# New and Old South American Saw-Flies (Hym., Tenthredinidae).

By

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## Genus Topotrita Kirby.

Topotrita, W. F. Kirby, List of Hymenoptera ... in the British Museum, Vol. I. Tenthredinidae and Siricidae. p. 48, London 1882.

The generic description reads: "Fore wings with three submarginal cells, the second receiving both recurrent nervures; one marginal appendiculate cell; tibiae unarmed."

Front wings with 3 cubital cells, the second cubital cross-vein wanting; the radial cell closed and with an appendiculate cell. The basal vein almost straight, nearly subparallel with the first recurrent vein, and it meets subcosta a distance from the base of cubitus somewhat shorter than the length of the first cubital cross-vein. The intercostal cross-vein distinct. The anal cell petiolate (without distinct closed cell at the base). The hind wings with two closed middle cells, the closed anellan cell long petiolate, and the radiellan cell not or only indistictly closed (obsolate at the apex). Head strongly enlarged behind the eyes, strongly shining and impunctate above; underface and clypeus indistinctly and sparcely punctured, not carinated behind. The inner margins of the eyes subparallel, hardly to distinctly subemarginated. The distance between the eyes below much longer than the length of an eye. Malar space as long as the diameter of an ocellus. Clypeus 5-6 times as broad as it is long, the anterior margin truncate or subemarginate. Labrum twice as long as clypeus, subtruncate, and strongly depressed in the anterior half. Mandibles simple, each with a more or less distinct basal corner. Labial palpi 4-jointed(?), shorter than the 3-jointed labial ones, the last joint of these latter ones is very long. Antennal flagellum bifurcate in the 3, stout and hardly tapering in the Q. Body large and heavy. Thorax and scutellum normal. Legs normal; tibiae without supra-apical thorns; claws simple; the hind metatarsus shorter than the following tarsal joints combined. Saw-sheath with three subequally high ridges from the apex to the very base, converging somewhat apically and basally. Colour almost identical in the three known

species, viz. blue-black; fulvous are: head, scapus, pedicellus, prothorax, and the front legs. Wings dark bluish black, the apex infumated from the apex of stigma in the  $\circ$ ; absolutely clear from the base of stigma in the  $\circ$ . Type of genus; *Hylotoma leucocephala* Klug 1834.

#### Key to the known species.

 The postocellar furrow complete, straight, sharply and deeply sunken; it communicates freely with the oval, not trapezoid circumocellar furrow by an equally deep interocellar furrow, that interrupts completely the frontal carina. The inner margins of the eyes almost straight. The subconvex postocellar area broader than long, as 4:3, and with an only very faint indication of a longitudinal middle furrow, narrow anteriorly and broad and extremely shallow posteriorly; its lateral furrows subparallel and continued in straight lines lateral of the lateral ocelli by the frontal furrows. From the middle of the almost flat interantennal space a carina is suddenly raised as high as its own width; the upper surface of this carina proper semicircular in cross-section. At the upper end of this carina the broad and fairly deep middle supra-antennal pit partakes in the frontal depression, but the upper part of the pit is cut off by the still deeper sunken, oval circumocellar furrow. The supraclypeal area abruptly raised above the clypeus. The posterior margin of the tegulae pale. Length ♀ 17 mm. (1 ♀.) Peru (Valle Chanchamayo, 800 m). T. wevrauchi n. sp.1

The interocellar furrow wanting and the frontal ridges fused together with the postocellar area thus broadly interrupting the postocellar furrow in the middle. The middle supraantennal pit equally deep and combined with the not oval circumocellar furrow; this combined frontal depression trapezoid in outline. . . 2

- 2. Smaller species, ♀ 13, ♂ 10 mm. The supraclypeal furrow distinct, but only seam-like and not deeply sunken. Head rather short in lateral view, as 3:2 (Fig. 1, A). The postocellar area distinctly elevated along the middle, almost roundly tectiform or indistinctly carinated. The middle ocellus depressed and not visible above the frontal ridges. The inner margins of the eyes distinctly subemarginated. In front of each lateral ocellus a short but distinct transversal carina from each side of the ridges surrounding the trapezoid frontal depression. The backwards faintly diverging lateral furrows of the postocellar area, which in the ♀ is almost subquadrate, again diverge anteriorly just lateral of the lateral ocelli as part of the frontal furrows. These frontal furrows then again curve sharply in passing the end of the transversal carinas. Tegulae entirely black. (1 ♂, 1 ♀). Brazil (Santa Catharina, Hansa Humbolt, 60 m., lowland). T. malleri n. sp.¹
- Larger species, ♀ 15.5 mm, ♂ unknown. The supraclypeal furrow strongly marked by the abrupt ending of the laterally strongly raised supraclypeal area; this area somewhat depressed anteriorly in the middle (Fig. 1, B). Head as flattened from above and elongated behind, in lateral view as 2:1. The inner margins of the eyes almost straight. The frontal area without transversal carinas, and the middle ocellus, in lateral view, visible above the frontal carinas. The subconvex postocellar area broader than it is long, as 3:2, not tectiform, but on the contrary with a broad and shallow depression or middle furrow in the posterior third; the subparallel lateral furrows continued in straight lines by the frontal furrows. The interantennal space subconvex, much broader than high. The black tegulae with a brownish tinge in the posterior half. (Holotype ♀.)
  Cayenne.

<sup>&</sup>lt;sup>1</sup> Named in honour of the collectors, viz. Dr. W. Weyrauch and Senor Antonio Maller respectively.

Entomol. Ts. Arg. 76. H. 2-4, 1955

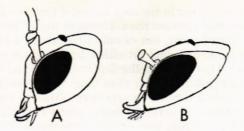


Fig. 1. Head, in lateral view, of: A. Topotrita malleri n. sp. B. Topotrita leucocephala (Klug 1834).

#### Genus Sericocerina Nov. nom.1

Sericocera Brullé, Hist. Nat. des Insectes, Hymen., Tome IV, p. 669, Paris 1864 (nec Macquart 1834).

Serioceros Konow, Genera Insectorum, Fasc. 29, Hymen. Tenthred., p. 29, Bruxelles 1905.

Sericocerus Mocsary, Ann. Musei Nat. Hungarici, VII, p. 8, Budapest 1909.

This genus is characterized by the very sturdy built, the short head placed low on the very large and convex thorax, the short palpi, the subsymmetric, three-dentate mandibles, and, in the  $\varphi$ , the upward bent, not tapering antennae.

Front wings with four cubital cells, the 3rd of these about twice as long on radius as on cubitus, and the 2nd and 3rd cells receiving a recurrent vein each. The radial cell mostly distinctly open at the apex. Intercostal cross-vein wanting. The almost straight basalis joins subcosta a distance from the base of cubitus as long as or mostly longer than the length of the partly obliterate 1st cubital cross-vein. Anal cell broadly contracted (with a minute basal cell). Hind wings with two closed middle cells, an at the apex open radial cell, and the closed part of the anal cell mostly shorter than its stem. The impunctate head almost three times broader than its own length, and extremely strongly narrowing behind the eyes. The inner margins of the eyes almost straight and distinctly converging downwards. The shortest distance between the eyes (below) longer than the length of an eye. Malar space fully as long as the diameter of an ocellus. Clypeus very short, flat, and shining, the subtruncate anterior margin parallel to the straight, sharp, and deep supra-clypeal furrow. Labrum semicircular in outline, shining, and twice as long as clypeus. Mandibles three-dentate, subsymmetric. Palpi very short, the 5-jointed maxillar palpi not twice as long as the three-jointed labial ones. The supraclypeal area convex and not keeled, likewise is the very narrow inter-

<sup>&</sup>lt;sup>1</sup> Comp. discussion on the validity of the name *Stromboceros* Konow 1885 versus *Strombocerus* Gemminger & Harold 1871 in "Ent. Tidskr." 63, p. 90, 1942.

antennal space, except for in the only known 3 that has a short, low, and acutely tectiform keel between the antennal sockets. The subconvex frontal area, in its lowest point, not or only little above a tangent touching both eyes. The supra-antennal pit either large and deep, or punctiform although distinct. The circum-ocellar depression deep and large. The postocellar area convex, much broader than long, the postocellar furrow deep and sharp, the lateral furrows mostly deep although rarely sharp. Antennal flagellum bifurcate in the 3, simple, gently curved upwards, hardly tapering towards the apex, and mostly somewhat laterally compressed in the 2; scapus conical, twice as long, but hardly broader than pedicellus which is broader than long. Thorax comparatively large, as swollen; scutellum subconvex without lateral carinas. Legs normal, the apical spurs of the hind tibia surpassing the end of tibia; supra-apical spurs wanting. Claws simple. Type of genus:  $Hylotoma\ gibba\ Klug\ 1834$ .

#### Key to the species.

- —. J. Black; dark reddish brown are: mesonotum; a rounded, indistinct middle spot on mesopleura; labrum; base of mandibles; flagellum somewhat; the narrow vicinity of trochanters; basal half of abdomen beneath; apex of the front femora anteriorly; indistinct parts of the tergites above. The apical half of all palpi and a broad stripe over the anterior side of the front tibiae dirty whitish. Wings clear in the basal half, infumated apically; costa, stigma, and venation blackish. The low inter-antennal space acutely tectiform. The supra-antennal pit punctiform. Propodeum (1st tergite) poorly chitinized. Length 6 mm. (1 J.)

