DUSENIA: III (6)
Dla 30 de Novembro de 1952

Neotropical Mycetophila

(Diptera, Mycetophilidae)

by

J. LANE *)

(Receipted on 30 th August, 1952)

Most of the new species described in this paper are from material loaned by the British Museum (Natural History) comprising the Fritz Plaumann collection made in Nova Teutonia, a locality in the State of Santa Catarina, Brasil. There are also specimens from Boracéa, a forest preserve in the municipality of Salesópolis, State of São Paulo, Brasil and a few from other places. Holotypes of the Nova Teutonia material will be returned to the British Museum (Natural History) together with most of the paratypes. The specific names are given from tribes of Brasilian Indians.

We wish to thank the aid given by Dr Paul Freeman of the British Museum. The illustrations were made by Mr. E. B. Ferraz with a "camera lucida".

We have considered the question of creating subgenera for the Mycetophilidae. In this paper we include the species of Mycetophila "sensu strictu" and delimit them by the following characters: - Anepisternite and pteropleurite with strong setae; katepisternite two thirds or slightly less the area of anepisternite; pteropleurite reaching coxa as a slender filament, its anterior surface not broken by the intrusion of the anepisternite. Wing with two forks. No ventral mid tibial setae. Lobes of basistyle generally longer than broad, tubular and capable of sheathing the elongate lobe of dististyle. Dististyles with an elongate slender ribbonlike lobe; a secondary short, rounded lobe present.

^{*)} From the "Departamento de Parasitologia, Facuidade de Higiêne e Saúde Pública da Universidade de S. Paulo, Brasil.

Read before the "Sociedade Brasileira de Entomologia" in the meeting held on the 30th, April, 1952.

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We have considered the question of creating subgenera for the Mycetophilidae. In this paper we include the species of Mycetophila "sensu strictu" and delimit them by the following characters: - Anepisternite and pteropleurite with strong setae; katepisternite two thirds or slightly less the area of anepisternite; pteropleurite reaching coxa as a slender filament, its anterior surface not broken by the intrusion of the anepisternite. Wing with two forks. No ventral mid tibial setae. Lobes of basistyle generally longer than broad, tubular and capable of sheathing the elongate lobe of dististyle. Dististyles with an elongate slender ribbonlike lobe; a secondary short, rounded lobe present.

 ⁾ From the "Departamento de Parasitologia, Faculdade de Higiêne e Saúde Pública da Universidade de S. Paulo, Brasil.

Read before the "Sociedade Brasileira de Entomologia" in the meeting held on the 20th, April, 1952.

KEY FOR MYCETHOPHILA *)

1 - Wing unicolorous
- Wing with a mesial spot
2 - Without spots over root of wing or prescutellar region; thorax with
- With prescutellar spot or spots over root of wing; thorax without greenish tinge on some scierites
3 - Flagellar segments yellow at base, blackish at apex; first three abdominal tergites mostly yellowish green
 Flagellar segments, except the first, blackish; first three abdominal segments brownisch, the apex blackish juinensis n. sp.
4 - Mesonotum darkened in the middle; pleurae with darker sclerites . 5 - Mesonotum unicolorous; pleurae also unicolorous 6
5 - Without a prescutellar spot; halterere with white stem and black
 With a variable prescutellar spot, haltere yellow (in some specimens it may be darkened at apex)
6 - Spot over root of wing and on the prescutellar region light brown . 7
- Spot over root of wing and on the prescutellar region
7 - Male genitalia greatly enlarged; basistyles with a row of stout setae mesially
- Male genitalia average; basistyles without such a row of mesial stout setae
8 - With additional wing markings besides the mesial spot
9 - With the mesial spot and an anterior clouding 10
- With the mesial spot and additional ones on all the cells which reach the wing margin stone n. n.
 Mesonotum reddish yellow; scutellum reddish passei n. sp Mesonotum darker in the middle, whitish on the sides; scutellum dark in the middle and whitish on the sides splendida Lane, 1948
11 - Coxae with dark spots; prescutellar spots present; tergites with broad yellow markings

^{*)} Chilean species are not included, also some of doubtfull position. The male genitalia offers excellent characters for confirmation of diagnosis.

