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NEOTROPICAL CEROPLATINÆ

(DIPTERA, MYCETOPHILIDÆ) *

by

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(Recebido em 14 de Novembro de 1949)

Since our last paper on this subfamily (Rev. Ent., 19 (3): 437-458, 1948) we have gathered, through the kindness of several friends and extensive collecting quite a large collection which has enabled us to enlarge the knowledge of this group in the Neotropical region.

We have used extensively, for the naming of new species, the names of Indian tribes within the Neotropical region. The numbers given for type specimens are those of the collection of the "Departamento de Parasitologia da Faculdade de Higiene". Our measurements are approximate.

We have included the genus *Macrocera* in this subfamily because we feel that there is no reason to maintain it in a separate subfamily as has been done up to the present. Edwards (1934, 1940) when describing *Macrocera nobilis* Edwards, 1934 and *Macrocera plaumanni* Edwards, 1940 placed them in the *Ceroplastinae* but gave no comments on his decision. We concur completely because we feel that the wing

*) Read before the «Sociedade Brasileira de Entomologia» in the meeting held on the 28th. September, 1949

venation, arrangement and shape of the thoracic sclerites and structures of male genitalia are of a true *Ceroplastinae* type. Shaw's (1948) study of the thoracic sclerites, in which he placed *Macrocera* in an intermediate position between *Platyura* Meigen, 1803 and *Paleoplattyura* Meunier, 1899 serves to confirm the position of this genus.

Such being the case, the subfamily *Ceroplastinae*, in which the antennae exhibit a great range of modification, is formed, in the Neotropical region, by the genera given in the following key:

Key for the genera of *Ceroplastinae* in the Neotropical region.

- 1 - Base of postnotum smooth.....2
 - Base of postnotum with a triangular pit-like depression; tibiae with only posterior setae; hind tibia thickened on the apical third or fourth,.....*Heteropterna* Skuse
- 2 - Scape about the size of torus; antenna not filiform: head smooth above the insertion of antennae and occiput..... 3
 - Scape much larger than torus, about twice its volume; antenna filiform; head with lateral ridges from the eye to the nape*Macrocera* Meigen
- 3 - Antenna not pectinate but flattened or roundet 4
 - Antenna strongly pectinate; mouth parts practically absent; palpus much reduced; face very narrow; tibial setulae in regular rows; hind tibia distinctly thickened *Platyroptilca* Westwood
- 4 - Palpus reduced, with one swollen, porrect segment and, sometimes, a small distinct one *Ceroplastus* Bosc
 - Palpus with three or four distinct segments *Platyura* Meigen

Genus *Macrocera* Meigen, 1803.

1803 *Macrocera* Meigen, Illiger's Mag., 2:261; 1804 Meigen, Klass., 1

? 1845 *Macroura* Berendt, Organ. Reste im Bernstein, 1:51 (nom. nud.)

1863 *Geneja* Lioy, Atti dell'Institut. Veneto, 3, 9 (2): 229

1909 *Macrocera* Johannsen, Gen. Inr., 28; Johannsen, Maine Agr. Exp. Sta., Bull. 172:265

1928 *Macrocera* Tannoir, Proc. Lin. Soc. N. S. Wales, 54:588-589

In our collection, we have numerous specimens of one described species (*M. plaumanni*), while the rest of the specimens comprise four new species herein described. We also have four specimens of a clear winged species whose taxonomic status is doubtful, comprising one or possibly two new species. This latter group will not be treated in this publication.

Key for the species of Neotropical *Macrocera* *)

- 1 - Wing infuscated, with or without markings in the middle and at the base; apical half of wing not marked2
 - Wing with markings, chiefly on the apical half5
- 2 - Anal vein reaching the margin of wing3
 - Anal vein very short and far from the wing margin; no macrotrichiae on wing*kaingang* n. sp.
- 3 - Wing devoid of macrotrichiae4
 - Wing with abundant macrotrichiae, at least at tip
plaumanni Edwards, 1940
- 4 - R.1 not swollen; antenna nearly twice as long as body; a dark brown species*unidens* Edwards, 1931
 - R.1 swollen; antenna nearly twice as long as body; a dark brown species*guianasi* n. sp.
- 5 - Anal vein reaching the wing margin6
 - Anal vein not reaching the wing margin; R.1 not swollen; apical dark spot with two hyaline fenestrations; haltere yellow
perpictula Edwards, 1940
- 6 - Apical spot divided or not, with or without hyaline fenestration. . . .7
 - Apical spot not reaching the apex of wing except for two finger like prolongations inclosing vein M.1 and M.2 and another supplementary spot from R.4 to below and frontal to vein R.5; wing colors strongly contrasting.*guarani* n. sp.
- 7 - No markings in anal cell8
 - A dark spot at base and one near apex of anal cell; apical dark spot clearly divided into two spots, the second one nearly reaching Cu.*tamoioi* n. sp.
- 8 - Middle and hind coxæ partially or almost entirely dark brown or blackish; pleurae also brownish or blackish ... ♂ *unica* Fischer, 1939
 ♀ *nobilis* Edwards, 1934
 - Coxæ yellowish or yellow brown9
- 9 - Strong wing markings from below M.2 to anal vein; apical brownish wing markings reach to apex of Cu.1. .*shannoni* Lane, 1946
 - No markings on or along anal vein nor at apex of Cu.1.
concinna Williston, 1896

We have not seen the following species: *nobilis*, *unica*, *concinna*, *unidens* and *perpictula*.

Macrocera kaingang n. sp.

Length of body 5 mm; wing 4,5 mm.

Male - Head: Mouth parts reduced. Palpus blackish; first segment globose, second the largest, third with about the same thickness. Clypeus brown, with black setae. Antenna with scape and torus yellowish; scape one and a half times the volume of torus; flagellar segments blackish; first to fifth

*) The species of the Chilean center of endemism have not been included.

segments of flagellum subequal, second slightly shorter; sixth to tenth segments slender and elongate, ornamented with longer hairs (the remaining flagellar segments missing). Occiput blackish, the two grooves distinct; pilosity sparse.

Thorax: Mesonotum yellowish, nude except for the two rows of dorsocentral setae in a single file from the anterior to the pre-scutellar region; setae also present on the sides and over the root of wing; pre-scutellar depression very small and brownish. Scutellum hemispherical, narrow a few marginal setae. Postnotum also narrow, brown except at base, which is lighter. Pleurae with two dark vertical brown stripes; the first one on anepisternite and katepisternite; the second on posterior portion of pleurotergite; pleurites apparently nude.

Legs: Fore coxa yellowish; the mid one blackish; the hind one infuscated posteriorly. Femora yellowish, the hind one dorsally darker. Tibiae and tarsi the color of femora. Fore basitarsus two thirds the length of corresponding tibia; (tibiae and tarsi of the mid pair lacking); hind tibia ending in two spurs, corresponding basitarsus with three fourths the length of tibia.

Wing clouded, with a darker spot in the middle and another one at base; devoid of macrotrichiae. R.I swollen. Petiole of M. thickened and short, about twice r.-m. Anal vein short and a little more than half the length of Cu. Haltere blackish, the basal half of stem yellowish.

Adomen: Tergite I blackish; apex of tergites II-VII yellowish, the rest blackish; tergites VII-VIII blackish.

Genitalia: Basistyle with the lobes fused; both broader than high. Dististyle (Fig. 1) nearly as long as basistyle and ending in two approximated teeth which are apical. Mesosome reduced and slender. Ninth tergite small, strongly spiculate and with five or six setae on the apical margin. Tenth sternite ? in a sub-triangular plate; strongly spiculate and setose, with two long setae on the upper margin.

Female - Unknown.

Type - Holotype male; registered under number 8373.

Type locality - BRASIL, State of São Paulo, Salesópolis, Boracéia, IX. 1948 (J. Lane col.).

Macrocera plaumanni Edwards, 1940.

1940 *Macrocera plaumanni* Edwards, Rev. Ent., 11: 445.

We have a large series comprising 29 specimens. They show quite a lot of variation on wing. The mesial spot on

medial fork and reaching Rs. and M.3 can be quite distinct or diluted. In a good number of specimens it is absent. The macrotrichiae extend over the distal two-thirds of wing in some specimens, however on the majority of specimens they are restricted to half the distal portion of wing, being quite sparse on cell M.3 in a good number of them.

Genitalia: Basistyles with the lobes fused, both of them broader than high. Dististyle (Fig. 2) with three-fourths the length of basistyle, with two strongly sclerotized teeth inserted at right angles to body of dististyle; one of them pre-apical, the other nearly in the middle. Ninth tergite finger like, large, nearly as high as basistyle. Tenth sternite small, rounded. Mesosome very much reduced.

Distribution of our material - BRASIL, State of Rio de Janeiro, Itatiaia, VIII. 1948 (S. J. Oliveira col.); Itanguai, III. 1947 (Petr Wygodzinsky col.); State of São Paulo, Santo Amaro, V.VII.IX. 1949 (E. Coher col.); Cantareira, X. 1945 (J. Lane col.); Embú, IX. 1949 (F. Lane col.); Boracéia, VI. 1948 (J. Lane col.), VII. 1949 (L. Travassos col.); Campos do Jordão, VIII. 1949 (J. Lane col.); Juquiá, VII. 1949 (J. Lane col.); State of Goiás, Corumbá, XI. 1945 (M. P. Barretto col.).

Macrocera guianasi n. sp.

Length of antenna 2,2 to 2,5 mm.; body 4,5 to 5 mm.; wing 4,2 to 4,6 mm.

Female - Body blackish, including head and abdomen.

Head: Mouth parts reduced. Clypeus rounded, with semi-erect setae. Palpus blackish; first segment globose, second the longest and thickest, third about two thirds the length of second, the fourth narrower than the second and nearly its length. Antenna with scape about one and a half times the volume of torus, darker than torus, both brown, as well as segments of flagellum which distally appear to be darker due to the greater number of blackish setae; first flagellar segment longer than the others which are sub-equal. Ocellar prominence large, the three ocelli equal in size. Frons depressed as well as the median portion of occiput. Occiput with short, black, marginal setae. Eyes pilose.

Thorax: Mesonotum shining; acrostichal setae absent, the dorsocentrals very short and in a single row; supra alar and lateral setae longer; pre-scutellar depression very small. Postnotum nude. Pleurae with the anepisternite about half the size of katepisternite; covered with short blackish pilosity; other pleurites nude; episternite developed.

