

New Neotropical *Sciophilinae*

(Diptera, Mycetophilidae)

by

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In this paper five new species are described from Peru, Panama, Brazil and Trinidad (B. W. I.). We take the opportunity of thanking Dr. Alan Stone of the U. S. National Museum and Dr. T. H. G. Aitken for sending us specimens for identification. *Aphrastomyia shannoni*, n. sp. and *Parvicellula shannoni*, n. sp. will be returned to the U. S. National Museum, the other specimens are registered in our entomological collections.

Tribe *Mycomyiini*.*Aphrastomyia shannoni*, n. sp.

Male - Head: Mouth parts not visible. Clypeus blackish. Palpus yellowish. Antenna with brownish scape and torus; flagellum yellow, the segments broader than wide, strongly covered with hairs, the sides with a lateral seta; last segment elongate and blunt at apex. Occiput brown; the two ocelli placed in the middle and well behind.

Thorax: Mesonotum with yellowish white basic colour but with indications of a broad median and two lateral posterior brown stripes which are, however, diluted into numerous brown spots that extend also to the sides; margins of disk whitish; sparsely covered with short brown hairs. Scutellum longer than wide, large, whitish in the middle and brown on the sides; free corners with indication of insertion of setae. Postnotum brown. Pleura yellowish with diluted light brown shadings, only pleurotergites hairy.

Wing with brownish tinge, specially on the anterior portion, Posterior fork noticeably before the base of stem of *M*. Otherwise as in *A. cramptoni* Coher and Lane, 1949. Haltere with white stem and elongate blackish knob.

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Legs: Coxae yellowish but with apical brown markings which extend to trochanteres and base of femora, fore coxa brown anteriorly. Femora yellowish but base and apex brown, more so on the hind pair. Tibiae quite broadened and flattened apically, whitish at joint, then with nearly the basal half blackish, then a yellow portion and finally ending in a blackish apex; setulae in compact rows; setae shorter than the diameter of tibiae; spurs 1-2-2, the inner one nearly twice as long as the outer. Tarsi blackish, the joints white.

Abdomen damaged in the moulting.

Genitalia: (fig. 1). The basistyles seem to be broader than wide. Dististyle doubled over apex of basistyle and appearing as a rod-shaped structure. Other parts not seen.

Female - Unknown.

Type - Holotype male, to be returned to the U. S. National Museum, Washington, D. C., U. S. A.

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

Note - This species is named in honor to its collector, the late Dr. R. C. Shannon. It agrees with all generic characters except for the mouth parts which were not seen. This species is easily separated from *A. cramptoni* Coher and Lane, 1949 by the mesonotal mottling, yellowish antenna and shape of the male dististyle, besides other characters.

Parvicellula shannoni, n. sp.

Male - Head: Palpus brown, the first segment swollen, others elongate. Clypeus brown, pilose. Antenna with yellowish scape and torus (first flagellar segment apparently quadrate, the rest of flagellum missing). Occiput yellowish except for the ocellar callus which is blackish, sparsely hairy, the three ocelli nearly in a line, mesial one slightly smaller than the laterals.

Thorax: Mesonotum yellowish with three indefinite reddish lines, the mesial one forks anteriorly and reaches the middle of disk, the laterals tend to converge on the prescutellar region; with sparse hairs and two strong lateral setae near the scutellum. Scutellum yellowish, slightly darker on free margin which bears a row of setae. Postnotum brownish with posterior hairs forming three tufts. Pleura yellow; pronotal, anepisternal and pleurotergal hairs present as well as one or the alar knob.

Wing fuscous except in the middle (see fig. 2). Macrotrichiae evenly distributed and recumbent. Veins as in the figure. Haltere with whitish stem and black knob.

Legs: Coxae brown. Femora yellow, brown dorsally, more so on the hind one. Tibiae brown with the setulae irregularly distributed. Setae shorter than diameter of tibia, hind one with a numerous dorsal row. Tibial spurs 1-2-2. Tarsi brown.

Abdomen blackish brown dorsally, the segments with indistinct lighter apical bands.

Genitalia: (fig. 3). Of difficult interpretation, structures drawn on a dorso-ventral position as in the figure.

Female - Unknown.

Type - Holotype male, to be returned to the U. S. National Museum, Washington, D. C., U. S. A.

Type locality - Panama, C. Z., Barro Colorado, VII. 1923 (R. C. Shannon col.).

Note - This species is named in honor to the late Dr. R. C. Shannon who collected it. Although it has setae on the anepisternite and alar knob, the stem of fork of *M.*, nearly twice as long as r-m it shows a striking resemblance to species of *Cluzobra* specially as to the wing ornamentation. The fuscous wing markings and structures of the male genitalia at once separate this species from the others belonging to this genus and occurring in the Neotropics.

Acnemia freemani, n. sp.

Male - Head: Mouth parts brown and short. Palpus with short and slender yellowish segments. Clypeus brown. Antenna with yellowish scape and torus; flagellum yellowish, the segments slightly longer than broad, last one blunt. Occiput shining blackish pilose; ocelli far from the eye margin, mesial one smaller and inserted below the laterals.