  Rio de Janeiro (Grajahu).

  S. nigrorubra n. sp.

- —. Front wings hyaline; a cross-band over stigma smoky brown like the triangular basal half of the wing. General colour luteous; black are: head above; antennae; tibiae and tarsi, but the four front pairs luteous on the inner side. Length ♀ 7.5 mm. (After Kirby.) Mexico (Orizaba).
  S. mexicana (Kirby 1882)
- 4. The four hind tibiae and tarsi black. Head with antennae black; palpi yellowish, remaining mouth-parts more or less distinctly brown. Flagellum strongly curved at the basal third so that the directions of the extreme base and of the apical half of flagellum together produce an angle of about 30 degrees......
- —. The four hind tibiae and tarsi more or less pale . . . . . . . . . . . . . . . . 6
  5. The first cubital cross-vein entirely obliterate. The inter-antennal space rather distinctly keeled. Eyes comparatively rounded and strongly protruding, their length and width as 15:13; each eye, in dorsal view, surpassing laterally the brim of its hind orbit a distance equal to the diameter of an ocellus. The supra-antennal pit punctiform. Saw-sheath not grooved, acutely pointed in dorview. Length 7-8 mm. (1 ♀, and both types studied although only superficially.) Brazil, Bahia (Santa Rita).
  S. obscura (Brullé 1846)
- (Trailia compressicornis Cameron 1878)

  —. The first cubital cross-vein present. The inter-antennal space only bluntly tectiform. Eyes elongate, the length compared to the width as 3:2, only inconside-

rably protruding and, in dorsal view, much less than half the diameter of an ocellus wider than their hind orbits. The supra-antennal pit round and shallowly infundibuliform. Saw-sheath with a longitudinal groove, almost as wide as the diameter of an ocellus when seen from behind; the form obscured by dense hair in dorsal view. Length 9 mm. (Holo-type ♀.)

Brazil, Rio Grande. S. fulva Mocsary 1909 6. The first cubital cross-vein wanting. Head pale below the antennae, and scapus and pedicellus likewise pale beneath. The four posterior tibiae and tarsi with a black line on the outer side. Length 9.5 mm. (After Cameron.)

Brazil, Bahia. S. nigro-lineata (Cameron 1878) Front wings with four distinct cubital cells. All tarsi entirely pale. The four hind tibiae black, and the front tibiae black with a pale stripe beneath, broadening towards the apex. Head with antennae black; clypeus and labrum with brown lateral spots; palpi yellowish. The first and second tergites blackish basally above, the dark colour indistinctly limited, the supra-antennal pit large, deep, and rounded. Eyes elongate, the length compared to the width as 15:11, they are not very protruding and, in dorsal view, only inconsiderably wider than the hind orbits. The inter-antennal space elevated into an indistinct keel. Flagellum only faintly curved. Length 8 mm. (1 2.)

Brazil, S:ta Catharina (Hansa Humbolt). S. palliditarsis n. sp. Head black, at least above. At least trochanters pale more or less ....... -. Head entirely pale; flagellum black; scapus and pedicellus pale except for a dot

on pedicellus above. The inter-antennal space roundly elevated, not keeled ... 8 Length 7 mm. The shortest distance between the eyes (below) compared to the length of an eye as 4:3. Pale fulvous; tibiae and tarsi blackish, the front tibiae pale beneath; the hind femora almost entirely black, but with the brown colour breaking through, and the same is valid for the base of the middle tibiae. The first

cubital cross-vein wanting. Malar space as long as an ocellus is broad. (1 Q.) Amazonas. S. amazonica n. sp.

-. Length 9-10 mm. Distance between the eyes below almost twice the length of an eye, as 9:5. The first cubital cross-vein complete. Malar space almost twice as long as an ocellus. Dark fulvous; tibiae pale, the four hind ones striped with black above, most pronounced on the hind tibiae. Tarsi pale, the pale colour mixed with brown and black on the four hind tarsi, especially on the hind ones. In some specimens the hind tibiae and tarsi are entirely infuscated. (4 \$\times \cdots). Columbia (Bogota). S. columbiana n. sp.

9. Head pale yellow below the antennae. In the front wings only the basal half of the radial cell strongly infuscated. The supra-antennal pit round, deep, and 

- Head almost entirely black, only labrum and base of mandibles pale brown. Front wings uniformly infuscated to the apex of the radial cell. The first cubital
- 10. Front wings with a large clear spot around the base of cubitus covering 3/4 of the first and 1/4 of the 2nd cubital cells, and also half of the discoidal cell. The 1st cubital cross-vein complete. Thorax and antennae fulvous; legs yellowish, the extreme apex of all tibiae black, and the claw-joints also somewhat infuscated. The inter-antennal space distinctly, but not acutely keeled. The supra-antennal pit large, round, and deep. Saw-sheath very faintly curved in lateral view, and, in its upper half, with a distinct groove as broad as the diameter of an ocellus in dorsal view. Length 9 mm. (Holo-type 2.) Brazil. S. albicollis (Klug 1834)
- Front wings with only an almost, but not quite clear stripe along and inside the combined 1st and 2nd cubital cells. The first cubital cross-vein obliterate except at its extreme ends. Saw-sheath pointed in dorsal view without incision along the apical margin. Antennae infuscated, pale beneath towards the base. Legs pale, tibiae infuscated above towards the apex, the hind ones infuscated along

almost the entire over side. The apical half of all tarsi more or less distinctly infuscated. Length 9 mm. (Holo-type Q.)

Brazil, Bahia.

S. brasiliana (Klug 1812–14)

11. Hind legs including coxae black; trochanters partly pale. The middle femora pale at the base, the front ones almost entirely pale. The front tibiae and tarsi with a pale stripe anteriorly. Palpi pale. The supra-antennal pit very broad and shallow. The postocellar area broader than it is long, as 2:1. The grooved part of the saw-sheath almost straight in lateral view. Length 8–9.5 mm. (Holo-type Q, one Q compared with the types of S. spinolae Brullé and of Hylotoma americana Fabricius 1804 = Tenthredo americana Fabricius 1793 nec Linnaeus, and 3 QQ.)

Surinam, Amazonas, Columbia and Panama (Taboga). S. gibba (Klug 1834) (S. spinolae Brullé 1846, Hylotoma americana Fabricius 1804 nec Linnaeus).

—. Palpi and all tibiae and tarsi black. All coxae entirely pale. Base of the hind femora, most of the middle ones, and the entire front femora pale. The supraantennal pit deep. The postocellar area broader than it is long, as 3:1. The grooved part of the saw-sheath convex in lateral view. Length 9 mm. (1 \(\infty\). Brazil, Sao Paulo (Tabaguara).

S. nigripalpis n. sp.

## Genus Acrogymnia Malaise.

Hemigymnia Malaise (nec Arnaud 1898); Ent. Tidskr. 58, p. 54, Uppsala 1937.

Acrogymnia Malaise n.n.; Ibidem 62, p. 140, Uppsala 1941 (Hemigymnia pusilla Malaise 1937).

Acrogymnia Malaise; Ark. f. Zool. 42 A, nr. 9, p. 9, Uppsala 1949.

#### Key to the known species.

- I. Claws with an acute basal lobe. Antennae not compressed. Scutellum with corner-like, but not acute lateral carinas and it is subconvex at the hind apex. The very acute forked carinas in the anterior half of the frontal area prolonged by roundly subconvex frontal ones. Comp. genus Acrogymnidia n. gen. (p. 106.)
- Claws simple. Antennae with distinctly compressed flagellum. Scutellum with acute lateral carinas. Frontal area flat, without distinct carinas in the posterior half. Wings uniformly infumated or dark hyaline
- —. Malar space of distinct length in the ♀ (♂ unknown), almost as long as half the diameter of an ocellus. Head behind the eyes first subparallel, then roundly narrowing in dorsal view. The postocellar area convex, anteriorly reaching between the lateral ocelli to the middle ocellus: the length and width of the area thus as 3:5; its lateral furrows distinct, fine, straight, very faintly diverging backwards, almost twice as long as the diameter of an ocellus, and hardly depressed, they just mark the limit of the convexity of the postocellar area. Reddish yellow; black are: head with antennae; propleura; prosternum; the anterior half of the mesonotal middle lobe; mesosternum; a middle spot on scutellum; metathorax, except around the base of the hind wings; the 3 apical abdominal segments including the saw-sheath; the hind legs almost entirely; coxae, trochanters, and base of the four anterior femora; the middle tarsi; an elongated spot along the middle tibiae. Saw-sheath tripointed in dorsal view with long lateral apophyses (Fig. 2, A). Length ♀ 8.5 mm. (♀.)
  Brazil, Minas (Campos de Diamantina).

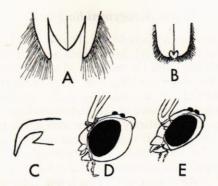


Fig. 2. Saw-sheath, in dorsal view, of: A. Acrogymnia diamantinensis n. sp., and of B. Acrogymnia rufina Malaise 1949; C. Claw of Acrogymnidia rioensis n. gen, n. sp.; D Head in lateral view of Brachyphatnus debilicornis Konow 1906; E. Head in lateral view of Brachyphatnus jenseni Konow 1906.

