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POLYBIOCYPTERA PLAUMANNI, GEN. ET SP. NOV. AND HEMYDA CONOPOIDES, SP. N., TWO NEW WASP-LIKE TACHINIDAE (DIPTERA)

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#### ABSTRACT

Polybiocyptera plaumanni, gen. et sp. nov. (type-locality: Brazil, Santa Catarina, Nova Teutônia) and Hemyda conopoides, sp. n. (type-locality: Brazil, São Paulo, Rio Paraná, Porto Cabral), belonging to the Phasiinae (Cylindromyini) are described. Both flies are remarkable by their wasplike appearance.

The two tachinid flies described below were encountered during recent studies of New World muscoidean Diptera accumulated in the Museu de Zoologia da Universidade de São Paulo. I wish to thank Drs. Nelson Papavero and F. Christian Thompson, who called my attention to these two interesting forms, belonging to the Cylindromyini (Phasiinae). The types are in the collection of this Museum (MZSP).

## Polybiocyptera, gen. n.

Elongate, wasp-like in form; facial plate long, moderately bulging on upper half; epistoma short, with arched edge; facialia obliquely furrowed; vibrissae short, indistinct from peristomal hairs, set below oral margin level; haustellum short; palpi strongly clavate, as long as haustellum; antennae elongate, longer than facial plate; third antennal joint long, nearly five times length of second, somewhat widened towards tip; arista long, thickened halfway and tapering beyond; eye long, straight on inner margin, outer margin with a slight incision at middle; lunula strongly convex; frontals weak, with one bristle below bases of antennae; ocellars weak and divergent; outer verticals absent; inner verticals convergent; one weak proclinate orbital; frontalia three times width of parafrontalia; parafacialia bare; genae about 0.12 of eye height.

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Thorax as wide as head; prescutum as long as postscutum; no acrostichals; dorsocentrals 0:1; humeral calli swollen; humerals 2; 2 strongs postalars; supraalars 2; scutellum with a strong pair of laterals; 3-4 thin hypopleurals; no sternopleurals; wings elongate;  $R_{4+5}$  widely open at wing tip; m-cu sinuous, very close to bend of vein M: squammae vestig al: legs slender and elongate.

Abdomen petiolate;  $T_{1+2}$  well-developed dorsally;  $T_3$  very narrowed on the middle, widening gradually from  $T_{1+2}$ ;  $T_4$  much shorter than  $T_{1+2}$ ;  $T_5$  conic, pointed, projected posteriorly downwards, thus completing the wasp-like pointed abdomen;  $T_{1+2}$  with three lateromarginals:

 $T_3$  to  $T_5$  with a row of about six marginals.

Type-species, Polybiocyptera plaumanni, sp. n.

Polybiocyptera is very close to Polistiopsis Townsend, 1915, differing mainly by the well-developed palpi, the vestigial squammae (reduced to a narrow fringe), by the absence of sternopleurals, by the presence of one pair of laterals on the scutellum, and by the ventrally bare subcosta.

## Polybiocyptera plaumanni, sp. n.

(Fig. 1)

Female. Total length, 12 mm.

Head brownish-black in ground color; front at vertex 0.24 of head width; parafacialia and parafrontalia golden-yellow pollinose, interrupted by a black spot at level of lunula; frontals 4, with one bristle below bases of antennae; frontalia black; occipital fringe black, ending on the eyes' upper half; occiput bulging, silvery-white pollinose, with long yellow hairs; palpi black, yellow on tip; haustellum short, reddish-brown; facial plate brown, with thin white pollen.

Thorax brown, mesonotum dark brown, with thin testaceous pollen; legs yellowish; front coxae yellow, silvery-white pollinose on anterior side; front femora reddish-brown, pale yellow pilose on posterior side; front tibiae reddish-brown; tarsi reddish-brown; middle and hind tibiae and tarsi yellow pollinose, covered with thin yellow pile. Wings hyaline, 10 mm in length, 3 mm in width; veins orange-yellow; 5R open before wing tip; costal spine undeveloped; epaulet reddish-brown; subepaulet orange-yellow; squammae vestigial, vitreous, with long cilia on border.

Abdomen brown, faintly testaceous pollinose dorsally;  $T_3$  with a yellow fascia on the constricted section;  $T_3$  and  $T_4$  with a narrow band of silvery pollen on posterior margin. Postabdomen brown,  $T_6$  conical, about as long as  $T_5$ .