Legs: Coxae blackish. Trochanters yellowish. Fore femur yellowish, the others slightly darker. Fore tibiae flattened distally as in most other species of this genus. Basitarsus slightly more than half as long as corresponding tibia. On hind tibia the corresponding basitarsus is nearly the length of tibia. Setae on legs very small, claws hooked.

Wing clouded; without marking. Macrotrichiae absent. Veins reaching the margin of wing except Cu.2. R.1 thickened. R.4 large, distinct. Petiole of M. about three times the length of r.-m. Haltere with whitish stem and blackish knob.

Abdomen apparently slightly lighter at apex of tergites, the segments fuscous. Cerci nearly rounded.

Male - Unknown.

Types - Holotype female; paratype female; registered under number 8374 and 8375.

Type locality - BRASIL, State of São Paulo. Holotype from Boracéia, XI. 1947; (Rabello and Travassos col.) paratype from Campos do Jordão, VIII. 1949 (J. Lane col.).

Macrocera guarani n. sp.

Length of antenna 15 mm; body 5,5 mm; wing 6 mm.

Male - Head: Mouth parts reduced. Clypeus very short, sparsely setose. Palpus yellowish, the first segment reduced, the second the longest, and thickest, the third about two thirds the length of second, the fourth as long as third and narrower. Antenna yellowish; scape more than twice the length of torus, nearly sub-quadrate, with a groove which is longitudinal and anterior; torus sub-hemispherical; flagellum more than four times the length of body; the first segment one and a half times the length of mesonotum, the second one and a half times the length of the first, the third segment and others have joints difficult to see up to the last segment which is slightly thicker, curved and with longer setae. Occiput with ocellar tubercle blackish, the grooves darker, the rest shining yellowish.

Thorax: Mesonotum shining-yellow, the posterior margin blackish; ornamented, with the dorso-central setae in a single row, with longer setae laterally, and over the wing root. Scutellum yellowish, the margins blackish. Postnotum yellowish except for the lateral and posterior blackish marking. Pleurae yellowish except most of the katepisternite and the pleurotergite posteriorly.

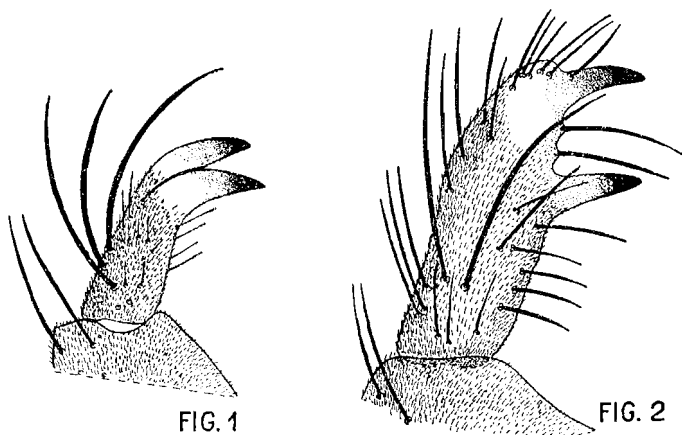


FIG. 1

FIG. 2

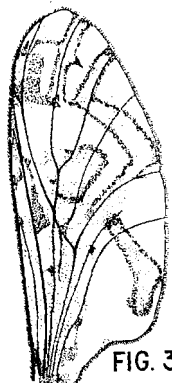


FIG. 3

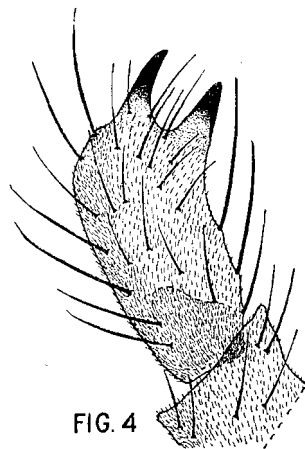


FIG. 4

- Fig. 1 - *Macrocera kaingangi* n. sp. Dististyle
 Fig. 2 - *Macrocera plaumanni* Edwards, 1940. Dististyle.
 Fig. 3 - *Macrocera guarani* n. sp. Diagrammatic drawing of wing.
 Fig. 4 - *Macrocera guarani* n. sp. Dististyle.

Wing: Yellowish; the veins as in figure 3. Macrotrichiae reduced to a few at apex of wing beyond the fork of R.4 and R.5. R.1 Swollen Petiole of *M.* elongate and about three and four times the length of r.-m. Haltere with yellowish stem, the knob blackish.

Legs: Coxae yellowish, the mid-one darker; the hind one with a darker spot distally. Femora yellowish as well as tibiae and tarsi.

Abdomen yellowish, the apex of segments II-VIII with a black band. Sternites yellowish.

Genitalia: Basistyle with the lobes fused, both broader than long. Dististyle (Fig. 4) four-fifths the length of basistyle, broad; two teeth at apex, internally, a notch like structure between them; the teeth quite removed one from the other. Mesosome very small, weakly sclerotized, slender. Ninth tergites finger like, broad, about two thirds the length of basistyle; spiculate and setose at apex. Tenth sternites ? ovate, broad, spiculate.

Female - Similar to the male but having much broader apical bands on the tergites.

Types - Holotype male; allotype female; paratypes four males. Registered under numbers 8376 to 8379.

Type locality - Holotype from BRASIL, State of S. Paulo, Boracéa, VII.1949 (Lane and Coher col.); allotype from Campos do Jordão, VIII.1949 (J. Lane col.); paratypes from State of S. Paulo, Cantareira, XI.1946 (M. Carrera col.); Boracéa, II.1949 (Travassos and Rabello col.); State of Goiás, Corumbá, XI.1945 (M. P. Barretto col.); State of Paraná, Curitiba XII.1937 (Claretianos col.).

Macrocera tamoyoi n. sp.

Length of antenna 17 mm; body 5 mm; wing 6 mm.

Male - Head yellowish. Mouth parts reduced. Palpus yellowish, slightly darker at base; first three segments apparently about the same size, the fourth slightly longer; second thickest; fourth the most slender. Antenna with scape more than three times the volume of the globose torus; torus not as wide as scapes; flagellum very long, yellowish at base, darker apically; first flagellar segment about one and half times the length of mesonotum; second about as long as body; other segments difficult to separate. Occiput light yellow, the ocellar prominence black and protuberant; groves deep.

Thorax: Mesonotum light yellow; dorsocentral setae very few and in a single row; lateral setae and those over the root of wing more abundant and darker; remainder of mesonotum nude. Scutellum light yellow, the margin whitish. Postnotum nude and whitish yellow. Pleurae whitish; the anepisternite and katepisternite brownish; about four long, slender setae present on anepisternite other pleurites bare.

Wing with veins and dark spots as in figure 5. Macro-

trichiae present only at tip of wing; R.1 swollen. Haltere with whitish stem and blackish knob.

Legs: Fore coxae yellowish, the mid and hind ones whitish but slightly fuscous at apex. Femora yellowish, the hind one slightly darkened at apex. Tibiae and tarsi darker.

Abdomen: Tergites yellowish with narrow posterior bands. Sternites yellowish.

Genitalia: Basistyle with lobes fused basally but separated apically. Dististyle (Fig. 6) slightly more than half the length of basistyle, broad, flattened, the two apical teeth strongly sclerotized. Ninth tergites broad, finger like, about one and a half times the greatest width. Tenth sternites ? rounded.

Female - Similar to male except that the macrotrichiae are much more extensive and reach cell M.3. The abdominal markings are also much broader, some of the segments appearing almost black.

Types - Holotype male; allotype female; paratypes four males and seven females. Registered under numbers 8380 to 8386.

Type locality - BRASIL, State of S. Paulo, Boracéa, VIII.1949 (J. Lane and E. Coher col.) for holotype, allotype, and four paratypes; four additional specimens from Boracéa, IV,VIII,IX.1948 (M. P. Barretto and L. Travassos col.); one specimen from Juquiá, IX.1945 (J. Lane col.); one from Itanhaem, VIII.1949 (E. Rabello col.) and one from the State of Rio de Janeiro, Itatiaia, IV.1945 (M. P. Barretto col.).

Ceroplatus (Ceroplatus) townsendi Lane, 1948.

1948 *Ceroplatus (Ceroplatus) townsendi* Lane, Rev. Ent., 19(3): 438.

Three males from BRASIL, State of Santa Catarina, Nova Teutonia, III.1940 (F. Plaumann col.).

Ceroplatus (Ceroplatus) caribai n. sp.

Length of body 8 mm; wing 4,8 mm.

Male - Head: Mouth parts reduced. Palpus with the terminal segment porrect, small, yellowish, covered with brown pile. Clypeus and front yellowish. Antenna with the scape and torus dark-brown; flagellum brown, the segments very broad, strongly flattened. Occiput with yellowish integument and two brown spots, the pilosity brown, two large ocelli inserted on a black tubercle.

Thorax: Pronotal lobe brown with yellowish portions, the pilosity brown. Mesonotum yellowish except the following brown pattern: two stripes on the anterior portion uniting on the pre-scutellar region and forming a V; between these stripes an indistinct longitudinal brown stripe; the sides with an anterior spot which reaches the root of wing and another one which, from the root of wing, reaches the posterior margin; covering homogeneous and formed by short brown pilosity which, on the sides is long. Scutellum basally yellowish, the rest brown; covering as in mesonotum. Postnotum nude, light brown. Pleurae with spiracular sclerite yellowish, anepisternite brown with pilose upper portion; sternopleura with the base yellowish, covering brown; pteropleurite with a brown spot; pleurotergite brown except for an extensive yellowish portion bearing dense long setae.

Legs: Coxae yellowish except for anterior distal spot on the mid one and a large external one on the hind one. Trochanters with black dots. Femora yellowish, except base of mid one and a large basal external spot which nearly reaches the whole posterior half. Tibiae with rows of setulae; anterior tibia with one, the other with two apical spurs, the internal one less than half as long as the external. Tarsi with apical yellowish narrow rings.

Wing with three darker spots which reach the costal vein; the first of these goes beyond the radial sector; the second is median and reaches a portion of M.; the third spot is apical and reaches cell R.5; there is a small additional spot at base of the radial sector. M., Cu. and An. not reaching the margin of wing. Haltere with yellowish stem and brown knob.

Abdomen dark-brown; segments I-IV with a longitudinal yellowish line on tergites; yellowish spots on the posterolateral margins from II to apex; II basally yellowish. Sternites yellowish with small brown baso-lateral spots.