3. Thorax entirely reddish yellow without any black markings. Base of abdomen and of the legs from the knees also pale; black are: head with antennae; apex of abdomen and the narrow margins of the tergites in the middle; an apical stripe along the anterior tarsi; the four remaining tarsi entirely together with the adjacent tibiae, except for the extreme base. Length 3.5 mm, 2.7 mm. (2 3.1 2.) Brazil, Rio de Janiero (Grajahu and Palmeiras); Sao Paulo (Alto d. Serra).

— At least mesosternum, apex of abdomen, and spots on mesonotum black or dark brown

4. The four hind tibiae and tarsi black. Wings blackish infumated with brownish black costa and stigma. The pale colour fulvous; pale are: prosterna; propleura below; the lateral halves of the pronotal lateral lobes; tegulae; mesonotal minute spots adjacent to the tegulae; the upper half of mesopleura; sides of scutellum; metasterna and metapleura partly; the basal ventrites; all coxae, trochanters, and femora; the anterior tibiae. The ultimate maxillar joint of the palpi whitish. The four basal tergites dirty blackish brown, as if transluscent in the middle above. Length ♂ 6 mm; ♀ unknown. (Holotype ♂.)

Brazil, Rio de Janeiro (Grajahu).

A. lopesi Malaise 1949

Tibiae pale; only the extreme apex and more or less of the adjacent tarsi infuscated. Wings hyaline; costa and stigma pale with black hair. The pale colour yellow or whitish

5. Thorax, abdomen. and antennae dark brown; head with a brownish tinge. Length ♀ 4.5 mm. Saw-sheath of ♀ without groove at the apex. (Holotype ♀; ♂ unknown.)

Brazil, Sta Catharina (Nova Teutonia).

A. pusilla (Malaise 1937)

Thorax and abdomen with rich pale markings. The pale colour yellow to very pale fulvous; black are: head with antennae, except for the palpi; a black stripe on propleura; mesonotum except for the lateral margins; a basal middle spot on scutellum; the mesopleural episterna; mesosterna except for a longitudinal medial stripe; lateral spots on the 2nd -5th tergites; the three apical abdominal segments entirely. Saw-sheath with distinct groove along the apex. Length 4-5 mm. (17 33, 8 \$\varphi.)

Brazil, Sta Catharina (Nova Teutonia). A. scutimacula Malaise 1942

## Genus Acrogymnidia gen. n.

Belongs to the *Sterictiphorinae* of the *Argidae* and is closely related to the genus *Acrogymnia* m. (1941), from which genus it is separated by the shape of the tarsal claws and the wanting of distinct and acute scutellar carinas. Whereas the claws are simple in *Acrogymnia* they have a broad and acute basal lobe in the new genus (Fig. 2, C). Claws with a free subapical tooth occur only in 4 genera of the *Sterictiphorinae* and claws with a basal lobe are accordingly entirely singular among the genera of *Argidae*.

Venation as in Acrogymnia, viz. the front wings with one radial cell open at the apex (the surrounding veins obliterate towards the apex of the cell); three cubital cells, the first cubital cross-vein wanting. The first and second of these three cells obtain each one recurrent vein, and the and of the cells is longer on radius than on cubitus. Basalis not entirely straight and joins subcosta far removed from the base of cubitus; this distance is one and a half as long as basalis itself. The anal cell with distinct basal lobe. The hind wings with two closed middle cells, the radiellan cell open at the apex, and the petiole of the anellan cell somewhat longer than its closed part. — Head strongly narrowing behind the eyes. The eyes longer than the shortest distance between them (below), their inner margins faintly but distinctly emarginated and downwards converging. At the upper corner of each eye the margin is broadened into a deep pit, longer and almost as broard as the diameter of an ocellus. The postocellar area convex, the lateral furrows fine, distinct, straight, faintly diverging backwards, but hardly deepened; they only just mark the limit of the convexity. The postocellar furrow wanting and the same area thus reaching with the same curvature to the middle ocellus; the area is nevertheless broader than long. The interantennal carina quite flat, extremely high, twice as high as the distance between the antennal sockets. This carina gradually diminishs in altitude anteriorly, but at the same time it broadens into a convex supra-clypeal area reaching to the very fine and rather indistinct supra-clypeal furrow. The interantennal carina is still visible as a low carina in the middle of clypeus and reaching to the somewhat angularly subemarginated anterior margin of clypeus. Above, the interantennal carina forks into two straight branches reaching as flat and acute carinas to half the distance to each lateral ocellus. Here they continue as roundly elevated frontal ridges; combined with the former they surround completely the frontal area that is extremely deeply depressed towards the punctiform middle supra-antennal pit. Malar space linear. Antennae with bifurcate flagellum in the 3 and they are somewhat longer than head and thorax combined in both sexes. Flagellum simple in the Q, gradually tapering, not compressed, and almost triangular in cross-section. Scapus longer than, but hardly broader than pedicellus, both cylindrical in general shape. Mandibles almost simple; the right one with a basal lobe, the left one with faint indication of two minute teeth in the middle.

Palpi rather long, the maxillar ones with 5 slender joints, the labial palpi 4-jointed, the 3rd joint triangular in outline. Thorax normal. Scutellum flattened above and becoming convex towards the apex, the sides cornerlike, especially towards the base, but without acute carinas. The first tergite of the abdomen (propodeum) membranaceous except for its narrow hind margin (a similar gigantic "blotch" occur also in Adurgoa bonariensis (Holmgren)). Legs normal; the apical thorns of the hind tibiae surpassing the end of the tibia itself. The hind basitarsus longer than the following tarsal joints combined. Claws with an acute basal lobe. (Fig. 2, C.) Type: A. rioensis n. sp.

A. rioensis n. sp. Black; reddish yellow are: propleura below; pronotum except for the middle; tegulae; parapterum and the adjacent narrow upper margin of mesopleura; a longitudinal stripe along the middle seam of mesosternum; mesonotum except for three very large, confluent spots covering most of the back of mesothorax; a middle spot on scutellum; metapleura; the underside of abdomen in its basal half; basal marginal stripes in the middle of the 3rd and the 4th tergites in the  $\mathcal{G}$ ; legs except for the hind tibiae and tarsi, which are entirely black in the  $\mathcal{G}$ , but, in the  $\mathcal{G}$ , the basal fourth of the hind tibiae fulvous and their black with a somewhat indistinctly limited whitish, longitudinal stripe behind. Wings uniformly dark hyaline or rather subinfumated; the fulvous colour of costa and stigma infuscated. Saw-sheath of the  $\mathcal{G}$ , in dorsal view, narrow and three-pointed owing to longitudinal carinas, the middle of these carinas higher than the lateral ones. Length  $\mathcal{G}$  7 mm,  $\mathcal{G}$  8 mm ( $\mathbf{I}$   $\mathcal{G}$ ,  $\mathbf{I}$   $\mathcal{G}$ ). Brazil, Rio de Janeiro (Mendés 92 kms from Rio, and Nova Friburgo).

# Genus Brachyphatnus Konow.

Konow, F. W., Neue mittel- u. südamerikanische Arginae. — Z. Hymen. Dipterologie, Vol. VI, p. 250, Teschendorf 1906.

Belong to the Sterictiphorinae and related to the genus Sophus mihi 1937.

Front wings with the radial cell open (obliterate) at the apex; four or three cubital cells, the first cubital cross-vein obliterate or entirely wanting, and the third cell mostly distinctly longer on radius than on cubitus, but if subequal, then the 3rd cubital cross-vein quarter-circularly bent. The second recurrent vein mostly interstitial to the 2nd cubital cross-vein, or nearly so. The almost straight basalis meets subcosta removed from the base of cubitus. Anal cell broadly contracted. The hind wings with two closed middle cells, the petiole of the anellan cell only little shorter than the closed part of the same cell<sup>1</sup>, and the radiellan cell open at the apex. The inner margins of the rounded eyes straight and

<sup>&</sup>lt;sup>1</sup> The North American genus *Sphacophilus* Provancher 1889 differs chiefly from *Sterictiphora* Billberg, according to Ross (1937), in having the petiole of the anellan cell longer than its closed part.

faintly converging downwards; the distance between the eves below longer than the maximal length of an eye. Frontal area triangular in outline, roundly elevated, and with a broad and shallow depression in front of the middle ocellus and separated from the punctiform middle supra-antennal pit. The interantennal carina short and acute. The postocellar area convex, with distinct lateral furrows prolongated anteriorly into sharp and deep, roundly curved frontal furrows. The anterior margin of clypeus truncate or extremely faintly subermarginate. Malar space almost as long as half the diameter of an ocellus, shorter in the 3. Antennae shorter than the width of the head in the ♀, much longer in the ♂, flagellum flattened in the  $\mathcal{Q}$  and hardly tapering basally of the apical fourth; bifide in the  $\mathcal{Z}$ . Scapus conical, somewhat longer than it is broad at the apex, at least in the 3. Pedicellus much broader than it is long. Thorax, abdomen, and legs normal, the hind tibiae slender, at the apex prolonged into a collar enclosing the base of tarsus on three sides. This collar has the brim strongly thickened and truncate, or even excavated at the apex, and becomes gradually higher from the inner side of the tibia towards its outer side and there terminating into an acute apex. Including this apex the collar becomes longer than the apical spur of the tibia in two species out of three (unknown in annulipes Schrottky). The hind basitarsus much shorter than the following tarsal joints combined. Claws simple. Small insects, usually less than 7 mm long. Type of genus: B. debilicornis Konow.

