

DESCRIPTION OF THE LARVÆ OF WYEOMYIA APHOBEMA DYAR

(*Diptera, Culicidæ*)

By J. BONNE-WEFSTER AND C. BONNE

Head rounded. Antennæ moderate, uniform, smooth, a single hair outwardly placed. Upper head hairs in threes, lower in twos, ante-antennal hairs in fives, ante-clypeal hairs in twos.

Lateral comb of eighth segment in a patch. Air-tube slightly attenuated near the base, but widened at the middle. False pecten of numerous spines over the whole length of the tube, irregularly placed in longitudinal rows; single hairs on tube and some two-haired tufts, basal ones longest.

Anal segment longer than wide, plate large, well down the sides. Subdorsal hairs in twos, lateral hair single, subventral tuft small, multiple. Anal gills longer than segment.

The number of the head hairs was in some of the specimens different; the ante-antennal hairs having one or two less, the upper head hairs in twos or fours, or the lower in threes.

Larvæ found in Bromeliaceæ near Paramaribo, Surinam, August 1918, in sandy district of the colony (March, 1918); and in the interior of the colony, Lawa River (March, 1917), and Sarah Creek (January, 1919).

A REVISION OF THE AMERICAN SABETHINI OF THE SABETHES GROUP BY THE MALE GENITALIA

(*Diptera, Culicidæ*)

By HARRISON G. DYAR

The tribe Sabethini divides into two groups on the character of the male structure. The *Joblotia* group has a simple, primitive structure and requires no further elucidation than given in the monograph. The *Sabethes* group, however, has the structures complicated and the species numerous. I have

postponed a consideration of this group to the last of our mosquitoes on account of the difficulty of the subject and the scarcity of material. The material has continued scarce, and it is not probable that the species will ever be represented by large series even when searched for, as their restricted habits prevent them from becoming abundant. On this account many species are represented only by females, which has rendered the following study far from complete.¹ Only the main outlines can be discussed, but these are of interest.

Breaking away entirely from the adult characters commonly in use, we find that the group divides into a number of well-defined genera. I treat them here as such, although the absence of female characters may not allow all of them to be subsequently recognized. The specialization affects in general the clasp filament, the basal structures remaining simple. In one branch, the side-pieces have undergone modification. The following table will be self-explanatory. The characters of the new genera are given here and are not repeated under the separate headings.

TABLE OF GENERA

1. Clasp filament apical on side-piece.....	2
Clasp filament not apical, reduced, the angle of the side-piece more or less produced	13
2. Clasp filament widened at tip and lobed	3
Clasp filament widened at tip, slightly notched, but not lobed <i>Menolepis</i> Lutz	
Clasp filament simple, with pointed tip	<i>Dodecamyia</i> Dyar
3. Clasp with the lobes well developed	4
Clasp with the lobes reduced	12
4. Clasp with four lobes, usually much complicated.....	5
Clasp with three lobes, not excessively complicated.....	8
Clasp with two lobes, articulated and opposed.. <i>Limatus</i> Theobald	
5. Harpes with projecting appendages	<i>Miamyia</i> Dyar
Harpes distorted; unci inflated and lobed.....	<i>Dinomyia</i> Dyar
Harpes and unci simple, normal.....	6
6. Clasp-stem shorter than the greatly expanded lobes.....	7
Clasp-stem long and slender, lobes small.....	<i>Heliconiamyia</i> Dyar

¹Actually of 97 species here recognized, only 45 are known to me in the male.

7. Clasp filament with a slender basal arm.....*Sabethinus* Lutz
Without this structure*Sabethes* Robineau-Desvoidy
8. Harpes with two finger-shaped processes at tip, *Diphalangarpe* Dyar
Harpes without appendages 9
9. Clasp with an angular subapical branch, a triangular widening
and a slender branch near base.....*Triamyia* Dyar
Clasp of three long branches, one with enlarged tip
Phoniomyia Theobald
Clasp of three short branches, rarely coalesced..... 10
10. Clasp with two simple arms and expanded hairy lateral one
Pentemyia Dyar
Clasp with central arm enlarged, the others small or obsolete.. 11
11. Stem of clasp short, irregular*Dendromyia* Theobald
Stem of clasp long and slender*Wyeomyia* Theobald
Clasp without stem, the lobes arising close to base, *Cleobonnea* Dyar
12. The three stout hairs of side-piece unmodified...*Calladimyia* Dyar
Two of the three hairs approximated, modified or joined
Decamyia Dyar
13. Apical angle of side-piece produced but little, with a thorn;
clasp reduced, but irregular and spurred.....*Lemmamyia* Dyar
Apical angle of side-piece strongly produced; clasp reduced,
simple*Hystatomyia* Dyar

Genus MIAMYIA, new genus

Type species: *Wyeomyia symmachus* Dyar & Knab.

TABLE OF SPECIES

(Coloration)

- Colors of the abdomen separated on the sides in a straight
line*SYMMACHUS* Dyar & Knab
- Colors separated in an irregular line, the ventral color forming
incisions on the posterior angles of the segments.
- Mid tarsi of male with second to fourth joints white below;
hind legs entirely white below.....*CODIOCAMPA* Dyar & Knab
- Mid tarsi of male with only tip of second, third, and fourth
joints white below; tip of third, fourth, and fifth of hind
tarsi white below*SERRATA* Theobald

(Genitalia)

- Appendages of harpes broad, with coarse hairs in a comb
symmachus Dyar & Knab
- These appendages slender with a long narrow tuft
codiocampa Dyar & Knab, *serrata* Theobald

Miamyia symmachus Dyar & Knab.

Wyeomyia symmachus Dyar & Knab, Smiths. Misc. Colls., Quart. iss., lii, 262, 1909.

Wyeomyia euthes Dyar & Knab, Smiths. Misc. Colls., Quart. iss., lii, 263, 1909.

Wyeomyia symmachus Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, plate 2, fig. 7, 1912.

This species does not differentiate itself in coloration from the ordinary *Wyeomyia* type. The larvæ occur in bamboo, a breeding place that always produces peculiar forms. The larva is rather peculiar and is allied to that of *codiocampa*.

Miamyia codiocampa Dyar & Knab.

Wyeomyia codiocampa Dyar & Knab, Journ. N. Y. Ent. Soc., xv, 209, 1907.

Wyeomyia codiocampa Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, plate 3, fig. 10, 1912.

The adult of this and the following have peculiar abdominal coloration, resembling that of *Limatus* and *Phoniomyia*; but in these genera the lateral incisions are on the anterior angles of the segments. The larvæ occur in bamboo.

Miamyia serrata Theobald.

Dendromyia serrata Theobald, Mon. Culic., iv, 615, 1907.