12 - Wing yellowish, the mesial spot distinct theresae Edwards, 1932
- Wing hyaline, the spot somewhat diluted freemani Lane, 1948
13 - Mesonotum without marks or spots
- Mesonotum with, at least, the prescutellar spot
14 - Abdomen with tergite IV mostly yellow . catharinae Edwards, 1932
- Abdomen with tergite IV mostly blackish boracensis Lane, 1948
15 - Trochanteres yellowish
 Trochanteres blackish as well as base of coxae and femora; wing spot large and black; abomen blackish with indistinct apical markings
16 - Abdomen with tergite I to IV mostly black
 Abdomen with tergite I to IV black above but broadly marked with yellow on the sides mathesoni Lane, 1948
17 - Wing spot large and black

Mycetophila acarensis n. sp.

Male - Paipus yellowish brown. Antenna with yellow scape and torus, the flagellar segments yellow at base and brown at apex. Occiput brown.

Thorax: Mesonotum brown in the middle, yellowish laterally and behind; spot over root of wing small and indistinct; two black spots on prescutellar region; covered with yellow hairs and short setae. Scutellum yellowish with two lateral blackish marks. Pleurae blackish except most of katepisternite, lower portion of pteropleurite and upper one of pleurotergite.

Legs yellow, the hind femur darker at extreme apex. Mid tibia with 5 dorsal (2 of them very small); 3 external; 2 internal besides very short setae. Hind tibia with 6 dorsal (2 of them very short); 6 external; a row of very short internal setae.

Wing with a mesial brown spot, tinged with yellow. Fork of Cu. before that of M. Haltere yellow.

Abdomen with tergites I to IV yellow and with black apical bands progressively larger to apex; V black with a narrow yellow basal band; VI blackish.

Genitalia large, yellow. Basistyle with the lobes fused, plane on upper margin, with four stout setae before apex in

a horizontal row. Dististyle (fig. 1) with a very small lobe, the larger one with many short, blunt setae at base giving it a characteristic appearance, then attenuated, the apex with four long setae. Mesosome (fig. 2) large and as in the figure.

Female - Similar to the male. Cerci very small. Ovipositor with an extruded point.

Types - Holotype male; allotype female; paratypes four males and fifteen females.

Type locality - N. Teutonia, V-IV-X-1938; two paratypes from Boracéa, VII-1949.

Mycetophila banhumai n. sp.

Male - Palpus yellowish, tinged with brown. Antenna with scape and torus yellow; basal flagellar segments yellow at base, blackish at apex. Occiput brown.

Thorax: Mesonotum brown in the middle, yellowish at the sides, with two prescutellar dark brown spots; covered with yellow hairs and short brown setae. Scutellum blackish, yellowish in the middle. Pleurae brown; katepisternite and base of pteropleurite yellowish as well as most of the hypopleurite.

Legs yellow. Mid tibia with 5 dorsal (two shorter), 2 external and 4/5 internal setae of which two are longer. Hind tibia with 5 dorsal and 6 external setae.

Wing tinged with yellow, the mesial brown spot from r.-m. to fork of M. Forks at about the same level. Haltere yellowish.

Abdomen blackish with narrow apical bands.

Genitalia: Basistyle with lobes fused, the upper portion nearly plane. Dististyle (fig. 3) divided into two lobes, one of them rounded with several differentiated setae including two expanded ones, and the other elongate and as in the figure. Mesosome as in fig. 4. Ninth tergite small, subtriangular, spiculose and with elongate setae at apex.

Female - Similar to the male. Cerci blackish, the last segment fingerlike.

Types: - Holotype male; allotype female; paratypes a female and four males.

Type locality - N. Teutonia, VII-1938; one paratype from Boracéa, VIII-1947.

Mycetophila boracensis Lane, 1948

1948 Mycetophila Lane, Rev. Ent., 19 (1/2): 257.

We have chosen as the allotype of this species a female from N. Teutonia, VII-1938 (Fritz Plaumann col.).

Similar to the male. Abdomen mostly blackish. Cerci slender and reddish.

Mycetophila curiaensis n. sp.

Male - Palpus yellowish brown. Antenna brownish, darker distally. Occiput light brown.