Thorax: Mesonotum blackish brown, the hairs inserted on distinct tubercles. Scutellum dark brown with about six marginal setae. Postnotum brown. Pleura yellowish, slightly brown above, only a few pleurotergals present.

Wing hyaline, evenly covered with macrotrichiae. Costa quite beyond R. 5. Stem of *M.* one third the length of r-m which is oblique. All veins bearing macrotrichiae. Cu.2 and An. as very short stumps. Haltere with white stem and elongate black knob.

Legs yellowish, setae very short and sparse. Tibiae with 1-2-2 spurs, the internals nearly twice as long as the externals and strongly setose. Front basitarsus as long as the corresponding tibia.

Abdomen brown, slightly lighter at apex of segments.

Genitalia: (fig. 4). Basistyle elongate, the dististyle as complex structures inserted at apex. Mesosome large and as in the figure. Other structures not seen.

Female - Similar to the male (antenna missing). Cerci elongate and yellow.

Types - Holotype male (mounted on a slide); allotype female; one male paratype. Registered under ns. 10.325 (holotype), 11.417 (allotype) and 11.416 (paratype).

Type locality - Holotype and allotype from Brazil, State of S. Paulo, Campos do Jordão, VIII. 1949 (J. Lane col.); paratype from Interlagos, near the city of S. Paulo, XI.1949 (J. Lane col.).

Note - As Edwards noted, the species which Enderlein ascribed to the genus do not belong to it. Freeman (1951) described three species of *Acnemia* and gave notes on *A. fulvicollis* (Philippi, 1865). The above species is named in honor to our friend Dr. Paul Freeman of the British Museum, Natural History, London, England. It can be placed near *A. flavicoxa* Freeman, 1951 but the coloration of the head and mesonotum as well as the male genitalic characters are different.

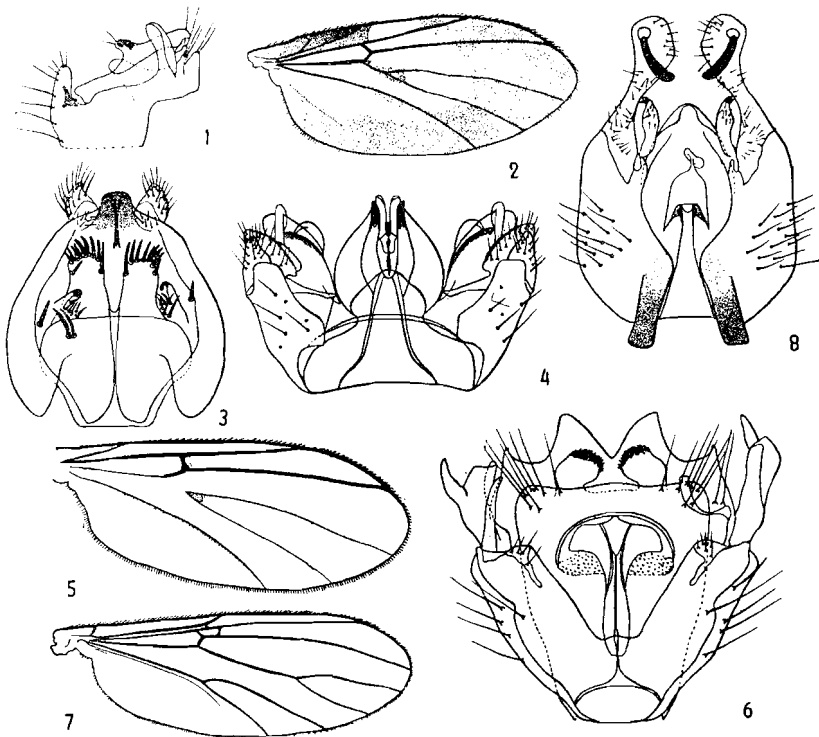


Fig. 1 - *Aphrastomyia shannoni*, n. sp. Apical portion of basistyle and dististyle. Fig. 2, 3 - *Parvicellula shannoni*, n. sp. 2 - Wing showing veins and markings only. 3 - Male genitalia. - Fig. 4 - *Acnemia freemani*, n. sp. Male genitalia. - Fig. 5, 6 - *Cluzobra aitkeni*, n. sp. 5 - Wing showing veins and markings only. - 6 - Male genitalia. - Fig. 7 - 8 - *Austrosynapha paulistana* n. sp. - 7 - Wing showing veins. - 8 - Male genitalia. All drawings were made with the aid of a "camera lucida" in a dorso-ventral position. Drawings made by Mr. E. B. Ferraz.

Cluzobra aitkeni, n. sp.

Male - Head: Mouth parts developed. Palpus blackish, the last two segments elongate. Clypeus brown. Frons yellowish with long and slender hairs. Antenna with yellowish scape and torus; flagellum with segments with a basal neck, strongly pilose, the basal portion blackish, the rest whitish; last segment elongate and pointed. Occiput brown pilose, the two ocelli far from eye margin.