Theobald gives a rough sketch of the genitalia which in no way resembles the actual structures and reminds one of a gross caricature. They are really very similar to those of *codiocampa*, as I discover by a mount made from a specimen kindly sent by Dr. Arthur Neiva, of Brazil.

Genus **DINOMYIA**, new genus

Type species: *Dinomyia proviolans* Dyar.

A single species is known in this genus.

Dinomyia proviolans, new species (Pl. V, fig. 1).

Male. Clypeus and postnotum nude, dark brown, pruinose, the latter with a group of setæ posteriorly. Head with flat blue-black scales, without white margin to the eyes, a patch of silvery white scales on the sides low down. Prothoracic lobes rather darkly violaceous; mesonotum with dark brown

scales. Abdomen blackish above, silvery white below, the colors separated on the sides in a straight line. Legs bronzy-black scaled, the femora whitish below; mid tarsi with the apical half of the second joint, the third and fourth continuously white-scaled below; hind tarsi with the fourth and fifth joints continuously white-scaled below. Wing-scales broad, obliquely subtruncate, bronzy blackish; basal cross-vein nearer the base of the wing than the anterior. Proboscis moderate, slender, slightly expanded at tip, about as long as the abdomen.

Genitalia. Side-pieces three times as long as wide, the tips conical and much narrowed. Clasp-filament sessile, divided into four lobes: a short slender arm; a long spatulate one with recurved tip and spines on one margin; a long slender one with stout apical hook and spine opposite it; a short slender one with row of four close teeth at tip and a feather-like projection from the summit. Harpes bent at right angles and elongated. Unci inflated, constricted, then a large inflated trilobate apex. Basal appendages small, but with long spines which are clawed, angularly expanded before tip.

Types, three males, No. 22006; U. S. Nat. Mus.; Porto Bello, Panama, March, 1911 (A. Busck); Caldera Island, Porto Bello Bay, Panama, January 4, 1908 (A. H. Jennings).

I am almost certain that this is the male of *Wyeomyia phroso* Howard, Dyar & Knab, described as having prothoracic lobes of the color of the mesonotum. On looking at the type of *phroso*, I can see a blue tint in a strong light; the blue in *proviolans* is dark and obscure; but I keep the new name to avoid any possibility of founding the new genus on a misidentification.

Genus SABETHINUS Lutz

Sabethinus Lutz in Bourroul, Mosq. do Brasil, 48, 57, 1904.

Type species: *Sabethinus intermedius* Lutz.

Theobald describes the genitalia of the type species, but not in such a manner as to be of service in the present review. The genitalia are unknown to me, and I have placed the genus

on another species than the type, whether rightly or wrongly remains to be seen.

TABLE OF SPECIES

(Coloration)

- | | |
|---|------------------------------|
| 1. Postnotum without scales | 2 |
| Postnotum with scales | 5 |
| 2. Prothoracic lobes metallic blue or purple | 3 |
| Prothoracic lobes blackish scaled, with white at base and tip | <i>moerbista</i> Dyar & Knab |
| 3. Abdomen with purple and coppery red reflections | |
| | <i>purpureus</i> Theobald |
| Abdomen with blue or greenish luster | 4 |
| 4. Anal abdominal setæ long; hind tarsi dark. IDENTICUS Dyar & Knab | |
| These setæ shorter; fifth hind tarsal white below | |
| | UNDOSUS Coquillett |
| 5. Setæ at base of wings jet black. | 6 |
| These setæ light golden brown. | <i>aurescens</i> Lutz |
| 6. Mesonotum metallic green | <i>intermedius</i> Lutz |
| Mesonotum deep metallic blue | <i>albiprivatus</i> Lutz |

(Genitalia)

- | | |
|---|---|
| 1. Clasp filament with four branches, the basal one long, simple, the inner broad, with a row of spines | |
| | <i>identicus</i> Dyar & Knab, <i>undosus</i> Coquillett |

These two species, the only ones of which I know the genitalia, are fully treated in the monograph under the same names.

Genus SABETHES Robineau-Desvoidy

Sabethes Robineau-Desvoidy, Mém. Soc. Nat. Hist. Paris, iii, 411, 1827.

Type species: *Sabethes locuples* Robineau-Desvoidy.

TABLE OF SPECIES

(Coloration)

- | | |
|---|---------------------------|
| 1. Mid legs only with tufts | 2 |
| Tufts also on the front legs, none on the hind, <i>tarsopus</i> Dyar & Knab | |
| Front legs also with small tufts. | 6 |
| 2. Tuft on mid tibia, not on tarsus. | <i>purpureus</i> Peryassú |
| Tuft also on the tarsus. | 3 |
| 3. No white on the legs. | 4 |
| White markings present on some of the tarsi. | 5 |

4. Basal cross-vein beyond the anterior one.....CYANEUS Fabricius
Cross-veins coincident or the anterior one within
albiprivus Theobald
5. Part of fringe of first mid tarsal white....*bipartipes* Dyar & Knab
Some white also on the tibial tuft.....*chroiopus* Dyar & Knab
6. Tarsi marked with white 7
Tarsi without white markings.....*lutzii* Theobald
7. Fore tarsi with white on second to fourth joints
goeldii Howard, Dyar & Knab
Fore tarsi black with a white line on apical half of second
joint*schausi* Dyar & Knab

The male is known in but one species :

Sabethes cyaneus Fabricius.

Culex cyaneus Fabricius, Syst. Antliat., 35, 1805.

Sabethes locuples Robineau-Desvoidy, Mém. Soc. Nat. Hist.
Paris, iii, 412, 1827.

Culex remipes Wiedemann, Ausser. zweifl. Ins., i, 573, 1828.

Sabethes cyaneus Howard, Dyar & Knab, Mosq. N. & Cent. Am.
& W. I., ii, plate 2, fig. 1, 1912.

Genus SABETHOIDES Theobald

Sabethoides Theobald, Mon. Culic., iii, 328, 1903.

Type species: *Sabethoides confusus* Theobald.

No male is known to me in this genus.

TABLE OF SPECIES

(Coloration)

1. Prothoracic lobes collar-like; cross-veins in line; abdomen
with iridescent whitish segmental bands
nitidus Theobald, *rangeli* Surcouf & Gonzales Rincones

Genus TRIAMYIA, new genus

Type species: *Wyeomyia aporonoma* Dyar & Knab.

TABLE OF SPECIES

(Coloration)

1. Scutellum darkAPORONOMA Dyar & Knab
Scutellum with a golden spot on each lobe.....*personata* Lutz

Triamyia aporonoma Dyar & Knab.

Wyeomyia aporonoma Dyar & Knab, Journ. N. Y. Ent. Soc., xiv, 230, 1906.

