

FURTHER NOTES ON NEOTROPICAL "KEROPLATINAE" (Diptera, Mycetophilidae) ¹

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(With 8 text-figures)

Several species of *Keroplatinae*, some of which are new, are here reported. Characters for the separation of the two species of *Neoceroplatus* are given. A new species of *Platyroptilon* is described and a key for the species of this genus prepared. The allotype of *Platyura* (*Plautyura*) *incasica* Lane, 1950 is selected. A key for the species belonging to the subgenus *Proceroplatus* is given and two species (*iaunai* and *rabelloi*) described as new while a new name is given for *Platyura elegans* Kertész (*nec* Coquillett, 1895). The allotype of *Isoneuromyia atra* Lane, 1948 is selected and a new species described as *Isoneuromyia timbira*.

The numbers mentioned are those of our entomological collections. The names *iaunai* and *timbira* are taken from Brazilian tribes of Indians. The author takes the pleasure of thanking all those who helped him in this work and furnished material.

Subgenus *Neoceroplatus*

With the opportunity of examining more specimens we were able to distinguish with more precision *K. minimax* from *K. paicoenai* the two Neotropical species. We give below a small table for the separation of these two species:

Distal hyaline spot not reaching M. 1; cubital cell with distinct and extensive spot; fore coxa with the two marks large, mid and hind ones with the large marks over more than basal half; mid and hind femora extensively dark at base; pleurotergite mostly black	<i>paicoenai</i> Lane, 1950.
Distal hyaline mark reaching vein M. 1; cubital cell without a distinct mark but with dilute shading; fore and mid coxae with small black spots, the hind one with large black mark; mid and hind femora with small markings at base; pleurotergite mostly yellow	<i>minimax</i> Edwards, 1934.

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Keroplatus (Neoceroplatus) minimax Edwards, 1934

1934 Edwards, Rev. Ent., 4: 358; 1941 Edwards, *ibid.*, 12:304; 1948 Lane, *ibid.*, 19:440.

Distribution — PERU, Iquitos, III-IV.1931 (R. C. Shannon col.); BRASIL, State of S. Paulo, City of S. Paulo, Butantan. III.1954 (Barreto-Reyes col.); Agua Funda, V.1955 (P. Forattini col.).

Keroplatus (Neoceroplatus) paicoenai Lane, 1950

1950 Lane, *Dusenja*, 1:43.

Distribution — BRASIL, State of S. Paulo, Ferraz de Vasconcellos, IV.1954 (J. Lane col.).

Key for Neotropical PLATYROPTILON

In this key we follow EDWARDS in counting the antennal segments in a linear series and not as we usually do when we consider the first flagellar segment as I.

- | | |
|--|------------------------------------|
| 1. Antenna with twelve or thirteen segments | 2. |
| Antenna with sixteen segments (segments III to XV with long branches) | <i>zemyi</i> Edwards, 1934. |
| 2. Antenna with twelve segments, completely blackish (segments III to XI branched); wing infuscated but without definite white markings | 3. |
| Antenna with thirteen segments, the apical three segments white and elongate (segments III to IX with long lateral branches); wing blackish with definite white markings | <i>dureti</i> sp. n . |
| 3. Hind tibia blackish and contrasting with the corresponding femur which is yellowish | <i>miersi</i> Westwood, 1849. |
| Hind tibia brownish as well as the corresponding femur | <i>ramicornis</i> Enderlein, 1911. |

Platyroptilon dureti sp. n.

