A NEW SPECIES OF *DOMINICOMYIA* FROM BRASIL (DIPTERA: DOLICHOPODIDAE)

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Abstract.—A second species of *Dominicomyia*, *D. brasiliensis*, is described as new and is compared with *D. chrysotimoides* H. Robinson of the Lesser Antilles.

A small collection of Dolchopodidae from Bahia, Brasil was received recently from John A. Winder at the Biological Control Station in Curitiba, Paraná. The series of potentially interesting specimens included three species of *Condylostylus*, two species of *Chrysotus* one of which is similar to *C. crosbyi* V. Duzee of North America, one species of *Diaphorus* with a yellow base on the abdomen, one species of *Xanthina*, *Micromorphus albipes* Zett., and a close relative of *Medetera crassicauda* H. Robinson. The packaging of the material in alcohol in small vials and the legal restrictions on dealing with recent collections from Brasil were sufficient to discourage any serious efforts at determination. Thanks to the efforts of museum preparators the material has been placed on pins and one species proves to be of sufficient interest and in sufficient quantity to warrant further study.

The genus *Dominicomyia* was described on the basis of a single species from the island of Dominica in the Lesser Antilles (Robinson, 1975). The genus was placed in the Medeterinae and seemed to have close relationship only to another monotypic genus, *Cryptopygiella*, described at the same time from Dominica. One of the species in the brasilian collection is a second species of *Dominicomyia* which allows a confirmation of various generic traits, a correction of one described feature of the female genitalia, and offers some insight into the kinds of specific variations that might be expected in the genus.

Dominicomyia brasiliensis H. Robinson, new species (Fig. 1-3)

Male.—Length 1.8 mm; wing 1.9 mm by 0.7 mm; stout, mostly brownish with slight metallic reflections; setae dark with pale reflections. Face and front dark reddish brown with slight gray pollen, face 2× as wide above as antennal segment 3, sides nearly straight, transverse suture weak. Palpus brown with a few smaller setae and a larger apical seta; proboscis brown, pseudotracheae geminately sclerotized; hypopharynx (Fig. 3) with large tooth ventrally. Antennae dark brown, segment 3 hemispherical. Hind surface of head metallic bluish; lower postocular setae pale. Thorax

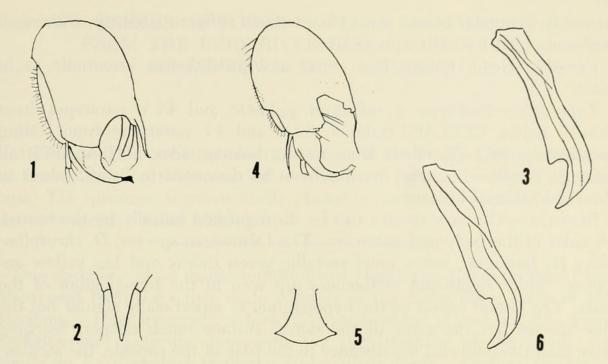


Fig. 1–3. *Dominicomyia brasiliensis*. 1, hypopygium of male. 2, ventral lobe of hypopygium. 3, hypopharynx, lateral view. Fig. 4–6. *D. chrysotimoides*. 4, hypopygium of male. 5, ventral lobe of hypopygium. 6, hypopharynx, lateral view.

brownish, mesoscutum and scutellum with metallic bluish or violet reflections; about 7 pairs of acrostichals; 5 pairs of large dorsocentrals; posterior slope flattened; scutellum with 1 pair of bristles, minute seta on lateral margin. Legs yellow with bases of middle and hind coxae and 5th segments of tarsi slightly brownish. Femora without preapicals. Fore and hind tibiae plain; middle tibia with small anterodorsal near basal ¼, 3 small apicals. Relative lengths of leg segments from base in mm as follows: Leg I, coxa 0.4, femur 0.55, tibia 0.57, segments of tarsus 0.25-0.18-0.15-0.11-0.10; leg II, femur 0.68, tibia 0.59, segments of tarsus 0.34-0.27-0.16-0.11-0.07; leg III, femur 0.68, tibia 0.90, segments of tarsus 0.14-0.35-0.16-0.11-0.10. Wing oblong-oval, clear; veins yellowish. Veins 2, 3, and 4 all nearly straight and parallel beyond middle of wing, vein 3 slightly nearer 2 in middle of last part, with scarcely perceptible forward turn at tip, ending slightly before wing apex, vein 4 ending slightly farther behind wing apex. Crossvein perpendicular to base of vein 4, nearly ½ as long as last of vein 5. Hairs of calypter pale; halter pale. Abdomen with tergites pale brownish, mostly without metallic reflections. Hypopygium (Fig. 1, 2) small, ca. 0.35 mm long, brown; apical appendage brown, tapering, curving toward venter with minute appendage at tip, not noticeably trilobed at base; smaller appendage not tapering, bearing fringe of hairs apically and ventrally; dorsal surface of capsule with sinus extending nearly to base, filled with pale pubescent cushion; mid-dorsal surface of capsule with

narrowly triangular brown projection, without differentiated tip, with small setiferous lobe on each side at base.

Female.—Head, thorax, legs, wing and preabdomen essentially as in male.

Type-data.—Holotype $\,^{\circ}$, allotype $\,^{\circ}$, $\,^{\circ}$, $\,^{\circ}$ and $\,^{\circ}$ paratypes from Brasil: Bahia, CEPLAC, Itabuna; $\,^{\circ}$ $\,^{\circ}$ and $\,^{\circ}$ paratypes from rotting cacao pods, 1971–72, others from rotting banana stem, 17 June 1973; all John A. Winder; holotype eventually to be deposited in Brasil, others in the U.S. National Museum.

Remarks.—The new species can be distinguished initially by the brownish color of the body and antennae. The Dominican species, D. chrysotimoides H. Robinson, has a more metallic green thorax and has yellow antennae. More significant differences are seen in the hypopygium of the male. The lateral aspect of the hypopygium is superficially similar but the new species has the sinus of the dorsal surface much deeper, reaching more than three-fourths the distance to the base of the capsule, the medianventral projection is narrowly tapering and totally brown without a differentiated tip, the apical curved armature is not obviously tricornute at the base, and the small appendage from the base of the armature is broader and fringed instead of simple and bristle-like. Differences elsewhere include the large tooth instead of a small notch ventrally on the hypopharynx and the very slightly but consistently more flexed last part of the third wing vein. The collection data suggests the habitat might also differ in the two species, the Dominican species was collected on palm trunks and cement walls while the Brasilian species is from rotting vegetable material.

The original generic description erred in citing only a single pair of dornen on the female genitalia. Reexamination shows a small crest which is barely visible. A crest is more obvious on material of the new species with four or five dornen on each side. The presence of a crest is of significance since other characters still indicate the genus is in the subfamily Medeterinae where such crests are usually reduced or absent.

Literature Cited

Robinson, H. 1975. Bredin-Archbold-Smithsonian Biological Survey of Dominica: The Family Dolichopodidae with Some Related Antillean and Panamanian Species (Diptera). Smiths. Contributions Zool. 185:1–141.

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