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~~manus.~~THE GENUS *MEGOPHTHALMIDIA* IN BRASIL
(DIPTERA, MYCETOPHILIDAE, SCIOPHILINAE) (1)

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In this paper a revision of the species occurring in Southern Brasil is made. *M. edwardsiana*, *M. plaumanni* and *M. freemanni* are described as new. A key is included and notes are given on the two remaining species.

The author thanks Dr. Paul Freeman and the trustees of the British Museum (Natural History) for the loan of this material. The drawings were made with the aid of a camera lucida by Mr. E. B. Ferraz.

Megophthalmidia Dziedzicki, 1889*Megophthalmidia* Dziedzicki, 1889, Horae Soc. Ent. Ross. 23: 525.

In the species studied by us the following characters are common to all. The head is elongate and markedly narrower than the thorax, quite protuberant above. The eyes are elongate. The mouth parts are short in the female and elongate in the male, usually doubled up behind as in *Aphrastomyia*. The mesonotum has hirsute hairs and darker setae resembling the condition found in the genus *Atrichopogon* (Ceratopogonidae).

There are five species in our collection and three of them are here described as new.

KEY FOR NEOTROPICAL *MEGOPHTHALMIDIA*

- 1 - Abdominal tergite II with a basal band; tergite I
yellow and contrasting with the shining black colour of the other segments 2

(1) From the Departamento de Parasitologia e Higiene Rural (Director Prof. Dr. P.C.A. Antunes) da Faculdade de Higiene e Saúde Pública da Universidade de São Paulo, Brasil. Read before the "Sociedade Brasileira de Entomologia" and received for publication June 30, 1954.

- Abdominal tergite II without basal band but lateral markings may be present; tergite I completely black, brown or marked with yellowish but not contrasting with the other colour 3
- 2 - Tergites II to V with broad basal yellow bands, on IV with narrow lateral yellow marks, the rest shining black *divergens* Edwards, 1932
- Tergites II with a broad basal yellow band, III and IV with narrow basal bands, on IV restricted to lateral marks, the rest shining black *bicolor* Edwards, 1934
- 3 - Abdomen unicolorous; halteres yellow 4
- Abdomen dark brown but tergites II to V with lateral yellow markings; halteres brownish *edwardsiana*, n. sp.
- 4 - Thorax completely black including coxae *freemani*, n. sp.
- Thorax dark brown, the coxae yellow *plaumanni*, n. sp.

Megophthalmidia divergens Edwards, 1932

Megophthalmidia divergens Edwards, 1932, Rev. Ent., Rio de Janeiro, 2 (2): 141.

We have a series of 19 specimens, male and female, from Brasil, State of Santa Catarina, Nova Teutônia, III, IV, VII, VIII 1938 (Fritz Plaumann col.).

It is interesting to note that in this series the amount of yellow in the abdominal segments is quite variable and in two specimens tergite II is nearly completely yellow, in one totally so. On the other hand no other variation was noted as to the remaining characters.

Megophthalmidia bicolor Edwards, 1934

Megophthalmidia bicolor Edwards, 1934, Rev. Ent., Rio de Janeiro, 4 (3): 363.

Two specimens from Brasil, State of Santa Catarina, Nova Teutônia, IX-1938 (Fritz Plaumann col.).

Megophthalmidia edwardsiana, n. sp.

Length of body 2,3 mm.; wing 2,4 mm. (1)

MALE — Mouth parts dark brown in front, doubled portion yellow. Palpus blackish. Clypeus dark brown, pilose. Antenna short, brown. Occiput blackish, the ocelli in a line and far from eye margin.

(1) Measurements are approximate.

Thorax: Mesonotum brown, the margins lighter and reddish, covered evenly with hirsute, short, blackish hairs. Scutellum slightly lighter brown with six long marginal setae besides very short ones. Pleura dark brown; hypopleurite light brown.

Wing unicolorous, with a slight brown tinge. Stem vein of anterior fork without macrotrichiae and about the same length as its fork veins. Cu forking at level of base of M, its branches divergent. Halteres brownish.



Fig. 1 - *Megophthalmidia edwardsiana*, n. sp. - Camera lucida drawing of the apex of basistyle and dististyle.

Legs brownish. Mid tibia with 3 d., 5 e., 2v. and 3/4 i. setae ⁽¹⁾. Hind tibia with 10 d. and about 18 e. setae. Spurs brown.

Abdomen with tergite I broadly yellowish brown at base, brown at apex; II to IV with lateral yellow marks, the rest shining dark brown.

