

New Neotropical Mycetophilidae (III) (Diptera)

by

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New Neotropical Mycetophilidae (III) (Diptera)

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(With 5 figures)

This paper comprises descriptions of twenty-four new species from various parts of the Neotropical region, the types all belonging to European Museums (Dresden, Halle, Hamburg and Vienna). Five genera and two subgenera are added to South American fauna.

Ceraplatinae Macrocera nobilis, sp. n.

 \S . — Head dark above; antennae almost entirely yellowish and very long. Thorax mainly blackish, mesonotum indistinctly yellowish between the stripes. Abdomen yellowish-brown; tergites 1-5 mainly blackish, but more or less broadly pale at base laterally. Legs yellow; middle and hind coxae almost entirely black. Wings hyaline, with three sharply-defined dark brown patches, one at the base, one in the middle extending from R_1 to Cu_2 and including base of median fork, the third and largest at the tip, not quite reaching back to R_4 but including two clear areas on margin, in cells R_5 and M_1 ; a small separate dark spot over R_4 . Membrane hairy at tip and along posterior margin (except in the large, square axillary area). Sc extending well beyond end of basal cell; r-m fusion very short, almost punctiform; R_4 strong; costa much produced. Halteres yellowish.

Length of body 6 mm.; wing 8.5 mm.; antenna 13 mm. Colombia: Paso del Quindin, Centr. Cord., 3000 m. (Fassl). Type 2 in Vienna Museum.

This is very distinct in wing-markings from other known American species.

Platyura (Lyprauta) burmeisteri, sp. n.

2. - Head mostly dark above, lighter above antennae and on face; palpi and scape of antennae yellow (flagellum missing). Thorax with vellow ground-colour; mesonotum with a median black stripe running the whole length, of even width except on front margin where it is enlarged to nearly three times its width; a large oval black spot above each wing-root; scutellum and most of mediotergite black; pleurotergites dark brown. Abdomen black, posterior borders of tergites broadly yellowish. Legs yellow, including all coxae (hind legs missing); spurs of middle tibia subequal. Wings clear pale yellowish-brown, unmarked. Sc ending somewhat beyond base of Rs; r-m fusion very long, almost four times as long as the short stem of the median fork; R_4 ending only slightly beyond tip of R_1 ; costa only very slightly produced; vein M_2 complete at base, both M_2 and Cu_1 slightly abbreviated at tip. Halteres with black knob. Wing-length 7 mm.

Type of in Halle Museum labelled «Nov. Frib.» (Burmeister).

Apart from the very distinctive colouring of the thorax this species differs from others of the subgenus in having the costa scarcely produced and M_2 complete, not interrupted at the base.

Platyura (Neoplatyura) regularis, sp. n.

Phead dark brown above, face and area above antennae yellow; antennae with scape brownish, flagellum black; palpi yellow. Lateral ocelli large, about their own diameter distant from eyes. Thorax light brownish; mesonotum darker posteriorly but not striped; scutellum yellowish; postnotum and pleurae largely dark. Mesonotal setulae uniformly distributed, no bare lines. Abdomen mainly dark brown; segments 1-5 yellow at base, more broadly so on sternites; segment 7 pale posteriorly. Legs yellowish, including all coxae. Tibial setulae regularly arranged throughout. Outer spur of middle and hind tibiae about one-third as long as inner. Wings mainly clear pale yellowish, but with a brown preapical band extending from costa almost to hind margin, darkest on upper half. Sc ending above base of Rs; r-m fusion shorter than the rather long stem of the median fork; veins

 M_2 and Cu_1 both somewhat abbreviated, not reaching margin. Halteres with dark knobs. Wing-length 5.5 mm.

Type Q. in Halle Museum from «Nov. Frib.» (Burmeister).

I refer this species to *Neoplatyura* on account of the presence of spiracular hairs and of numerous macrotrichia on the branches of the media and cubitus; it differs from other species of the subgenus known to me in having the tibial setulae in rather definite rows.

Platyura (Pyratula) paraguayana, sp. n.

Head blackish above, ocelli enclosed in a deeper black spot; face and palpi vellow. Lateral ocelli far from eves. Antennae short, slender in 9, distinctly flattened in 3; scape brownish, flagellum black. Thorax brownish vellow. unmarked. Mesonotal setulae evenly distributed. Abdomen blackish above, posterior margins of tergite narrowly pale; sternites yellow. Hypopygium small; ninth tergite long and narrow; style rather narrow, with tip rounded and narrowly blackened. Legs vellowish, including all coxae; tibial setulae in regular rows throughout; outer spur of middle and hind tibiae about one-third as long as inner. Wings pale greyish, slightly darker apically towards costa. Sc abbreviated, not reaching costa; r-m fusion shorter than stem of fork, but rather variable; branches of M and Cu all reaching margin, but M_2 sometimes slightly interrupted at base. An very short. Halteres with dark knob. Wing-length 3.5 mm.