Thorax: Mesonotum dark brow in the middle, whitish laterally and behind: a spot over root of wing and a large blackish prescutellar mark which is nearly as broad as scutellum; covered with yellowish hairs and very short scattered setae. Scutellum blackish. Pleurae blackish brown except lower margin of anepisternite, katepisternite and base of pteropleurite but this coloration variable. Postnotum blackish, the sides yellowish.

Legs yellow, the extreme apex of mid and hind femora darker. Mid tibia with 5 dorsal (1 very small); 3 external; and 5 internal (4 very small) setae. Hind tibia with 5 dorsal (1 very small); 6 external and a row of small internal setae.

Wing unmarked but tinged with yellow. Fork of Cu. slightly beyond that of M. Haltere yellow.

Abdomen blackish, narrowly yellow at base and apex and on ventral portion of tergites II to IV.

Genitalia: Basistyle with the lobes fused, broader than wide, upper portion plane. Dististyle with (fig. 5) three lobes, one of them short and ending in a blunt spine, the other short and nude; the ribbonlike one subtriangular and with five stout setae mesially, and four at apex. Mesosome as in fig. 6. Ninth tergite with the lobes as high as mesosome, subtriangular.

Female - Similar to male but much lighter, the haltere might be yellow. Cerci with basal segment shorter than the free one which is rounded and short. A digitate secondary structure present.

Types - Holotype male; allotype female; paratypes three males and five females.

Type locality - N. Teutonia, IV.V.VI.VII.VIII.IX-1937

Mycetophila duanensis n. sp.

Male - Palpus yellow. Antenna with yellow scape, torus and first flagellar segments, the rest blackish. Occiput brown.

Thorax: Mesonotum blackish brown in the middle due to the fusion of the three marks, whitish on the sides, reaching scutellum; small spot over root of wing; covered with golden hairs, the setae blackish and longer than usual. Scutellum blackish, lighter in the middle. Pleurae with anepisternite blackish above, whitish below; katepisternite whitish above, blackish below; pteropleurite whitish below; pleurotergite blackish.

Legs yellow; trochanteres blackish; hind femur darker dorsally, the apex blackish. Mid tibia with 5 dorsal, one small; 3 external and 8 small internal setae. Hind tibia with 4 dorsal, 6 external and a row of very small internal setae.

Wing tinged with yellow, the mesial spot oblong, blackish and from r.-m. reaching fork of M. Fork of Cu. beyond that of M. Haltere yellowish.

Abdomen blackish with indistinct apical yellowish markings.

Genitalia: Basistyle with lobes fused, nearly as broad as long, the upper margin with two rounded protuberances in the middle. Dististyle (fig. 7) with two lobes, the first small and with a few strong setae at apex; the ribbonlike one with many short setae at base and eight long ones on upper margin. Mesosome as in fig. 8. Ninth tergites with the lobes fused, slender and with a few setae at apex.

Female - Similar to the male. Cerci short, slender, reddish.

Types - Holotype male; allotype female; paratypes two males and three females.

Type locality - N. Teutonia, VI.VII.VIII-1937-1938.

Mycetophila freemani Lane, 1948

1948 Mycetophila Lane, Rev. Ent., 19: 256.

Seven specimens from N. Teutonia, VI.VII.VIII-1938. Four from Boracéa, IX-1947.

Mycethophila guaraiasi n. sp.

Male - Palpus yellow, brownish at base. Antenna with scape, torus and first segment yellow, the other segments light brown. Occiput brown.

Thorax: Mesonotum dark brown in the middle, broadly white laterrally and behind, a small brown spot over root of wing; covered with yellow hairs and short setae. Scutellum white escept for two lateral basal blackish spots. Pleurae dark brown except lower margin of anepisternite; upper portion of katepisternite which are yellowish and base of pleurotergite which is whitish; hypopleurite white, posteriorly black where there are short hairs.

Wing unmarked with yellowish tinge. Fork of Cu. slightly beyond that of M. Haltere with white stem and black knob.

Legs yellowish; mid femora with extreme apex blackish; hind one with the apical sixth blackish; hind tibia blackish at extreme apex also. Mid tibia with 4 dorsal (on of them short); 4 external; and 4 internal (three of them short) setae. Hind tibia with 4 dorsal; 5 external and a row of short internal setae.

