

REVISION OF "LEIELLA" ENDERLEIN, 1911 (Diptera, Nematocera, Mycetophilidae)¹

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(With 4 text-figures)

This genus has not been found outside the Neotropical region up to the present. All species here described have hairs on the pleurotergite. The base of R.1 is present in all specimens examined. Sc.2 is present but very weak in some species. In some species vein M.3 is long and so forks quite basad, in such cases its detached base is difficult to see.

Notes are given about some known species and three species are described as new. The allotype of *L. uncinata* Edwards, 1933 is here selected and the genitalia figured.

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KEY FOR THE SPECIES OF THE GENUS *LEIELLA*

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|--|-------------------------------------|
| 1. Abdomen black or dark brown | 2. |
| Abdomen with some of the tergites marked with yellow or white | 3. |
| 2. Wing smoky anteriorly but hyaline posteriorly; legs blackish | <i>acirenealcar</i> Enderlein, 1911 |
| Wing hyaline with distinct apical dark mark besides a mesial spot; legs yellow | <i>catharinensis</i> sp. n. |
| 3. Some of the pleural sclerites black; haltere unicolorous | 4. |
| Pleurae yellow; haltere with yellowish stem and blackish knob | <i>shannoni</i> sp. n. |
| 4. First three abdominal tergites yellow | 5. |
| Some of these tergites blackish | 6. |

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5. Abdomen black but tergites I and IV whitish
 Abdomen with tergite I blackish but with lateral yellow
 marks on tergites II to IV
 6. Head black above, yellow below the ocelli
 Head ochreous
 7. Tergites IV to apex of abdomen with some yellow
 Tergites I to III yellow, IV mostly shining black
 8. Wing with a blackish band at apex; basal four abdominal
 tergites yellow, V and VI black in the middle with
 yellow bands at base and apex; anepisternite, katepi-
 sternite and pleurotergite blackish
 Wing with an apical dark marking but not forming a
 band; basal three abdominal tergites yellow, IV to VI
 black in the middle with yellow bands at base and apex;
 only pleurotergite blackish

6.
unicincta Edwards, 1933.
bicolor Fisher, 1939.
zonalis Edwards, 1931.
 8.
distincta Freeman, 1951.

jarusi Lane, 1942.

fulva sp. n.

***Leiella ochreocalcar* Enderlein, 1911**

1911 *Leiella ochreocalcar* Enderlein, Stet. Ent. Zestg., 72:200
 1933 Edwards, Rev. Ent., 3:320.

Twelve specimens from BRASIL, S. Catarina, N. Teutonia (Fritz Plaumann col.) and two specimens from ARGENTINA, Tucuman, Quebrada La Toma, XII.1950 (Golbach col.) and Salta, Embarcación, II.1950 (Golbach col.).

All the S. Catarina specimens have a blackish thorax. Of the Argentina specimens one has the anterior portion of the mesonotum yellowish while the specimen from Embarcación is remarkable because most of the mesonotum, part of the propleura and most of the occiput are yellowish. It seems that this species has quite a range of colour variation.

***Leiella zonalis* Edwards, 1931**

1931 *Leiella zonalis* Edwards, An. & Mag. N. H., 10 (7):239.

The abdominal tergites II and III can be tinged with whitish in some specimens.

Ten specimens from ARGENTINA, Tucuman, San Rafael, I.1950 and Lavacera, XI.1951 (M. Aczél col.); Salta, Urundel, II.1951 (R. Golbach col.).

***Leiella uncinata* Edwards, 1933**

(Fig. 1)

1933 *Leiella uncinata* Edwards, Rev. Ent., 3:319.

We have a male from BRASIL, State of Goiás, Corumbá, XI.1945 (M. P. Barretto col.). This specimen is here selected as the allotype of this species. It agrees with the original description except that there is no long ventral seta on mid tibia and the 1th abdominal tergite has a black mark in the middle.

Genitalia (fig. 1): Basistyles elongate, fused at base, attenuated apically into a slender filament. Dististyles in two lobes; the first horn-shaped and ending in a group of lamellate setae; the second transverse and with curved setae. Mesosome rounded and as in the figure. Ninth tergite with three appressed setae on each side.

Type — Allotype male, registered in our collections under number 8.554.

***Leiella catharinensis* sp. n.**

(Fig. 2)

Male — Mouth parts and palpus yellow. Occiput yellow except near the ocelli where it is dark brown. Antenna with scape, torus and first four flagellar segments yellow, the rest dark.

Thorax shining blackish brown.

Wing hyaline with the following brown marks: — a spot from R. across r.-m. and reaching below fork of M.; a diluted spot over more than the apical third of wing; a barely perceptible mark on the anal cell. Haltere yellow.