The four known South American species may be separated with help of the following key:

- 1. Head above including the postocellar area very finely punctured. Head black with yellowish labrum and palpi. Thorax pale yellow; the mesonotal lobes, scutellum, and mesopleura each with a black spot. Legs pale yellow, the apex of the hind tibiae black. Abdomen yellowish brown with dark brown apex and infuscated segmental borders. Wings rather strongly infumated; stigma and venation (costa?) pale yellow. (General colour thus similar to that of Subsymmia machaerii n. sp. p. 110). Length of ♂ 6.5 mm, ♀ unknown (larger ?.) (After Schrottky.) Eastern Argentina (Prov. Misiones, Bompland). B. annulipes Schrottky 1913
- Head impunctate, shining. Wings clear or hyaline. Smaller species . . . . . . 2. Head strongly narrowing behind the eyes. Clypeus almost as long as the distance from the antennal socket to the supra-clypeal furrow in lateral view (Fig. 2, E). The supraclypeal area only subconvexly elevated. The middle supra-antennal pit extremely minute. The postocellar furrow complete and curved; the same area short, three times as broad as it is long. The interocellar furrow short and broad; the frontal depression not large. The first cubital cross-vein more or less entirely wanting; the 3rd cross-vein mostly with a short spur near the middle; the 3rd cubital cell longer on radius than on cubitus. The apical spur on the hind tibia not surpassing the apex of the tibial collar. - Black; whitish are in the 3: palpi, margin of tegulae, and legs below the knees, but the apex of the hind tibiae and tarsi may be somewhat infuscated; wings entirely clear. In the ♀ the following parts yellowish according to Konow 1906: pronotum, tegulae, mesonotum except for three confluent black spots, scutellum, and the uppermost part of the mesopleura; wings hyaline with infuscated base. Length 3.5–4 mm. (1 & from Chile). Western Argentina (Mendoza); Chile (Prov. Atacama, Caldera).

B. jenseni Konow 1906

3. Black; tegulae pale. Mesopleura black; mesonotum and scutellum fulvous in the ♀, black in the ♂. Clypeus about half as long as the distance from the antennal socket to the sharp supra-clypeal furrow; the supra-clypeal area strongly elevated (Fig. 2, D). The 3rd cubital cell hardly longer on radius than on cubitus, and the 3rd cubital cross-vein roundly, quatercircularly curved. The postocellar furrow broadly interrupted in the middle, and the postocellar area thus communicating with the frontal ridges; the area itself more than twice as broad as it is long. The apical spurs on the tibiae distinctly shorter than the "collar". Length ♂ 5-5.5 mm, ♀ 5-6 mm. (Paratype ♂♀, and 10 ♂♂, 6 ♀♀ (topotypes).)

Western Argentina (Mendoza).

B. debilicornis Konow 1906

Tegulae blackish, entirely in the typical form, and in this form mesopleura dark fulvous like the rest of pro- and mesothorax, except for the black mesosternum in both sexes. Abdomen black (according to Konow), or dark brown with black apical margins on the apical segments. Head likewise black or with the brown colour breaking through in spots (in the only avaible ♀). Labrum and palpi pale.

— The supra-clypeal furrow rather indistinct. Clypeus as long as the supra-clypeal area itself in lateral view and both their curvature (convexity) subequal. The 3rd cubital cross-vein mostly S-shaped, and the 3rd cubital cell distinctly longer on radius than on cubitus. The postocellar furrow complete, sharp, angularly curved, and connected with the equally sharp and deep circumocellar furrow in a punctiform interocellar "furrow"; the area itself broader than long, but only as 3:2. The apical spur on the hind tibiae surpassing somewhat the apex of the collar. Length 6-6.5 mm (♀).

Argentina (Buenos Aires, La Plata, Tandil, Chacabuco).

B. tegularis (Konow 1899)

Ssp. Thorax black, only the broad pronotal angles and the margins of the tegulae pale in the ♂; ♀ unknown. Abdomen fulvous; the 4-5 apical segments black. Femora fulvous; only the basal quarter of the hind ones, like the basal two thirds of the anterior ones black; all tibiae pale fulvous to whitish, except for the black extreme apex. Length 5 mm. (3 ♂♂, type in Zool. Staatssamlung, München; paratype in Stockholm.)

Argentina, Prov. Santa Fé (Rosario).

B. tegularis ssp. rosarioensis n. ssp.

# Genus Subsymmia gen. n.

Related to Sericocerina, but the palpi, antennae, and the general built is different. Front wings with open radial cell, four cubital cells, and broadly contracted anal cell. The intercostal cross-vein wanting. The 3rd cubital cross-vein strongly curved and the corresponding cubital cell accordingly twice as long on radius as on cubitus. The recurrent veins open into the 2nd and 3rd cubital cells respectively. Medius only faintly curved and meets subcosta a little further away from the base of cubitus than the length of the 1st cubital cross-vein. The hind wings with two closed middle cells, the closed part of the anal cell subequal in length to its petiole, and the radiellan cell open at the apex as in the front wings. The built of the insect less plump than in the genus Sericocerina. Head impunctate, very strongly narrowing behind the eyes. The inner margins of the eyes rather distinctly converging downwards, almost

straight in the 3, very faintly subemarginated in the 9; the distance between the eyes below longer than the length of an eye. Malar space as long as the diameter of an ocellus or somewhat longer in the 2, considerably longer in the 3. Clypeus almost flat, four times as broad as it is long, the anterior margin subemarginate in the middle and the membraneous base of labrum visible in the emargination. Labrum flat, semicircular in outline, and about twice as long as clypeus. Mandibles subsymmetric, each with two subapical teeth in addition to the end-tooth. Palpi long and slender, the maxillar ones longer than the length of an eve. Antennae about as long as the abdomen and pedicellus somewhat broader than long in both sexes, scapus  $1\frac{1}{6}$  times as long as pedicellus in the  $\Omega$ . more than twice as long in the 3; flagellum bifurcate in the 3; straight, strongly compressed (twice as high as broad at the basal third), and gradually tapering towards the apex in the Q. Frontal area triangular in outline, roundly elevated above a tangent touching both eyes, and laterally limited by the sharp and complete frontal furrows; the frontal area itself depressed somewhat around the middle ocellus, and inside it, the supra-antennal pit is large and round. The postocellar area subconvex, anteriorly reaching between the lateral ocelli to the middle ocellus, and it is distinctly limited by broad and deep, gradually sunken, but not very sharp lateral furrows and the less deep postocellar furrow. Scutellum flatly subconvex without any traces of lateral carinas. Claws simple. The hind basitarsus a little longer than the following tarsal joints combined. The apical tibial spurs surpassing the end of tibia itself: supra-apical spurs wanting. Type of genus S. machaerii n. sp.

S. machaerii n. sp. Dirty yellowish with black markings; black are: head with antennae except for palpi (labrum, pedicellus beneath, and, in the 3, flagellum pale brownish); 7 elongated spots on mesonotum, one of these covering most of the middle lobe; one large and one small elongated spot above, and one more rounded one on the lateral side of each lateral lobe. The two small spots above confluent in the ♀ specimen to one spot anterior of scutellum and also confluent with the spot of the middle lobe and with a longitudinal stripe over scutellum. A large black spot covers most of each mesopleurum and mesosternum leaving only a narrow margin connected with the pale mesosternal middle seam. Abdomen black above and at the apex, the 6 anterior tergites each with a very large pale middle spot leaving only the narrow basal margin and the broad sides infuscated: the corresponding sternites pale with lateral dark spots; the deflexed parts of the 6 basal tergites pale in the 2, blackish in the 3. Legs pale, the apical third of the hind tibiae and the apex of all claw-joints infuscated. Wings vellowish hyaline, infumated in the apical half, costa and stigma yellow. Saw-sheath, in dorsal view, strongly narrowing from the broad base towards the three-pointed apex. Length 37,

♀ 9 mm. (1 ♂, 1♀.) Argentina, Missiones (Loreto). (Ex Machaerium sp?)

## Genus Asymmia gen. nov.

Related to the genus *Sericocerina* and the above described new genus *Subsymmia*.

The generic description of *Subsymmia* is valid also for *Asymmia* with the following exceptions: The mandibles are asymmetric, e.g. the right one has only one subapical tooth, but the left one has two subapical teeth, thus similar to both mandibles in the genus *Sericocera*. Malar space as long as the diameter of an ocellus. Flagellum filiform in the  $\mathcal P$  and shorter than the width of thorax. Scapus twice as long as pedicellus in both sexes. Type

of genus: A. albuquerquei n. sp.