Genitalia yellowish. (Fig. 7). Basistyle longer than broad, fused. Dististyle with two arms; the external two and a half times the length of the internal arm, slender, sparsely setose, a nude portion at apex; internal arm about two thirds the length of the basistyle; more than apical half covered with short, thick, differentiated setae. Tenth sternite ? as in figure.

Female - Unknown.

Type - Holotype male. To be returned to the U.S.N.M.

Type locality - PANAMA, Canal Zone, Barro Colorado Island, VIII.1923 (R. C. Shannon col.).

Observations - The above described species can be separated from *C. fiebrigi* Edwards, 1934, among other differential characters, by the coloration of legs and wing; it is separated from *C. mexicanus* Lane, 1948 by coloration of head, mesonotum and legs.

Ceroplatus (Cerotelion) boracensis n. sp.

Length of body 10 mm; wing 7,8 mm.

Female - Head blackish fuscous. Palpus with the distal segment blackish, short and thick. Mouth parts as long as palpus, brown. Clypeus pilose. Antenna short, about as long as two thirds the length of mesonotum; flagellum rounded; scape, torus and nearly all the basal portion of the first flagellar segment yellowish, the rest of this segment and the remaining ones blackish-brown. Three ocelli which are equally separated one from the other and from the ocular margin, the mid one smaller. Occiput with blackish hairs.

Thorax: Mesonotum yellowish, ornamented with small black acrostichal and dorsocentral and lateral setae, the rest nude. Scutellum yellowish except for a small brown spot on the middle of the hind margin; the margin covered with short, blackish setae. Postnotum yellowish. Pleurae also yellowish except anepisternite, the upper portion of katapisternite and pleurotergite which are dark brown; hypopleurite also with a dark upper portion.

Legs: Coxae yellowish. Trochanters yellowish with blackish internal spots. Tibiae and tarsi darkened. Fore tibia with one, the others with two spurs, the internal ones a little longer than the externals.

Wing blackish at apex, this color advancing until it reaches a small portion of the costal cell; anterior portion of wing yellowish, the rest hialine; veins nearly reaching the margin of wing. Haltere yellowish.

Abdomen: Tergites brown with apical yellowish bands. Sternites similarly marked.

Male - Unknown.

Type - Holotype female; registered under number 7591

Type locality - BRASIL, State of São Paulo, Salsópolis, Boracéia, IX. 1948 (M. P. Barretto col.).

Observations - This is the first time that a species belonging to this subgenus is found in the Neotropical region. *Ceroplatus vespiformis* Enderlein, 1911, belongs to the genus *Platyura*.

Ceroplatus (Neoceroplatus) paicoenai n. sp.

Length of body 7 mm; wing 5 mm.

Male - Head: Mouth parts very short, yellowish. Palpus with the free segment elongate, slender, half as long as the length of head, porrect, rigid, whitish but covered with long setae on the upper margin. Clypeus small, redish. Frons narrow. Antenna with scape and torus subequal, dark brown, covered with blackish pilosity; flagellum with the segments united, strongly flattened, broad, blackish, a seta at upper margin of each segment; last segment with a small whitish apical knob. Ocelli inserted on a black prominence, the median one small, all at equal distances from one another and from the ocular margin. Occiput blackish-brown, pruinose, with blackish setae.

Thorax: Pronotal lobes dark-brown. Mesonotum dark-brown, evenly covered with dense, longish pilosity, the setae with silvery sheen. Scutellum with the color and covering of thorax, the marginal setae longer. Postnotum nude, brown, with yellow marks. Pleurae: Anterior spiracle with dense, black setae anteriorly and posteriorly, the sclerite yellowish; anepisternite blackish with sparse setae on the upper angle; katapisternite yellowish on top and brownish below; pteropleurite the color of katapisternite; pleurotergite large, protuberant, blackish, posteriorly yellowish in the middle, densely covered with long pilosity.

Legs: Fore coxa yellowish, a blackish spot on the side, another one below; mid coxa with a pre-apical spot and an extensive apical one which occupies nearly its half; hind coxa with yellowish base, the rest blackish. Fore femur yellowish, the mid one blackish at base. Hind femur blackish with a yellowish spot which involves all the apical half. Tibiae yellowish, the anterior one with a single spur, the others with two, the internal one more than twice the length of the external one; tibiae with rows of blackish setulae. Fore basitarsus nearly one and half times the length of corresponding tibia. Tarsi with apical yellowish rings.

Wing with a dark spot at base, another one in the middle and the apical third blackish except for a small yellowish spot; homogeneously covered with macrotrichiae. Subcostal vein reaching the costal one, diluted. R.4 inserted into R.1. R.-m, indistinct. The branches of M., Cu., and An. not reaching margin. Haltere with whitish stem and blackish knob.

Abdomen with blackish tergites except for yellowish lateral spots at apex of segment II to VII.

Genitalia small and blackish. (Fig. 8). Basistyle with

the lobes fused, about two thirds as broad as long. Dististyle divided into two arms; the outer arm curved, about one fifth shorter than the basistyle, setose and ending in two long differentiated setae; inner arm divided, the longest portion glabrous and nearly as long as the outer arm, the shortest one ornamented with setae as in figure. Tenth sternite ? broadly notched in the middle. Ninth tergites with lobes large and strongly spiculate and setose.

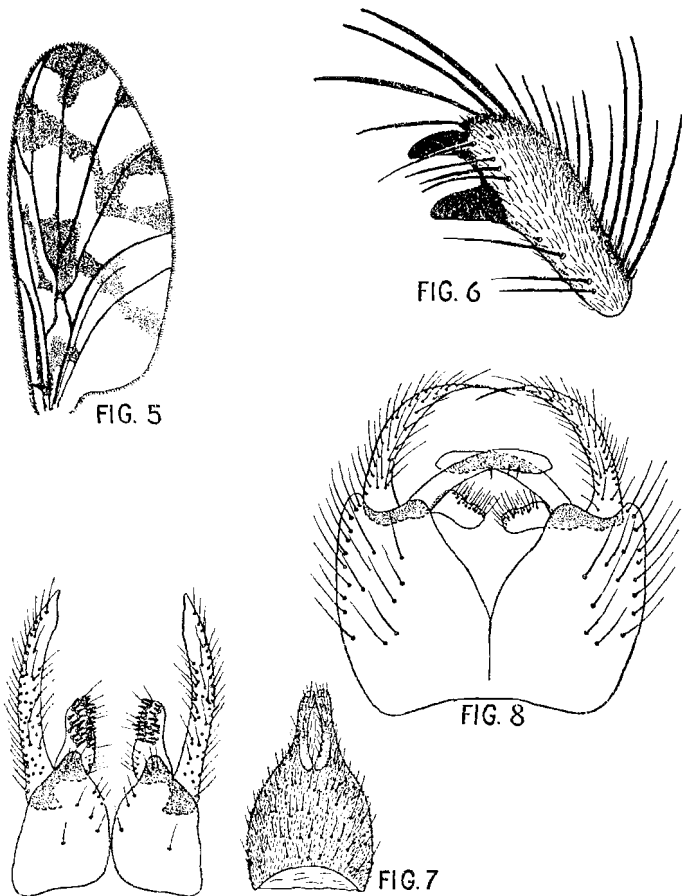


Fig. 5 - *Macrocera tamoyoi* n. sp. Diagrammatic drawing of wing.

Fig. 6 - *Macrocera tamoyoi* n. sp. Dististyle.

Fig. 7 - *Ceroplatus (Ceroplatus) caribai* n. sp. Basistyle, dististyle and tenth sternite.

Fig. 8 - *Platyura pacoenai* n. sp. Basistyle and dististyle.

Female - Unknown.

Type - Holotype male; registered under number 8148.

Type locality - BRASIL, State of S. Paulo, Salesópolis, Boracéia, VI.1948 (J. Lane col.).

Observations - The above species can be separated from *C. minimax* Edwards, 1934 by details of coloration on pleurae, legs and wing.

Subgenus *Placoceratias* Enderlein, 1911.

1911 *Placoceratias* Enderlein, Stet. Ent. Zeitg., 72: 149.

We have been unable to identify *Ceroplatus (Placoceratias) fuscithorax* Enderlein, 1911. The other species of this subgenus are represented in our collection. Two of them (*Ceroplatus [P.] uracui* n. sp. here described and *C. [P.] bimaculipennis* Enderlein, 1911) have the wing distinctly spotted. The other three species (*C. [P.] longimanus*, *barrettoi* and *imitans*) have unmarked wings. In this last group, the species are very similar and we now believe that they may prove, in the future, to be only subspecies. Such a course can be decided upon only when larger series are examined.

Ceroplatus (Placoceratias) longimanus Williston, 1896

1896 *Ceroplatus longimanus* Williston, Trans. Ent. Soc. London, 23: 18, fig. 12.

This species was described from a single male captured in the island of St. Vincent (B. W. I.). In the series which we have studied there is a female which has been elected allotype of this species. We have taken this opportunity to describe it.

Female - Head: Mouth parts and free segment of palpus, as well as frons, yellowish. Antenna with scape and torus yellowish; flagellum flattened, broad, dark, in the center a little lighter; last segment minute; length of antenna smaller than that of mesonotum. Occiput dark-brown. Ocellar prominence blackish. Pilosity short and blackish.

Thorax: Mesonotum light brown, with two darker median stripes, diagonally placed and united in the prescutellar region; two indistinct brown, diluted spots on the sides of stripe but reaching the root of wing; sides whitish from the front up to the root of wing; covering formed by evenly distributed short blackish setae. Scutellum brown on the middle and yellowish on the sides. Postnotum brown. Pleurae yellowish except for portions of the anepisternite, katepisternite and pleurotergite which have brown spots.

Legs: Coxae yellowish; hind one with a brown spot over the distal external half. Femora yellowish except for small spots at base of mid and hind ones but larger on the hind one. Tibiae and tarsi dark. Spurs with the external mid and hind ones about two thirds and a half the length of the internal one. Fore basitarsus about two and a half times the length of corresponding tibia.

Wing hialine. Haltere with whitish base and blackish stem.

Abdomen depressed. Tergites I-VI with large basolateral yellowish spots, the rest blackish; on I and II the spots unite mesially; covered with short, blackish pilosity. Sternites yellowish, basally marked with brown in some of the segments.

Type - Allotype female. To be returned to the U. S. N. M.

