. The 3rd cubital cell one third longer on cubitus than on radius. (*T. nigrita* Strand 1910.)

Ecuador.

Genus *Tioloma* Strand 1910.

- Distance between the eyes below subequal to the length of an eye, or shorter than it II
- II. The basal $\frac{3}{5}$ of the clypeus rather flat; it is increasingly transversally rugose towards the very faintly emarginated anterior margin, and close along it with a uniformly, roundly elevated, and rather sharp transversal carina (Fig. 6, A). Malar space as long as the diameter of an ocellus. The inner margins of the eyes extremely faintly S-shaped, parallel in the middle. Mesopleural episterna appears as if triangularly incised by addition of the broadly triangular and completely fused praesterna; the lower margin of these praesterna entering the anterior margin of the mesopleura at an angle of about 60°. Claws without basal lobe, the subapical tooth almost longer than the apical one. The hind basitarsus longer than the following tarsal joints combined. Antennae longer than abdomen; flagellum gradually tapering towards both ends; pedicellus longer than broad, as long as the main part of scapus; the 3rd and 4th joints subequal in length; all flagellar joints except the last one at the apex with a minute, acute tooth on the under side. Frontal area in the type specimens completely surrounded by low ridges. Basalis angulate at the base; the 3rd cubital cell subequal in length to the two basal cells combined, and the 3rd cubital cross-vein straight. The anellan cell sessile. (*Waldheimia orbignyana* Brullé 1846.)

Bolivia.

Genus *Brulléana* n. gen.

- Clypeus subconvex 12

12. Claws rather short, with one subapical tooth and a basal lobe, the latter mostly rather difficult to see. Praesternal furrows indistinctly separating the broadly triangular praesterna 13
 — Claws without basal lobe 14
13. Malar space linear. The inner margins of the eyes strongly converging downwards. (*I. pusilla* Malaise 1942.)
 Costa Rica (San José). Genus *Inea* Malaise 1942.
 — Malar space as long as the diameter of an ocellus. The inner margins of the eyes very faintly converging downwards, almost subparallel. (*Anapeptamena nitida* Strand 1910.)
 Ecuador (2840 m). Genus *Neonanapeptamena* Strand 1910.
14. Claws slender, simple or with an erect subapical tooth much shorter than the apical one and removed from it (Fig. 2 G) 15
 — Claws cleft, the subapical tooth mostly as long as or even somewhat longer than the apical one (Fig. 2 E, 2 F), but sometimes a little shorter 17
15. Praesterna of an almost equilateral form and completely fused together with the mesopleura without any separating furrow visible on the surface, subcutaneously the limit visible especially if these parts are pale; the mesopleura seem accordingly to be deeply triangularly incised anteriorly and the incision membranous and only partly chitinized (Fig. 5 A). The subapical tooth of the mandibles removed from the apex (Fig. 1 D). Basalis and the 1st recurrent vein converging. Anellan cell mostly sessile. (*R. amazonica* Forsius 1925.)
 Amazonas, Peru, Bolivia, Paraguay, Brazil (St. Catharina), Ecuador. Genus *Romaniola* Forsius 1925.
 — Mesopleura not triangularly incised anteriorly; praesterna of an elongated triangular form and rather indistinctly separated (Fig. 5 B). Frontal area mostly rather distinct. Flagellum of antennae mostly tapering from the middle, almost filiform in the type species. Frontal area with rather distinct ridges. Malar space linear in the ♂ 16
16. Head very strongly narrowing behind the eyes. The subapical tooth of the mandibles removed from the long and slender apex into the basal half of the mandible (Fig. 1 B). (*Stromboceros absonus* Konow 1899.)
 Bolivia, Ecuador, South Brazil. Genus *Bolivius* Malaise 1942.
 — Head only very faintly narrowing behind the eyes. The subapical tooth of the mandibles placed near to the apex (Fig. 1 C). (*Stromboceros farctus* Konow 1901 (*andeana* Cameron 1903).)
 Ecuador, Peru, Bolivia, South Brazil. — Genus *Andeana* Malaise 1942.
17. Labrum triangularly pointed with straight sides. Malar space longer than the diameter of an ocellus. Antennae as long as the body proper, gradually tapering. The subapical tooth of the claws longer than the apical one (Fig. 2 F). Inner margins of the eyes

straight and parallel. Praesterna distinctly convex and separated from the mesopleura by deep furrows. Clypeus hardly subconvex, the anterior margin truncate. The 3rd cubital cell rectangular, longer than the two basal ones combined. (*Stromboceros nigripennis* Konow 1908 (*giganteus* Enderlein 1919).)