Paraguay: S. Bernardino (Fiebrig'). Type &, paratypes 1 & 2 \(\rightarrow \) in Vienna Museum; paratypes 1 & 1 \(\rightarrow \) in British Museum.

I refer this species to *Pyratula* on account of the setulose media and cubitus, produced costa, bare postnotum and form of hypopygium. It differs from the other (European) species of the subgenus in the regular arrangement of the tibial setulae, a character to which it would seem that I have hitherto attached too much importance. The abbreviated subcosta is very unusual.

Platyura (Proceroplatus) paramariboensis, sp. n. (Fig. 1)

9. — Head blackish, including antennae and palpi, only scape of antenna more brownish; flagellum considerably flat-

tened. Thorax dark brown above, pleurae lighter. Abdomen mostly blackish, tergites 2-5 each with obscure yellowish transverse bands, interrupted in middle, near but not on posterior margin. Legs yellowish, including all coxae. Wings with sharply-defined markings similar in type to those of other species of the genus, but differing in many details; upper half of basal cell dark; a larg dark area in middle from costa to Cu_1 , including a small clear spot near base of cell R_5 ; wing-tip largely dark, but including four clear areas: two in cell R_5 (one on the margin and a larger one below vein R_5) an one on the wing margin in each of cells M_1 and M_2 . Halteres with dark knob. Wing-length 3 mm.

Dutch Guiana: Paramaribo (Michaelis). Type ♀ in Vienna Museum.

The two other South American species of the subgenus have the abdomen much more extensively yellow, besides differing in wing-markings.

Ceroplatus (s. str.) fiebrigi, sp. n.

Head largely brownish above; face yellow and rather narrower than in the European species. Only two ocelli present; eyes in both sexes widely separated above. Antennae uniformly dark brown, segments rather more than twice as deep as long. Palpi short and thick. Thorax largely brown above, with four rather indefinite lighter stripes; shoulders and lateral margin of mesonotum yellow; scutellum yellow with a brown spot in middle at base; pleurae largely dark brown. Abdomen dark brown, segments 2-5 with posterior margins yellow, in 9 all equally so, in of the yellow area on segments 2 and 3 is much more extensive. Seen in side view abdomen of o appears much enlarged beyond middle. Legs yellow, coxae at tip and femora at base and tip dark brown, more broadly so on hind legs. Spurs black as usual. Tarsi with narrow pale rings at the joints. First segment of front tarsus not much longer than tibia. Wings with apical and posterior margin slightly but broadly darkened; a dark brown blotch over middle of vein R_1 and another (larger). over tip of R_1 and surrounding R_4 . Halteres with blackish knob as usual. Wing-length 5 mm.

Paraguay: S. Bernardino (Fiebrig). Type of and of in Vienna Museum.

This species differs from others of the subgenus known

to me in having only two ocelli; I place it in *Ceroplatus* (sensu stricto) rather than in *Placoceratias* on account of the venation $(R_4$ ending in R_1) and relatively short front tarsi. The pleurotergites are hairy and the tibial setulae arranged in regular rows as in typical species of both these subgenera.

Ceroplatus (s. str.) minimax, sp. n.

o. - Head light brownish, with the usual black ocellar spot. Antennae extremely broad and entirely blackish. Palpi pale vellow, unusually long and thin for a member of this genus, but as usual composed of a single rigid segment. Face rather narrower than usual. Thorax brownish, without distinct markings above; margin of mesonotum and middle of pleurae pale. Abdomen blackish, posterior margins of tergites broadly yellowish. Hypopygium rather small and more or less hidden, black. Legs yellow; front coxae with a small dark spot in middle in front; middle coxae with a dark brown spot in middle and another at tip; hind coxae with a dark brown stripe on outer side from near base to tip; hind femur with a rather broad blackish ring in middle. First front tarsal segment about half as long again as tibia. Wings with normal venation $(R_1 \text{ ending in } R_1)$; tip broadly dark, but including a pale streak beyond tip of R_1 extending from costa across vein R_s ; a large brown patch in middle extending from costa to base of median fork; a small brown spot over base of Rs. Halteres with dark knob. Wing-length 4 mm.

Costa Rica: Farm La Caja, 8 km. west of S. José, VIII. 1925. Type & in Hamburg Museum.

This is the smallest species of the subgenus known to me, and is very distinct from the others in the markings of its wings and legs and shape of palpi.

Platyroptilon zernyi, sp. n.

at apex of postnotum and upper half of pleurotergite brown. Abdomen of type mostly destroyed by some pest, only the middle portions of the first three tergites and sternites remaining, these portions entirely blackish; apparently the abdomen was stout, indicating that the specimen was a female.

