

A NEW ANOMALOUS ACALYPTRATE FLY (DIPTERA).

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The fly herein described has been in the writer's hands for several years, during which time an exhaustive attempt was made to determine its relationships, without, however, much success, since it belongs to a group of families the delimitations of which are evermore becoming less distinct. It seems advisable to present at this time a description of the unique specimen and to append a discussion of its taxonomy.

Cinderella lampra, n.g. and n.sp.

(Figure 1, wing; figure 2, head)

Female. Length of body, 1.8 mm.; length of wing, 1.65 mm.

Shining black, slightly brownish pruinose on mesonotal disc only; legs with middle and hind knees and tarsi yellow, the last tarsal joint brown, its claws black, the pulvilli white; antennae yellow, brown above on third joint, arista yellow on basal fourth; palpi black; proboscis piceous; wings hyaline or somewhat whitish, the veins pallid yellowish; calypters and their fringe white; halteres black, stem brown; all bristles and hairs black.

Head and antennae as figured, the third antennal joint covered with a fine pubescence, the arista bare; face carinate between the antennae and protuberant below, with shining white pruinose (tomentose) areas as figured. Eyes with 43 rows of similar ommatidia, counting from upper front to lower hind margin.

Thorax with one strong humeral, one sublateral close before the suture, two notopleural, two supra-alar, two dorsocentral, one prescutellar acrostichal, and two scutellars on each side, the scutellars convergent; approximately eight rows of hairs between the dorsocentral lines; scutellum bare above, convex; pleura lacking propleural, stigmal, or mesopleural bristles or hairs; sternopleura with one posterior bristle and two anterior hairs; prosternum not examinable.

Wings as figured, the minute black costal spinules ending at two-thirds the distance from third to fourth longitudinal veins; calypters very small, with sparse, short fringe.

Legs with rather stout fore femora furnished with two or three posterodorsal bristles near middle and five or six posteroventral bristles on apical half; middle femur with one posterior preapical bristle; all tibiae with preapical dorsal bristle, that of middle tibia

1.5 times as long as diameter of tibia; middle tibia with one ventral, one posterior, and two anterior apical spurs; posterior basitarsus nearly twice as long as succeeding joint, scarcely greater in diameter; crown of spinules at tips of tarsal joints conspicuous; claws and pulvilli small; fore coxae with a row of three exterior bristles.

Abdomen ovate, flat above, furnished with sparse, bristly hairs; the intermediate segments subequal in length; the ovipositor retracted and bearing at its tip a pair of apparently soft cerci about as long as second hind tarsal joint; tergites without definite transverse wrinkle before posterior margin, turning well down on under side of abdomen; sternites small.

Holotype, female, Ada, Oklahoma, July 16, 1937 (Standish-Kaiser), no. 59162 in United States National Museum.

The genus, the characteristics of which may be gleaned from the foregoing description of its sole known species, belongs with the group of forms included in the families Sphaeroceratidae (= Borboridae, Cypselidae, etc.), Drosophilidae, Helomyzidae, Milichiidae, Piophilidae, and probably others. Its distinctly convergent post-ocellars, strong preapical tibial bristles, and the nature of the subcostal vein remove it from the Piophilidae, and one or another character precludes its ready placement in any one of the other groups.

In the Curran manual (1934: 24) *Cinderella* runs to the Drosophilidae, and in Brues and Melander (1932: 345) it runs to the subfamily Amiotinae of the Drosophilidae. In Hendel (1922, 1928, 1937) the genus runs to the Sphaeroceratidae, or if a defect in the key wherein but a single costal break is ascribed to the Drosophilidae be disregarded, to the Drosophilidae. The shining black body surface of *Cinderella* is not Drosophiline and the outstanding character of that group, the presence of a proclinate fronto-orbital bristle, is lacking.

The Sphaeroceratidae are generally characterized as having the hind basitarsus shorter and considerably greater in diameter than the succeeding joint. Aside from this character, *Cinderella* might well go in the Sphaeroceratidae, in the group that has been called *Bordoridae spuriae* by Duda (1921) and later given subfamily rank as Cypselosominae by Hendel (1931). The group, except for the dubious genus *Therina* Meigen,¹ lacks the second basal cell and the

¹ *Therina femoralis* Meigen, Syst. Besch. 6: 197, pl. 62, ff. 7-9 (1830), was described without locality citation, and has never been recognized. The type is lost and the name is antedated by *Therina* Huebner 1826.

anal cell is rudimentary. *Therina* disagrees with the present form in a number of points. Duda himself (1938) and Richards (1930, 1931) have rejected the "*spuriae*" from the Sphaeroceratidae.

Cinderella seems to have a relationship with the austral genera *Notomyza* Malloch (1933a, Patagonia) and *Protoborborus* Malloch (1933b, New Zealand). Its author referred the latter genus to the Sphaeroceratidae, although the hind basitarsus is long and slender, and remarked upon its similarity to *Notomyza*, which genus, however, he placed in the Helomyzidae, defining that family on a broader basis than is usual. Our genus is most similar to *Notomyza*, differing in having two rather than three dorsocentral bristles, the fronto-orbital bristles reclinate rather than curving outward over the eyes, and a nasute face.

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