DUSENIA: III (3) Dia 31 de Maio de 1952

# Neotropical Mycomyia ||

## (Diptera: Mycetophilidae)

by

EDWARD I. COHER \*)

Neotropical Mycomyia ||

(Diptera: Mycetophilidae)

bу

EDWARD I. COHER \*)

University of Massachusetts, Amherst, Massachusets

(Receipted on 10th April, 1952)

This paper treats a third group of males (see Rev. Ent. 21: 561-580, 1950) of the genus Mycomyia. The species herein described have the following combination of characters which distinguish them from the species of all other groups: subcosta branched; mid-coxal spur absent; anterior portion or anterolateral corner of abdominal segments two to four yellowish, often one to six with such a pattern; tergal portion of terminalia bearing a pair of long lateral setae on each side, a group of usually comb-like spurs and an anal ring; sternal portion fused basally, the ornate dististyle bearing a variety of processes, spines and setae.

The anal lobe and the process which connects the sternal portion of the terminalia to the tergal portion are omitted in all drawings.

## Group C

Head: vertex and occiput dark red-brown, setiferous with longest setae anterior; frons red-brown, bare; clypeus red-yellow to fuscous, setiferous, the setae about one-fourth the length of the first flagellar segment; antenna flattened, red-brown with scape, torus and base of first flagellar segment yellowish, flagellum with light-colored setae; palpi yellow to yellow-brown.

<sup>•)</sup> This work was done in the Department of Parasitology and Rural Hygiene of the Faculdade de Higiene da Universidade de São Faulo, Brasil and as a Pan-American Airway Travel Fellow and with a grant-inaid from the Federal Security Agency (Office of Education).

Thorax: anterior pronotum yellow with several strong dark curved setae and some finer shorter setae; pleura bare, yellow to red-brown, the pleurotergite at least a little darker than the other pleurites; mesonotum sparsely covered with setae, yellow-brown to fuscous with dark acrostichal bands (may form a homogeneous, roughly triangular area) which extend from anterior margin nearly to posterior margin and with two broader dorso-central bands which extend from posterior margin to the humeral angle and may fuse with the acrostichal bands, humeri yellowish; scutellum red-brown, bearing four long setae, inner pair longer; postnotum bare, red-brown.

Legs: coxae yellow; anterior coxa bearing scattered setae; middle coxa bearing distally scattered setae and an irregular mesal row of setae gradually reduced in size towards base; posterior coxa with an irregular row of long setae; femora yellow; tibiae and tarsi yellow, appearing brown due to rows of setulae; tibial spurs 1-2-2, the inner spur of the middle tibia longer than the outer, spurs of hind tibia equal; comb present on anterior tibia; median comb of middle tibia absent, comb between spurs poorly developed, usually represented by a few strong bristles; two well-developed combs on posterior tibia.

Wing: hyaline; Sc1 ends in C and Sc2 ends in R1; M, longer than or equal to Cu2 which is longer than M2; M, M,1 M2 and Cu1 bare (except for two species in which Cu and Cu2 are also bare); haltere yellow with knob varying to redbrown. Wing length 3mm.

Abdomen: with red-brown to fuscous posterior bands or with antero-lateral corner of tergites one to six light-colored in most species; sternites usually yellowish.

## Mycomyia arethusa n. sp.

general coloration somewhat fuscous; pleura yellow, katepisternite dark apically, dark markings on anepisternite and mesoepimeron; hind coxa slightly to moderately brownish laterally and posteriorly; anterior basitarsus barely longer than anterior tibia; M longer than Cu2 which is longer than M2; haltere yellow; antero-lateral corner of abdominal tergites one to four yellowish; sternites one to four yellowish.

Terminalia: (fig. 1a and 1b); filamentous, yellow, unlarged; dististyle with a distal subapical lobe bearing several long setae and with a single inner process bearing three apical spurs; tergal portion with a row of spur-like setae and spurs, the largest somewhat hooked terminally; anal ring well-developed.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Campos do Jordão, VIII-1949 (Lane).

Paratopotypes: 3 with same data as holotype.

Observations: Arethousa, one of Diana's nymphs who was changed into a fountain. One specimen has only two scutellar setae and is abnormal in this respect. Most closely related, from present knowledge, to M. brontes n. sp., but, easily distinguished by the form of the terminalia.

Mycomyia brontes n. sp.

♂ pleura yellow; anterior basitarsus slightly shorter than anterior tibia; branches of M distinctly shorter than petiole, M longer than Cu2 which is longer than M2; anterolateral corner of abdominal tergites one to four yellowish; sternites one to four yellowish.