Abdomen blackish with very narrow apical rings and small basal yellow spots at lower margin of tergites III and IV.

Genitalia brown. Basistyle with the lobes fused, the upper margin slightly curved. Dististyle (fig. 9) with two lobes, the first one small and as broad as long with three differentiated setae; the second one long, with a basal downcurved protuberance bearing three long setae at apex, the rest as in the figure. Mesosome (fig. 10) broader at apex and ending in a capitate structure. Ninth tergites slender, setose at apex.

Female - Similar to the male. Cerci short, rounded, reddish.

 $\it Types$ - Holotype male; allotype female; paratypes two males and two females.

Type locality - N. Teutonia, VI-1938: VII-1937 and VIII-1937.

Mycetophila juinensis n. sp.

Male - Palpus yellow. Antenna with yellow scape, torus

and base of first flagellar segment, the rest blackish. Occiput brownish.

Thorax: Mesonotum light brown in the middle, a dull green sheen on sides. Scutellum yellowish green. Pleurae with katepisternite and pleurotergite greenish; hypopleurite yellowish.

Legs yellowish. Mid tibia with 5 dorsal, 2 of them small; 3 external; 2 internal and some very small setae. Hind tibia with 5 dorsal, one of them very small; 6 externals and a row of very small internal setae.

Wing unmarked, tinged with yellow. Forks at about the same level. Haltere yellowish.

Abdomen brownish, the first four tergites darker at apex, V much darker.

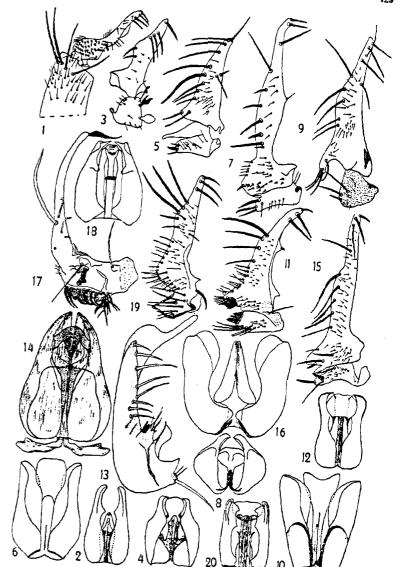
Genitalia: Basistyle with lobes fused, slightly longer than wide, upper margin nearly plane. Dististyle (fig. 11) with first lobe nearly quadrate with a row of longer setae, a blunt spine and a bunch of about six closely appressed blunt setae; long lobe with about forty blunt, differentiated spines forming a mass at the basal protuberance; four setae before constricted portion on dorsal margin, the constricted portion with three apical setae. Mesosome as in figure 12. Ninth tergite with lobes nearly as long as basistyle, subtriangular, sparsely setose.

Female - Unknown.

 $\it Types$ - Holotype male; allotype female; paratypes two males.

Type locality - N. Teutonia, VI.VII-1938.

Mycetophila acarensis n. sp. Fig. 1 - Apex of Basistyle and dististyle. Fig. 2 - Mesosome — Mycetophila banhumai n. sp. Fig. 3 - Dististyle. Fig. 4 - Mesosome — Mycetophila curiaensis n. sp. Fig. 5 - Dististyle. Fig. 6 - Mesosome — Mycetophila duanensis n. sp. Fig. 7 - Dististyle. Fig. 8 - Mesosome — Mycetophila guaraiasi n. sp. Fig. 7 - Dististyle. Fig. 10 - Mesosome — Mycetophila juinensis n. sp. Fig. 11 - Dististyle. Fig. 12 - Mesosome — Mycetophila passei n. sp. Fig. 13 - Dististyle. Fig. 14 - Mesosome — Mycetophila shamanensis n. sp. Fig. 15 - Dististyle. Fig. 16 - Mesosome — Mycetophila tacuensis n. sp. Fig. 17 - Dististyle. Fig. 18 - Mesosome — Mycetophila uaianai n. sp. Fig. 19 - Dististyle. Fig. 20 - Mesosome — Mycetophila uaianai n. sp. Fig. 19 - Dististyle. Fig. 20 - Mesosome —



Mycetophila mathesoni Lane, 1948

1948 Mycetophila Lane, Rev. Ent., 19 (1/2): 252.

A male from N. Teutonia and additional specimens from Boracéa.