Wyeomyia aporonoma Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 5, fig. 31, 1912.

This species differentiates itself from the others with coppery prothoracic lobes by having a coppery spot on the vertex of head.

Found in Central America and Panama, and I have lately received specimens from Surinam (Mrs. J. Bonne-Wepster).

The larvæ occur in cocoanut husks, hollow trees, etc. I know *personata* only in the female, but think it will fall in the genus.

Genus **PHONIOMYIA** Theobald

Phoniomyia Theobald, Mon. Culic., iii, 311, 1903.

Type species: *Wyeomyia longirostris* Theobald.

TABLE OF SPECIES

(Coloration)

- | | |
|---|------------------------|
| 1. Mesonotum dark bronzy and blue | LONGIROSTRIS Theobald |
| Mesonotum dull gray-brown | TRINIDADENSIS Theobald |

(Genitalia)

- | | |
|---|------------------------------|
| 1. Expansion on basal arm of clasp smooth; apical hook re-curved | <i>longirostris</i> Theobald |
| This expansion pilose-denticulate on the margin; apical hook laterally directed | <i>trinidensis</i> Theobald |

Phoniomyia longirostris Theobald (Pl. V, fig. 2).

Wyeomyia longirostris Theobald, Mon. Culic., ii, 275, 1901.

The larvæ live in water in Bromeliaceæ according to Peryassú.

Phoniomyia trinidensis Theobald (Pl. V, fig. 3).

Wyeomyia trinidensis Theobald, Mon. Culic., ii, 277, 1901.

Fully described in the Monograph under the genus *Wyeomyia*. The larvæ live in water in Bromeliaceæ.

Genus PENTEMYIA, new genus

Type species: *Wyeomyia drapetes* Dyar & Knab.

But a single species at present known. Others may be found among the species of *Wyeomyia* with dark prothoracic lobes when the males are known.

Pentemyia bromeliarum Dyar & Knab.

Wyeomyia asullepta Dyar & Knab (not Theobald), Journ. N. Y. Ent. Soc., xiv, 228, 1906.

Wyeomyia bromeliarum Dyar & Knab, Proc. Biol. Soc. Wash., xix, 138, 1906.

Wyeomyia drapetes Dyar & Knab, Smiths. Misc. Colls., Quart. iss., lii, 264, 1909.

Wyeomyia espartana Howard, Dyar & Knab (in part, not Dyar & Knab), Mosq. No. & Cent. Am. & W. I., iii, 108, 1915.

The identification with *asullepta*, adopted by Dyar & Knab, is remote, as that species has golden yellow prothoracic lobes. The name *bromeliarum* is unfortunate, as the larvæ live in bamboo joints and not in Bromeliaceæ. In the monograph we place *bromeliarum* widely separated; but that is due to an error of observation, for, while the type is only represented by two legs, another specimen from the same collector shows white tips on the prothoracic lobes. Correcting this will cause *bromeliarum* and *drapetes* to fall together. The type of *espartana* has long scales on the bases of the forks of the second vein as stated by us; but this is not the case with the specimens from Panama associated with *espartana* in the monograph. The name *espartana* must remain founded upon the single female type, the male being unknown, and its characters as given in the monograph canceled. There remain the slight differences given in the genitalia in the monograph (compare Pls. 2 and 3, figs. 8, 9, and 12); but these I do not verify on reëxamination. They are due to the artist having attempted to draw too accurately and represent things which she really could not see. The delicate outlines of these parts are difficult to follow, especially with imperfect mounts.

Genus *HELICONIAMYIA*, new genusType species: *Wyeomyia galoa* Dyar & Knab.

TABLE OF SPECIES

(Coloration)

1. Female with white on the mid tarsi; bronzy shade on occiput
very broad (male unknown) *chalcocephala* Dyar & Knab
- Female without white on mid tarsi; bronzy shade on vertex
narrow *GALOA* Dyar & Knab

Heliconiamyia galoa* Dyar & Knab (Pl. V, fig. 5).Wyeomyia galoa* Dyar & Knab, Proc. Biol. Soc. Wash., xix, 140, 1906.*Wyeomyia galoa* Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 4, fig. 23, 1912.¹

In the type, a diffuse bronzy median band on the occiput is quite distinct; the eyes have a narrow white border, though it is obsolete at the vertex. The species should therefore be placed in the coloration table in the Monograph in dichotomy 36 with the other *Heliconia*-inhabiting species. The hind tarsi of the female take a white reflection below on the last joint only, but there seems to be no definite marking. In the male, both the hind and mid legs are continuously white below. The specimen mentioned below under *onidus* was originally determined as *galoa* and quite properly with the coloration as the sole guide.

Heliconiamyia chalcocephala* Dyar & Knab.Wyeomyia chalcocephala* Dyar & Knab, Proc. Biol. Soc. Wash., xix, 140, 1906.*Wyeomyia chalcocephala* Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 8, fig. 27, 1912.

The male genitalia seem indistinguishable from those of *galoa*. Further material must be obtained to show whether the two species have closely similar males or whether the male of supposed *chalcocephala* is really a male of *galoa*. The

¹Figure 23 is bad; the structure is shown better in figure 27. I refigure it.

females seem distinct. Both species occur in *Heliconia* in Guatemala.

Genus DENDROMYIA Theobald

Dendromyia Theobald, Mon. Culic., iii, 313, 1903.

Type species: *Wyeomyia luteoventralis* Theobald.

The male of the type species is unknown to me; but as it appears to be somewhat close to *chrysomus* D. & K., I make the present identification.

TABLE OF SPECIES

(Coloration)

1.	Prothoracic lobes silvery	2
	Prothoracic lobes coppery golden	6
	Prothoracic lobes violet or blue	9
2.	Abdomen silvery-tipped above	3
	Abdomen without silvery tip above	5
3.	No white on mid tarsi <i>minor</i> Dyar & Knab	
	With white marking on the mid tarsi.....	4
4.	From Florida <i>VANDUZEEI</i> Dyar & Knab	
	From the Bahamas <i>bahama</i> Dyar & Knab	
	From Cuba <i>ARGYRURA</i> Dyar & Knab	
5.	From Martinique <i>fratercula</i> Dyar & Knab	
	From Santo Domingo <i>sororcula</i> Dyar & Knab	
6.	Scutellum silvery; a large silver spot on vertex of head	
 <i>homotina</i> Dyar & Knab	
	Scutellum dark-scaled	7
7.	Eyes with a white border and white line between them	
 <i>luteoventralis</i> Theobald, <i>quasiluteoventralis</i> Theobald	
	Vertex with a white spot; no white line between the eyes.....	8
8.	Proboscis short and stout <i>agnostips</i> Dyar & Knab	
	Proboscis long and slender <i>CHRYSOMUS</i> Dyar & Knab	
9.	Scutellum silvery (prothoracic lobes "mauve")... <i>magna</i> Theobald	
	Scutellum dark-scaled	10
10.	Eyes with a continuous white margin	11
	Eyes without a continuous white margin.....	13
11.	Mid tarsi marked with white in the female, the hind spotted	
 <i>guatemala</i> Dyar & Knab	
	Hind tarsi dark in the female.....	12
12.	White on mid tarsi on tip of second, third, and fourth joints	
 <i>abascanta</i> Dyar & Knab ¹	

¹The slide has been lost; see genus *Diphalangarpe* below.