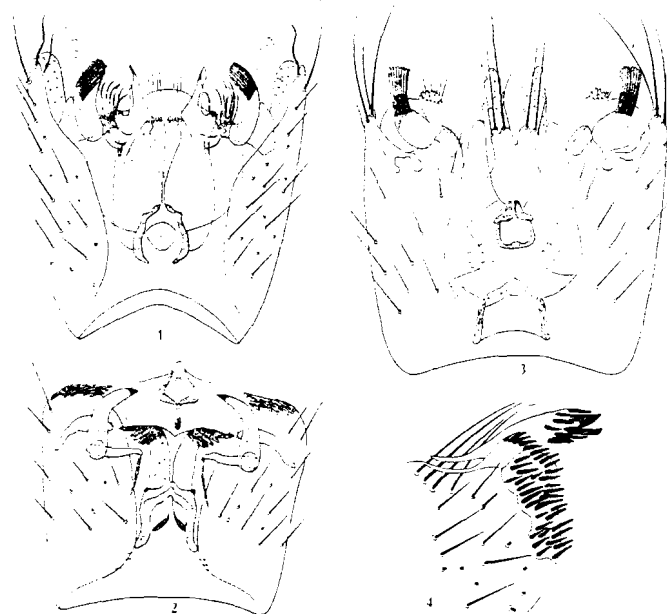


FIG. 1 — *Leiella uncinata* Edwards, 1933, dorso-ventral drawing of male genitalia; fig. 2: *Leiella catharinensis* sp. n., dorso-ventral drawing of whole genitalia; fig. 3: *Leiella fulva* sp. n., dorso-ventral drawing of whole genitalia; fig. 4: *Leiella swannoni* sp. n., distal portion of genitalia.

Legs yellowish. Mid tibia with 4 d., 5 subdorsal, 3 e., 2 v. and 0 i. setae. Hind tibia with 4 d., 5 subdorsal and 8 e. setae. Spurs yellowish.

Abdomen brown, the apex of segments black, covered with long hairs.

Genitalia (fig. 2): Basistyle large, a hollow lobe which surround the other structures, its upper portion with many setae at right angles, directed inwards. Dististyle inserted before apex of basistyle, divided into three lobes, the largest horn-shaped, curved and ending in a blunt appendicle, others as in figure. Mesosome large and as in figure. Ninth tergite with six or seven black setae on each side at apex.

Female — Unknown.

Type — Holotype male. To be returned to the British Museum.

Type locality — BRASIL, State of S. Catarina, N. Teutonia, V. 1938 (Fritz Plaumann col.).

Leiella fulva sp. n.

(Fig. 3)

Male — Head yellow, blackish only around ocelli which are near the eye margin. Antenna with scape, torus and first eight flagellar segments yellow, the rest darkened.

Thorax yellow but scutellum blackish in the middle and pteropleurite contrastingly shining black.

Wing anteriorly tinged with yellow, the apex darkened as well as a small dilute spot on anal cell. Haltere yellow.

Legs yellow, the hind femur blackish at apex. Mid tibia with 4 d., 5 subdorsal, 3 e., 2 i. and 0 v. setae. Hind tibia with 6/7 d., 6/7 subdorsal and 8 e. black setae. Spurs yellowish.

Abdomen with the first three tergites yellow. IV mostly yellow in the middle and VI and VII with large lateral black marks which are progressively larger and nearly unite in VII.

Genitalia (fig. 3): Basistyle elongate, tubular, sparsely setose. Dististyle with a very short protuberance ending in a group of lamellate, closely set dark, blunt setae, a secondary setose lobe present. Ninth tergites and mesosome as in the figure.

Female — Similar to the male, anepisternite brown. Cerci rounded, yellow.

Types — Holotype male; allotype female; paratype a single female. To be returned to the British Museum. A paratype retained under n.^o 10.190.

Type locality — BRASIL, State of S. Catarina, N. Teutonia, VII. VIII. IX. 1938 (Fritz Plaumann col.).

* d. = dorsal, e. = external, v. = ventral and i. = internal setae.

Leiella shannoni sp. n.

(Fig. 4)

Male — Head: Palpus brown, the last two segments yellow. Clypeus light brown and pilose. Antenna with scape and torus yellow; flagellar segments yellow at base and blackish at apex. Occiput brown.

Thorax yellowish, posterior portion of mesonotum and scutellum slightly darker. Pleura yellowish.

Wing unicolorous and smoky anteriorly. Haltere with yellow stem and blackish knob.

Legs yellow. Mid tibia with 4 d., 2 subdorsal, 3 e., and 1 v. setae. Hind tibia with 3 d., 3 subdorsal and 5 e. setae.

Abdomen with the first four tergites yellowish, the apex and sides dark brown; remaining tergites dark brown.

Genitalia (fig. 4): Damaged. Only the dististyles formed by complex structures can be seen and are shown.

Female — Unknown.

Type — Holotype male. To be returned to the United States National Museum, Washington.

Type locality — PANAMA, Sabanas, IV. 1923 (R. C. Shannon col.).

Note — This species is named in honor to the late R. C. Shannon. The specimen is somewhat damaged but so distinct that we have not hesitated in describing it as a new species.

SUMMARY

The author makes a revision of the Neotropical genus *Leiella* Enderlein, 1911 giving a key for its species and extending the zoogeographical distribution of described ones. The following species are described as new: *Leiella catharinensis* sp. n., *shannoni* sp. n. and *fulva* sp. n. The allotype of *Leiella uncinata* Edwards, 1933 is selected.