In our original description a mistake was made when we mentioned that this species had ventral setae in the mid tibiae, because, in this species they are absent.

Mycetophila passei n. sp.

Male - Head reddish yellow. Palpus brown. Antenna with scape, torus and first flagellar segments yellowish, the rest darkened.

Thorax: Mesonotum reddish, covered with long golden hairs. Scutellum reddish as well as postnotum and pleurae.

Legs: Coxae and trochanteres reddish, femora yellowish as well as tibiae. Mid tibia with 5 dorsal (one small); 6 small internal and 5 external setae. Hind tibia with 6 dorsal, 9 external and 13 internal setae.

Wing yellowish baso-anteriorly, darker at apex and with the following blackish marks; first over r.-m., reaching fork of M.1 and M.2; second at junction of R.1 with costa; third at junction of R.5 with costa and diluted posteriorly. Fork of M. slihhtly before that of Cu. Haltere reddish.

Abdomen brown with indistinct apical bands.

Genitalia: Basistyle with lobes fused, sub-quadrate, sparsely covered with short setae. Dististyle (fig. 13) as long as basistyle, with an apically divided portion. Mesosome (fig. 14) ovate. Ninth tergite with the lobes shorter than dististyle, subtriangular, setose.

Female - Unknown.

Type - Holotype male.

Type locality - BRASIL, State of Rio de Janeiro, Angra dos Reis, Jussaral, X-1934 (Travassos & Lopes col.).

Mycetophila shamanensis n. sp.

Male - Palpus yellow. Antenna with scape, torus and first four or five segments yellow, the rest slightly darker. Occiput light yellow.

Thorax: Mesonotum yellow, slightly darker mesially, an oblong blackish spot over root of wing and a blackish triangular, prescutellar spot; covered with short scattered setae and golden hairs. Scutellum yellow. Pleurae yellow.

Legs yellow. Mid tibia with 4 dorsal (one small); 3 external (one small); 1 long and 5 short internal setae. Hind tibia with 4 dorsal, 6 external, 5 very small apical internal setae.

Abdomen brown with narrow apical yellowish bands.

Genitalia: Basistyle with the lobes fused, the upper margin rounded. Dististyle with a small lobe bearing stout setae; the ribbonlike lobe with (fig. 15) about three setae at base, five in the middle and four at apex, attenuated beyond the middle. Mesosome with a triangular structure in the middle (fig. 16) and large lateral flaps. Ninth tergites fused, the lobes elongate and ending in a few stout setae.

Female - Similar to the male.

Types - Holotype male; allotype female; paratypes thirteen males and nine females.

Type locality - N. Teutonia, VI.VII.VIII-1938.

Mycetophila splendida Lane, 1948.

1948 Mycetophila Lane, Rev. Ent., 19 (1/2): 247.

A couple of specimens VI-1937 and VII-1938 N. Teutonia.

The female specimen is here selected as the allotype of this species. The last segment of cerci is elongate and reddish, otherwise it is similar to the male.

Mycetophila stonei n. n.

1948 Mycetophila edwardsi Lane, Rev. Ent. 19 (1/2): 248.

Dr. Alan Stone has called our attention to the fact that the name edwardsi is preoccupied by a species described in 1913 by Lundström. We take this occasion to give this species a new name in honor to Dr. Alan Stone of the U.S. National Museum.

Two specimens from N. Teutonia, VII.VIII-1938.

Mycetophila tacuensis n. sp.

Male - Palpus yellow. Antenna with scape, torus and first four or five segments mostly yellow the rest slightly darkened.

Thorax: Mesonotum yellowish, indistinctly darker in the middle; spot over root of wing brow and indistinct; a small triangular brown prescutellar mark; covered with yellow hairs and very short brown setae. Scutellum yellow. Pleurae yellow.

Legs yellow. Mid tibia with 5 dorsal (2 smaller), 3 external; I long internal and several short ventral setae. Hind tibia with 5 dorsal (1 small), 8 external and a row of short internal setae.

Wing with a slight yellow tinge. Haltere yellow.

Abdomen with broad basal yellow bands, distally brown.