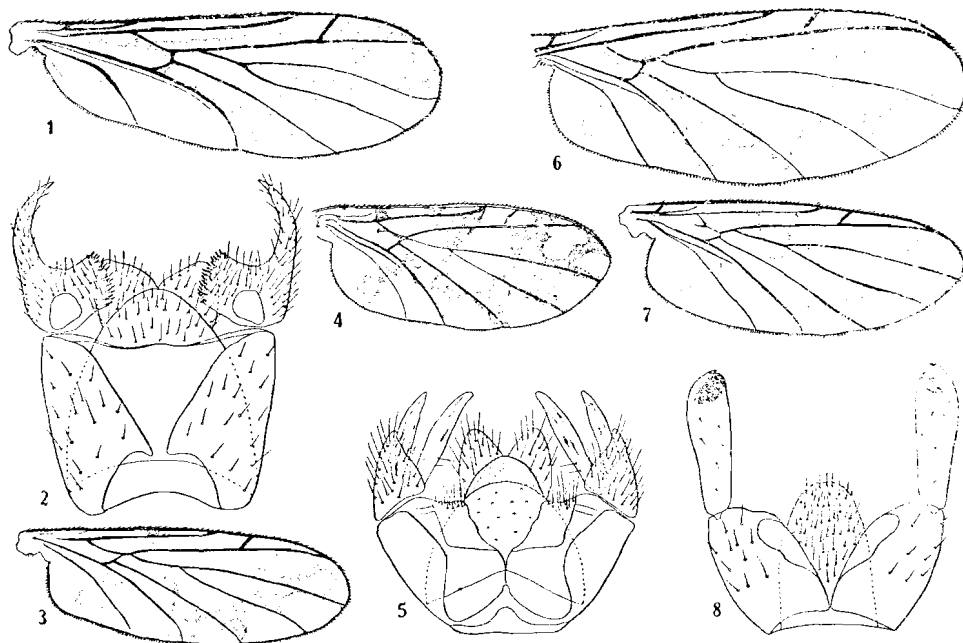
(Figs. 1 and 2)

Male — Head: Mouth parts minute, blackish. Palpus with a single, porrect rounded segment. Frons narrow and yellowish. Antenna with blackish scape and torus; flagellar segments blackish except XI, XII and XIII which are white; segment III (or flagellar segment I) with a short branch, IV longer, V longer yet and VI to IX slightly longer than V and bearing a very small blunt apical spine, all segments above mentioned broader than wide; segment X elongate with a protuberance which, however, does not form a branch at the distal external margin; segment XI white, elongate, nearly one and a half times as long as wide; segment XII white, elongate and two and a half times as long as wide; segment XIII, white, very slender and knoblike. Occiput brown; ocellar callus blackish with three distinct ocelli, the mesial one more than half the size of laterals; lateral ocelli removed from the eye margin by nearly three facets.

Thorax: Pronotum blackish. Mesonotum dark brown with the indications of three marks, densely covered with short, brown hairs. Scutellum yellowish at base, blackish at apex, bearing a row of marginal setae. Postnotum yellow-

ish brown. Pleura brown but lower portion of anepisternite and pteropleurite yellowish; hypopleurite brown but blackish in the middle.

Wing blackish with veins and markings as in fig. 1. As can be noted in the figure R.4 is nearly vertical, r-m quite weak and M.1 sinuous. Haltere with white stem and blackish knob.



Platyroptilon dureti sp. n. — Fig. 1: Wing; fig. 2: male genitalia. Fig. 3 — *Platyura (Proceroplatus) hervézi* n. n., wing. *Platyura (Proceroplatus) jaunai* sp. n. — Fig. 4: Wing; fig. 5: male genitalia. Fig. 6 — *Platyura (Proceroplatus) rabelloi* sp. n., wing. Fig. 7 — *Platyura (Proceroplatus) terenoi* Lane, 1950, wing. Fig. 8 — *Isoneuromyia timbira* sp. n., male genitalia. (All drawings made by Mr. E. B. Ferraz with the aid of a "camera lucida". Male genitalias are drawn in a dorso-ventral position).

Legs blackish. Mid coxa yellowish at base, hind one on basal two thirds, the rest brownish. Fore coxa and femora yellowish. Tibiae brownish black; setulae irregularly distributed; setae shorter than diameter of tibia. Tarsi with narrow white rings on all the joints, the rest brownish black.

Abdomen: Tergites with narrow basal yellowish markings on II to IV, the rest blackish.

Genitalia (fig. 2): Basistyles fused, nearly quadrate. Dististyle with a long, upcurved, external protuberance; internal portion broadened and bearing rows of short, blunt, differentiated setae. Other structures as in the figure.

Female — Unknown.

Type — Holotype male. Registered in our collections under n. 11.295.

Type locality — BRASIL, State of Minas Gerais, Juiz de F6ra, VII.1953 (J. P. Duret col.).