A. albuquerquei n. sp. Fulvous with almost identical black markings as in the above described Subsymmia machaerii, but the black colour is more prevalent. Thus are the palpi infuscated in both sexes. The black markings of head, thorax, and abdomen in the ♂ correspond to those of the ♀ in machaerii, except that the deflexed parts of the abdominal tergites are also infuscated. In the Q, head with mouth-parts entirely black, but flagellum of the antennae somewhat paler on the under side. Thorax, except tegulae, black above, but scutellum brown with a black, basal middle spot, and postscutellum brown. The brown colour on abdomen breaking through the black of the tergites, but the deflexed parts of the 5 basal tergites fulvous like the entire corresponding sternites in the \( \text{\text{?}}; \) the lower half of pronotum and the upper half of mesopleura pale at the same time as pro-, meso-, and metasterna remains black. Legs pale fulvous; the four anterior tibiae with a black dot at the extreme apex in the 3, this dot enlarged into an indistinct stripe in the \(\times\); the tarsal claw-joints alone infuscated in the  $\beta$ , but, in the  $\mathcal{Q}$ , the infuscation reaching almost to the base of the entire tarsus. The tarsi of the hind legs entirely black in both sexes: the hind tibiae pale only at the extreme base in the  $\mathcal{D}$ , but, in the  $\mathcal{J}$ , only the apical two fifths of the hind tibiae black. Wings uniformly dark infumated; venation, costa, and stigma black in the  $\mathcal{L}$ , brown in the  $\mathcal{L}$ . The ocellar depression of the subconvexly elevated frontal area apparently variable, it is deeply sunken in both 33 and either separated from or confluent with the large and equally deeply sunken supra-antennal pit, but, in the single \( \text{?} \), the entire area almost flat, hardly elevated above a tangent touching both eyes, and both the supra-antennal pit and the frontal depression are obliterated. The postocellar area subconvex, the surrounding furrows rather deep, but not very sharp. Saw sheath of the single ? somewhat damaged, its shape accordingly uncertain. Length 7-8 mm. (2 33, I Q.)

Rio de Janeiro (Corcovado and Grajahu).

Named in honour of the collector, Dr. Dalcy de O. Albuquerque.

## Genus Tanymeles Konow.

Tanymeles Konow, Zeitschrift für Hymenopterologie und Dipterologie, VI, p. 244, 1906.

The genus Tanymeles Konow was treated in 1937 by the present author (Ent. Tidskr. p. 55) and a generic definition of the genus was given together with a key to the known species. By courtesy of the Berlin Museum an opportunity was recently given to study some of Klug's types that belong to Tanymeles. In 1951 the type of Trailia urcacensis Cameron had been studied by the present author on a visit to London and it had been found also to belong ro the genus Tanymeles. From my redescription of the holotype of T. hilarulus Konow in 1937 it seems not unlikely that T. hypoleucus Klug 3 and T. hilarulus Konow 9 should represent the different sexes of the same species? Until future studies will prove this to be the case they are regarded as belonging to different species.

The known species may be separated with help of the following key:

2. Tegulae and a rounded anterior spot on the mesonotal middle lobe black; rest of mesonotum together with scutellum dark reddish; head, rest of thorax, and most of the legs black, the front tibiae and tarsi striped with sordid yellow anteriorly. The infumation at the apex of the front wings extending over the entire wing although less pronounced basally of stigma in the ♀; ♂ unknown. Saw-sheath of ♀ narrow in dorsal view and at least twice as long as it is broad at the base, the apex roundly tapering. Length ♀ 6 mm. (Holotype ♀.)
Brazil (Leg. Olfers and accordingly possibly from Sao Paulo?).

T. compressicornis (Klug 1834)

—. In addition to pronotum also propleura, tegulae, palpi, and margins of the three mesonotal middle lobes fulvous; middle of mesonotum black owing to three confluent large black spots connected also with the black scutellum. Supraclypeal area to the malar spaces pale more or less. The broad base of the posterior tibiae and a broad stripe along the anteriror side of the four front legs from the knees to the tarsi whitish yellow. Front wings clear with a rather strongly infuscated large spot at the apex of the wings in the ♀; as a broad band over the stigma, and extending basally to include the discoidal cell in the ♂. Length ♂ 6 mm, ♀ 5-7 mm. (Holotype ♀, + 1♂, 2 ♀♀.)

Brazil (Rio de Janeiro, Matto Grosso, and possibly Sao Paulo?).

T. mesomelus (Klug 1834) (inconspicuus /Kirby 1882)

3. Head and thorax black in the 3; Q unknown. Legs pale yellowish, all tarsi and the apex of the hind tibiae somewhat infuscated. Wings almost uniformly infumated. Distance between the eyes much longer at their upper than at their lower corners, as 4:3. Length 3 6 mm. (Holotype 3.)

Brazil (Sao Paulo?).

T. hypoleucus (Klug 1834)

4. Length of pedicellus and of scapus in the ♀ as 2:3; in the ♂ as 1:2. Distance between the eyes at their lower and upper corners in the ♀ as 15:16, in the ♂ as 7:9 (accordingly almost subequal). Hind tibiae infuscated only at the apex; the

middle ones hardly infuscated at all. Wings uniformly infumated in the  $\mathfrak{J}$ ; in the  $\mathfrak{P}$  infumated only at the apex and base. Head and thorax without black markings in the  $\mathfrak{P}$  except for a small dot lateral of each latera mesonotal lobes; all three mesonotal lobes reddish brown in the middle; middle of the 9th tergite and apex of saw-sheath black. In the  $\mathfrak{J}$  the head except for the mouthparts and the interantennal carina black; black are further the mesonotal middle lobe, the 8th abdominal segment, and hypopygum; the 7th tergite, rest of mesonotum, and scutellum infuscated. Length 5–6 mm. (1  $\mathfrak{J}$ , 1  $\mathfrak{P}$ .) Amazonas (Para, Rio Purus and Rio Autaz).

T. apicalis (Spinola 1853)

(urcacensis/Cameron 1878/; analis Malaise 1937) New syn.

— Length of pedicellus in the ♀ subequal to that of scapus. Distance between the eyes at their lower and upper corners as 4:5 in the ♀. The four hind tibiae black, only the narrow base pale, the foremost ones infuscated in the same manner. Front wings clear, except for apex and a minute spot at the very base. Head black; supra-clypeal area, base of clypeus, and palpi pale; the two last abdominal segments and the apical half of the saw-sheath black. Length ♀ 5 mm; ♂ unknown. (From rediscription of the holotype in 1937.)

Amazonas (Rio Tapajos, Itaituba).

T. hilarulus Konow 1906

## Genus Weyrauchia n. gen.

Belongs to the Sterictiphorinae and is in venation, etc. related to the genus Neardua m. (1937) to which genus it leads in my key of 1941. In Neardua the face between the eyes to the apex of labrum suggest an almost equilateral triangle, and the long maxillar palpus is subequal in length to the distance between the eyes below, or to the length of one eye. The subconvexly elevated postocellar area is so strongly elevated between the two lateral ocelli that it reaches above a level touching all three ocelli. The head is accordingly much broader in Weyrauchia than in Neardua, most strikingly noted in the long distance between the eyes.

Radial cells of both the front and of the hind wings without cross-vein and open, i.e. the surrounding veins disappearing towards the apex. The intercostal cross-vein of the front wings wanting. The first cubital crossvein wanting or only faintly indicated, and the front wings accordingly with only three (instead of four) cubital cells; the 2nd (otherwise 3rd) cubital cell short, subquadrate, and not longer on radius than on cubitus. Basalis meets subcosta removed from the origin of cubitus a distance longer than or subequal to the length of any of the cubital cross-veins. Anal cell broadly contracted with a distinct closed part at the base, the apical closed part mostly with a very faint indication of a spur directed basally. Hind wings with two closed middle cells, but without closed anellan cell, as the anellan vein is represented by a short and abruptly ending stump. The mediellan vein mostly with a faint indication of a punctiform remnant of a mediellan cross-vein. Head narrowing behind the small eyes, very broad compared to its length; the distance between the eyes below more than twice the length of each eye. The inner margins of the eyes distinctly converging downwards, almost straight or, in the &,

with a very faint indication of being subemarginate. Inter-antennal carina wanting in the  $\mathcal{L}$ , bluntly tectiform in the  $\mathcal{L}$ . The broadly triangular, not carinated, sub-cylindrically convex supra-clypeal area separated from clypeus by a deep and sharp furrow; clypeus short, the shallowly emarginated anterior margin almost acute, and not or hardly covering the base of the subconvex, almost flat labrum, that is more than twice as long as clypeus in the middle, and with the anterior margin rounded or roundly subtruncate. Malar space almost twice as long as the diameter of an ocellus. Palpi very short, not half as long as the above mentioned distance between the eyes. The bifurcate, gradually tapering, and at the apex curved flagellum of the antennae as long as head and thorax combined in the ♂; antennae as long as thorax in the ♀; pedicellus twice as broad as it is long, but only half as long as the conical scapus; flagellum stout, only faintly curved, the basal half, in the type-specimen, almost round in crosssection, the somewhat thinner apical half rather strongly compressed and bluntly ending. The triangular frontal area subconvexly, but not strongly elevated. The middle supra-antennal pit deep, round, and almost as large as the diameter of an ocellus; the lateral ones similar although somewhat larger, and placed close above the antennal basis. The ocelli in a very broad triangle, neither the frontal nor the postocellar areae reaching a level touching all three ocelli; the postocellar area subconvex, but backwards slanting, fully three times as broad as it is long, the backwards strongly converging lateral furrows sharp and rather deep. Thorax, abdomen, and legs normal for the subfamily; claws simple, tibiae and tarsi normally slender. Type of genus: W. rufo-nigra n.sp.