- White on mid tarsi on apical half of second, third to fifth joints *megalodora* Dyar & Knab
13. A white spot on vertex of occiput..... 14
No white spot on vertex; wing-scales narrow, ligulate
homothæ Dyar & Knab
14. Mid and hind tarsi spotted with white in the female
violescens Dyar & Knab
Mid tarsi white-spotted but the hind tarsi all dark..... 15
15. Proboscis moderately long; prothoracic lobes violet..... 16
Proboscis long; lobes pale blue; a blue spot on vertex
PHILOPHONE Dyar & Knab
16. White margin of the eye on less than the lower half; lobes with a coppery reflection SMITHII Coquillett
The white margin reaching above the lower half of eye, or almost to vertex..... *mataea* Dyar & Knab

(Genitalia)

1. The three lobes of clasp filament united by membrane, all rather broad *chrysomus* Dyar & Knab
Lateral lobes free, narrow 2
2. Three lobes of clasp about equally long; a tuft of hairs from the base of the mid lobe
vanduzeei Dyar & Knab, *argyrura* Dyar & Knab
Side lobes of clasp shorter than the mid lobe..... 3
3. Apex of mid lobe of clasp pilose only *smithii* Coquillett
Apex of mid lobe of clasp capitate with a double tooth
philophone Dyar & Knab

Dendromyia chrysomus Dyar & Knab.

Phoniomyia chrysomus Dyar & Knab, Journ. N. Y. Ent. Soc., xv, 208, 1907.

Wyeomyia chrysomus and *mataea* Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 3, fig. 14, pl. 4, fig. 17, 1912.

Wyeomyia mataea Howard, Dyar & Knab (in part, not Dyar & Knab), Mosq. No. & Cent. Am., & W. I., iii, 93, 1915.

The type of *chrysomus* is a single male from Panama, the prothoracic lobes of which take a distinct coppery reflection. The types of *mataea* are two females from Mexico and Salvador, the lobes showing little or no coppery tint, being blue. In Mr. Jennings' bred series from Panama, cited in the Monograph under *mataea*, the males have the lobes more coppery tinted than the females, but I think only one species is represented in his series. Certainly Jennings' male is *chrysomus*, to

judge by the genitalia. The larvæ live in Bromeliaceæ, but no specimens are before me.

Dendromyia vanduzeei Dyar & Knab.

Wyeomyia vanduzeei Dyar & Knab, Proc. Biol. Soc. Wash., xix, 138, 1906.

Wyeomyia vanduzeei Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 3, fig. 13, 1912.

The larvæ occur in Bromeliaceæ, as fully described in the monograph.

Dendromyia argyrura Dyar & Knab.

Wyeomyia argyrura Dyar & Knab, Proc. U. S. Nat. Mus., xxxv, 70, 1908.

Wyeomyia conchita Dyar & Knab, Smith. Misc. Colls., Quart. iss., lii, 264, 1909.

The larvæ live in Bromeliaceæ. Fresh material from Doctor Pazos contains males. The genitalia do not differ from those of *vanduzeei*. I think it is probable that *vanduzeei*, *argyrura*, and *bahama* represent only local forms of one species, and I have accordingly separated them on locality in the table. The differences given in the monograph tables between *argyrura* and *conchita* cannot be substantiated, and I accordingly unite them.

Dendromyia smithii Coquillett.

Aedes smithii Coquillett, Can. Ent., xxxiii, 260, 1901.

Wyeomyia smithii Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 3, fig. 16, 1912.

Our familiar pitcher-plant mosquito. The prothoracic lobes verge distinctly on a coppery tint, though with blue ground.

Dendromyia philophone Dyar & Knab.

Phoniomyia philophone Dyar & Knab, Journ. N. Y. Ent. Soc., xv, 209, 1907.

Wyeomyia philophone Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 3, fig. 15, 1912.

The larvæ live in Bromeliaceæ.

Genus DIPHALANGARPE, new genus

Type species: *Wyeomyia abascanta* Dyar & Knab.

Diphalangarpe abascanta Dyar & Knab

Wyeomyia abascanta Dyar & Knab, Proc. U. S. Nat. Mus., xxxv, 65, 1908.

Wyeomyia abascanta Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, plate 4, fig. 19, 1912.

A distinct genus seems warranted for this species, as the genitalia are figured with two finger-shaped processes on top of the harpes. Unfortunately the single slide is lost and there is no second male at hand to mount. The larvæ were found in a terrestrial Bromeliad resembling a Century plant in Trinidad.

Genus **WYEOMYIA** Theobald

Wyeomyia Theobald, Mon. Culic., ii, 267, 1901.

Type species: *Wyeomyia grayii* Theobald (Mon. Culic., ii, 269, 1901).

The type species is unknown to me. It comes from the island of Santa Lucia, whence I have no material. I am assuming it to have dark prothoracic lobes and to be allied to *fallax* Bonne-Wepster & Bonne and *abia* Dyar & Knab. *Wyeomyia*, as here defined, may be considered to be founded on *leucopisthepus* Dyar & Knab.