Note — We take pleasure in naming this species in honor to our friend Dr. J. P. DURET from the "Divisi6n de Higiene y Medicina Preventiva, Dire-

cción General de Sanidad, Ministério de Ejercito, Buenos Aires, Argentina", who not only permitted us to describe it but to keep it in our collections.

Heteropterna abdominalis Lane, 1948

1948 Lane, Rev. Ent., 19:447.

In the illustration which we gave for this species a group of short differentiated setae on the upper internal portion of basistyle was not represented.

Distribution — BRASIL, State of S. Paulo, Presidente Epitácio, Porto Albano, X.1954 (J. Lane col.).

Platyura (Lyprauta) nubilapex Edwards, 1940

1940 Edwards, Rev. Ent., 11:452.

The male from Pres. Epitácio shows a yellowish pleura with only the pleurotergite dark brown.

Distribution — BRAZIL, State of S. Paulo, Cantareira, X.1949 (E. I. Coher col.), one male; Martilandia, V.1951 (O. P. Forattini col.), one female and Pres. Epitácio, Pto. Albano, X.1954 (Exp. Fac. Hig. col.), one male.

Platyura (Lyprauta) chacoensis Edwards, 1931

1931 Edwards, Konowia, 10:77.

1939 Fisher, Trans. Ent. Soc. Am., 65:228.

1940 Edwards, Rev. Ent., 11:451.

Distribution — BRASIL, State of Rio de Janeiro, Três Rios, Faz. Travessão, IV.1947 (S. J. Oliveira col.), two males and one female; State of S. Paulo, S. Amaro, near the city of S. Paulo, XI.1953 (J. Lane col.), one male and one female.

Platyura (Tylparua) spatulata Edwards, 1941

1941 Edwards, Rev. Ent., 12:307.

Distribution — BRASIL, State of S. Paulo, Cantareira, X.1949 (E. I. Coher one male).

Platyura (Plautyra) incasica Lane, 1950

1950 Lane, Dusenya, 1(1):68.

We have a male and a female. The male is here selected as the allotype of this species and described below.

Male — Similar to the female.

Genitalia: Basistyle with lobes fused, broader apically, quadrate. Dististyle as long as basistyle, curved and ending in a long black, pointed tooth; below the tooth another brown tooth which is quite long and blunt at tip.

Type — Allotype male registered under n. 11.302.

Type locality — Allotype from BRASIL, State of S. Paulo, Juquiá, X.1939 (J. Lane col.); one female from City of S. Paulo, Morumbí, XI.1949 (J. Lane col.).

Key for Neotropical PROCEROPLATUS

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|---|---------------------------------------|
| 1. Abdomen completely blackish | 2. |
| Abdomen yellowish, or blackish with yellow bands or marks | 3. |
| 2. Wing with a large mesial spot as in fig. 6 | <i>rabelloi</i> sp. n. |
| Wing with a small mesial spot as in fig. 7 | <i>terenoi</i> Lane, 1950. |
| 3. Abdomen yellow with blackish markings | 4. |
| Abdomen blackish with yellow markings | 5. |
| 4. Abdomen yellow but tergites III and IV with narrow basal black bands | <i>variventris</i> Edwards, 1931. |
| Abdomen yellow but tergites II to VI broadly black at base, narrowly at apex, also a narrow mesial longitudinal line which joins the bands is present | <i>iaunai</i> sp. n. |
| 5. Tergite IV mostly blackish | 6. |
| Tergite IV yellowish, the blackish markings at extreme base; haltere whitish; pleura whitish; pleurotergite light brown | <i>stonei</i> Lane, 1950. |
| 6. Tergite V mostly yellow, blackish only at extreme base | 7. |
| Tergite V mostly black, yellow markings as bands or spots | 8. |
| 7. Haltere yellow with black knob; pleura yellowish but the pleurotergite blackish | <i>catharinae</i> Edwards, 1932. |
| Haltere yellowish; pleura brown but pleurotergite darker only on its posterior margin | <i>guayanasi</i> Lane, 1950. |
| 8. Mesonotum uniformly brown; humeral angle may be yellowish | 9. |
| Mesonotum yellowish in the middle | 10. |
| 9. Haltere yellowish | <i>puncticoxalis</i> Edwards, 1940. |
| Haltere with white stem and blackish knob | <i>kertészi</i> n. n. |
| 10. Tergites II to IV with yellowish posterior bands .. | <i>paramariboensis</i> Edwards, 1934. |
| | <i>borgmeieri</i> Shaw, 1940. |
| Tergites II to VI basally dark but with yellowish posterior bands | <i>pictipennis</i> Shaw, 1940. |
| | <i>venustipennis</i> Shaw, 1940. |
| | <i>vittata</i> Fisher, 1941. |

Platyura (Proceroplatus) kertészi n. n.