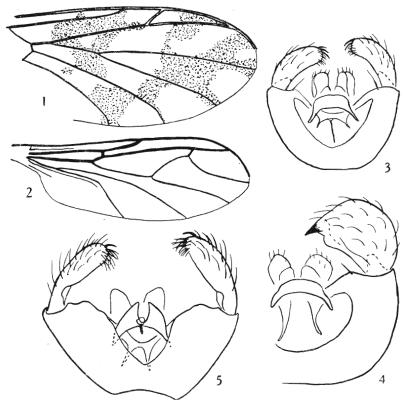


Fig. 1. Platyura (Proceroplatus) paramariboensis, n, sp., distal portion of wing, showing markings. — Fig. 2. Mapiria transversalis, n. g. n. sp., venation. — Fig. 3. Zygoneura boliviana, n. sp., hypopygium of male, from beneath. — Fig. 4. Zygoneura glaberrima, n. sp., hypopygium of male, from beneath. — Fig. 5. Eurobradysia longicollis, n. sp., hypopygium of male, from beneath.

Legs with front coxae dark at base, middle coxae dark at tip in front; hind coxae blackish on outer side for their whole length; femora pale fellow, hind pair narrowly dark at base; front and middle tibiae and all tarsi yellowish; hind tibiae black; tibial spurs black. Claws thick and blunt, with a fine basal tooth. Wings almost clear, with a slight brown cloud at the tip (beyond R_4). Wing-length 4 mm.

Brazil: Pará, Belem, V. 1927, «über Waldbach rasch hin und her fliegend» (Dr. H. Zerny). Type in Vienna Museum.

The genus Platyroptilon is remarkable on account of the strongly pectinate antennae. Only two South American species have been described each from a single of specimen, and both from Brazil: P. miersi Westwood (genotype) and P. ramicornis End. I have examined the type of the latter in the Stettin Museum, and also a second of P. miersi in the Dresden Museum. These differ remarkably from the specimen described above as P. zernyi in having only 12 segments in the antennae (segments 3-11 branched) and in having the eyes much larger and in contact with the ocelli. These differences may perhaps be merely sexual, but there are nevertheless some other distinctions which lead me to believe that P. zernyi is a distinct species from the other two: P. miersi has a different colouring of the thorax and all the coxae dark; P. ramicornis resembles P. zernyi in the colour of its thorax and coxae, but the hind tibiae are pale like the femora.

Among the characters common to the three Brazilian species now known, the following may be mentioned as being probably of generic importance: mouth parts practically absent, the palpi scarcely distinguishable; face very narrow; pleurotergites and postscutellum bare; tibial setular arranged in regular rows; hind tibia distinctly thickened and with two subequal spurs, but with scarcely any distinguishable bristles; branches of media and cubitus bare.

One Oriental species (Platyura talaroceroides White) has been referred to the genus Platyroptilon, but certainly does not belong here, as it has well-developed mouth-parts, with moderately long 3-segmented palpi; broad face; hairy pleurotergites; slender hind tibia with a single spur and distinct though short bristles. In this Ceylon species there is a remarkable sexual difference in the antennae, the \bigcirc having these organs 15-segmented (3-14 each with a very long branch), the \bigcirc having them only 12-13 segmented (3-10 each with a moderately long branch). There is thus a reduction of the antennae in the \bigcirc and not in the \bigcirc as organs 15-segmented (3-14 each with a very long branch), the \bigcirc having them only 12-13 segmented (3-10 each with a moderately long branch). There is thus a reduction of the antennae in the \bigcirc and not in the \bigcirc as it is suggested may perhaps be the case in the Brazilian Platyroptilon.

Sciophilinae

Stenophragma humeralis, sp. n.

Head brownish, darker round ocelli, which are in practically a straight line. Antennae with scape yellowish; flagellum black, segments about half as long again as broad. Palpi brownish. Thorax shining, ochreous, with a small black patch on each shoulder due to subcutaneous pigment; a rather large but ill-defined brown patch above each wing root, and a small dark area on each side of scutellum; some irregular blackish mottling on pleurae due to subcutaneous pigment, including a patch on anepisternite and usually a line round margin of pleurotergite. Pronotal lobes and sternopleura pale. Abdomen slender, dark brown, with narrow ochreous bands which are mainly on posterior margins of tergites 2-6 but extend over the incisures on to bases of succeeding segments,

especially at sides. Hypopygium of & moderately large, dark; tergite tapering almost to a point, as long as whole hypopygium; upper style curved, almost bare with a long, curved bristle just before the tip. Legs slender, yellowish, including all coxae; no part of hind femur darkened. Tibial bristles short, not longer than tibial diameter. First segment of fore tarsus shorter than tibia. Wings clear, unmarked. Macrotrichia fairly dense over most of the surface, but few or absent towards base of wing, suberect, but definitely inclined towards apex and not towards base of wing. Microtrichia very fine and dense. Sc extending somewhat beyond end of small cell, which is larger and less rectangular than usual in this genus; Sc_2 at middle of cell. Stem of median fork short, at most as long as r-m but variable, in some specimens practically absent, the fork being just sessile. Cubital fork short, almost pointed at base; Cu_2 straight. Halteres with knob and usually also distal part of stem black. Winglength 4-5 mm.