Holotype 9, BRAZIL, Santa Catarina: Nova Teutônia. x.1967 (F. Plaumann) (MZSP).

### Hemyda conopoides, sp. n.

(Fig. 2)

Female. Total length, 9 mm.

Head white pollinose; front at vertex 0.20 of head width; parafrontalia pale yellow pollinose, about one-fourth of frontalia; frontals

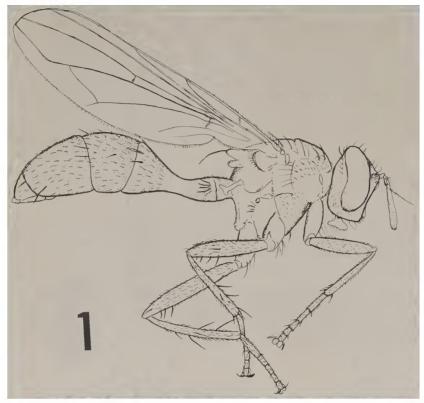


Fig. 1. Polybiocyptera plaumanni, gen. et sp. n. Holotype Q.

weak, the lower bristle at level of first antennal segment; frontalia dark brown, with a large, oval, polished area, except on lateral margins; eye reaching from lower edge of head to well above level of vertex; ocellars hairlike; outer verticals absent; inner verticals vestigial, convergent; facialia and face pale white tomentose; vibrissae reduced to a small bristle far below median level of oral margin; parafacialia bare, white tomentose; antennae brownish, as long as face; third segment about three times length of second; arista bare, yellowish, slightly enlarged on basal half; genae silvery pollinose, sparsely pale white haired, linear in profile; proboscis short, labella large and fleshy; palpi reddish-brown, the thickened tip yellowish; occiput white pollinose, clothed with pale hairs.

Thorax subshining brown; scutellum reddish apically, with pale yellow pollen; sternopleura, humeri and transverse suture of mesonotum dusted with yellow pollen; acrostichals 1:0; dorsocentrals 1:2; notopleurals 2; sternopleurals 1 (hindmost); scutellum with 2 laterals and 1 decussate apical; no discals; hypopleura with one small cilium; legs reddish-brown, becoming darker basally; last tarsal segment



Fig. 2. Hemyda conopoides, sp. n. Holotype Q.

yellowish; claws pale yellow, with brown tips. Wings rather narrow and long, brownish on costal third, subhyaline behind; cell  $R_5$  narrowly open before wing tip; bend of vein M obtusely rounded, without fold or stump;  $R_{4\ast 5}$  with 3 small hairs near base; costal spine not developed; epaulet dark brown; calypteres small, transparent.

Abdomen dark brown in ground color, dusted with a thin gray pollen; constricted portion of  $T_3$  transparent white, except along median line above; anterior margin of  $T_4$  white a narrow yellow transverse fascia, thinly dusted with white pollen;  $T_3$  to  $T_5$  with an irregular row of median marginals; genitalia brownish, composed of a pair of sclerotized anal forceps with tips of latter opposite to the divergent arms of a Y-shaped process arising from the ventral surface of the apical sternite.

Holotype  $\$ , BRAZIL,  $S\~{ao}$  Paulo: Porto Cabral, Rio Paraná,  $6-15. \times .1941$  (L. Travassos F.º) (MZSP).

Hemyda Robineau-Desvoidy, heretofore known only from North America and Mexico, was represented by three species — aurata, decumana and zonula (Guimarães, 1971: 16). Townsend (1936: 70) placed Hemyda in the Cylindromyini (Phasiinae), a group which the female punctures the integument of the host (Hemiptera) and injects an unincubated macrotype egg.

Hemyda conopoides, sp. n., is closest to aurata in structure and color, except as follows: abdomen clavate (not clavate in aurata); parafrontalia wider; frontals and ocellars weak (as compared to the narrow parafrontalia, with long and slender frontals in aurata); legs uniformly reddish-brown (tibiae and large posterior portion of the femora yellow in aurata).

#### REFERENCES

Guimarães, J. H., 1971. Family Tachinidae (Larvaevoridae), in Museu de Zoologia, Universidade de São Paulo, A catalogue of the Diptera of the Americas south fo the United States 104: 1-333. São Paulo.

Townsend, C. H. T., 1936. Manual of Myiology, part III, 255 pp. São Paulo.