TABLE OF SPECIES

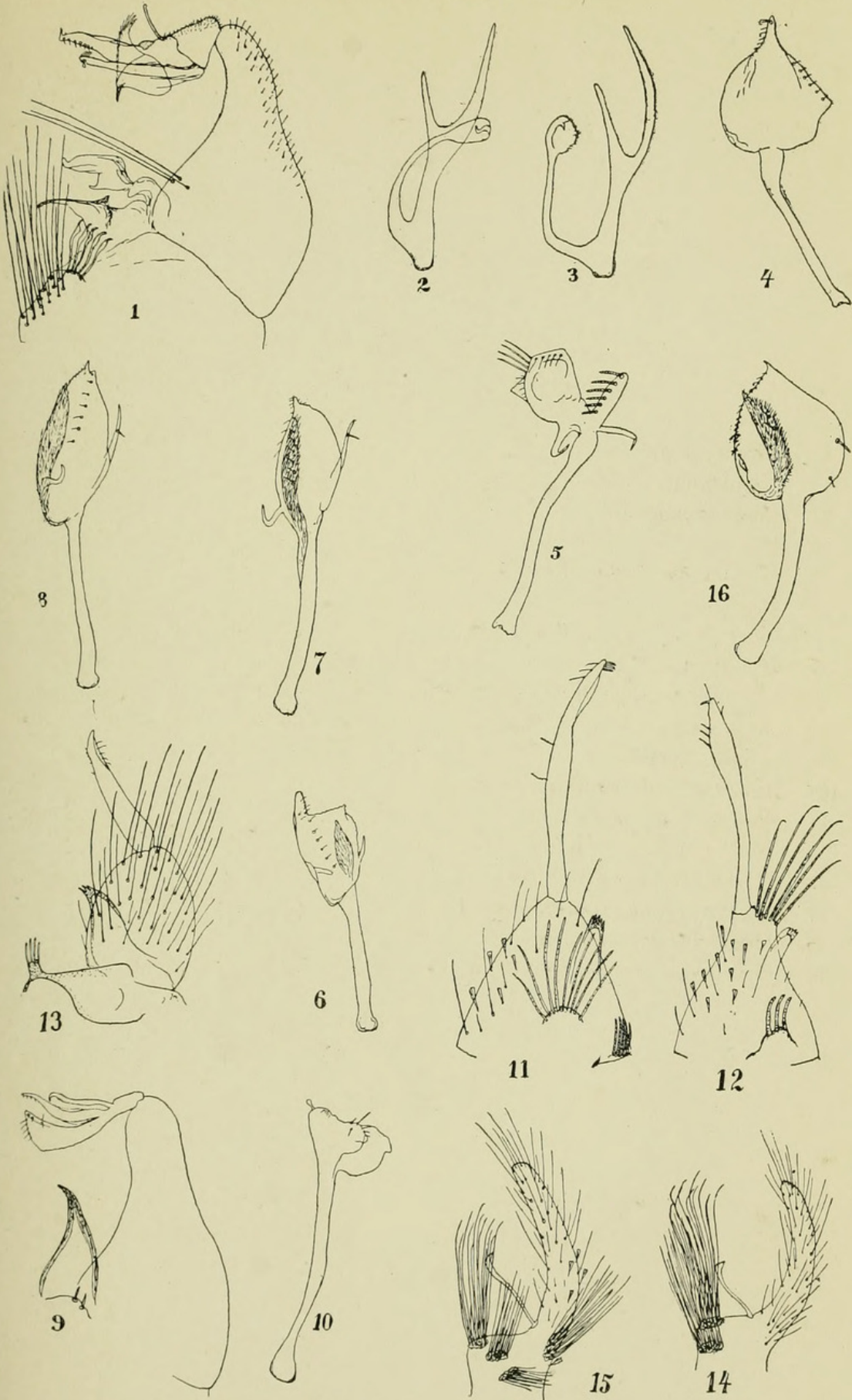
(Coloration)

1. Prothoracic lobes blue	2
Prothoracic lobes darkly colored like the mesonotum.....	3
2. Mid tarsi white-marked; hind usually white spotted	
MITCHELLII Theobald	
Tarsi all dark	MELANOPUS Dyar
3. Prothoracic lobes with a distinct white tip.....	4
Without this character	11
4. Eyes with a white-scaled margin.....	5
Without this character	10
5. Female with mid and hind tarsi white-marked (male the same)	6
Female with the mid tarsi only white-marked.....	7
Female with the hind tarsi only white-marked.....	8
Female with the tarsi all dark	9
6. The white marks restricted; mid tarsi with no white on second joint	labesba Howard, Dyar & Knab
White marks less restricted; mid tarsi with the apex of second joint white.....	ABLABES Dyar & Knab

7. Female with long thin outstanding scales on second to fourth veins; lateral white area of abdomen a thin line (male unknown)*oblita* Lutz
Female with long wing scales only in the cell; lateral white area of abdomen broad, shaded; male with narrow line of white scales on all of fourth and apical two-thirds of fifth joint of mid tarsi*FALLAX* Bonne-Wepster & Bonne
8. White marks at bases of second to fifth hind tarsal joints; male with mid tarsi white above on last two joints
ABRACHYS Dyar & Knab
White marks at bases of fourth and fifth hind tarsal joints only (male unknown)*gynæcopus* Dyar & Knab
9. Palpi silvery tipped in the female (male unknown)
espartana Dyar & Knab
Palpi without silvery tip*ABEBELA* Dyar & Knab
10. Mid and hind tarsi white marked in the female (male unknown)*hosautus* Dyar & Knab
Mid tarsi only marked with white (male unknown)
abia Dyar & Knab
Tarsi all dark in the female (male unknown)
panamena Dyar & Knab
11. Eyes with a narrow white border or vertical spot..... 12
Without this character 18
12. A median broad white stripe on occiput (male unknown)
cara Dyar & Knab
Without this character 13
13. White border of the eyes uniform..... 14
This border constricted or broken subdorsally..... 16
14. Female with the mid and hind tarsi white-marked
ADELPHA Dyar & Knab
Female with the tarsi all dark 15
15. Wing scales broad (male unknown)*agyrtes* Dyar & Knab
Wing scales narrowly ovate (male unknown), *pertinans* Williston
16. Female with the mid tarsi only white-marked 17
Female with mid and hind tarsi white-marked
LEUCOPISTHEPUS Dyar & Knab
Female with the hind tarsi only white-marked
simmsi Dyar & Knab
17. Mid tarsi with the fifth joint dark; proboscis white-marked below*TELESTICA* Dyar & Knab
Not so marked*glaucocephala* Dyar & Knab
18. Proboscis short and stout; female with the hind tarsi only white-marked*baria* Dyar & Knab
Proboscis long and slender 19

EXPLANATION OF PLATE V

1. *Dinomyia phroso* Howard, Dyar & Knab (*proviolans* Dyar), male genitalia, side view (half).
2. *Phoniomyia longirostris* Theobald, clasp filament.
3. *Phoniomyia trinidadensis* Theobald, clasp filament.
4. *Wyeomyia melanopus* Dyar, clasp filament.
5. *Heliconiamyia galoa* Dyar & Knab, clasp filament.
6. *Wyeomyia fallax* Bonne-Wepster & Bonne, clasp filament.
7. *Wyeomyia rolonca* Dyar & Knab, clasp filament.
8. *Wyeomyia adelpha* Dyar & Knab, clasp filament.
9. *Cleobonnea occulta* Bonne-Wepster & Bonne, male genitalia, side view (half).
10. *Menolepis albosquamata* Bonne-Wepster & Bonne, clasp filament.
11. *Dodecamyia aphobema* Dyar, male genitalia.
12. *Dodecamyia splendida* Bonne-Wepster & Bonne, male genitalia.
13. *Dodecamyia clasoleuca* Dyar & Knab, male genitalia.
14. *Hystatomyia circumcincta* Dyar & Knab, side-piece.
15. *Hystatomyia intonca* Dyar & Knab, side-piece.
16. *Wyeomyia roloncetta* Dyar, clasp filament.