Paraguay: S. Bernardino, 3 & 6 9 (Fiebrig). Type in Vienna Museum; paratypes in Vienna and British Museums.

I refer this species to *Stenophragma* rather than to *Sciophila* on account of the bare anepisternite, although it shows some differences from the Australian species, notably in the shape of the cubital fork. The genus *Stenophragma* has not hitherto been recorded from outside Australia, but I am acquainted with several South American species which seem referable to it.

Stenophragma pleuralis, sp. n.

P. Resembles S. humeralis, differing chiefly as follows: Head almost entirely black. Segment of antennal flagellum fully twice as long as broad. No black markings on thorax due to subcutaneous pigment, but black areas on mesonotal integument more sharply defined, formed by fusion of a supra-alar patch with a short lateral scutal stripe; pronotal lobes, anepisternite, pleurotergite, and lower half of sternopleurite dark brown. Abdomen more slender, yellowish bands chiefly at bases of tergites. Legs longer and more slender, first front tarsal segment as long as tibia. Wings with the small cell larger, almost twice as long as broad, Sc_2 practically at outer end of cell; cubital fork longer,

distance of its base from base of median fork only about equal to twice length of r-m. Wing-length 5-6 mm.

Bolivia: La Paz (O. Garlepp), type 9 and 1 paratype.

Peru: Mamara (Sshnuse), 1 specimen. Dresden Museum.

Stenophragma fusca, sp. n.

Head blackish, including whole of antennae; palpi more brownish. Flagellar segments mostly about four times as long as broad, last few even longer. Thorax wholly blackish, mesonotum somewhat shining, pleurae somewhat dusted with grey. Abdomen broken in type (first segment blackish). Legs very long and slender, light brownish; coxae darkened, especially front pair. First segment of front tarsus slightly longer than tibia. Wings clear; veins all rather thin and pale. Macrotrichia very small and almost confined to distal third of wing; microtrichia very fine and dense. Sc immediately beyond outer end of small cell, which is rather narrow, almost twice as long as broad; median fork quite sessile, both branches somewhat curved down at tip; base of cubital fork below tip of Sc, Cu_2 rather strongly curved. Halteres remarkably long and slender, base yellowish, stem brown, knob darker. Wing-length 7 mm.

Peru: Cuzco, 4000-4200 m., 12. vi. 1905. Type in Dresden Museum; sex uncertain owing to loss of abdomen, but the long antennae suggest a \mathcal{S} .

In the reduction of the macrotrichia of the wing-membrane and the curvature of vein Cu_2 this approaches the Australian species more closely than do the two just described.

Acnemia binocellaris, sp. n.

Head dark above, but without a darker ocellar spot: face yellowish. Palpi blackish. Antennae yellowish, bases of flagellar segments darkened, last few segments all dark. Only two ocelli present, these rather small and separated by over three times their diameter, their distance apart much greater than the distance of either from the eye-margin. Thorax mainly yellowish; mesonotum with the usual three stripes yellowish-brown but bordered with dark brown, so that four narrow brown stripes are present. Abdomen blackish, genitalia in both sexes paler. Tergite of & hypopygium with a pair of fingerlike, bare processes on post-

erior margin. Legs yellowish; middle and hind coxae more or less darkened on outer side distally; femora and tibiae in no part darkened. Wings with a faint grey band in middle including base of Rs and base of median fork; distal third of wing also uniformly dark grey. Macrotrichia dense and slightly decumbent as usual. Sc rather short, ending above base of Rs; stem of median fork slightly longer than r-m. Knob of halteres black. Wing-length 3 mm.

Paraguay: S. Bernardino (Fiebrig). Type & and \$\gamma\$ (taken in copula) in Vienna Museum; paratype & in British Museum.

This is well distinguished from other species of the genus known to me (including A. fulvicollis Phil., and three other Chilean species) by the short subcostal vein and the lack of a median ocellus. Enderlein's A. bicolor and A. vittidorsum, from South Brazil, resemble the new species in these respects, but, as I have ascertained from examination of the types, they have reflexed macrotrichia on the wingmembrane and therefore belong rather to Monoclona than to Acnemia. Enderlein was in error in describing the type of A. bicolor as a male; actually it is a female, and A. vittidorsum is almost certainly the male of the same species.