Distribution - Allotype TRINIDAD (B. W. I.), VI (A. Busck col.); 2 males PANAMA, C. Z., Ft. Sherman. IX.1923 (Dyar and Shannon col.); 1 male Fort Davis, X; 2 males Close's Cano Saddle, V.1925 (R. C. Shannon col.); 1 male Barro Colorado, XI.1941 (Zetek col.); 1 male PERU, Rio Perene, Sta. Margaritha, IX.1939 (Muczinsky-Goddard col.).

Ceroplatus (Placoceratias) barretoii Lane, 1948.

1948 *Ceroplatus (Placoceratias) barretoii* Lane, Rev. Ent., 19(3):440.

Three males from BRASIL, State of Minas Gerais, Lasserance, I.1939 (Martins, Lopes and Mangabeira cal.).

Ceroplatus (Placoceratias) uaracui n. sp.

Length of body 8 mm; wing 5 mm.

Male - Head: Mouth parts and free segment of palpus yellowish; the segment which is free, short and broad. Frons very narrow. Ocellar prominence black; ocelli not far from eye margin; upper ones large, the lower ones quite smaller. Antenna with scape and torus reddish, the flagellar segments flattened; length of flagellum slightly longer than that of mesonotum; blackish but slightly lighter in the middle. Occiput blackish with white pruinosity and covered with short black setae.

Thorax: Mesonotum brown, with a blackish pattern formed by two stripes which fuse on prescutellar region and two other stripes on humeral region to scutellum; anterior margin whitish; disk evenly covered with short blackish setae. Scutellum yellowish, brownish in the middle. Postnotum yellowish, darker in the middle. Pleurae yellowish, except anepisternite, katapisternite and pleurotergite which have large brown

spots.

Legs: Coxae yellowish, the mid and hind ones with large brown spots on external distal half. Fore femur yellowish, hind and mid one with extensive basal brown spots. Tibiae and tarsi dark. Fore basitarsus nearly twice the length of brown spots. Tibiae and tarsi dark. Fore basitarsus nearly twice the length of corresponding tibia.

Wing: With a smoky mark straddling anterior mid portion and, from costa, reaching fork of M.; a second mark present on distal portion. Haltere with whitish stem and blackish knob.

Abdomen with first four tergites and less than basal half of V yellowish, the rest of V and VI to apex blackish.

Genitalia: (Fig. 9). Basistyle about as long as dististyle, subquadrate; internal portion of basistyle with a protuberance bearing longer setae. Dististyle thickened and rounded apically, with spicules and short setae; internal secondary arm ending in four blunt, strong, teeth; a seta on the upper margin and two on the inner basal portion.

Female - Unknown.

Type - Holotype male; registered under number 8155.

Type locality - BRASIL, State of São Paulo, Salesópolis, Boracéia, VI.1948 (J. Lane col.).

Genus *Platyura* Meigen, 1804.

1804 *Platyura* Meigen, III. Mag., 2: 264.

1857 *Orfelia* A. Costa, II. Giambatt. Vico, 2: 488.

1909 *Platyura* Johannsen, Gen. Ins., 93: 20 - type *fasciata* (designated by Zetterstedt).

Edwards divided this genus into numerous subgenera based chiefly on the arrangement of the setulae on tibia, wing venation and chaetotaxy. We believe that the arrangement of setulae on tibiae is subject to variation and can not be taken into great consideration specially for subgeneric concepts. There is also quite a variation on the veins of wings and we do not trust them to a great extent. We are then left with chaetotaxy which we believe is much more stable. We are in agreement with Edwards that the male genitalic structures are of great value. For the above given reasons we have decided to consider *Rutylapa* as a synonym of *Ralytupa* and *Apyrtula* as a synonym of *Tylparua*. Below we give a key for the genera based, whenever possible, on chaetotaxical characters.

Key for the subgenera of *Platyura*.

- 1 - Pleurotergites hairy or pilose 2
 - Pleurotergites nude 5
 2 - Anepisternites pilose on top or ornamented with fine hairs 3
 - Anepisternites nude; postnotum with fine hairs *Lutarpya*
 3 - Mesonotum uniformly setulose 4
 - Mesonotum with glabrous areas; postnotum nude *Monocentrotu*
 4 - Hypopleurite nude *Proceroplatus*
 - Hypopleurite with fine hairs *Lapyruta*
 5 - With anterior or posterior spiracular hairs 6
 - Without spiracular hairs 8
 6 - Mesonotum niformly setulose 7
 - Mesonotum with nude areas; anepisternite, katepisternite, pteuropleurite, pleurotergite and hypopleurite nude *Neoplasyura*
 7 - With hairs in front as well as behind spiracle *Taulyrpa*
 - With hairs only behind the anterior spiracle *Ralytupa*
 8 - Mesonotum with nude areas 9
 - Mesonotum uniformly setulose 13
 9 - Branches of M. and Cu. setulose. 10
 - Branches of M. and Cu. bare *Micrapemon*
 10- All veins reaching wing margin 11
 - Anal vein abbreviated 12
 11- Hypopleurite hairy *Pyrtavula*
 - Hypopleurite nude *Urytatpa*
 12- Postnotum nude *Pyrtavula*
 - Postnotum with a transversal row of setae *Ryptavula*
 13- Branches of M. and Cu. bare 14
 - Branches of M. and Cu. setulose; pleural sclerites nude *Isoneuromyia*
 14- Postnotum nude or nearly nude 16
 - Postnotum with distinct setae 15
 15- An. and Sc. absent *Laurypya*
 - An. moderately long; Sc. distinct *Platyura*
 16- An. reaching margin 17
 - An. not reaching margin 18
 17- With black hair in front of antenna *Xenoplasyura*
 - Without such hairs *Truplaya*
 18- An. distinct 19
 - An. indistinct *Tylparua*
 19- M.2 interrupted at base *Lyprauta*
 - M.2 complete *Plautyura*

Platyura (Isoneuromyia) griseofasciata Edwards, 1933

1933 *Platyura (Isoneuromyia) griseofasciata* Edwards, Rev. Ent., 3: 304.

We have a male from BRASIL, State of Rio de Janeiro, D. F., Grajahú, III.1937 (H. S. Lopes col.). Our specimen shows the following differences from the original description: front coxa blackish, mid and hind ones very dark brown. Front

and mid femora black at base and apex, also on dorsal surface, the rest yellowish. Hind femur, tibia and tarsi blackish. Wing much darker.

Platyura (Isoneuromyia) borinqueni n. sp.

Length of body 7 mm; wing 5 mm.

Male - Head: Mouth parts and palpus yellowish. Clypeus and frons yellowish until ocellar prominence which is blackish, lateral ocelli quite larger than the mid one which is very small. Antenna with yellowish scape and torus; first to third flagellar segments yellowish at base, the rest as well as other segments blackish, somewhat flattened; length of flagellum quite longer than that of mesonotum. Occiput yellowish, covered with brown pilosity.

Thorax: Mesonotum yellowish with a pattern formed by two dark brown stripes, diagonally placed and forming a broad mark in front and a small one on the prescutellar region, margins from humeral region to scutellum with a broad lateral dark brown stripe; anterior angles of mesonotum whitish in a very narrow stripe on margins; covering formed by even short, brown setae; long ones on sides and over root of wing. Scutellum yellowish, brown in the center. Postnotum brown, lighter on the sides. Pleurae yellowish.

Legs: Coxae yellowish, femora yellowish, except the hind one which is brown on the basal half. Tibiae and tarsi dark. Fore basitarsus about one fourth longer than corresponding tibia.

Wing hyaline. Haltere with whitish stem and blackish knob.

Abdomen elongate, dark-brown, tergites with broad apical whitish rings.

Genitalia (fig. 10). Basistyle slightly more than two thirds as long as broad, sparsely setose. Dististyle simple, slightly longer than basistyle uniformly covered with long setae. Mesosome nearly hyaline, the upper portion with two long, curved, slender horns. Tenth sternites ? as in the figure.

Female - Unknown.

Type - Holotype male. To be returned to the U. S. N. M.

Type locality - COSTA RICA, San José, V: 15.VII (H. Schmidt col.).

Observations - This species can be separated because it has apical abdominal bands instead of the basal ones found in the other species.

Platyura (Isoneuromyia) xanthocera Edwards, 1931.

1931 *Platyura (Isoneuromyia) xanthocera* Edwards, An. & Mag N. H., 7 (10): 256

1948 Lane, Rev. Ent., 19: 457.

We have a female from PANAMA, Trinidad rv., 20 III.1912 (A. Busck col.).

Platyura (Isoneuromyia) lopesi n. sp.

Length of body 7.5 mm; wing 5 mm.

Female - Head: Mouth parts reduced, yellowish. Palpus with long yellowish segments. Clypeus and frons yellowish, the clypeus with short, sparse, dark setae. Antenna with scape and torus yellowish; flagellum brown; segments slightly broader at apex, somewhat flattened but rounded. Ocelli three, the median one small; all of them placed in nearly an horizontal line. Region in front of ocelli dark but lighter towards antennae until it becomes whitish; densely covered with whitish pruinosity, behind ocelli the occiput is blackish and densely covered with black pile; mentum covered with white pruinosity and nape with a yellowish spot.

Thorax: Pronotal lobes with white pruinosity and blackish setae. Mesonotum blackish in the center from the anterior portion up to scutellum, the sides yellowish, this color advancing anteriorly on the transversal suture; covering homogeneous and formed by blackish pilosity which is longer at root of wing. Scutellum brown, the margins yellowish, covering as in mesonotum. Postnotum strongly pointed; lower portion blackish, the upper one with dense silvery pruinosity. Pleurae with spiracular sclerite yellowish, the other sclerites blackish with silvery pruinosity except the pleurotergite which is yellowish and covered above with silvery pruinosity but is blackish below.

Wing yellowish, the apical portion blackish. Veins M.2, M.3 and An. not reaching apex of wing. Haltere yellowish.

Legs: Coxae yellow-red. Trochanters dark brown. Femora yellowish except the hind one which is yellowish in the middle and brown at base and apex. Hind tibia with small dorsal internal, external and ventral setae. Spurs, one on front tibia, two on the others, the external one half as long as the internal.

Abdomen with broad basal bands on tergites II-IV, the

rest as well as hairs, blackish. Last tergite completely yellowish.

Male - Unknown.

Types - Holotype female; registered under number 8158.

Type locality - BRASIL, State of Rio de Janeiro, D. F. Grajahú, VIII.1939 (H. S. Lopes col.).

Observations - This species is related to *P. sesiiformis* Edwards, 1940 from which it can be separated chiefly by the yellowish haltere, color of head and its appendages, amount of silvery pruinosity on pleurae and leg marking and vein M.1 which is straight.