Terminalia: (fig. 2a and 2b); expanded, yellow, elongate; dististyle divided into several subapical processes, one bearing several long, terminal setae, a second with several short, terminal setae, a third with a row of short stout spurs and a row of long, fine setae, the expanded apex bearing many short, fine setae; single inner process bearing three terminal spurs; tergal portion with two strong doubled spurs; anal ring trident-shaped.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Cajurú, II-1947 (Barretto).

Paratopotypes: 3 with same data as holotype.

Paratype: 1, Goiaz, Corumbá, XI-1945 (Barretto).

Observations: The Thunderer, Brontes, one of the cyclops. At present, most closely related to M. arethusa n. sp., from which it is easily separated by the form of the terminalia.

Mycomyia cleta n. sp.

pleura yellow, mesonotum with pattern fused so

spurs; tergal portion with a row of spur-like setae and spurs, the largest somewhat hooked terminally; anal ring well-developed.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Campos do Jordão, VIII-1949 (Lane).

Paratopotypes: 3 with same data as holotype.

Observations: Arethousa, one of Diana's nymphs who was changed into a fountain. One specimen has only two scutellar setae and is abnormal in this respect. Most closely related, from present knowledge, to M. brontes n. sp., but, easily distinguished by the form of the terminalia.

Mycomyia brontes n. sp.

c) pleura yellow; anterior basitarsus slightly shorter than anterior tibia; branches of M distinctly shorter than petiole, M longer than Cu2 which is longer than M2; anterolateral corner of abdominal tergites one to four yellowish; sternites one to four yellowish.

Terminalia: (fig. 2a and 2b); expanded, yellow, elongate; dististyle divided into several subapical processes, one bearing several long, terminal setae, a second with several short, terminal setae, a third with a row of short stout spurs and a row of long, fine setae, the expanded apex bearing many short, fine setae; single inner process bearing three terminal spurs; tergal portion with two strong doubled spurs; anal ring trident-shaped.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Cajurú, II-1947 (Barretto).

Paratopotypes: 3 with same data as holotype.

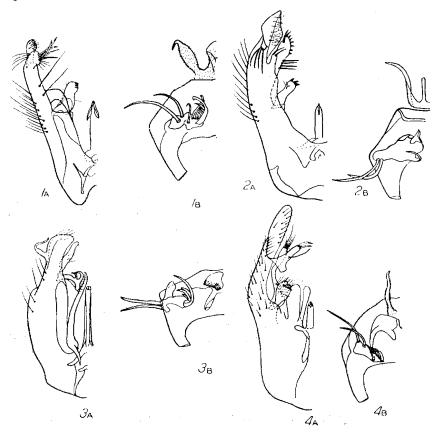
Paratype: 1, Goiaz, Corumbá, XI-1945 (Barretto).

Observations: The Thunderer, Brontes, one of the cyclops. At present, most closely related to M. arethusa n. sp., from which it is easily separated by the form of the terminalia.

Mycomyia cleta n. sp.

pleura yellow, mesonotum with pattern fused so

that posterior two-thirds appears dark; anterior basitarsus slightly shorter than anterior tibia; M subequal to Cu2 which is longer than M2 (the wings of the 2 Brasilian specimens differ somewhat); haltere yellow; abdominal tergites with dark posterior bands.



Figs. 1a & 1b: Mycomyia arethusa n. sp. Figs. 2a & 2b: Mycomyia brontes n. sp. Figs. 3a & 3b: Mycomyia cleta n. sp. Figs. 4a & 4b: Mycomyia dryope n. sp.

Terminalia: (fig. 3a and 3b); leafy, expanded, yellow; dististyle apically flattened and broadened with a long, thin, lateral subapical process and with two median processes one of which is digitiform with fine setae and the other bearing two hook-like processes; tergal portion with a small platelike process at base of lateral setae and with the anal ring slightly developed, appearing more like a fleshy lobe with one striated edge.

Female: Unknown.

Holotype: Argentina, Province of Salta, Urundel, II-25-31-1950 (R. Goldbach).

Paratopotypes: 20 with same data as holotype.

Paratypes: Argentina, Province of Salta; 14, Embarcacion, II-2-6-1950, 1, Tartagal, II-7-12-1950, 1, Aguaray, II-14-19-1950 (R. Goldbach). Brasil, State of São Paulo, 2, Itaporanga, I-1946 (Barretto).

Observations: Kleta, one of the charities - know as the personification of grace and beauty. Closely related to M. tantilla Loew, but, may be separated on the form of the terminalia. In cleta, a subapical digitiform process is present on the dististyle, the process basad of this has a double hook and the apex of the dististyle not broadened as in tantilla. The holotype and many of the paratype series, of this species only, are deposited at the Instituto Miguel Lillo, Tucuman, Argentina. Distribution of other types is as mentioned in Part I.