W. rufonigra n. sp. Reddish yellow; black are: head with antennae; a large spot on the back of thorax, in the 3 covering meso- and metanotum except for the always pale tegulae and the adjacent narrow lateral margins of mesonotum, in the 9 limited to a broad longitudinal band from the anterior margin of the mesonotal middle lobe over the broad medial corners of the lateral lobes to include the anterior apex of scutellum (the bottom of the mesonotal furrows remain pale); propleura and mesosternum entirely in both sexes; the lower parts of mesopleura, more broadly in the 3 than in the 9; a small dot at the upper corners of mesopleura (under the root of the wing); part of metasternum; all legs entirely; the genitalia in the 3. Saw-sheath broadly triangular with blunt apex in dorsal view. Length 3 6–7 mm; 9 8 mm. (3 3 1, 9)

Peru (Contumafa, 1700 m).

Named in honour of the collector, Dr. W. Weyrauch of Lima in Peru.

#### Genus Themos Norton.

Themos Norton, Trans Amer. Ent. Soc., Vol. I, p. 58, 1867.

This genus is chiefly characterized by the claws that all have a subapical tooth, the inflated mandibles and the short palpi. The first cubital cross-vein entirely wanting. The radial cell open at the apex in the hind wings, *Entomol. Ts. Årg. 76. H. 2-4, 1955* 

but more or less distinctly closed and with a large appendiculate cell in the front wings.

Front wings with a large appendiculate cell at the apex of the radial cell, but the veins becoming indistinct at the apex and the appendiculate cell then also becomes indistinct; the radial cell then appears more or less distinctly open at the apex. The first cubital cross-vein wanting entirely and the thus combined 1st and 2nd cells long and angularly bent and receives both recurrent veins in its apical half. The usually 3rd cubital cell (2nd in this genus) is short. Basalis meets subcosta removed from the base of cubitus. Intercostal cross-vein wanting. Anal cell broadly contracted. In the hind wings the radiellan cell open at the apex; the closed part of the anellan cell somewhat longer than its petiole. The discoidellan closed middle cell very short, hardly half as long as the cubitellan cell. Head not narrowing, mostly dilated behind the eyes. The inner margins of the eyes almost subparallel, sometimes faintly subemarginate. The distance between the eyes twice the length of an eye. Malar space only little shorter than the diameter of an ocellus. The supra-clypeal area strongly roundly elevated and prolonged between the antennal sockets as a strongly elevated, but extremely blunt carina that suddenly curves downwards and ends by the large and deep supra-antennal pit. This pit more or less completely confluent with the depressed frontal area inside whose abruptly raised but blunt ridges the middle ocellus is situated. The postocellar area convex and surrounded by deep and sharp furrows. Clypeus rather flat, like the entire face below the ocelli with large, scattered, and rather ill-defined punctures, the anterior margin acute, truncate or subemarginate. Labrum is three times as broad as it is long, the anterior margin deflexed downwards. Mandibles strongly convex, as if inflated at the base, the right one with one large subapical tooth, the left one simple or with two minute subapical teeth in the middle. Palpi very short and stout the maxillar ones even shorter than the labial palpi. Antennae biramose in the 3; flagellum compressed from the sides, distinctly clavate, and curved upwards in the ♀. Thorax with scutelli normal. Legs normal; the apical spur of the hind tibia surpassing the end of the tibia itself; supra-apical spurs wanting. The hind basitarsus subequal in length to the following tarsal joints combined. All claws with a subapical tooth. Type of genus: T. hyaline Norton=?Hylotoma olfersii Klug.

## Key to the species.

— Wings hyaline or clear
2 General colour pale dirty yellowish (in life possibly green?) black are in the \$\rightarrow\$ (\$\frac{3}{3}\$ unknown): flagellum anteriorly, pedicellus, the extreme apex of the four hind tibiae, all claw-joints, a stripe along the front tarsi and the apical half of the front tibiae above. Stigma, apex and base of costa, subcosta, and of cubitus pale,

rest of venation brownish black, less dark towards the apex of the wings. Flagellum in the  $\mathcal{Q}$  long, strikingly slender, gradually and quartercircularly bent with only the very apex distinctly clavate. The convex postocellar area almost twice as broad as it is long, the extremely deeply, but not broadly sunken lateral furrows reaching half-way to the theoretical hind margin of the head; the postocellar furrow angular in outline, very broadly although shallowly sunken and narrowly interrupted at the anterior apex of the area. The diamond-shaped frontal area includes the middle ocellus and its blunt surrounding ridges abruptly raised posteriorly, but not towards the large, round, deep, and abruptly sunken middle supra-antennal pit. Saw-sheath flat with a low edge-like, black middle carina, and very broad, pale lateral lobes, very elongate hart-shaped in outline when seen from behind. Length 11–13 mm. (1  $\mathcal{Q}$ , compared with type.)

Ecuador (Banos).

T. laqueatus Enderlein 1919

General colour dark fulvous with black markings in the \$\(\chi\) (\$\(\chi\) unknown\); black are: flagellum; head above antennae; meso- and metanotum, but not tegulae; the four last tergites. Wings hyaline; stigma and venation brownish black, only extreme base of costa fulvous. Postocellar- and frontal area as in laqueatus, but the supra-antennal pit almost separated from the frontal depression, and frontal ridges rugosely punctured. The 3rd cubital cell, (in this genus the 2nd) is very small and rectangular in outline. Length \$\(\frac{1}{2}\) 8 mm, the unknown \$\(\chi\) probably larger. (1 \$\(\frac{1}{2}\).

Brazil (Minas Geraes).

T. nigronotum n. sp. 3. Large species, ♂ 11 mm, ♀ 18-22 mm. Legs pale basally of the black extreme apex of femora; the front tibiae and tarsi with a pale stripe behind and extending from the entirely pale femora, but not reaching to the claw-joints. Flagellum and pedicellus black in the ♀, and the gradually subclavate flagellum roundly bent at an angle of about 120 degrees at the basal fourth; antennae entirely pale in the ♂, but the black hairs of flagellum makes this appear to be black. The postocellar area subquadrate, the very deeply depressed lateral furrows reaching half-way to the theoretical hind margin of the head. The depressed frontal area diamond-shaped and uninterruptedly fused together with the supra-antennal pit. The inter-antennal carina flattened on top. (1 ♂, 5 ♀♀.)

Brazil, Sao Paulo (Ypiranga and Campinas).

T. olfersii (Klug 1834)

4. Claws of the middle legs with distinct and rather large subapical tooth. Head distinctly narrowing behind the eyes. Each eye longer than it is broad, as 10:7. The distance between the antennal sockets somewhat shorter than the diameter of each socket and the carina between them distinctly double with a narrow but rather deep longitudinal furrow on the top. The fulvous colour of thorax lighter than that of the head and almost yellow. Abdomen without any trace of pale colour. (Holo-type ♀, its posterior claw-joints missing.)

Peru (Pachitea).

T. Concinnus Mocsary 1909

— Subapical tooth of the claws of the middle legs indistinct or wanting. Head not or hardly narrowing behind the eyes. The eyes less elongate; their length and width, as 9:7. The interantennal carina blunt, almost flat above, and almost

¹ The missing claw-joints of the hind legs in the holo-type of concinnus makes it impossible to say if this species belongs in the genus Themos or in Adiernia. Owing to the courtesy of the Budapest Museum the very similar types of Themos concinnus and T. similis could be studied. At first both were considered to be colour forms of Adiernia surinamensis (Klug), but a close study of both revealed that they could not be conspecific. A. surinamensis has the legs almost entirely pale, and is known from Panamaribo in Surinam and from Lower Amazonas (Para de Belem), and the ssp. similis from Central Amazonas, but T. concinnus from the eastern slopes of the Peruan Cordillera.

broader at the base than the diameter of each antennal socket. The pale colour of head and thorax alike, mostly rather dark fulvous. At least the base of the saw-sheath with fulvous hairs or indications of pale spots. (Holo-type Q.) Central Amazonas (Manaos).

Adiernia surinamensis ssp. similis (Mocsary 1909)

# Family Loboceridae.

# Genus Loboceras Kirby.

Loboceras, Kirby, W. F., List of Hymenoptera ... in the British Museum, p. 79, London 1882.

Loboceros, Konow, F. W., Természetrajzi Füzetek, 24, p. 68, Budapest 1901.

L. atriventris n. sp. Black; reddish yellow are: base of mandibles; pronotum, except for a narrow marginal spot in the middle; tegulae; the margins of all three mesonotal lobes; scutellum, except for two lateral marginal dots; mesopleura above a straight horizontal line at the height of each lower pronotal corner. Labrum with an indistinct pale tinge, and likewise a longitudinal anterior stripe on the front tibiae from the knees and disappearing on the adjacent tarsus. Wings uniformly and rather strongly infuscated.

The postocellar area fully twice as broad as it is long, strongly convex, the postocellar furrow sharp, deep, and almost straight, the lateral furrows equally sharp, still deeper, faintly diverging backwards, and continue with the same depth to abreast the hind fourth or third of the lateral ocelli, then suddenly becoming less sharp and deep and continue almost straight to the antennal basis. Antennae as long as head and thorax combined; scapus and pedicellus subequal in length, the third antennal joint longer than any of the remaining and between themselves subequally long joints, as 5:4; the last joint roundly tapering at the apex (probably truncate in the unknown  $\mathfrak{P}$ ). Malar space linear. The hind metatarsus longer than the remaining tarsal joints combined. Length  $\mathfrak{F}$  6 mm. (2  $\mathfrak{F}$ .)