Platyura (Neoplatyura) ignobilis Williston, 1896.

1896 *Platyura ignobilis* Williston, Trans. Ent. Soc. London, 257, fig. 9

1902 *Kerteszi*, Cat. Dipt., 1: 52.

1909 *Johannsen*, Gen. Ins., 92: 23; 1909 *Johannsen*, Maine Agr. Exp. Sta., 172: 257.

Through the kindness of Dr. Paul Freeman of the British Museum, we were able to compare some of our specimens with the type at the British Museum. He found out that they agree. We have noted that the coloration of the mesonotum changes from dark brown to yellowish. The dark tone of wing coloration can also be strong in some specimens and very light in others. We take this opportunity to describe and illustrate the male genitalia.

Genitalia: (Fig. 11) Basistyle with the lobes shallow and markedly broader than long. Dististyle divided into four filaments: the external one about one and a half times the length of basistyle, strongly setose and with differentiated setae; internal filament slightly shorter than the external one, curved, expanded and sclerotized at apex; the two other filaments shorter than the internal one, similar, curved and with four or five setae at apex which is expanded, one of the filaments longer than the other. Mesosome longer than basistyle and dististyle, with differentiated structures at apex. Ninth tergites with the lobes small and sub-triangular, setose and spiculose.

Distribution - PANAMA, Punta Bruja (Zetek col.); BRASIL, State of S. Paulo, Cantareira, VIII.IX.XXI (J. Lane and M. P. Barreto col.); Jaraguá, VIII.1945 (J. Lane col.); Batêa, XI.1940 (J. Lane col.); Boracêa, XI.1947 (J. Lane col.); Campos do Jordão, XII.1945 (J. Lane col.); State of Rio de Janeiro, Itatiaia, VIII.1946 (M. P. Barretto col.).

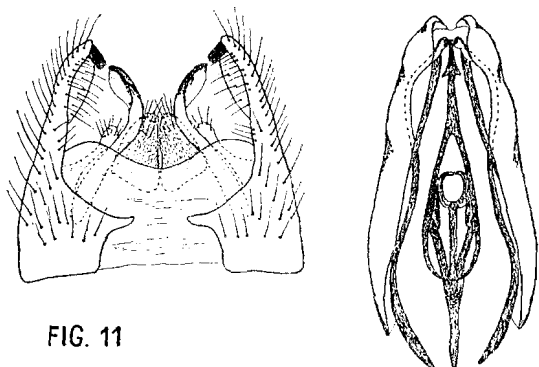
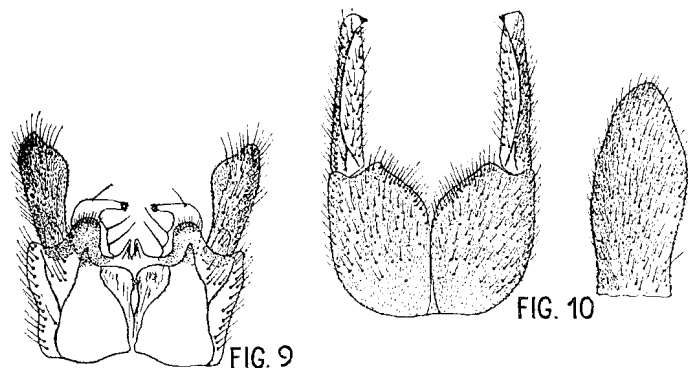


Fig. 9 - *Platyura (Placoceratias) uaracui* n. sp. Basistyle and dististyle.
 Fig. 10 - *Platyura (Isoneuromyia) borinqueni* n. sp. Basistyle, dististyle and tenth sternite?
 Fig. 11 - *Platyura (Neoplatyura) ignobilis* Williston, 1896. Basistyle, dististyle and mesosome.

Platyura (Neoplatyura) regularis Edwards, 1934.

1934 *Platyura (Neoplatyura) regularis* Edwards, Rev. Ent., 4: 355.

We have five males and two females. One of the males has been elected the allotype of this species. The mesonotal markings are formed by three stripes which, in the female are fused posteriorly. Yellow spot on abdominal tergite VII is absent in the males. There is also a large amount of variation in the size of our specimens, the largest being 7 mm.

long and the smallest 4,5 mm. Below we give some of the male selected as the allotype.

Male - Mesonotum with three bands which are darker than in the female, quite separated anteriorly but fused posteriorly. Mid tibia with a long spur and the other one about a fourth its length; hind tibia as in female. Abdomen blackish, base of tergites I, III and IV and sides of V yellowish but not as extensively marked as in the female.

Genitalia: (Fig. 12). Basistyles fused. Dististyle divided in two lobes, the first one light yellowish, nearly as long as the basistyle, spiculose and setose; internal lobe horn-shaped. Mesosome elongate and narrow.

Type - Allotype male; registered under number 7551.

Locality of allotype - BRASIL, State of S. Paulo, Campos do Jordão, XII.1945 (J. Lane col.).

Platyura (Pyrtaula) alticola Lane, 1948.

1948 *Platyura (Pyrtaula) alticola* Lane, Rev. Ent., 19 (3): 450.

Four males from Boracéia, VI.1949, IX.1947 and VII. (Rabello, Barretto and J. Lane col.).

Platyura (Pyrtaula) paraguayana Edwards, 1934.

1934 *Platyura (Pyrtaula) paraguayana* Edwards, Rev. Ent., 4 (3): 356.

Three females from BRASIL, State of Goiás, Corumbá, XI.1945 (M. P. Barretto col.). They are quite smaller than Edward's specimens but otherwise agree with his description. Wing length 2,8 mm.

Platyura (Xenoplatyura) tapuii n. sp.

Length of body 5 mm; wing 4,2 mm.

Male - Head: Mouth parts, palpus, clypeus and frons yellowish with a brown tinge; ocellar prominence blackish, mid ocellus smaller than the others. Antenna with yellowish scape and torus, also base of first flagellar segment, the rest blackish; flagellum nearly cylindrical, slightly longer than mesonotum. Occiput yellowish, covered with brown pilosity and a transversal row of setae behind ocellar prominence, they reach from eye to eye and are long.

Thorax: Mesonotum yellowish with faint light brown median and broad stripes, the margins whitish. Scutellum yellowish as well as postnotum and pleurae.

Legs: Coxae and femora yellowish. Tibiae and tarsi slightly darker. Fore basitarsus slightly longer than corresponding tibia.

Wing with a small dark spot near apex and which from the costal vein reach beyond Rs. Another small spot at apex of Cu.1. Haltere yellowish.

Abdomen with tergites I-IV yellowish, the others apparently, progressively darker; hairs brown.

Genitalia: (Fig. 13). Basistyle slightly longer than broad, with short setae and spicules. Dististyle divided into four filaments; the longest about as long as basistyle, glabrous, curved; the second shorter, broad, sparsely setose; the third sparsely setose and with differentiated setae at apex; the fourth slender and glabrous except for two or three long, pointed setae at apex. Mesosome longer than basistyle and dististyle, with differentiated structures at apex. Tenth sternite ? very large, sub-quadrate.

Female - Unknown.

Type - Holotype male; registered under number 8164.

Type locality - BRASIL, State of Minas Gerais, Lassance, I.1939 (Martins, Lopes and Mangabeira col.).

Observations - We have a female which might belong to this species. The mesonotum is darker, the wing markings quite distinct but the abdomen does not bear the longitudinal bands on tergites.

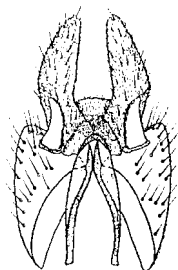


FIG. 12

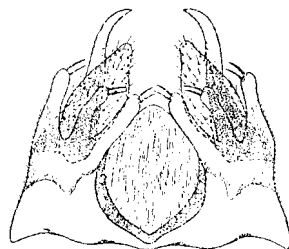


FIG. 13

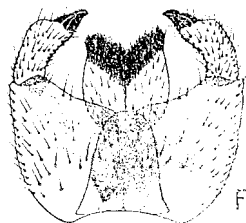


FIG. 14

Fig. 12 - *Platyura (Neoplatyura) regularis* Edwards, 1934. Basistyle, dististyle and mesosome.

Fig. 13 - *Platyura (Xenoplatyura) tapuiai* n. sp. Basistyle and dististyle.

Fig. 14 - *Platyura (Taulyrpa) vespiformis* (Enderlein, 1911). Dististyle, basistyle, mesosome and tenth sternite.

Subgenus *Micrapemon* Edwards, 1924.

1924 *Micrapemon* Edwards, Trans. Ent. Soc. London, 3: 523.

We have two males and two females which we have determined as belonging to *P. parva* Williston, 1896. Although in our material the wing characters are in accord with the subgenerical diagnosis, we have noted that the pleurotergite and anepisternite have very short but distinct hairs on their upper portions.

Platyura (Micrapemon) parva Williston, 1896.

1896 *Platyura parva* Williston, Trans. Ent. Soc. London, 257.

1902 Kertész, Cat. Dipt., 1: 54.

1909 Johannsen, Gen. Ins., 93:24: 1909 Johannsen; Maine Agr. Exp. Sta., 172:250.

1940 *Platyura Micrapemon parva* Edwards, Rev. Ent., 11: 450.

We describe and illustrate the genitalia below.

Genitalia: (Fig. 15). Basistyle longer than broad, the lobes fused, sub-quadrate, protuberant on supero-internal margin where there are thick differentiated setae which are turned inwards. Dististyle shorter than the basistyle, flattened, attenuated apically, strongly covered with setae, specially groups of differentiated ones on inner margin. Ninth tergite shorter than basistyle, rounded, setose and spiculate.

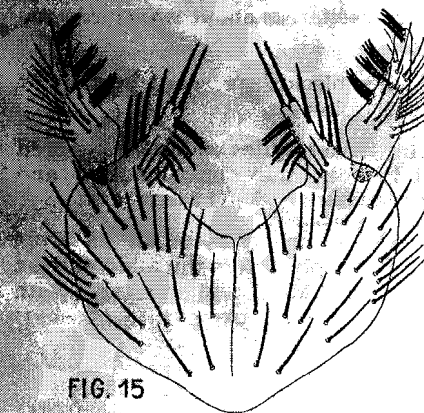


FIG. 15

Platyura (Micrapemon) parva Williston, 1896. Basistyle and dististyle.

Locality - BRASIL, State of Rio de Janeiro, Itanguay, XI.1947 (Petr Wygodzinsky col.).