Megophthalmidia bicolor, sp. n.

Head black. Antennae short and thick as usual; first few segments light brownish, rest darker. Palpi light brownish. Thorax wholly light reddish, with black hairs and bristles; four strong propleural bristles directed downwards; six strong scutellar bristles besides several weaker ones. Abdomen with first segment yellowish, remainder almost wholly shining black, second and third tergites narrowly yellowish at base in Q. Hypopygium small. Legs light brownish; hind femora and tibiae wholly dark brown; spurs black; bristles as in M. divergens Edw. Wings with faint yellowish tinge, distal third more greyish. Branches of median fork not quite regularly divergent, upper branch somewhat bent downwards distally, lower branch slightly curved at base. Halteres yellowish. Wing-length 2.7 mm.

Paraguay: S. Bernardino (Fiebrig). Type & and \(\) (in copula) in Vienna Museum.

A strikingly distinct species on account of the reddish thorax and black abdomen, though evidently closely allied to the Brazilian *M. divergens* Edw.

Dziedzickia fiebrigi, sp. n.

♂. — Head brownish, darker round ocelli, which are in a straight line, lateral ocelli about their own diameter from eyes. Antennae with first few segments brownish, remainder black; flagellum not flattened, with short pubescence; intermediate segments less than twice as long as broad. Palpi brownish, lighter at base; second segment somewhat thickened, third and fourth moderately long. Thorax yellow; a blackish patch above each wing-root; three narrow and indistinct dark lines on posterior half of mesonotum along lines of acrostichal and dorsocentral hairs, which are roughly biserial; four scutellar bristles; pleurae unmarked, pleurotergites with numerous black hairs. Abdomen black, posterior margins of tergites yellow. Hypopygium with truncate tergite; upper style long, black, infolded, lower style fingerlike, hairy, projecting backwards. Legs yellow, only tarsi and tibial spurs darkened. No modification of front tarsi or middle tibiae. Wings brownish-tinged. Branches of M and Cu with fairly numerous macrotrichia. Sc ending just beyond twothirds of the distance from humeral crossvein to base of Rs; Sc_1 represented by a short stump; R_1 absent (just indicated in one wing of type by a slight forking of basal section of Rs); stem of median fork nearly twice as long as r-m; base of cubital fork slightly before base of r-m. Halteres r-m; base of cubital fork slightly before base of r-m. Halteres with dark knobs. Length of wing 3.5 mm.

Paraguay; S. Bernardino (Fiebrig). Type & in Vienna Museum, paratype & in British Museum.

From the other known South American species of the genus (D. pubericornis Edw.) this differs strikingly in the slender antennae, mainly yellow thorax, and setose veins.

Synapha filicauda, sp. n.

J. — Head blackish, including whole of antennae; palpi more brownish. Thorax almost uniformly dull dark brown. Prothoracic and mesonotal bristles long and black; short dark bristles on mesonotum not numerous; four scutellar bristles. Pleurotergites bare. Abdomen blackish; hypopygium pale. Ninth tergite and coxites rather small; styles long, finger-like, almost twice as long as coxites and directed backwards; two pairs of thread-like processes visible between styles, one of them bent in middle and with the distal half more slender. Legs yellowish, including coxae; only tarsi darkened and tibial

spurs black. Middle tibia simple, without sensory patch. Wings clear; no macrotrichia on branches of M and Cu; Sc short, ending well before base of Rs; R_4 absent. Halteres with blackish knob. Wing-length 2.3 mm.

Paraguay: S. Bernardino (Fiebrig). Type & (unique) in Vienna Museum.

The combination of short subcosta, bare wing-veins and simple middle tibia distinguishes this species from most of its congeners; the last two characters are found in the European *S. vitripennis* Mg. The structure of the hypopygium is also very distinctive.

Mycetophilinae Epicypta oedipus, sp. n.

2. — A shining black species with a small central wingspot, very much resembling the European E. punctum, and having the venation of the wings and chaetotaxy of the legs almost exactly as in that species. Differs from E. punctum as follows: Antennae with the basal half yellowishbrown, and even the distal segments of the flagellum each narrowly pale at the base. Only one pair of pre-scutellar bristles, the inner pair, which in E. punctum is as strongly developed as the outer pair, being here scarcely distinguishable from the ordinary short hairs. Tip of last abdominal tergite conspicuously yellow. Front tarsus noticeably shorter, first segment slightly shorter than tibia, instead of about the same length; second and third segments very short and thick (in E. punctum q these segments are longer and scarcely thickened at all), the whole tarsus yellowish. Mid and hind femora almost entirely black. Wings without any trace of darkening on distal third.

Paraguay: S. Bernardino (Fiebrig). Type 9 in Vienna Museum.