## Mycomyia dryope n. sp.

c) pleura light red-brown to red-brown, base of katepisternite darker, proepimeron yellow; anterior basitarsus and tibia subequal; branches of M distinctly shorter than petiole, M longer than Cu2 which is longer than M2; cloud over trapezoidal cell; antero-lateral corner of abdominal tergites one to five with successively smaller yellowish areas.

Terminalia: (fig. 4a and 4b); filamentous, expanded, yellow; dististyle with a subapical flap-like fold bearing several strong setae; two median processes present, one long and slim, bearing a terminal tuft of setae and a basal row of long, fine setae, second process club-like with three strong, short setae; two membranous lobes present near base of aedeagus; tergal portion with a row of spur-like setae; anal ring forceps-like, basally pilose.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Cantareira, IV-1946, (Barretto).

#### Paratopotype: 1, VIII-1946, (Barretto).

Paratypes: 1, São Paulo, Boracea, VII-1949, (Lane and Coher); 1, São Paulo, Morumbi, XI-1949, (Ortiz).

Observations: Dryope, a playmate of the wood nymphs. The Boracea specimen is darker than any of the other specimens. Most closely related to M. *irene* n. sp., from which it is easily distinguished by the form of the terminalia.

#### Mycomyia hamadryas n. sp.

*c*<sup>¬</sup> pleura yellow, katepisternite distally as dark as pleurotergite; anterior basitarsus little more than half as long as anterior tibia; M longer than Cu2 which is longer than M2; wing slightly clouded at trapezoidal cell; Sc2 almost contiguous with Rs; haltere with yellow stem and yellow or brownish knob; antero-lateral corner of abdominal tergites one to five or six yellowish.

Terminalia: (fig. 5a and 5b); enlarged, yellow-red; apex of dististyle expanded and flattened, bearing a large, flattened subapical seta which is slightly enlarged at tip; inner median processes present, one of which bears two apical spurs; tergal portion with a comb-like row of spine-like setae and spurs, two larger than the rest, a pair of membranous tipped processes mesad; a pair of median processes, the apices of which are slightly flared at tip.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Santo Amaro, III-1949 (Coher).

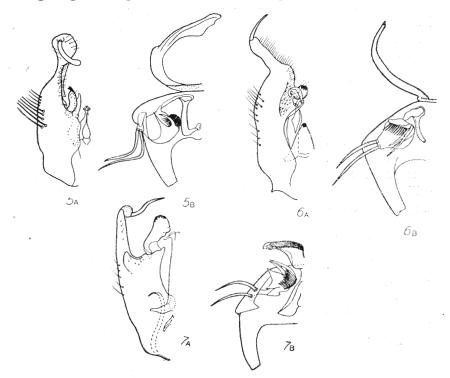
Paratypes: Brasil, 1, State of Goiaz, Corumbá, XI-1945 (Barretto); 1, State of São Paulo, Cantareira, X-1945 (Barretto); 1, State of Rio de Janeiro, Munic. Itaquai, Km. 47 Rio - São Paulo Rd., XI-1944 (Wygodzinsky); 1, Rio Claro, XII-1930 Borgmeier); Argentina, Province of Salta, Tartagal, II-7-12-1950 (R. Goldbach).

Observations: Hamadryas, a wood nymph. Most closely related to M. *iphis* n. sp., from which it is easily distinguished by the form of the terminalia, particularly the apex of the dististyle.

### Mycomyia iphis n. sp.

pleura light red-brown to dark red-brown, katepisternite distally as dark as pleurotergite; anterior basitarsus barely shorter than anterior tibia; M slightly longer than Cu2 which is longer than M2; wing slightly clouded at and above trapezoidal cell; Sc2 ends in R or R1; haltere with yellow stem and yellow or yellow-brown knob; antero-lateral corner of abdominal tergites one to six yellow, less evident on segments four to six.

Terminalia: (fig. 6a and 6b); enlarged, yellow; apex of dististyle slightly tapering with an apical, somewhat flattened spine; involved median process present, the most outstanding feature a flattened, sub-oval process with three apical spurs and redoubled margins; unlike other species in having a broad triangular aedeagus; tergal portion with a comb-like row of spine-like setae with some larger spines at median margin; a pair of median processes with apices slightly striated; anal ring large, forceps-like with a setose apex.



Figs. 5a & 5b: Mycomyia hamadryas n. sp. Figs. 6a & 6b: Mycomyia iphis n. sp. Figs. 7a & 7b: Mycomyia irene n. sp. Female: Unknown.