Platyura (Taulyrpa) vespiformis (Enderlein, 1911).

1911 *Cerotelion vespiformis* Enderlein, Stet. Ent. Zeith., 72: 147.

1933 *Platyura (Taulyrpa) vespiformis* Edwards, Rev. Ent., 3 (3): 304.

A male from BRASIL, State of Goiás, Corumbá, XI. 1945 (M. P. Barretto col.). As there is no description of

this interesting species since the original one, we take the opportunity to describe the male and illustrate the genitalia.

Male - Head: Mouth parts and palpus, as well as frons and clypeus reddish-brown. Ocellar prominence blackish; mid ocellus quite small. Antenna reddish except for the basal seven flagellar segments which have a broad, mesial black mark; segments slightly flattened; length of antenna about one and a half times that of mesonotum.

Thorax: Mesonotum yellowish with three black stripes in the middle of sub-equal size; the first stripe goes from anterior portion to before pre-scutellar region; the lateral ones from humeral region to scutellum; covering is formed by short, black hairs leaving glabrous areas. Scutellum yellowish. Postnotum slightly darker in the middle, blackish at apex. Pleurae with posterior pronotum and propleura yellowish; anepisternite and katepisternite blackish over most of sclerite; pteropleurite with a large blackish lower spot; the rest whitish.

Legs: Coxae yellowish, the mid and hind ones brown at base. Femora yellowish the mid and hind ones brown below. Tibiae and tarsi dark. Fore basitarsus about two-thirds the length of corresponding tibia.

Wing yellowish, the apex blackish, a small portion of M. and Cu. also blackish. Haltere yellowish.

Abdomen with the first five tergites yellowish, covered with blackish setae; from VI to apex they are blackish and covered with dense brown setae.

Genitalia (Fig. 14): Basistyle nearly as broad as long, setose. Dististyle simple, curved sharply before the middle, apex with two large, pointed black teeth. Middle of genitalia with a rounded plate (tenth sternite?) formed by a tuft of short black setae.

Platyura (Taulyrpa) monochroma Edwards, 1933.

1933 *Platyura (Taulyrpa) monochroma* Edwards, Rev. Ent., 3 (3): 304.

We have a male with hairy postnotum but the anterior spiracular hairs are absent. Below we describe and illustrate the male genitalia.

Genitalia: (Fig. 16). Basistyle longer than broad, the lobes fused, sub-quadrate, with dense setae on supero-internal margin, the rest with sparse setae and spicules. Dististyle sparsely setose, about two thirds the length of basistyle, broad, globose, and ending in two large teeth, one of them quite remo-

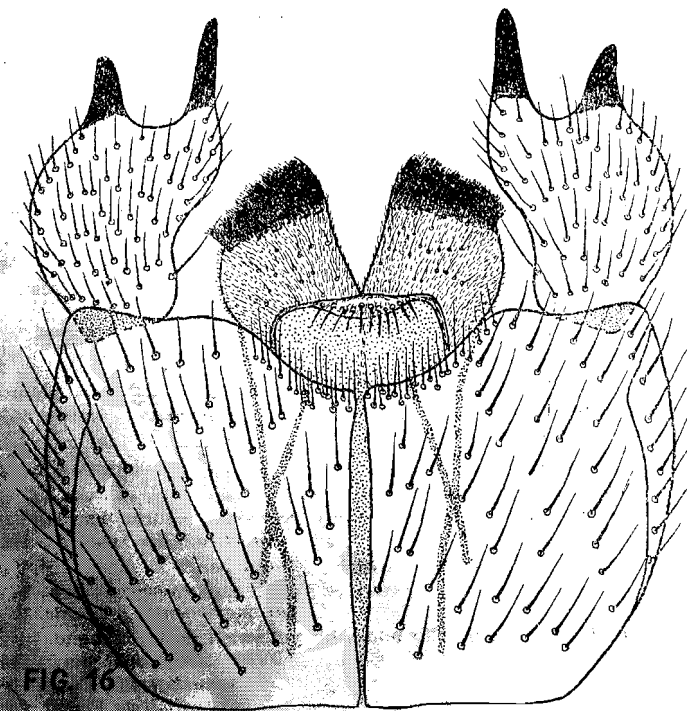


FIG 16 - *Platyura (Taulyrpa) monochroma* Edwards, 1933. Basistyle, dististyle, mesosome and tenth sternite.

ved from the other, the internal tooth larger, both blackish. Ninth tergite? divided in two lobes which are elongate, strongly setose and covered with apical tufts of black setae. Tenth sternite? with rounded apex, ornamented with thick black setae.

Distribution - BRASIL, State of S. Paulo, S. Paulo, 1.1949 (M. P. Barretto col.).

Subgenus *Proceroplatus* Edwards, 1924.

1924 *Proceroplatus* Edwards, Trans. Ent. Soc. London, 3: 523

In this genus the wings have a pattern which is formed by dark spots. The mesonotum is uniformly setulose. The pleurae have the following chaetotaxy: - anepisternite pilose on top; pleurotergite with erect setae; other sclerites except the propleura and pronotum nude. Below a key is given for the species of the Neotropical region.

Key for the species of *Proceroplatus*.

- 1 - Abdomen with tergites marked 2
 - Abdomen blackish and unicolorous. *teranoi* n. sp.
- 2 - Abdomen blackish with yellow markings 3
 - Abdomen yellowish with blackish markings; haltere yellowish . . .
variventris Edwards, 1931
- 3 - Fourth abdominal tergite mostly blackish 4
 - Fourth abdominal tergite yellowish. The markings at extreme base;
 haltere whitish; pleurae whitish; pleurotergite light brown.
stonei n. sp.
- 4 - Fifth abdominal tergite mostly yellowish; the blackish color restric-
 ted to the extreme base 5
 - Fifth abdominal tergite mostly blackish, the yellow markings in the
 form of bands or spots 6
- 5 - Haltere yellowish with a black knob; pleurae yellowish, the pleuro-
 tergite blackish. *catharinae* Edwards, 1932
 - Haltere yellowish; pleurae brown, the pleurotergite darker only on
 the posterior portion. *guoyanasi* n. sp.
- 6 - Mesonotum yellowish in the middle 7
 - Mesonotum uniformly brown; haltere yellowish; pleurae blackish . . .
puncticoxallis Edwards, 1940
- 7 - Tergites II - V dark with yellowish posterior bands
borgmeieri Shaw, 1940
paramariboensis Edwards, 1934
 - Tergites II - V dark basally and with yellowish posterior bands.
pictipennis Shaw, 1940
venustipennis Shaw, 1940
vittata Fisher, 1941

Platyura (Proceroplatus) vittata Fisher, 1941.

1941 *Platyura (Proceroplatus) vittata* Fisher, Ent. News, 52:8

COSTA RICA, San Mateo, Higuito (Pablo Schild col.), one specimen.

Platyura (Proceroplatus) venustipennis Shaw, 1940

1940 *Platyura (Proceroplatus) venustipennis* Shaw, Rev. Ent. 11:804.

COSTA RICA, San Mateo, Higuito (Pablo Schild col.), one specimen.

Platyura (Proceroplatus) borgmeieri Shaw, 1940.

1940 *Platyura (Proceroplatus) borgmeieri* Shaw, Rev. Ent., 11:803.

COSTA RICA, San Mateo, Higuito (Pablo Schild col.), one specimen. We find that the above three species are very similar and may, in the future, show only subspecific differences.

Platyura (Proceroplatus) puncticoxallis Edwards, 1940.

1940 *Platyura (Proceroplatus) puncticoxallis* Edwards, Rev Ent., 11:451.

BRASIL, State of São Paulo, Salesópolis, Boracéia, XI.1947 (Rabello and Travassos col.); Cantareira, IX.1946 (M. P. Barretto col.).

Platyura (Proceroplatus) guyanasi n. sp.

Length of body 4.5 to 5 mm; wing 3, to 4.5 mm.

Male - Head: Mouth parts and palpus blackish. Antenna completely black. Ocellar prominence black, ocelli equidistant. Occiput black, covered with black pile.

Thorax: Mesonotum dark-brown, the humeral angles whitish; evenly covered with short blackish setae. Scutellum a lighter brown, the marginal setae blackish. Postnotum brown. Pleura brown, the margins of anepisternite and portions of pleurotergite darker.

Legs yellowish. Tibiae and tarsi darker. Spurs 1-2-2, the externals very small, the internals long, stout and blackish. Fore basitarsus about two-thirds the length of corresponding tibia.

Wings with several blackish marks. Haltere whitish yellow.

Abdomen with the basal four tergites with large latero-apical yellowish bands which fuse in the middle; tergite V blackish.

Genitalia: (Fig. 17). Basistyle with fused lobes, broad; in the middle there is a strongly sclerotized filament. Dististyle two thirds the length of basistyle, with a blackish structure apically setose; a little above base there is an elongate structure which ends in a large head, turned inwards and ending in deformed teeth. Ninth tergites small, about half as long as basistyle, setose and spiculate. Tenth sternites? subtriangular.

Female - Similar to male. The wing marking more extensive and the spots of abdomen from tergites I to VII.

Types - Holotype male; allotype a male. Registered under numbers 8172 to 8174.

Type locality - Holotype BRASIL, State of S. Paulo, Santo Amaro, I.1949 (J. Lane col.); paratype II.1949 (E. Coher col.); allotype Horto Florestal da Cantareira, I.1944 (P. C. A. Antunes col.).

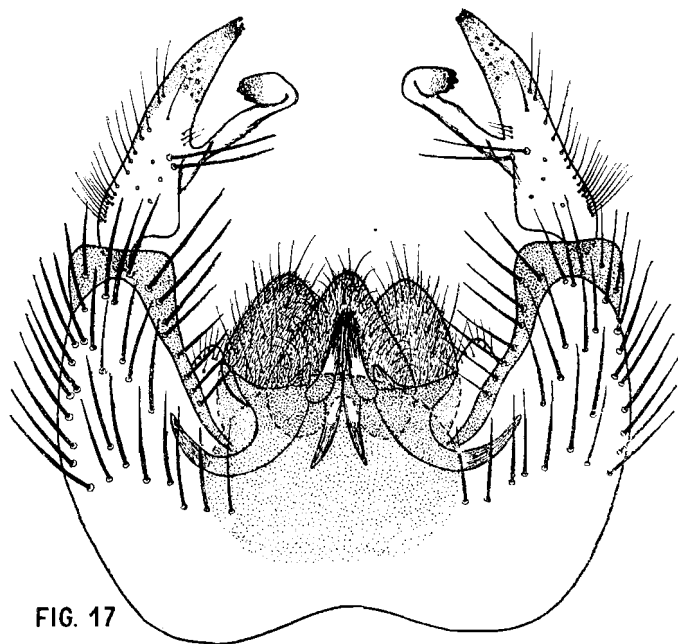


FIG. 17

Fig. 17 - *Platyura (Proceroplatus) guyanasi* n. sp. Basistyle, dististyle, mesosome, ninth tergite and tenth sternite.