MALE GENITALIA OF SABETHINE MOSQUITOES

19. Mid tarsi white-marked in the female 20
 Mid tarsi dark in the female SCOTINOMUS Dyar & Knab
20. Hind tarsi dark in the female (male unknown)
celænocephala Dyar & Knab
 Hind tarsi white-marked 21
21. Female with fourth mid tarsal white below; hind tarsi with
 bases of second, third and most of fourth and fifth white-
 marked (male unknown) *hapla* Dyar & Knab
 Male with third mid tarsal white below; hind tarsi with most
 of fifth joint white below, the other joints scarcely marked
 (female unknown) ROLONCETTA Dyar
 Male with third to fifth mid tarsals white below; hind tarsi
 with bases of fourth and fifth joints broadly white-marked
 (female unknown) ROLONCA Dyar & Knab

(Genitalia)

1. Tip of mid lobe not widely expanded 2
 Tip widely expanded, squarely ended 6
2. Mid lobe with small expanded tip and central core
telestica Dyar & Knab
 Mid lobe without projecting expanded tip 3
3. Mid lobe without free lateral arms 4
 Mid lobe with small free lateral arm on each side 5
4. Mid lobe without central core *melanopus* Dyar
 Mid lobe with pilose central core *roloncetta* Dyar
5. Lower end of clasp-tip rounded, free from the stem
adelpha Dyar & Knab, *ablaves* Dyar & Knab
 Lower end of clasp-tip produced narrowly down the stem
rolonca Dyar & Knab
6. Tip of central lobe hammer-headed; lateral lobe furcate
abebela Dyar & Knab
 Central lobe quadrately expanded; lateral lobes simple 7
7. One angle of mid lobe produced.. *fallax* Bonne-Wepster & Bonne
 Mid lobe squarely ended 8
8. Central core of mid lobe large; one lateral lobe large, with
 setæ *mittchellii* Theobald
 Central core more or less small; lateral lobes small, pointed.. 9
 Central core absent; small lateral lobe prolonged down the
 stem *abrachys* Dyar & Knab
9. Central core broadly ended, fimbriate, with two ridges
scotinomus Dyar & Knab
 Central core small, ovate; small lateral lobe not prolonged
 down the stem *leucopisthepus* Dyar & Knab

Wyeomyia melanopus, new species (Pl. V, fig. 4).

Male. Palpi black-scaled; clypeus and tori nude, pruinose, partly whitish; occiput with flat black scales with bluish reflection, a white spot at the vertex and narrow central white line, white scales on the sides below; prothoracic lobes blue-violet, shading to whitish at the tips; mesonotum and scutellum with light brown scales, a white line on the lateral edge; postnotum brown, nude, pruinose, with a group of setæ posteriorly; abdomen black above, silvery white below, the colors separated on the sides in a straight line; legs with the tarsi entirely bronzy black; wing-scales small, dense, on the forks of the second vein ligulate at the base, becoming shorter and more triangular apically.

Genitalia. Side pieces inserted on the upper half of the segment, about three times as long as wide, conical, the tips narrowed and down-curved, the filaments capable of being directed straight inward; filament with long slender uniform stem, the tip expanded into a rounded lobe with pointed bud-shaped tip, with a central ridge running from the tip halfway down; a row of setæ along one margin, which is angled, representing one side lobe; the other side is smoothly rounded, the lateral lobe being quite obsolete. Harpes long, a little bent in the middle, digitate, with five teeth. Unci similar, smaller, pointed. Basal appendages with two spines, articulated and opposed to the side pieces.

Type, male, No. 22005, U. S. Nat. Mus.; Porto Bello, Panama, January 2, 1908 (No. 119), bred from a *Bromelia* on a fallen tree near a brook (A. H. Jennings).

Two species with blue prothoracic lobes from Panama are unknown in the male, *agnostips* D. & K. and *homothæ* D. & K.; but these have white marks on the tarsi in the female, so that I cannot associate this male with either of them.

Wyeomyia telestica Dyar & Knab.

Wyeomyia telestica Dyar & Knab, Journ. N. Y. Ent. Soc., xiv, 230, 1906.

Wyeomyia telestica Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 4, fig. 24, 1912.

The larvæ occur in Bromeliaceæ in Trinidad, as fully described in the monograph. I have captured specimens from Surinam which appear to be this species (Mrs. J. Bonne-Wepster).

Wyeomyia fallax Bonne-Wepster & Bonne (Pl. V, fig. 6).

Wyeomyia fallax Bonne-Wepster & Bonne, Ins. Ins. Mens., vii, 110, 1919.

The larvæ occur in Bromeliaceæ in Surinam, as recorded by Mrs. J. Bonne-Wepster and Dr. C. Bonne.

Wyeomyia rolonca Dyar & Knab (Pl. V, fig. 7).

Wyeomyia rolonca Dyar & Knab, Proc. Ent. Soc. Wash., xi, 173, 1910.

The larvæ occur in Bromeliaceæ in Panama, collected by Mr. A. H. Jennings.

Wyeomyia roloncetta, new species (Pl. V, fig. 16).

Head with black scales with greenish reflection, without white border to the eyes above; prothoracic lobes darkly colored like the mesonotum; mid tarsi with the third joint marked with white below, its base and the last two joints black, contrasting; hind tarsi faintly but largely white on the fifth joint below, perhaps slight traces of white at the bases of the preceding joints; wing-scales narrowly ligulate, those on the forks of the second vein becoming a little broader toward the tip of the wing.

Genitalia. Clasp filament with the tip enlarged, bud-shaped, without lateral arms, the spine and seta of the long arm being borne on one side of the enlargement, a slight irregularity on the side indicating the short arm; tip pointed, with fine setæ on one side reaching nearly to tip; central core large, nearly reaching tip, pilose; median row of setæ reduced to two. Side pieces with the tips attenuated and downcurved with three long hairs below. Harpes and unci well-developed, normal.

Type, male, No. 22027, U. S. Nat. Mus.; Porto Pello, Panama, March 5, 1908, bred from a Bromelia growing on a tree in old Fort San Felipe (A. H. Jennings).

This may be the male of *W. hapla* Dyar & Knab, but the white mark on the under side of the mid tarsi is on a different joint. The difference may be sexual, but this remains to be proved.