Argentina, Prov. Salta (Angostura de Arios). Leg. P. Wygodzinsky; Prov. Jujuy (Los Perales). Leg. Monrós—Willink.

This is the only known *Loboceras* with entirely black abdomen.

#### Genus Incalia Cameron.

Incalia Cameron, Trans. Ent. Soc. London, p. 143, 1878.

In addition to the 7-jointed antennae, etc. the most striking character is the primitiveness of the venation and that cubitus does not join subcosta, but medius. The built and phylogeny of the stigma and the venation around the radial cell is revealed.

Front wings (Fig. 3, A) with four cubital and one closed radial cells, the latter is appendiculated. The cubital vein and, to some extent also the radial vein branching off from the medial vein. The anal cell wanting. In the hind wings the radiellan cell closed and with an appendiculate cell, the cubitellan middle cell present, but the anellan cell wanting. Head

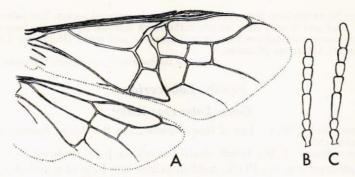


Fig. 3. A. Wings of *Incalia fulviventris* n. sp. 3; B. Antenna of *Incalia americana* (Linnaeus 1758) \( \mathbb{Q}; C Antenna of *Incalia ultimajor* n. sp. \( \mathbb{Q}. \)

elongated behind, sometimes to such an extent that the hind margin above becomes corner-like and suggesting a blunt carina, wanting below. Inner margins of the eyes almost straight and subparallel. The postocellar area subconvex, its lateral furrows almost straight and parallel, only little deeper than the complete and inconsiderably angulated postocellar furrow. The interocellar furrow equally deep and sharp as the lateral ones, and extends from the postocellar furrow to the middle ocellus where it is angularly forked into two straight branches of the incomplete circumocellar furrow. In front of the middle ocellus a longitudinal middle furrow. The lateral postocellar furrows continued into the complete and also nearly straight frontal furrows. All three supraantennal pits indistinct and partaking in respective furrows. Frontal area only subconvexly elevated, with distinct scattered punctures, but without distinct ridges. Malar space almost as long as the diameter of an ocellus. The interantennal space abruptly raised from the supraclypeal furrow, saddle-shaped between the raised brims of the antennal sockets. Clypeus very faintly subconvex, four times as broad as it is long, with scattered punctures, the acute anterior margin subtruncate or truncate with a narrow shining depression along the anterior margin suggesting this to be shallowly emarginated; it overlaps the base of the flat semicircular and shining labrum. Each mandible with a large, acute subapical tooth. Labial palpi 3-jointed; maxillar ones 5-jointed. Antennae 7-jointed (Fig. 3). Thorax normal, the mesopleura somewhat protruding bluntly below. Scutellum almost flat above, without marginal- or other carinas but overlapping the base of the postscutellum; its appendage completely fused together with scutellum itself. Abdomen normal; the first tergite (propodeum) not divided along the middle, only sharply incised in the middle of the anterior margin. Saw strong; saw-sheath protruding, rounded in lateral view, roundly triangular in dorsal view. Legs normal, alike in both sexes; all tibiae with two simple apical spurs, the four hind ones in

addition with a more or less strongly curved supra-apical spur on the outher side near the middle; the hind basitarsus longer than the following tarsal joints combined. Claws simple. — Black with bluish tinge, fulvous are: Head below antennae, the entire thorax, the front legs entirely and the base of the remaining legs; head and most of antennae black. Type: *I. hirticornis* Cameron 1878 = americana (L.).

#### Key to the known species.

- 1. The postocellar area with a narrow longitudinal middle furrow from base to apex. Abdomen fulvous with black apex. Legs pale, only the apex of the four hind tibiae together with the adjacent tarsi black. Wings hyaline with a broad, infumated border which becomes infuscated at the apex of the radial cell. Only 33 are known. Head distinctly narrowing behind the eyes. Mesopleura not strongly elevated below, and thorax accordingly, in frontal view and below the wings, somewhat broader in the upper than in the lower part. Pronotum and adjacent parts of mesonotum with distinct scattered punctures. Length 39.5-10 mm. (3 33; type and paratype in Mus. Paris, paratype in Mus. Stockholm.)
- 2. The 7th antennal joint much shorter than the 3rd one (Fig. 3, B). Head not narrowing behind the eyes, viz. the maximum width of the head over the eyes and over the hind orbits subequal in dorsal view. The postocellar area is only subconvex, broader than it is long. Scapus, pedicellus, and the interantennal space all more or less pale in colour; the hind femora infuscated only towards the apex. Length \$\Qmathcap\$ 11 mm. (Holotype \$\Qmathcap\$.)

Surinam; Amazons (Ega=Teffé). Panama (Chiriqui)1

I. americana (Linnaeus 1758) (hirticornis Cameron 1878)

—. The last antennal joint almost as long as the 3rd one (Fig. 3, C). Head distinctly less broad behind than over the eyes in dorsal view. The postocellar area distinctly longer than it is broad, and faintly elevated along the middle, almost tectiform. Antennae and the interantennal space bluish black, and the hind femora almost entirely so too. Larger species, length of Q 13 mm. (1 Q.)

Peru (Changemayo, 1300 m).

I. ultimajor n. sp.

# Genus Saltia n. gen.

Front wings with appendiculate, undivided radial cell; four cubital cells, the first and second subequal in length, and the 3rd cell more narrow

¹ The enlarged hind orbits are usually regarded as a rather uncertain character. In the same species a large individual may have the head enlarged behind the eyes, whereas small specimens have the head narrowing. This character is much more reliable as specific when a smaller species has the head enlarged behind the eyes and larger one not so. *I. hirticornis* has been depicted by Kirby 1882 and by Cameron 1883–90 (Biologia Centralia Americana, Hym. I.). The character of the head behind the eyes is uncertain due to the small scale of the general figures. The type (in Kirby) has probably the head enlarged, but the specimens from Chiriqui probably narrowing, provided the two artists have been exact.

than the other ones; anal cell wanting. The hind wings with appendiculate radiellan cell, one closed middle cell, and the anellan cell wanting. Antennae 7-jointed, as long as abdomen; scapus as long as it is broad, flattened on the outer side; pedicellus small and short, almost twice as broad as it is long and only about one third as long as scapus; flagellum with short smooth hairs, the preultimate joint inconsiderably shorter than the subequally long and broad third to seventh joints, the seventh one distinctly compressed. Head not carinated, but roundly and rather strongly narrowing behind the eyes. Eyes large, the inner margins almost subparallel above, then faintly emarginated and inconsiderably converging downwards. Frontal area almost flat. The postocellar area more than twice as broad as it is long, subconvexly elevated into a blunt middle apex; the postocellar- and lateral furrows indistinct, only marked by the raising area. The upper medial part of the brim of the antennal sockets elevated into angularly diverging supra-antennal tubercles, separated by a short and broad middle fovea. The middle supra-antennal pit replaced by a minute tubercle. The supra-clypeal area concave, as the entire head strongly shining. The anterior margin of the broad and flat clypeus is straight and appears as if thickened. Labrum flat and subtruncate. The labial palpi very short and stout, 3-jointed; the maxillar ones 5-jointed, long and slender. The left mandible with a broad basal tooth, the right one with only indistinct teeth in the middle. Malar space distinct, half as long as the diameter of an ocellus. Thorax normal; scutellum subconvex without carina along the margins. Propodeum (1st tergite) undivided, but separated from the 2nd tergite by a large blotch. Legs slender, the four hind tibiae each with a long supra-apical spur in addition to the two apical ones. Claws simple. The hind metatarsus a little longer than the remaining tarsal joints combined. Type of genus: S. fuscoapicalis n. sp.

The new genus Saltia is closely related to Loboceras Kirby, but this latter genus has: Supra-apical thorns only on the middle tibiae; antennae with long, distended hairs; scapus not remarkably thicker than pedicellus; flagellum gradually thickening to the very abruptly ending, usually slanting apex, the hind orbits almost wanting in their lower half; the lateral furrows of the postocellar area sharp and deeply sunken, and continued by mostly also sharp and uninterrupted antennal furrows; the flat upper surface of scutellum overlapping its almost vertical sides as a sharp carina; the first cubital cell of the front wings broader than long and much shor-

ter than the second cell.

S. fuscoapicalis n. sp. Reddish yellow, black are: head with antennae, except for labrum and the apical joint of the maxillar palpi; propleura and prosternum partly; a large spot on mesonotum composed of three large, confluent spots extending over most of scutellum except for its hind apex; mesopleura and mesosternum entirely; most of metapleura, metasternum, and spots on metanotum lateral of the pale postscutellum; apex of abdomen consisting of the three last tergites entirely and the middle

of the sixth tergite and likewise the corresponding ventrites; a double spot along the margin of propodeum; all coxae more or less; the clawjoints of the four anterior tarsi, and the three apical joints of the hind tarsi. Wings reddish yellow, the apex blackish infuscated in the front wings, from the apex of the pale stigma; venation matching the colour of the wings. Saw-sheath of the  $\varphi$  twice as long as it is broad at the base, roundly tapering towards the almost acute apex in dorsal view. Length  $\varphi$  8 mm. ( $\varphi$ )

Argentina (Prov. Salta, Angostura de Arias).