Platyura (Proceroplatus) catharinae Edwards, 1932.

1948 *Platyura (Proceroplatus) catharinae* Edwards, Rev. Ent., 2: 139.

1948 Lane, Rev. Ent., 19: 452.

We have a series of specimens from BRASIL, State of Sta. Catarina, Nova Teutonia and State of Rio de Janeiro, D. F. Grajahú, VII.1940. The first were collected by Fritz Plaumann and the last by H. S. Lopes and S. J. Oliveira.

Platyura (Proceroplatus) stonei n. sp.

Length of body 3,2 mm; wing 2,8 mm.

Male - Head: Mouth parts yellowish. Palpus light brown, darker on basal segments. Frons and clypeus yellowish. Ocellar prominence blackish, middle ocellus the smallest. Antenna with scape, torus and more than basal half of first flagellar segment whitish, the rest brown except at base which is whitish (ninth flagellar segment to apex missing). Occiput brown, covered with brown setae.

Thorax: Mesonotum dark brown, whitish in front; evenly covered with brown setae. Scutellum brown. Postnotum dark brown. Pleurae whitish except basal half of anepisternite and nearly all the pleurotergite which are dark brown.

Legs: Coxae whitish, the mid and hind ones with brown spots in the middle. Femora whitish, the mid and hind ones with brown spots in the middle. Tibiae and tarsi dark.

Wings with the usual dark spots. Haltere whitish.

Abdomen with brown tergites except for lateral spots on I and distal half of II and III as well as nearly all IV and distal third of V which are whitish.

Genitalia: (Fig. 18). Basistyle with the lobes fused, slightly broader than high, sclerotized on distal portion. Dististyle nearly as long as basistyle, slender, setose, blackish towards apex, with a long filament which is blackish at base, another smaller filament beyond the middle, the apex with a tooth. Ninth tergite about half as long as dististyle, rounded, spiculate and setose.

Female - Unknown.

Types - Holotype male. To be returned to the U.S.N.M.

Type locality - Jamaica, Newport, II.1937 (Chapin and Blackwelder col.).

Platyura (Proceroplatus) terenoi n. sp.

Length of body 4 to 5 mm.; wing 3,5 to 4 mm.

Male - Head: Mouth parts blackish brown as well as palpus, clypeus and frons. Occiput blackish brown, with brown pilosity. Antenna brown, flagellum flattened, the segments lighter at base. Ocellar prominence blackish.

Thorax: Mesonotum dark brown, anterior angles whitish; evenly covered with brown setae. Scutellum slightly lighter than mesonotum with marginal setae. Postnotum yellowish with a darker median longitudinal line. Pleurae dark-brown.

Leg: Coxae and femora yellowish brown. Tibiae and tarsi darker.

Wing with the usual dark spots. Haltere with yellowish stem and blackish knob.

Abdomen with blackish-brown tergites, covered with dark brown setae.

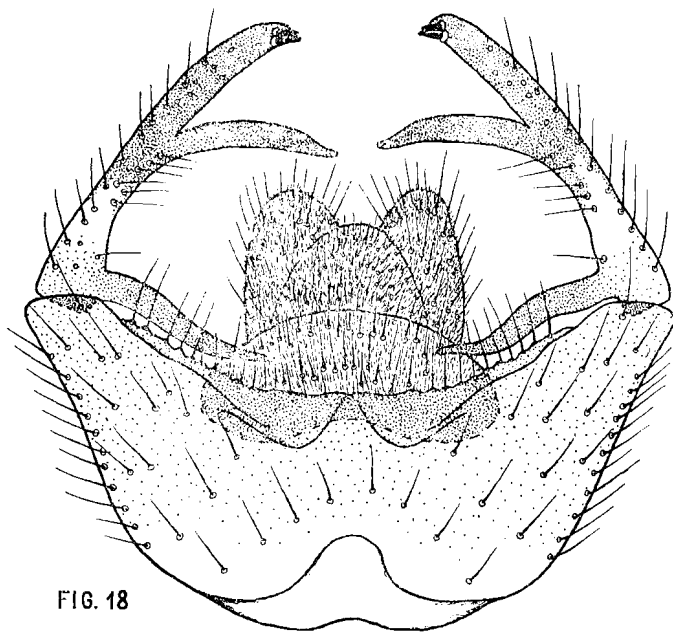


FIG. 18

Fig. 18 - *Platyura (Proceroplatus) stonei* n. sp. Basistyle, dististyle and other structures.

Genitalia: (Fig. 19). Basistyle with the lobes fused, broader than high. Dististyle longer than basistyle, with an arm nearly as long as it, inserted near the base, sclerotized at apex where there is a strongly sclerotized protuberance; body of basistyle thick, deformed, blackish at apex where it ends in two blunt teeth. Ninth tergites large, elongate and with a dense row of setae from before middle to apex.

Female - Similar to male.

Types - Holotype male; allotype female; paratypes twenty nine males and seven females. The retained material registered under numbers 8183 to 8196. Other specimens to be sent to several institutions.

Type locality - BRASIL, State of Mato Grosso, VIII and IX.1940 (C o m. C. Z. B. col.).

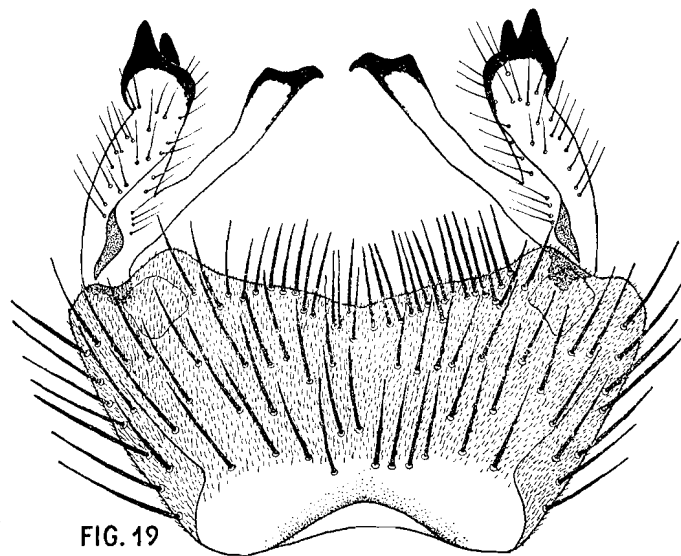


FIG. 19

Fig. 19 - *Platyura (Proceroplatus) terenoi* n. sp. Basistyle and dististyle.

Subgenus *Lyprauta* Edwards, 1931.

1931 *Lyprauta* Edwards, *Konowia*, 10 (1): 77 - Type *P. defecta* Adams (in Edwards.)

We know of four species described in this genus. The characters of the mesonotum and wing coloration we have found out, are variable. Probably *P. nubilapex* merits only a subspecific status. We have paratypes of *P. chacoensis* and a specimen of *P. nubilapex* determined by Edwards. Below we give a key for the species of this subgenus. We have not seen *P. defecta*. Two new species are herein described.

Key for the adults of *Lyprauta*.

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 1 - Pleura blackish brown | 2 |
| - Pleura yellowish | 3 |
| 2 - Wing nearly clear, a brown spot at base of R.5; a faint are at tip nearly filling R.4 and across R.5 | <i>chacoensis</i> Edwards, 1931 |
| - Second brown cloud of wing not at tip but crossing cell R.5, below the short vein R.4 | <i>defecta</i> Adams, 1931 |
| - Wing evenly darkened from R.4 outwards and including tip of Cu.1 a larger dark area below distal half of Cu.2 and spot at base of R.5 larger | <i>nubilapex</i> Edwards, 1940. |
| 3 - Wing hyaline or with a faint shadowing | <i>knabi</i> n. sp. |
| - Wing with a definite cloud at about the apical third | <i>zeteki</i> n. sp. |

Platyura (Lyprauta) knabi n. sp.

Length of body 3 mm; wing 2,8 mm.

Male - Head: Mouth parts and palpus yellowish, basal segment of palpus blackish. Clypeus yellowish. Ocellar prominence blackish. Antenna with scape, torus and lower portion of first flagellar segments slightly lighter than the rest which is dark brown. Occiput brown with brown setae.

Thorax: Mesonotum yellowish except for three large, broad brownish stripes which occupy nearly the whole disk, the median stripe reaches the anterior portion, the lateral ones the pre-scutellar one; anterior corners whitish; covering formed by evenly distributed brown setae. Scutellum brown, slightly lighter in the middle. Postnotum brown, lighter on the sides. Pleurae yellowish; anepisternite and pleurotergite brown.

Legs: Coxae yellowish. Femora and tibiae yellowish, the femur darker. Tarsi darker.

Wing hyaline, slightly darker between Rs. and stem of M. Haltere with yellowish stem and brown knob.

Abdomen brown, except for yellow lateral apical spots from tergite II distally, covered with dark brown setae.

Genitalia: (Fig. 20). Basistyle slightly higher than broad, sparsely setose. Dististyle shorter than the basistyle, uniform, ending in a strongly sclerotized beak. Ninth tergites broad, quite shorter than basistyle. Other structures as in figure.

Female - Unknown.

Types - Holotype male. To be returned to the U.S.N.M. Paratypes four males, one of them damaged. Three paratypes retained in our collection.

Type locality - COSTA RICA, Puntarenas, r. Aranuez (Frederik Knab col.); San José (H. Schmidt col.).

Platyura (Lyprauta) zeteki n. sp.

Length of body 3 to 4 mm; wing 2,8 to 3,6 mm.

Male - Head: Mouth parts short, yellowish. Palpus yellowish except the first segment which is brown. Clypeus yellowish. Antenna with scape, torus and base of first segment lighter than the rest of flagellum which is dark brown. Occipital prominence black, the ocelli equidistant. Occiput dark brown, with blackish setae.

Thorax: Mesonotum yellowish except for three large

brownish broad stripes which occupy nearly the whole disk, the median stripe reaches the anterior portion, the lateral ones reach the pre-scutellar margin; covering formed by evenly distributed brown setae. Scutellum light brown. Postnotum yellowish, darker in the middle. Pleurae yellowish.