***Wyeomyia adelpha* Dyar & Knab (Pl. V, fig. 8).**

Wyeomyia adelpha Dyar & Knab, Proc. Biol. Soc. Wash., xix, 140, 1906.

Described from captured females from Esparta and Zent, Costa Rica. Males are before me from Estrella or Orosi, Costa Rica (C. Picado), which, though in bad condition, are certainly referable here. They were bred by Señor Picado, probably from Bromeliaceæ, and killed too soon after emergence.

Genitalia. Side pieces three times as long as wide, conically tapered at apex, the three hairs inserted close together near base of side piece. Clasp with long slender uniform stem; apical expansion narrowly elliptical, the tip shortly pointed, a broad pilose core reaching nearly to tip; two rows of setæ, one coarse and widely set, the other small and closely set; long lateral arm rather narrow, with a spine before tip; short lateral arm infolded, curved. Harpes slender, long, normal, toothed at tip; unci small, pointed. Basal appendages small, with one or two stout spines.

***Wyeomyia ablabes* Dyar & Knab.**

Wyeomyia ablabes Dyar & Knab, Proc. U. S. Nat. Mus., xxxv, 66, 1908.

Wyeomyia ablabes Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, plate 4, fig. 21, 1912.

The larvæ occur in Bromeliaceæ in southern Mexico, as fully described in the monograph. The species is probably not different from *adelpha*. I have not the larvæ for comparison. The genitalia are alike. The colorational differences given of *ablabes* having a white tip to the prothoracic lobes and *adelpha* not, may be due to the condition of the specimens, the former being bred and fresh, the latter captured.

Wyeomyia abebela Dyar & Knab.

Wyeomyia abebela Dyar & Knab, Proc. U. S. Nat. Mus., xxxv, 67, 1908.

Wyeomyia abebela Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 4, fig. 22, 1912.

The larvæ occur in Bromeliaceæ in southern Mexico, as fully described in the monograph.

Wyeomyia mitchellii Theobald.

Dendromyia mitchellii Theobald, Mosq. or Culic. Jam., 37, 1905.

Wyeomyia ochrura Dyar & Knab, Journ. N. Y. Ent. Soc., xiv, 229, 1906.

Wyeomyia antoinetta Dyar & Knab, Proc. Biol. Soc. Wash., xix, 141, 1906.

Wyeomyia mitchellii Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 4, fig. 20, 1912.

This species breeds in Bromeliaceæ in the Greater Antilles and southern Florida. The white marks at the bases of the hind tarsal joints vary in size and are sometimes absent (*antoinetta*). I have lately received many typical *mitchellii* from Florida, taken by Mr. C. A. Mosier on Paradise Key.

Wyeomyia abrachys Dyar & Knab.

Wyeomyia abrachys Dyar & Knab, Smith. Misc. Colls., Quart. iss., lii, 262, 1909.

Wyeomyia abrachys Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 5, fig. 26, 1912.

The larvæ were found in Bromeliaceæ on an island in Porto Bello Bay, Panama (East Coast), as fully described in the monograph.

Wyeomyia scotinomus Dyar & Knab.

Phoniomyia scotinomus Dyar & Knab, Journ. N. Y. Ent. Soc., xv, 209, 1907.

Wyeomyia dymodora Dyar & Knab, Proc. U. S. Nat. Mus., xxxv, 68, 1908.

Wyeomyia scotinomus Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., pl. 5, fig. 30, 1912.

The larvæ occur in Bromeliaceæ in Panama and the Canal Zone, as described in the monograph.

Wyeomyia leucopisthepus Dyar & Knab.

Wyeomyia leucopisthepus Dyar & Knab, Journ. N. Y. Ent. Soc., xv, 212, 1907.

Wyeomyia chresta Dyar & Knab, Smiths. Misc. Colls., Quart. iss., lii, 263, 1909.

Wyeomyia chresta, *simmsi* and *leucopisthepus* Howard, Dyar & Knab, l. c., ii, pl. 4, fig. 25, p. 5, figs. 28, 29, 1912.

Wyeomyia simmsi Howard, Dyar & Knab (in part, not Dyar & Knab), Mosq. N. & Cent. Am. & W. I., iii, 146, 1915.

The female has the mid tarsi white on the outside at tip; hind tarsal joints broadly white at the bases of the fourth and fifth, specks on the second and third. The male has much less of white than the female, which is the reverse of the usual condition. The male *simmsi* of the monograph is this species, but the female type has, apparently, dark mid tarsi and must be held apart. The legs are broken in the single type and stuck on a card-point, so there may be some question as to the fact. In the monograph tables, we place *leucopisthepus* as having dark mid tarsi in the female, but we had no female at the time. The larvæ occur in Bromeliaceæ in the Canal Zone, Panama.

Genus CLEOBONNEA, new genus

Type species: *Wyeomyia occulta* Bonne-Wepster & Bonne.

A single species occurs in the genus, which is characterized by the absence of a stem to the clasp, the three branches arising almost directly from the tip of the side piece.

Cleobonnea occulta Bonne-Wepster & Bonne (Pl. V, fig. 9).

Wyeomyia occulta Bonne-Wepster & Bonne, Ins. Ins. Mens., vii, 105, 1919.

The larvæ were found in a jelly-like mass at the bases of the leaves of a *Heliconia* in Surinam by Mrs. J. Bonne-Wepster and Dr. C. Bonne.

This may be the same as *Dendromyia ulocomia* Theobald (Mon. Culic., iii, 313, 1903), described from British Guiana. Theobald's description is insufficient and, in any case, his type appears to be in such poor condition that a perfect description could not be prepared from it. See Doctor Howard's notes

(Mosq. No. & Cent. Am. & W. I., iii, 121, 1915). In addition the females of *intonca* D. & K., *circumcincta* D. & K., and *cænonus* H., D. & K. are indistinguishable from this in coloration, which does not add to the ease of identifying Theobald's name.

Genus LIMATUS Theobald

Limatus Theobald, Mon. Culic., ii, 349, 1901.

Simondella Laveran, C. R. Soc. Biol., liv, 1160, 1902.

Type species: *Limatus durhamii* Theobald.

Eliminating *methysticus*, which I place in the genus *Lemmamyia*, there is nothing to add to the account in the monograph. *Dendromyia paraënsis* Theobald (Mon. Culic., iii, 316, 1903), is apparently a *Limatus*, as Peryassú says that the prothoracic lobes are yellow and the abdominal colors are incised anteriorly on the segments. There is also a *Limatus* described from Argentina, *L. leontiniæ* Bréthes (Bol. Inst. Ent. y Pat. Veg., i, 41, 1912); but I do not know these species in nature.

Genus DECAMYIA, new genus

Type species: *Wyeomyia onidus* Dyar & Knab.