(Fig. 3)

1901 *Platyura elegans* Kertész (nec Coquillett, 1895). Trm. Fuzet., 24:404.

We do not know that the above case of homonymy has been corrected. For this reason we do so now and propose the name *kertészi* for the species described by KERTÉSZ.

We have a female which we base the below redescription on.

Female — Head: Mouth parts and palpus brown. Scape and torus whitish yellow (flagellum missing). Occiput yellowish brown; ocellar callus blackish, lateral ocelli large and quite removed from eye margin, mesial one minute.

Thorax: Pronotum yellow. Mesonotum brown, the humeral angle yellowish; covered with brown hairs. Scutellum yellow, marginal setae brown. Pleura yellow; pleurotergites with a tuft of setae and very slightly tinged with brown; anepisternite with minute hairs; postnotum yellow.

Wing with veins and markings as in fig. 3. Haltere with white stem and blackish knob.

Legs: Coxae yellow, hind one slightly tinged with brown. Femora yellowish, hind one brownish at base. Tibiae and tarsi brown. Spurs 1-1-1, on hind tibia very long.

Abdomen: Tergites I mostly yellow, II to IV with narrow apical whitish bands, VII brown. Cerci brown.

Distribution — One female. PERU, Iquitos, III-IV.1931 (R. C. Shannon col.).

Platyura (Proceroplatus) iaunai sp. n.

(Figs. 4 and 5)

Male — Head: Mouth parts brown. Palpus blackish. Frons brown. Antenna with scape and torus brown; flagellum blackish, the segments flattened. Occiput dark brown; lateral ocelli quite removed from eye margin, the mesial one small.

Thorax: Pronotum yellowish. Mesonotum blackish, humeral region yellowish; densely and evenly covered with blackish hairs. Scutellum blackish with a row of marginal setae. Pleura: anepisternite dark brown in the middle and yellowish on the sides, with short hairs; katepisternite yellowish above and brown below; pteropleurite yellowish; pleurotergite brown, with dense hairs; hypopleurite yellow but slightly brown mesially; postnotum brown, the sides yellowish.

Wing with veins and brown marks as in fig. 4. Haltere yellow, the base of knob light brown.

Legs: Anterior coxa brown, mid one yellow, the hind one with a large brown mark. Femora yellow, mid and hind ones blackish apically. Tibiae brown, spurs 1-1-1, the hind one very long. Tarsi brown.

Abdomen: Tergite I yellow but brown in the middle; II to VI broadly black at base, narrowly black at apex, with a narrow mesial longitudinal line which joins the basal and apical bands, the rest yellowish.

Genitalia (fig. 5): Basistyles fused at base, free at apex, forming a triangularly shaped plate. Dististyle short, triangular, with two sclerotized and very large teeth from inner margin, the lower one larger than the upper. Other structures as in the figure.

Female — Unknown.

Types — Holotype male, paratypes two males. Holotype to be returned to the British Museum (Natural History). The two paratypes registered in our collections under ns. 11.297 and 11.298.

Type locality — BRASIL, State of S. Catarina, Nova Teutonia, VI.1938 (Fritz Plauman col.), holotype and one paratype; State of S. Paulo, Munic. Salesópolis, Boracéia, XII.1940 (Travassos et Guimarães col.).

Note — Besides the characters given in the key this species has a male genitalia quite different from all others belonging to this subgenus.

Platyura (Proceroplatus) rabelloi sp. n.

(Fig. 6)

Female — Head: Mouth parts and palpus blackish. Frons blackish. Antenna with scape and torus dark brown; flagellar segments somewhat flattened, blackish. Occiput blackish brown; ocellar callus black; ocelli quite removed from eye margin, the mesial one smaller.

Thorax: Pronotum yellowish. Mesonotum blackish, humeral region yellowish; evenly covered with black hairs. Scutellum blackish with a row of marginal setae. Pleura blackish; pteropleurite brown; hypopleurite brown. Postnotum brown.