Ecuador.

Genus *Belea* Malaise 1942.

— Labrum rounded at the apex; if pointed, the sides are roundly curved. Malar space hardly as long as half the diameter of an ocellus in the ♀, linear in the ♂. Antennae shorter than the body proper, mostly as long as the abdomen, tapering from the middle or from the base. The subapical tooth of the claws shorter than the apical one. The inner margins of the eyes more or less distinctly converging downwards. Praesterna rarely somewhat convex, mostly only visible as separated by a fine seam. Clypeus variable, the anterior margin truncate or roundly protruding and either roundly deflexed or acute. The 3rd cubital cell mostly shorter than the two basal cells combined. (*D. albisignata* Enderlein 1919.)

Peru, South Brazil.

Genus *Dochmioglene* Enderlein 1919.

Dochmioglene cubitalis n. sp. Entirely black; only a minute whitish spot at the base of the sawsheath in the ♀. Wings blackish infuscated.—Head shining, narrowing behind the eyes, strongly in the ♂; the hind orbits not carinate, but finely and rather densely punctured. The postocellar area strongly convex, broader than long, in the ♀ as 3:2, the posterior half finely punctured; the postocellar furrow sharp, the lateral ones faintly curved, evenly deep and sharp, and only faintly diverging backwards. The two legs of the circumocellar furrow straight, deeply and abruptly sunken (like the interocellar furrow) and the angles between the two legs is of about 60°. The frontal area roundly in outline, rather flat, but more or less variably sculptured, inside it frequently with a short ridge anterior of each circumocellar leg and running obliquely from the middle ocellus to the mostly roundly elevated, but sometimes inconspicuous frontal ridges. The two lateral supra-antennal pits round in outline, deep, and larger than the diameter of an ocellus; the middle one as long as the lateral ones, but much broader, irregular in outline, and sometimes the bottom furrow-like and somewhat angular. Malar space as long as half the diameter of an ocellus in the ♀, linear in the ♂. Clypeus densely haired, convex with the maximum of the curvature anterior of the middle; the anterior margin acute, truncate, or very shallowly and angularly subemarginate; along the middle the clypeus with a very shallow and narrow furrow that sometimes becomes obliterate. Labrum rounded at the apex or subangulate. Mandibles subsymmetric, each with a broad basal tooth. Antennae slender, as long as the abdomen, gradually tapering from the

6th joint; the 4th joint subequal with the 3rd one or inconsiderably shorter. Pedicellus distinctly longer than it is broad at the apex, but less broad than the scapus which is twice as long as it is broad. Thorax shining, only the posterior half of scutellum proper with fine punctures, increasing in density towards the impunctate and strongly shining appendage. The mesopleural praesterna quite at a level with the episterna, and separated from each of them respectively by a very narrow but deep and abruptly sunken linear furrow. In the front wings the distance on subcosta from basalis to the base of cubitus as long as half the 1st cubital cross-vein; the base of cubitus not refracted and without spur, only faintly curved. The 3rd cubital cell as long as or longer (on cubitus) than the two basal cubital cells combined. The hind basitarsus as long as the following tarsal joints combined. Claws cleft without distinct basal lobe, the apical and subapical teeth subequal in length. Sawsheath, in dorsal view, broadest in the middle and strongly tapering towards base and the blunt apex. Length ♂♂ 9-10, ♀♀ 10-11 mm. (10 ♀♀, numerous ♂♂).

Judging from the description, *Stromboceros nigerrimus* Konow 1899 from Peru (Callanga, Cuczo) ought to be very similar to the new species *cubitalis*. *Str. nigerrimus* Konow may be distinguished by the following characters: Cubitus angularly curved at the extreme base and there with a short spurious stump directed basally; basalis and base of cubitus join subcosta close one to another; the 3rd cubital cell almost shorter than the 2nd one alone. Head not or hardly narrowing behind the eyes. Antennae longer than abdomen.