Three species fall in this genus, apparently inseparable on colorational characters. The larvæ occur in the flower bracts of *Heliconia* and *Calathea*. All the species are widely distributed.

TABLE OF SPECIES

(Genitalia)

1. Detached hairs of the side-piece elongated and approximated,
straight 2
These hairs bent at right angles and thickened, *onidus* Dyar & Knab
2. These two hairs long, double the length of the clasp
pseudopecten Dyar & Knab
These hairs shorter, equal to the length of the clasp
eloisa Howard, Dyar & Knab

Decamyia onidus Dyar & Knab.

Wyeomyia onidus Dyar & Knab, Smith. Misc. Colls., Quart. iss.,
lii, 261, 1909.

Wyeomyia pantoia Dyar & Knab, Smith. Misc. Colls., Quart. iss.,
lii, 262, 1909.

Wyeomyia cacodela Dyar & Knab, Smith. Misc. Colls., Quart. iss., lii, 265, 1909.

Wyeomyia onidus, *pantoia* and *cacodela* Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 5, figs. 33, 34, pl. 6, fig. 35, 1912.

In this species the white margin to the eyes is normally distinct and continuous, though narrow; there is a faint median pale bronzy shade on the occiput; the hind tarsi have the last two joints white below, the black area widening at the tip of the fourth joint and, in certain lights, appearing to interrupt the white there; but it does not really do so, even in the type of *onidus*. The fore and mid tarsi are dark in the female; in the male, the mid legs have a white luster beneath throughout, but the last two tarsal joints are contrastingly black below. In the table of the monograph, we place *cacodela* first "without a median pale stripe on occiput;" but in the male type I can see this quite distinctly even with a hand lens. It is less plain in the female type, though traces are visible. Again we say: "Tarsi all dark in the female." This is clearly an error of observation, for the female type shows the usual white marking, although, as the tarsi are rubbed, it is obscure and only visible in the right light. Again we place *pantoia* also in the section "eyes without a white border;" but this seems unnecessary as far as the type series is concerned. On the other hand, specimens reared by Mr. A. H. Jennings from *Heliconia* at San Pablo, Canal Zone, Panama, the genitalia of which agree perfectly, have all the white markings reduced to obsolescence, both the eye-margin and the hind tarsal marking being distinguishable only as traces after prolonged search in special lights. This occurs in both sexes, four specimens. The larval differences given in the monograph for *cacodela* I think are without specific value.

The larvæ occur in the flower-cups of *Heliconia* of the types of *champneiana*, *luteofusca*, and *acuminata* in Trinidad and Panama.

***Decamyia pseudopecten* Dyar & Knab.**

Wyeomyia pseudopecten Dyar & Knab, Proc. Biol. Soc. Wash., xix, 139, 1906.

Wyeomyia pseudopecten Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 5, fig. 32, 1912.

The larvæ occur in the same habitat as the preceding in Trinidad and Panama. I have also specimens from Peralta, Costa Rica, March 25, 1910 (P. P. Calvert).

***Decamyia eloisa* Howard, Dyar & Knab.**

Wyeomyia eloisa Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 6, fig. 36, 1912.

Wyeomyia eloisa Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., iii, 121, 1915.

The larvæ occur in the flowers of *Calathea discolor* in Panama. I have received the species also from Surinam (Mrs. J. Bonne-Wepster).

Genus CALLADIMYIA, new genus

Type species: *Wyeomyia pandora* Dyar & Knab.

But a single species is known. The larvæ live in the fluid in the leaf-axils of *Calladium*. The species is widely distributed.

***Calladimyia melanocephala* Dyar & Knab.**

Wyeomyia melanocephala Dyar & Knab, Proc. Biol. Soc. Wash., xix, 140, 1906.

Wyeomyia canfieldi Dyar & Knab, Journ. N. Y. Ent. Soc., xv, 207, 1907.

Wyeomyia pandora Dyar & Knab, Smiths. Misc. Colls., Quart. iss., lii, 261, 1909.

Wyeomyia pandora Howard, Dyar & Knab, Mosq. No. & Cent. Am. & W. I., ii, pl. 3, fig. 11, 1912.

Wyeomyia fauna Dyar & Knab, Ins. Ins. Mens., vii, 2, 1919.

There is some variation in the amount of white on the tarsal joints. In the single type of *melanocephala*, the white on the mid tarsi occupies not quite the apical half of the second joint. This is from Trinidad. In specimens from Rupununi, British Guiana (K. S. Wise), somewhat over half of the joint is white. In specimens from Paramaribo, Dutch Guiana (Mrs. Bonne-Wepster), fully two-thirds of the second joint is white, as occurs typically in *canfieldi* in Panama. In *pandora* the white does not completely encircle the last joint of hind tarsi, as stated, for even in the types, in the right light, a narrow line

of black scales can be seen running down the dorsal side of the fourth joint. This line is very narrow in these types and others, although commonly distinct, but it is not a specific character. In *fauna* the white becomes more extensive on the mid tarsi, occupying all of the second joint below and touching the tip of the first joint; but as the male genitalia are identical, I scarcely think that the form will be found to represent a distinct species.

Genus *MENOLEPIS* Lutz

Menolepis Lutz, in Peryassú, Os Culic. do Brasil, 303, 1908.

Type species: *Wyeomyia leucostigma* Lutz (in Bourroul, Mosq. do Brasil, 67, 1904).

The male of the type species is unknown to me. I take the characters from *albosquamata* Bonne-Wepster & Bonne, found in Bromeliaceæ. *M. leucostigma* is reported as breeding in water at the leaf-bases of *Typha*.

TABLE OF SPECIES

(Coloration)

1. Prothoracic lobes blue *leucostigma* Lutz
Prothoracic lobes dark like mesonotum
ALBOSQUAMATA Bonne-Wepster & Bonne

Menolepis albosquamata Bonne-Wepster & Bonne (Pl. V, fig. 10).

Wyeomyia albosquamata Bonne-Wepster & Bonne, Ins. Ins. Mens., vii, 107, 1919.

Larvæ found in Bromeliaceæ along the Lawa River, Surinam, by Mrs. J. Bonne-Wepster and Dr. C. Bonne.

Genus *DODECAMYIA*, new genus

Type species: *Wyeomyia aphobema* Dyar.

TABLE OF SPECIES

(Coloration)

1. Colors of the abdomen separated on the sides in a straight line 2
The black color incised by the ventral white on the anterior angles of the segments..... *SPLENDIDA* Bonne-Wepster & Bonne



1919. "A revision of the American Sabethini of the Sabethes group by the male genitalia (Diptera, Culicidae)." *Insecutor inscitiae menstruus* 7, 114–142.

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