Wing with veins and markings as in fig. 6. Haltere with brown stem and blackish knob.

Legs: Coxae brown. Femora yellowish. Tibiae and tarsi dark. Tibial spurs 1-1-1, the hind one very long.

Abdomen completely blackish including cerci.

Male — Unknown.

Type — Holotype female, registered under n. 11.299.

Type locality — BRASIL, State of S. Paulo, Munic. Salesópolis, Boracéia, XI.1947 (E. X. Rabello et L. Travassos col.).

Note — Besides the mesial wing marking, other markings are also quite different as can be seen by comparing figs. 6 and 7. We take pleasure in naming this species after our old friend Dr. E. X. RABELLO of the "Departamento de Produção Animal, Secretaria de Agricultura do Estado de S. Paulo," Brazil.

Platyura (Proceroplatus) terenoi Lane, 1950

(Fig. 7)

1950 Lane, *Dusenya*, 1(1):61.

So that a comparison of the markings of *Platyura (Proceroplatus) rabelloi*, here described, can be made with the above mentioned species a figure of the wing of a paratype is here given (fig. 7).

Isoneuromyia atra Lane, 1948

1948 *Platyura (Isoneuromyia)* Lane, *Rev. Ent.*, 19(3):456.

A female was collected and is here selected as the allotype of this species.

Female — Similar to male. Abdomen broad and short, blackish, tergites IV to apex with basolateral silvery white marks. Femora much darker, nearly completely blackish. Wing darkened more towards anterior portion (in male it is marked more towards apex).

Type — Allotype female, registered under n. 11.290.

Locality of allotype — BRASIL, State of S. Paulo, S. Amaro (near the city of S. Paulo), IX.1953 (J. Lane col.).

***Isoneuromyia timbira* sp. n.**

(Fig. 8)

Male — Head: Mouth parts yellow. Palpus yellow, the last segment quite long. Frons yellow. Antenna with scape and torus yellow; flagellum blackish, the segments somewhat flattened. Occiput blackish, shining in front; ocellar callus shining, ocelli quite removed from eye margin; back of occiput and mentum yellowish.

Thorax: Pronotum yellow. Mesonotum shining black; hairs black; nude areas present. Scutellum blackish in the middle, yellowish on the sides. Postnotum black. Pleura black but upper region of pteropleurite and spiracular sclerite yellow as well as hypopleurite.

Wing hyaline with a very much diluted spot at apex. Haltere with white stem and black knob.

Legs: Coxae yellow. Femora yellow with a large basal spot at base of mid and hind ones, more extensive on hind one. Tibiae and tarsi dark. Spurs 1-2-2.

Abdomen with black tergites. Tergite I with very narrow basal yellow band, II to IV with broad yellow bands, V with the basal two thirds yellow, the rest black.

Genitalia (fig. 8): Basistyle with lobes fused, broader than long. Dististyle longer than length of basistyle, broadened at apex where it ends in a single short spine, distal portion with many close small teeth forming a comb-like structure. Other structures as in the figure.

Female — Unknown.

Type — Holotype male, registered under n. 11.291.

Type locality — BRASIL, State of S. Paulo, Campos do Jordão, Cidade Azul, XI.1953 (L. Travassos col.).

Note — The nearest species to *I. timbira* is *I. borinqueni* Lane, 1950. It can be separated from it by the coloration of occiput, mesonotum and the male genitalic structures besides other characters.

SUMÁRIO

Neste trabalho o A. trata de diversas espécies de *Keroplantinae*. Dá características para a separação das duas espécies de *Neoceroplatus*. Descreve uma nova espécie de *Platyroptilon* e dá uma chave para as espécies pertencentes a este gênero. É escolhido o alótipo de *Platyura (Plautyia) incasica* Lane, 1950. Uma chave para as espécies do gênero *Proceroplatus* foi compilada e duas espécies novas são descritas (*iaunai* e *rabelloi*) neste subgênero e novo nome escolhido para *Platyura elegans* Kertész (*nec* Coquillett, 1895). É escolhido o alótipo de *Isoneuromyia atra* Lane, 1948 e uma nova espécie (*timbira*) é descrita.