Thorax: Mesonotum yellowish with three dilute brown stripes which follow the acrostichal and dorsocentral setae and converge on the prescutellar region; an additional sublateral brown stripe is present; with many lateral setae. Scutellum brown in the middle but lighter on the sides. Postnotum brown, lighter in the middle. Pleura yellowish-white, with dilute brown markings above; pleurotergite hairy.

Wing (fig. 5). With macrotrichiae which are denser at apex, absent on basal radial cell and base of costal cell. Veins with macrotrichiae. Stem of *M.* weak. Spots as in the figure but apical third of wing seems imperceptibly shaded. Haltere white stem and blackish knob.

Legs: Coxae with anterior one brownish and strongly hairy, mid and hind whitish the apex darkened. Femora yellowish white, the base blackish. Tibiae and tarsi yellowish white, setae about the diameter of tibiae, sparse.

Abdomen lost in the mounting.

Genitalia: (fig. 6). Basistyle elongate. Dististyle drawn into a blackish lobe. Other structures as in the figure.

Female - Unknown.

Type - Holotype male, registered under n. 11.415.

Type locality - Trinidad (B. W. I.), Arena Forest, 28 II.1953 (T. H. G. Aitken col.) on blue light trap.

Note - This species is named after its collector our friend Dr. T. H. G. Aitken of the International Health Division of the Rockefeller Foundation. The wing markings and genitalic structures separate this species from all others of this genus. This genus is reported for the first time outside of Southern Brazil.

Austrosynapha paulistana, n. sp.

Male - Head: Mouth parts and clypeus yellowish. Palpus yellowish. Antenna with yellow scape and torus; flagellum brown the segments subquadrate. Occiput brown, hairy. Ocelli not quite visible and obstructed by antennae.

Thorax: Mesonotum dark brown but anteriorly widely yellowish; acrostichals and dorsocentrals in rows, long as well as the setae inserted anteriorly and on the margins of disk. Scutellum dark brown, the sides slightly yellow. Postnotum brown. Pleura yellowish brown; pleurotergite slightly darker.

Wing unicolorous and evenly covered with macrotrichiae. (fig. 8). Veins as in the figure. Haltere with yellow stem and black knob.

Legs: Coxae yellow. Femora yellow but apex of hind one brown. Tibiae and tarsi dark. Tibiae with 1-2-2 spurs, inner ones slightly shorter than the outers.

Abdomen with tergite I yellow (others lost in mounting).

Genitalia: (fig. 8). Basistyle with the lobes ovate, fused. Dististyle indistinctly separated from basistyle, elongate, knobbed at apex where there is a very large, black, differentiated seta, besides a slender structure with two apical teeth. Other structures as in the figure.

Female - Unknown.

Type - Holotype male, registered under n. 11.423.

Type locality - Brazil, State of S. Paulo, Embú, XII. 1952 (J. Lane col.).

Note - The male genitalia as well as other characters separate this species from all others belonging to this genus in the Neotropics.

Fauna do Distrito Federal

XXIV - Sobre a genitália de *Entimus nobilis* (Olivier, 1790)*)

(Coleoptera - Curculionidae)

por

THOMAZ PEREIRA FILHO **)

Em continuação ao estudo do gênero *Entimus* Germar 1817, damos a publicação mais este trabalho, no qual descrevemos, tal como em nosso trabalho anterior (Pereira Filho - 1954), a genitália do macho e da fêmea de *Entimus nobilis* (Olivier, 1790).

Os exemplares manuseados pertencem à coleção do Museu Nacional, com os n.ºs 54.347 ♀ e 54.397 ♀ de Petropolis; 54.420 ♂ e 54.418 ♂ do Estado do Rio (Belem); 54.403 ♂ e 54.425 ♀ do Museu Nacional; 54.406 ♂ do Rio Grande do Sul; 54.440 ♂ da Baía e 54.408 do Distrito Federal.

No presente trabalho, continuamos usando a nomenclatura de Sharp & Muir - 1912 e Jeannel - 1944.

As figuras, citadas neste trabalho, referentes à *Entimus imperialis* (Foster, 1771), foram publicadas em Pereira Filho - 1954).

As gravuras que deveriam representar as placas em forma de cône (localizadas na região interna da vagina) e a placa quitinizada (observada na região interna do pênis), da espécie em apreço (*Entimus nobilis*), não foram desenhadas, devido ao fato das mesmas não apresentarem diferenças marcantes com relação a *Entimus imperialis* (Pereira Filho - 1954; figs. 7, 11 e 12-PQ).

GENITÁLIA DO MACHO

Segmento genital: *Spiculum ventrale* (SV - Fig. 1) é constituído por uma peça em forma de "M", sustentada

*) - Com auxílio do Conselho Nacional de Pesquisas.

***) - Trabalho realizado no Laboratório do Prof. José Oiticica Filho - Divisão de Zoologia - Museu Nacional.