Holotype: Brasil, State of São Paulo, Campos do Jordão, VIII-1949 (Lane).

Paratopotypes: 1 with same data as holotype. 2, XII-1945.

Paratype: 1, State of São Paulo, Boracea, VIII-1947 (Lane).

Observations: Iphis, one of the Argonauts. Most closely related to M. hamadryas n. sp., but, easily distinguished by the form of the terminalia.

## Mycomiya irene n. sp.

If pleura dark red-brown, mesoepimeron and metaepisternum a little lighter, mesonotum almost entirely dark; coxae whitish to yellow; anterior basitarsus and anterior tibia subequal; M longer than Cu2 which is longer than M2; wing slightly clouded at and above trapezoidal cell; haltere yellow; antero-lateral corner of abdominal tergites two to four and sternites one to four yellow, the Argentine specimen with tergites two to five with yellow markings.

Terminalia: (fig. 7a and 7b); dististyle simple with a large terminal seta and a poorly defined basal lobe; a single median process with a row of five apical spurs; tergal portion with a comb-like row of spine-like setae and spurs; anal ring large with a fringe-like margin.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Campos do Jordão, VIII-1949 (Lane).

Paratypes: 1, State of São Paulo, Boracea, IX-1947 (Lane); Argentina, 1, Province of Salta, Aguaray, II-14-19-1950 (R. Goldbach).

Observations: *Eirene*, Greek goddees of Peace. Most closely related to M. *hamadryas* n. sp., but, easily differentiated on the basis of the form of the terminalia.

#### COHER - Neotropical Mycomyia II

## Mycomyia midas n. sp.

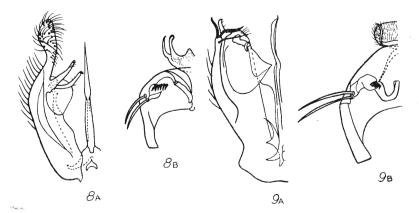
♂ pleura yellow, base of katepisternite same color as pleurotergite; anterior basitarsus shorter than anterior tibia; M slightly longer than Cu2 which is longer than M2; wing slightly yellow around trapezoidal cell and distally to fork of Sc; base of M1 and M2 weak; Cu and Cu2 bare; antero-lateral corner of abdominal tergites one to four yellow, sternites yellowish.

Terminalia: (fig. 8a and 8b); enlarged, elongate and easily distinguished by two long leafy parts covered with black setae (dististyles); dististyle also with two simple median processes, one apically setiferous, the other with a strong terminal spine; tergal portion with a comb-like row of short, broad setae; anal ring large with two lateral processes.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Cajurú, IV-1947 (Barretto).

Observations: *Midas*, the ancient king. Most closely related to *M. nicothoe* n. sp., from which it differs principally in the form of the terminalia.



Figs. 8a & 8b: Mycomyia midas n. sp. Figs. 9a & 9b: Mycomyia nicothoe n. sp.

#### DUSENIA, Vol. III, Fasc. 2 - 1952

## Mycomyia nicothoe n. sp.

Jelura red-brown, proepimeron and mesoepimeron yellow-brown; anterior basitarsus slightly shorter than anterior tibia; M longer than Cu2 which is longer than M2; branches of M much shorter than stem; Cu and Cu2 bare; haltere yellow; antero-lateral corner of abdominal tergites two to four yellow.

Terminalia: (fig. 9a and 9b); enlarged, yellow; dististyle divided into three processes, the outer long and thin, bearing three large terminal setae, a second hook-like and the third expanded with an apical recurved spur; tergal portion with a small comb-like row of setae; anal ring almost plate-like, covered with pilosity.

Female: Unknown.

Holotype: Brasil, State of São Paulo, Morumbi, XI-1949 (Ortiz).

Paratopotype: 1 with same data as holotype.

Paratype: State of São Paulo, 1, Cantareira, XI-1946 (Barretto); 1, Cajurú, II-1947 (Barretto).

Observations: Nicothoe, one of the Harpies. This is the darkest species in this series. Closest affinities are with M. midas n. sp., from which it differs principally in the form of the terminalia.

#### SUMMARY

In this paper, nine new species of Neotropical *Mycomyia* are described, the study being a continuation of one started in Rev. Ent. 21:1950. A new group is presented which is remarkable for the homogeneity of the tergal portion of the male terminalia and the diversity of shape and structures of the sternal portion.

#### RESUMO

Nove novas espécies do gênero *Mycomyia* são descritas em continuação à um trabalho anterior (Rev. Ent. 21:1950).

O autor estabelece um novo grupo, baseado na homogeneidade da porção tergal da terminalia do macho e sôbre a diversidade da porção esternal.