This is the first record of the genus *Epicypta* from South America.

Zygomyia aurantiaca, sp. n.

9. — Head orange, somewhat dusted with grey. Palpi and base of antennae yellowish, remainder of antennae dark, flagellar segments about as long as broad. Thorax uniformly bright orange, surface dull. Abdomen mainly yellowish, tergites with large blackish triangles which have their bases

practically on the hind margin, apex of each triangle reaching base of segment. Legs yellow; tarsi, tibial spurs and bristles blackish. Middle tibia with 4 dorsal bristles, 2 external, 1 or 2 ventral, 0 internal. Hind tibia with 4 dorsal and 6 external bristles. Wings with yellowish tint, quite unmarked. Venation normal. Halteres yellow. Wing-length 2.3 mm.

Costa Rica: Farm La Caja, 8 km. west of S. José, vi. 1925. Type q in Hamburg Museum.

This is apparently the first Neotropical species of the genus to be described. The colouring is strikingly different from that of the North American and European species, which all have a dark thorax.

Zygomyia bicolor, sp. 11.

9. — Head and thorax as in *Z. aurantiaca*. Abdomen wholly black, somewhat shining. Legs yellow, hind femora with a narrow dorsal stripe running the whole length, but tip not darkened. Front tibia with one small dorsal bristle beyond middle. Hind tibia with 4 dorsal and 7 external bristles, also with a row of about 15 short posterodorsal bristles (middle legs missing in type). Wings with faintly yellowish ground-colour; distal half slightly darkened; a brown spot over cross-vein. Halteres with base of knob darkened. Winglength 2.5 mm.

Bolivia: Mapiri, Lorenzopata, 8. V. 1903. Type ç in Dresden Museum.

Sciarinae

Pseudosciara superba, sp. n.

 \circ . — Head shining black; face and palpi yellow; antennal scape brownish (flagellum missing). Thorax yellow, except for three confluent blackish-brown stripes on mesonotum which leave the shoulders broadly yellow. Abdomen with segments 1-4 yellow; 5 dark brown; 6-8 brownish-yellow, slender and weakly chitinised; cerci slender, elongate. Legs with all coxae and femora, and fore and mid tibiae yellow; all tarsi and hind tibiae black; hind femora very narrowly darkened at base (not at tip). Claws simple as usual. Wings with yellowish tinge; costal cell dark brown at base; tip of wing rather broadly dark brown, this darkened area sharply defined and extending back almost to tip of R_1 , leaving base of median fork clear. R_1 reaching well

beyond fM; costa produced barely half-way to M_1 ; An absent. Halteres with black knobs. Wing-length 7.5 mm.

Bolivia: Mapiri, S. Carlos, 800 m., 6. i. '03. Type of in Dresden Museum.

The generic name Pseudosciara Schiner, must replace Megalosphys Enderlein. I have examined the types of P. hirtella Schin. and M. luteicoxa End. (the respective genotypes) and find that they are obviously congeneric, the two species being very closely allied. The antennae of Schiner's type were broken, hence his error in counting the number of segments. A further synonym is Chaetomegalosphys Lengersdorf, which was supposed to be distinguished from Megalosphys by the setose branches of the media and cubitus. There is, however, no such distinction, as all three genototypes, as well as all other species of Pseudosciara known to me, have these veins setose, the setae being merely slightly longer in some species than in others. The genus includes numerous species, but is apparently confined to the Neotropical region. P. superba is the largest species of the genus and is strikingly distinct in colouring of body wings and legs from all other Sciarinae known to me.

Pseudosciara bifasciata, sp. n.

J. - Head shining black above; face, palpi, and scape of antennae yellow (fla ellum missing). Eye-bridges well separated in middle, four facets wide at origin but tapering to a point. Thorax yellow; mesonotum with a large dark brown patch in middle; scutellum brownish. Abdomen brown above, sides of tergites and venter yellowish; hypopygium clear yellow, tips of styles black. Styles somewhat spindleshaped, narrowed before the tip which is again slightly widened and provided with the usual tuft of short bristles; a strong curved spine, set on a small tubercle, at mid-length of style beneath. Legs yellow, only tarsi darkened. Claws short, appearing slightly thickened beneath at base. Wings with two light brown bands, one just before middle, including base of cubital fork, the other occupying most of distal third of wing, though the actual tip is slightly clearer. A short line of macrotrichia between R_5 and M_1 mostly on under surface of wing. R_1 much shorter than R and ending well before fM; costa produced distinctly more than halfway to M_1 ; An absent. Halteres yellow. Wing-length 3 mm.

Peru: Mamara (O. Garlepp). Type & in Dresden Museum.

The two dark bands of the wing will at once separate this species from other members of the genus, though it is curious that similar wing-markings occur in some other unrelated South American Sciarinae (Metangela calliptera Rübs.; Zygomma fasciatellum End.).