Genitalia: Dististyle and apex of basistyle as in figure 1. Dististyle one fourth the length of basistyle. Basistyles tubular, fused only at base. Mesosome longer than basistyle and dististyle together; with an inverted T-shaped structure at base articulated with a much longer tubular appendage which is probably the intromittent organ, its apex with a sheath which is curved apically. Ninth tergites very small (about one third the length of basistyle) rounded and setose.

FEMALE — Similar to the male. Cerci very small, rounded and yellowish.

⁽¹⁾ d. = to dorsal; e. = to external; v. = to ventral and i. = to internal setae.

TYPES — Holotype male; allotype female; paratypes sixteen males and one female. Holotype, allotype and half the paratypes to be returned to the British Museum (Natural History); remaining paratypes to be deposited in our collection.

TYPE LOCALITY — Brasil, State of Santa Catarina, Nova Teutônia, VI-VII and VIII-1938 (Fritz Plaumann col.).

Note — There is a certain amount of variation in the proportion of yellow present on tergite I. The name of this species is given in honor to the late Dr. F. W. Edwards of the British Museum (Natural History).

Megophthalmidia freemani, n. sp.

Length of body 2,3 mm.; wing 2,4 mm.

MALE — Mouth parts, palpus and antenna dark brown. Occiput black, the three ocelli nearly horizontally placed.

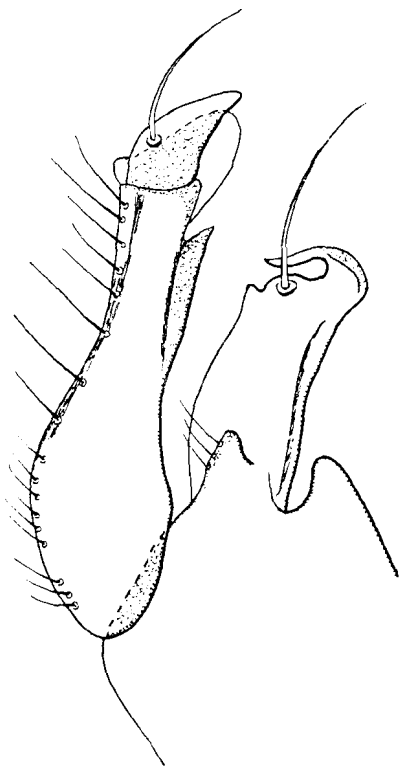


Fig. 2 - *Megophthalmidia freemani*, n. sp. - Camera lucida drawing of apex of basistyle and dististyle.

Thorax: Mesonotum shining black with dense decumbent hairs. Scutellum shining black with six long marginal setae. Pleura dark brown.

Legs: Coxae, femora and tibiae dark brown. Mid tibia with 5 d., 4 e., 2 v., and 3 i. setae. Hind tibia with 7 d. and 11 e. setae. Spurs blackish.

Wing much as in *M. edwardsiana*. Halteres yellow.

Abdomen completely blackish.

Genitalia: Dististyle and apical portion of basistyle as in fig. 2. Dististyle about one third the length of basistyle. Basistyles broad, fused basally. Mesosome as in *M. edwardsiana* but the apical portion not clearly seen. Ninth tergites about one third the length of basistyle, rounded and setose.

FEMALE — Similar to the male. Cerci rounded and brown.

TYPES — Holotype male; allotype female. To be returned to the British Museum (Natural History).

TYPE LOCALITY — Brasil, State of Santa Catarina, Nova Teutônia, VII-X-1938. (Fritz Plaumann col.).

Note — This species is named after our friend Dr. Paul Freeman of the British Museum (Natural History).

Megophthalmidia plaumanni, n. sp.

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

MALE — Palpus, mouth parts and occiput as in *M. edwardsiana*, n. sp. Antenna with light brown scape, torus and base of segment I, the rest dark brown.

Thorax: Mesonotum shining blackish brown, covered with black hairs. Scutellum blackish brown with six marginal setae besides smaller ones. Pleura blackish brown, hypopleurite slightly lighter.

Wing as in *M. edwardsiana* but stem of anterior fork shorter than its branches. Halteres yellow.

Legs: Coxae yellow. Tibiae and tarsi light brown. Mid tibia with 3 d., 3 e., 3 v. and 2 i. setae. Hind tibia with 10 d. and about 18 e. setae. Spurs dark brown.

Abdomen blackish brown, tergite I slightly paler.

Genitalia: Lost.

FEMALE — Similar to the male. Cerci rounded and brownish.

TYPES — Holotype male; allotype female. To be returned to the British Museum (Natural History).

TYPE LOCALITY — Brasil, State of Santa Catarina, N. Teutônia, V-VIII-1938. (Fritz Plaumann col.).

Note — This species is named in honor to its collector.