Legs: Coxae and femora yellowish. Tibiae and tarsi a little darker.

Wing with a distinct dark band at apex and another spot from Rs. to stem of M. Haltere with yellowish stem and blackish knob.

Abdomen dark brown, with broad apical yellowish bands on II-IV; covered with dark-brown setae.

Genitalia: (Fig. 21). Basistyle with the lobes fused, about one and a half times as long as wide, sparsely setose. Dististyle simple, about one third shorter than the length of basistyle, ending in two large teeth which are turned inwards, one of them is strongly sclerotized. Ninth tergites very small, rounded. Other structures as in the figure.

Female - Similar to male.

Types - Holotype male; allotype female. To be returned to the U. S. N. M. Paratypes one male and three females, of which one male and two females are retained in our collections.

Type locality - PANAMA. Holotype and allotype from Canal Zone, Quarry Heights, VI.1920 (J. Zetek col.); paratypes from Balboa, VII.1930 (J. Zetek col.); Ft. Clayton, I.1925 (D. Baker col.); Corazal, VII.1911 (A. Busek col.); Close's Cano Sadle, V.1925 (R. C. Shannon col.).

Subgenus *Platyura* Edwards, 1941.

1941 *Platyura* Edwards, Rev. Ent., 12 (1/2): 305.

Below a key is given for the species belonging to this subgenus.

Key for the adults of *Platyura*.

- 1 - Mesonotum brown or yellowish, ornamented or not 2
 - Mesonotum shining black, only the humeral angles whitish *tamoyoi* n. sp.
- 2 - A black spot over the root of wing 3
 - With such a spot 5
- 3 - With a median black longitudinal stripe 4
 - Without a median longitudinal black stripe *salobrensis* Edwards, 1941
- 4 - Abdomen with basal yellow markings *macilenta* Arribalzaga, 1892
 - Abdomen with distal elow markings *burmeisteri* Edwards 1934
- 5 - Scutellum and postnotum yellowish 6
 - Scutellum and postnotum blackish *batesi* Edwards, 1931
- 6 - Abdomen yellowish *shannoni* Lane, 1948
 - Abdomen dark brown with broad apical yellow bands *incasica* n. sp.

Platyura (Plautyura) macilenta Arribalzaga, 1892.

1892 *Platyura macilenta* Arribalzaga, Bol. Ac. Nac. Cordoba, 12: 432.

1902 Kertész, Cat. Dipt., 1: 52.

1909 Johannsen, Gen. Ins., 93: 23.

1941 *Platyura (Plautyura)* Edwards, Rev. Ent., 12: 305.

1948 Lane, Rev. Ent., 19: 449.

We have a male from PANAMA, Canal Zone, VII.1922 (C. S. Ludlow col.).

Platyura (Plautyura) tamoyoi n. sp.

Length of body 6,5 mm; wing 5,5 mm.

Male - Head: Mouth parts short, yellowish. Palpus, clypeus and frons yellowish. Region from insertion of antenna to ocellar prominence shining black. Antenna with scape, torus and base of first flagellar segment reddish yellow, the rest of segment and other flagellar segments blackish; flagellar segments somewhat flattened; length of antenna nearly twice that of mesonotum. Ocellar prominence black, the two lateral ocelli larger than the lower one. Occiput black, covered with black hairs.

Thorax: Mesonotum shining black except the humeral angles which are whitish; covering formed by homogeneous, short, black setae. Scutellum blackish brown, the corners yellowish; hairs very short. Postnotum black. Pleurae with pronotum and proepimeron yellowish, the other sclerites blackish brown with whitish pruinosity.

Legs: Coxae yellowish. Femora yellowish, the mid and hind ones brown at base, underneath, more so on hind one. Tibiae and tarsi darker.

Wing hyaline, the apex slightly darker. Haltere with yellow stem and dark knob.

Abdomen blackish; tergites with progressively larger apical yellow bands on segments II to V, on V and VI with basal yellowish bands also.

Genitalia: (fig. 22). Basistyle elongate, sparsely setose, about twice the greatest width. Dististyle slightly longer than the basistyle, thickened towards apex where there is, on apical portion, internally dense blackish setulosity and a tooth which is large, blunt and black. Ninth tergites with the lobes less than half as long as basistyle, rounded. Mesosome and other structures as in the figure.

Female - Similar to male. Tergites II-V with apical bands of yellow color; the basal ones absent; the rest blackish.

Types - Holotype male. Allotype female; registered under numbers 8197 and 8198.

Type locality - BRASIL, Holotype from the State of S. Paulo, Campos do Jordão, XII.1945 (J. Lane col.); allotype from the State of Rio de Janeiro, Itatiaia, IX.1945 (M. P. Barretto col.).

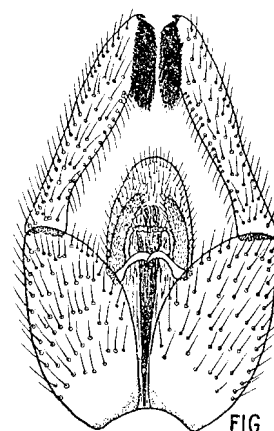


FIG. 22

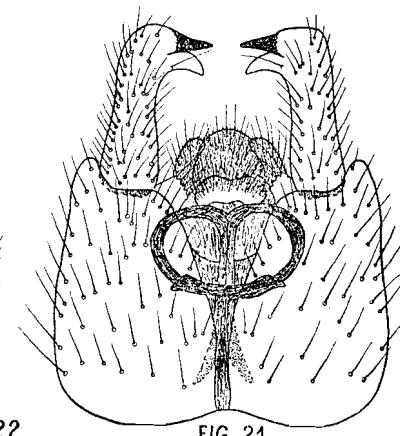


FIG. 21

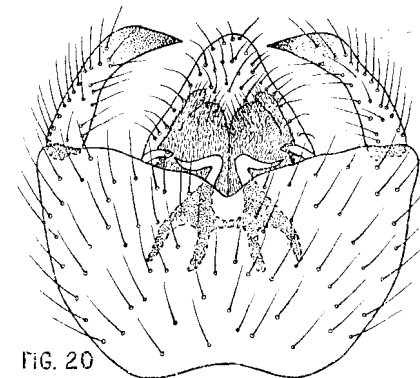


FIG. 20

Fig. 20 - *Platyura (Lyprautia) knabi* n. sp. Basistyle, dististyle and other structures.

Fig. 21 - *Platyura (Lyprautia) zeteki* n. sp. Basistyle, dististyle and other structures.

Fig. 22 - *Platyura (Plautyura) tamoyoi* n. sp. Basistyle, dististyle and other structures.

Platyura (Plautyura) incasica n. sp.

Length of body 6,5 mm; wing 5,5 mm.

Female - Head: Mouth parts and palpus brown as well as clypeus which is pilose. Portion between the antennae and ocellar prominence yellow, glabrous. Ocellar prominence blackish. Antenna with scape, torus and base of first flagellar segment yellowish, the rest brown; flagellar segments flattened. Occiput brown, with dark brown pilosity.

Thorax: Mesonotum yellowish, with two nearly parallel narrow stripes which from the anterior portion reach the scutellum; evenly covered with short, brown hairs. Scutellum slightly lighter. Postnotum yellowish, darker in the middle. Pleurae yellowish.

Legs: Coxae and femora yellowish. Tibiae and tarsi darker.

Wing unicolorous, very slightly darker towards apex. Haltere with yellowish stem and blackish knob.

Abdomen brown, with broad apical bands on tergites I - VI, VII nearly completely yellow.

Male - Unknown.

Type - Holotype female. To be deposited in the U. S. N. M.

Type locality - PERU, Iquitos, III and IV. 1931 (R. C. Shannon col.).

ACKNOWLEDGEMENTS

The author wishes to thank the help which Mr. Edward I. Coher gave him in the separation of species, generic position and keys for the genus *Macrocera*. The loan and gift of specimens from the following friends, enabled the author to describe several of the new species. Drs. Alan Stone from the United State National Museum at Washington; Sebastião J. de Oliveira from the Geigy do Brasil S/A., Hugo de Souza Lopes from the Escola Superior de Veterinaria do Rio de Janeiro; Lauro Travassos Filho from the Departamento de Zoologia da Secretaria de Agricultura do Estado de São Paulo and Mauro Pereira Barretto from the Faculdade de Medicina da Universidade de S. Paulo. The drawings of this paper were done by Mr. E. B. Ferraz of our Department.

ABSTRACT

The author studied one hundred and eighty eight specimens belonging to *Ceroplastinae*. The specimens are chiefly from Brazil with a

few from other countries within the Neotropical region also represented. Eighteen new species are described, the allotype of one species is elected and the zoogeographical distribution of nineteen known species extended. Several keys are also compiled.

RESUMO

Neste trabalho, o autor estuda extensa coleção que possibilita a descrição de numerosas espécies novas. O gênero *Macrocera* é considerado como pertencente à subfamília *Ceroplastinae* e o autor segue, neste ponto de vista, Edwards dando ao mesmo tempo os motivos que o levam a assim proceder. Inclui uma chave para os gêneros de *Ceroplastinae* que ocorrem na região neotropical. No gênero *Macrocera* dá uma chave para as espécies e descreve as seguintes espécies novas: *katingangi*, *guayanasi*, *guarani* e *tamoyoi*. No gênero *Ceroplatus* trata da distribuição zoogeográfica de diversas espécies bem como da posição sistemática de outras e descreve as seguintes espécies novas: *Ceroplatus (Ceroplatus) caribai*, *C. (Cerotelion) boracensis*, *C. (Neoceroplatus) paicoenai* e *C. (Placoceratias) uaracui*. Tratando do gênero *Platyura* dá uma chave para os subgêneros, considerando alguns dos subgêneros existentes como sinônimos. Amplia a distribuição zoogeográfica de diversas espécies e discute a posição sistemática de algumas delas. Neste gênero descreve as seguintes espécies novas: *Platyura (Isoneuromyiu) borinqueni* e *lopesi*, *Platyura (Xenoplautyura) tapuai*, *P. (Proceroplatus) guayanasii*, *stonei* e *terenoii*, *P. (Lyprauta) knabi* e *zeteki*, *P. (Plautyura) tamoyoi* e *incasica*. Dá uma chave para as espécies dos seguintes subgêneros: *Proceroplatus*, *Lyprauta* e *Platyura*.