Pseudosciara coroicoensis, sp. n.

 φ . — Head shining black, face more brownish. Eyebridges 2-3 facets wide. Palpi yellow. Antennae with the first three segments yellow, remainder blackish; flagellar segments slender, fully twice as lond as broad. Thorax uniformly ochreous, somewhat shining; dorsocentral hairs irregularly uniserial, rather strong and black, even those towards front margin. Abdomen with first two segments largely dark; 3-5 each dark brown with a broad yellow basal band; 6-8 wholly yellow, slender and membranous. Legs yellowish, including all coxae; tibiae and tarsi somewhat darkened. Wings clear. R_1 shorter than R and ending well before fM; costa produced two-thirds of the distance from R_5 to M_1 ; An absent. Halteres yellow. Wing-length 3 mm.

Bolivia: Yungas von Coroico, 1800 m., 30.xi.'06. Type in Dresden Museum.

This small species is related to *P. pygmaea* End., *P. trifasciata* Coq. and *P. thoracica* Ldf., differing from the small species is related to *P. pygmaea* End., *P. trifasciata* Coq. and *P. thoracica* Ldf., differing from the first in the black head, from the last two in the uniformly ochreous thorax, and from all in the yellow halteres. Lengers dorf's name *Chaetomegalosphys* applies to this group of species, which are distinguished from typical *Pseudosciara* by their smaller size, largely yellow colouring, and stronger dorsocentral hairs on the thorax.

Mapiria, gen. n.

Differs from all other known genera of Sciarinae in having a complete and strong cross-vein connecting Rs with M_1 ; venation otherwise similar to that of Zygoneura, the median fork being widened near the base, and cubital fork well before base of stem of median fork. Membrane of wings and branches of M and Cu without macrotrichia. Palpilong, with three subequal segments. Head-capsule slightly produced below lower edge of eyes. Spur formula 1. 2. 2. The genus would appear to be a derivative of Zygoneura.

Genotype, the following new species.

Mapiria transversalis, sp. n. (Fig. 2)

9. — Head wholly shining black, including face, which is almost bare. Eye-bridges 3-4 facets wide and in contact; anterior ocellus well removed from eyes, the three ocelli in an almost equilateral triangle. Antennae with scape brownish; first twelve flagellar segments black, last two white, all about twice as long as broad. Thorax wholly brightly shining black, only the postnotum appearing duller through rugosity. No trace of acrostichal hairs; dorsocentral hairs very short, inconspicuous, irregularly uniserial. Mesonotum not regularly rounded in front as in most Sciarinae, but with a conspicuous depression above each shoulder. Abdomen mainly shining black above, second segment wholly yellow, venter mostly light brownish, lateral membrane dull black. Segments 7-8 are largely membranous, but tergite 9 is chitinised, shining, and rather elongate. Legs: front pair yellow; middle pair also mainly yellow, but base of coxae darkened; hind coxae, femora and tarsi black, tibiae more brownish. Spurs rather longer than tibial diameter. Wings mainly smoky-brown, darker in middle; basal cell and a rather large area beyond middle across base of median fork whitish-hyaline: anal lobe also largely clear. Venation: R_1 much shorter than R, but ending only slightly before fM; costa reaching fully five-sixths of the distance from Rs to M_1 ; stem of median fork subequal in length to M_2 and almost in line with it; fork twice as wide at the cross-vein as it is at its narrowest point, r-m only about a quarter as long as basal section of M; cubital fork narrow on basal third; An short. Halteres yellow. Wing-length 5 mm.

Bolivia: Mapiri, Lorenzopata, 9. V. 1903, 1 9. Dresden Museum.

This species has extremely distinctive colouring, and as noted above it also shows several peculiarities of structure in addition to the presence of an adventitious cross-vein on the wing, so that the erection of a distinct genus for it is probably justified.

Zygoneura boliviana, sp. n. (Fig. 3)

♂. — Head shining black. Eye-bridges only about 2 facets wide; median ocellus almost in contact with bridge. Antennae black (last few segments missing), flagellar segments stout, about as long again as broad, with dense pubes-

cence which is rather longer than diameter of segments, and with conspicuous bare necks which are about half as long as the segments. Palpi black, moderately long and slender. Thorax wholly brightly shining black. No acrostichal hairs; dorso-central hairs very few in number and very minute. Abdomen wholly dull black. Hypopygium with no striking features; style over twice as long as broad, with two or three spinules at tip. Legs dark brown, only front coxae and femora lighter. Hind tibia with a rather close-set row of short bristly hairs posterodorsally on distal half. Tibial spurs pale and short, not longer than tibial diameter. Wings hyaline. Microtrichia dense as usual. R_1 shorter than R and ending shortly before fM; costa extending four-fifths of the distance from R_2 to M_1 ; median fork very much widened on basal third, then with sides parallel; Cu_2 reaching hind margin at an acute angle. Halteres black. Wing-length 3 mm.