Genitalia: Basistyle with the lobes fused, a triangular structure connecting them on upper margin. Dististyle (fig. 17) with base complex, formed by several structures with differentiated setae, then a long filament constricted mesially where a very long and a smaller seta are inserted, the apex ending in a flameshaped seta. Mesosome as in fig. 18. Ninth tergites small with sout setae on upper margin.

Female - Similar to the male. Last segment of cerci small.

Types - Holotype male; allotype female; paratypes six males and nine females.

Type locality - N. Teutonia, VII.VIII.IX.X-1937-1938; one paratype from Boracéa, VII-1947.

Mycetophila theresae Edwards, 1932

1932 Mycetophila Edwards, Rev. Ent. 2: 148.

1948 Lane, ibd., 19: 255.

Three specimens from N. Teutonia, VII.IX-1938. One from GUATEMALA, Chiantla (10.000 ft.), VI-1902 (G. Eisen col.). Twenty eight from Boracéa, VIII-1948.

Mycetophila uaianai n. sp.

Male - Palpus yellowish. Antenna with scape, torus and base of all segments yellowish, the apex blackish. Occiput yellowish.

Thorax: Mesonotum yellowish green in the center, greenish at the sides; covered with golden hairs and blackish setae; dorsocentrals longer than usual. Scutellum and pleurae greenish.

Legs: Coxae and femora yellowish. Tibiae and tarsi progressively darker. Mid tibia with 3 long and 2 short dorsal, 3 external, 1 long and 4 very short internal setae. Hind tibia with 5 long dorsal and 1 very short; 6 externals and a row of short internal setae.

Wing unmarked but tinged with yellow. The forks at about the same level. Haltere yellowish.

Abdomen with the basal three segments mostly yellowish green, IV broadly marked with blackish apically.

Genitalia: Basistyle with the lobes fused, slightly longer than broad, upper margin slightly concave. Dististyle with a lobe bearing two short, blunt setae and long ones; a secondary small nude appendage; the ribbonlike lobe (fig. 19) with a row of about tan setae at base, five in the middle and three at apex. Mesosome as in figure 20. Ninth tergites with the lobes subtriangular, sparsely setose.

Female - Similar to the male.

Types - Holotype male; allotype female; paratypes two males. Holotype registered under number 8046.

Type locality - Holotype from Boracéa, XI-1947; allotype and one paratype from N. Teutonia; one paratype from COSTA RICA, S. José, VII-1915 to be returned to the U. S. National Museum.

Mycetophila iheringi (Lane, 1948)

1948 Mycetophila Lane, Rev. Ent., 19: 260.

Six specimens from Boracéa, VIII-1948 (M. P. Barreto col.) and four from N. Teutonia, VII.VIII.X-1937-1938 (Fritz Plaumann col.) The females bear very long setae on the fourth abdominal tergite.

A male from Boracéa has been selected as the allotype of this species and is registered under number 8.032.

Male - Mesonotum slighty darker. Abdominal markings narrower. Otherwise similar to the female.

Genitalia: Basistyle with lobes fused, slightly more than one and a half times greatest width; the mesial portion with four differentiated, thick and black setae on each lobe, the internals smaller; a mesial plate with three united setae on each side, horizontally placed and forming a crown. Dististyle with a short lobe bearing many differentiated setae and supero-lateratelly a dense tuft of hairs; the second elongate lobe slender and with an apical seta. Between the basistyles an upper hyaline conical structure. Mesosome small, the lateral flaps exceeding the capitate mesial portion. Ninth tergite very small, subtriangular and sparsely setose.

SUMÁRIO

O autor delimita êste gênero para englobar as especies que possuem o anepisternito e pteropleurito com cerdas fortes; katepisternito com dois terços ou pouco menos de área do anepisternito, pteropleurito alcançando a coxa em um filamento delgado, com a superfície anterior lisa; asa com duas forquilhas; sem cerdas ventrais nas tibias medianas; com os lobos do basistilo titulares e capazes de receber o lobo alongado do dististilo e com os dististilos formados por um lobo alongado em forma de fita e outro curto e arredondado.

Neste trabalho descreve como novas dez espécies, muda o nome de *M. edwardsi* para *M. stonei* n. n. e elege o alótipo de *M. boracensis* e *M. splendida.*