# Family Perreyidae.

The Perreyidae are represented in South America by several genera, each mostly with a rather limited number of species. The genera are differing from one another by characters that in other groups are regarded as most essential. Many species, hitherto referred to one genus, possess also such characters that a separation into different genera would have been justified. This indicates that the family must be old, flourished in passed geological epochs and that they must have had a very long development behind themselves. During this long time a number of intermediate forms must have disappeared. Their only relatives in other continents are found in Australia, which also indicates an ancient origin. Their first appearance occurred hardly later than during the Miocene or perhaps the Cretaceous? So differs Heteroperreyia costata Rohwer in colour and a number of characters from the type species and also from a second species described below as new. Decaperreyia, with two species, was described by Conde in 1938 as a subgenus to Heteroperrevia. The shape of the 10jointed antennae, similar to those of Endecaria m., suggest a rather close relationship to the genus Camptoprium. Decaperrevia is unknown to the present author, but from the characters given in the description, it seems better to regard Decaperrevia as an independent genus in the vicinity of Camptobrium. It was probably the strong rigid saw, enabling the females to place their eggs beneath the surface skin of a plant, that induced Conde to join his Decaperrevia as a subgenus to Heteroperrevia. As a rule, the *Perrevidae* have a weak ovipositor for attaching the eggs on the surface of plants.

# Generic key to the Perreyidae with a strong ovipositor.

striated, subopaque. Type: C. leprieurii Spinola 1840.

Genus Camptoprium Spinola 1840 Entomol. Ts. Arg. 76. H. 2-4, 1955

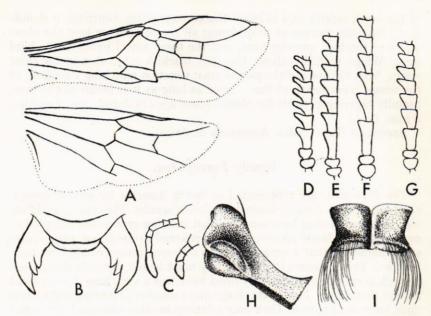


Fig. 4. Heteroperrevia hubrichi n. sp. A. Wings; B. Mandibles and clypeus; C. Palpi; D. Antenna &; E. Antenna Q; H. and I. Saw-sheats (in lateral and dorsal view); F. Antenna of Tenuiperreyia costata (Rohwer 1921) Q; G. Antenna of Heteroperrevia joergenseni (Schrottky 1913) Q.

—. Clypeus subtruncate. Abdominal tergites shining. Type: Heteroperrevia pseudoleprieuri Conde 1938.

Genus Decaperrevia Conde 1938

3. The hind basitarsus slender, as long as the three following tarsal joints combined. Antennae also slender, the 3rd to 10th joints distinctly longer than they are broad at the apex. (Fig. 4, F). Labial palpi 4-jointed; maxillar ones 6-jointed. The postocellar area laterally defined only posteriorly. (Only one known species, which is characterized by the yellow wings with black apex). Type: Heteroperrevia costata Rohwer 1921.

Genus Tenuiperreyia n. gen.

-. The hind basitarsus shorter than or subequal in length to the two following tarsal joints combined. The middle (5th to 10th) antennal joints (Fig. 4, D, E, and G) not longer than they are broad at the apex, at least in the Q. The postocellar area sharply limited laterally by distinct lateral furrows reaching to the postocellar furrow. Labial palpi 3-jointed, maxillar ones 5-jointed. (Two known species). Type: Ancyloneura joergenseni Schrottky 1913.

Genus Heteroperrevia Schrottky 1915

# Genus Heteroperreyia Schrottky.

Heteroperrevia Schrottky. Einige neue Hym. aus Paraguay. — Soc. Ent. XXX, 2, p. 5, Stuttgart 1915.

This genus is enough characterized by the above key. The two species may be distinguished with the help of the following key:

- 1. Black; pro- and mesothorax dark yellowish red, colour of clypeus, mesosternum, tegulae, scutellar appendage, and postscutellum may vary from entirely black to entirely reddish. The radiellan cell of the hind wings closed at the apex and its appendiculate cell as distinct as that of the front wings. Wings rather strongly infuscated with black venation and they become gradually paler towards the apex. Antennae stout, 14- to 15-jointed (Fig. 4, G). Saw-sheath as in fig. 4, H and I). Length 6.5 (♂?) to 10.5 mm. (5 ♀♀ from the type locality.) Argentina, Prov. Misiones (Bompland and Sta Ana); Paraguay.
- H. joergenseni (Schrottky 1913)

  —. Black; reddish yellow are: palpi, pronotum, tegulae, base of front wings with costa and stigma, scutellar appendage, ridges of metanotum, the narrow posterior margin of mesopleura, the upper part of metapleura, large and rectangular middle spots on the abdominal tergites, which spots become more or less indistinct towards the apex of abdomen, saw-sheath and anus partly, legs, except for base of all coxae and apex of all tarsi infuscated. Only the front wings with appendiculate cell, the margin of the radiellan cell in the hind wings becoming obliterate and the cell more or less distinctly open at the apex; the appendiculate cell thus wanting (Fig. 4, A). Wings uniformly infumated. Antennae 16- to 17-jointed (Fig. 4, D, E). Mandibleles, palpi, saw-sheath (Fig. 4). Length ♂ 5-7 mm, ♀ 8-9 mm. (6 ♂ ♂ , 4 ♀ ♀, type, allotype, and paratypes in Zoolog. Staatsammlung, München; paratypes in Mus. Stockholm.)

Argentina, Prov. Rosario (Sta Fé). Leg. Jos. Hubrich. (Salad.)

H. hubrichi n. sp.

## Genus Barilochia n. gen.

Belongs to the *Perreyidae* and is related to the genus *Camptoprium* Spinola 1840.

Front wings (Fig. 5, B) with appendiculate radial cell; four cubital cells: the discoidal cell very large; the intercostal cell with rather distinct crossvein; the anal cell petiolate. Basalis meets subcosta just before the base of cubitus. Nervulus extremely short. The hind wings with closed, appendiculate radiellan cell, one closed middle cell, but without anellan cell. — Head very finely, indistinctly, and somewhat rugosely punctured with semiopaque lustre; roundly narrowing and not carinated behind the eyes, the hind orbits, in dorsal view, subequal in length with the simultaneously seen adjacent eye. The postocellar area subconvexely raised, twice as broad as it is long, the postocellar furrow rather broad, quatercircular in outline, the lateral furrows very short, consisting almost of punctiform enlargements of the postocellar one. The inner margins of the eyes subparallel. The frontal area convexly elevated, much above a tangental line touching both eyes; shallowly depressed around the middle ocellus, and from this depression a very broad but shallow middle fovea directed anteriorly. The middle supra-antennal pit obsolate. The supra-clypeal furrow very deep and sharp. Clypeus almost flat, indistinctly subrugose, the acute anterior margin truncate or faintly subemarginate, and covering the base of the subconvex and round truncate labrum. The 5-jointed maxillar palpi short and tiny, shorter than the three basal antennal joints combined, the penultimate joint as long as it is broad, and the 3rd and the last joints each about twice as long as they are broad. The

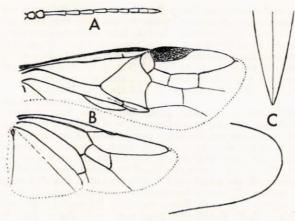


Fig. 5. Barilochia brunneo-virens n. gen, n. sp. A. Antenna; B. Wings; C. Saw-sheath (in dorsal and in lateral wiew).

labial palpi 3-jointed and very short. Malar space as long as the diameter of an ocellus. Antennae (Fig. 5, A) II-jointed, almost filiform, as long as head and thorax combined or just a little longer; scapus and pedicellus subequal in length, each hardly longer than it is broad, but twice as thick as the 3rd antennal joint; the last joint tapering and with a very faint indication of being composed of two joints fused together. Thorax normal, semiopaque, but a little more shining than head; scutellum subconvex, but almost flat. The abdominal tergites finely cross-striated, shining, the first one (propodeum) not divided along the middle by any furrow, but by a faint carina. Legs normally slender; tarsi without supra-apical spurs, the hind tibiae longer than the normal (not dentate) femur, as 5:3; claws simple; the hind metatarsus only half as long as the remaining tarsal joints combined. Type of genus: B. brunneo-virens n. sp.

B. brunneo-virens n. sp. Head and thorax dark reddish brown, abdomen and parts of the legs pale with a dirty greenish tinge; black are two elongate spots on mesonotum, one on each of the lateral lobes. Pale brown with a greenish tinge are on the legs knees, trochanters, and the extreme adjacent parts of the otherwise dark reddish brown coxae and femora; tibiae and tarsi pale brown to brown without greenish tinge. Wings clear; stigma, costa, and the anal vein pale greenish, rest of venation and the narrow anterior margin of the stigma blackish. Saw-sheath (Fig. 5, C) long and protruding, greenish with infuscated apical margin, in dorsal view, triangularly tapering to the very acute apex, in lateral view rounded at the apex. Length  $\mathcal{Q}$  4.5 mm;  $\mathcal{J}$  unknown. ( $\mathcal{I}$   $\mathcal{Q}$ .)

Argentina, Prov. Rio Negro (San Carlos de Bariloche).