Bolivia; Yungasweg, 2500-4000 m., 11.x.1906. Type in Dresden Museum.

I refer this species to Zygoneura ou account of te resemblance in the wings and legs to the European Z. sciarina, although the segments of the antennal flagellum have shorter pubescence and shorter necks than in the genotype, these features being in my opinion of less taxonomic importance than the venation and trichiation of the wings. No South American Zygoneura has hitherto been described, but Sciara zygoneura Williston of St. Vincent belongs to this genus; it differs from the new species in having the first abdominal segment vellow. Will is No South American Zygoneura has hitherto been described, but Sciara zygoneura Williston of St. Vincent belongs to this genus; it differs from the new species in having the first abdominal segment yellow. Will iston's Zygoneura sciastica, according to the figure of the venation, is a Sciara rather than a Zygoneura; the type is lost.

A second male from the same locality as the type and collected on the same day apparently represents another allied species, differing from Z. boliviana in having numerous short humeral and dorsocentral hairs and a pair of dorsocentral furrows on the mesonotum.

Zygoneura glaberima, sp. n. (Fig. 4)

d.—Resembles Z. boliviana, differing as follows: Antennae longer, but not quite so stout; flagellar segments fully twice as long as broad, necks relatively shorter. Median ocellus well removed from eye-bridge. Thorax apparently without dorsocentral hairs and with a slight depression on mesonotum behind each shoulder. Abdomen shining black instead of dull, but less polished than thorax. Hypopygium with style swollen, with one strong thorn at tip. Middle femora yellowish at tip; middle tibia all yellowish (hind legs missing in type). Wings with the microtrichia less dense; membrane faintly

clouded in middle; R_1 less than half as long as R. Winglength 4 mm.

Bolivia: Mapiri, 4-5000 m., 14.V.1903. Type & in Dresden Museum.

Eurobradysia longicollis, sp. n. (Fig. 5)

♂ ♀. — Head shining black. Eye-bridges narrow (2-3 facets wide); eyes moderately hairy. Anterior ocellus well removed from eyes. Antennae blackish, flagellar segments in about 1.5 times as long as broad (in & broken). Palpi blackish, of three moderately long and subequal segments. Thorax rather long and narrow, slightly produced and somewhat squarely truncate in middle in front, with a well-marked depression on each shoulder; black, scarcely shining (much less so than the head); margin of scutellum and hypopleura brownish. Dorsocentral hairs short, dark, uniserial; no acrostichals. Abdomen long and narrow, shining brownish, posterior margins of segments rather narrowly dull black; pubescence short and dark. Hypopygium of & as figured; its chief peculiarity is the divided tegminal plate. Ovipositor of 9 long and slender. Legs blackish; coxae appearing pale grey in some lights owing to the dense covering of microscopic pale pubescence, all short, middle and hind pairs widely separated; femora rather thick, with a rather dense covering of short dark hair; tibial spurs dark, about as long as diameter of tibia, formula 1. 2. 2; no obvious bristles even on hind tibia of &; claws small, not longer than the empodium and pulvilli. Wings clear, posterior veins not noticeably darkened; membrane and forks bare; anal area rather obtuse, but not markedly reduced. R_1 less than half (\mathcal{E}) or about half (9) as long as R and ending far before fM; costa reaching about three-fifths of the distance from R_z to M_1 ; stem of median fork rather faint, lower branch nearly continuing direction of stem; r-m nearly as long as basal section of M; stem of cubital fork of moderate legth; Anabsent. Halteres blackish. Length of body & 6, & 7 mm.; wing ♂ 3.5, ♀ 4 mm.

Bolivia: Yungas von Coroico, 18. x. 06, 1800 m., type &. Peru: Chanchamayo, 11. i. 1904, allotype Q. Dresden Museum.

I have used the generic name Eurobradysia for this insect beasuce it is evidently very closely related to the genotype, E. acicularis

Ldf. of Costa Rica but the genus is not at all satisfactorily distinguished. In addition to the type of E. acicularis (in the Hamburg Museum) I have examined four females in the Dresden Museum from Peru, which appear to be the same species, although they differ from the type in having no acrostichal hairs, the type possessing a double row of short ones. All these specimens agree with the species described above in most structural details, as well as in the rather unusual colouring of the abdomen, the chief differences being that in E. acicularis the thorax is somewhat shorter, with less distinct humeral depressions, the coxae are light brownish, and the vein R_1 is not so remarkably short. The Peruvian specimens of E. acicularis differ slightly among themselves in the shape of the anal area of the wing, this being apparently a matter of individual variation.