

THE GENUS *PARALEUCOPIS* MALLOCH (DIPTERA: CHAMAEMYIIDAE), WITH ONE NEW SPECIES¹

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Specimens of a small, shining black fly that "were hovering about the faces and getting into the eyes of workers" at the Boyd Desert Research Center, Riverside County, California, were recently sent to me. The species turned out to be an undescribed species of the genus *Paraleucopis* Malloch (1913). The genus has until now consisted of the sole species *P. corvina* Malloch, described from Kerr Ranch, New Mexico, 23 April 1910, taken on *Yucca* sp., together with one specimen from the same locality marked "from raven's nest, 5-4-1910." Of the 14 original specimens, 9 remain in the U.S. National Museum. A single specimen, not included with the type series, from Dallas, Texas, 6 May 1910, was also recorded with the original description. No additional records have been noted.

The new species is sufficiently similar to *P. corvina* that all of the distinctive characters that I can discern may be cited in comparison with those of *P. corvina*, as follows.

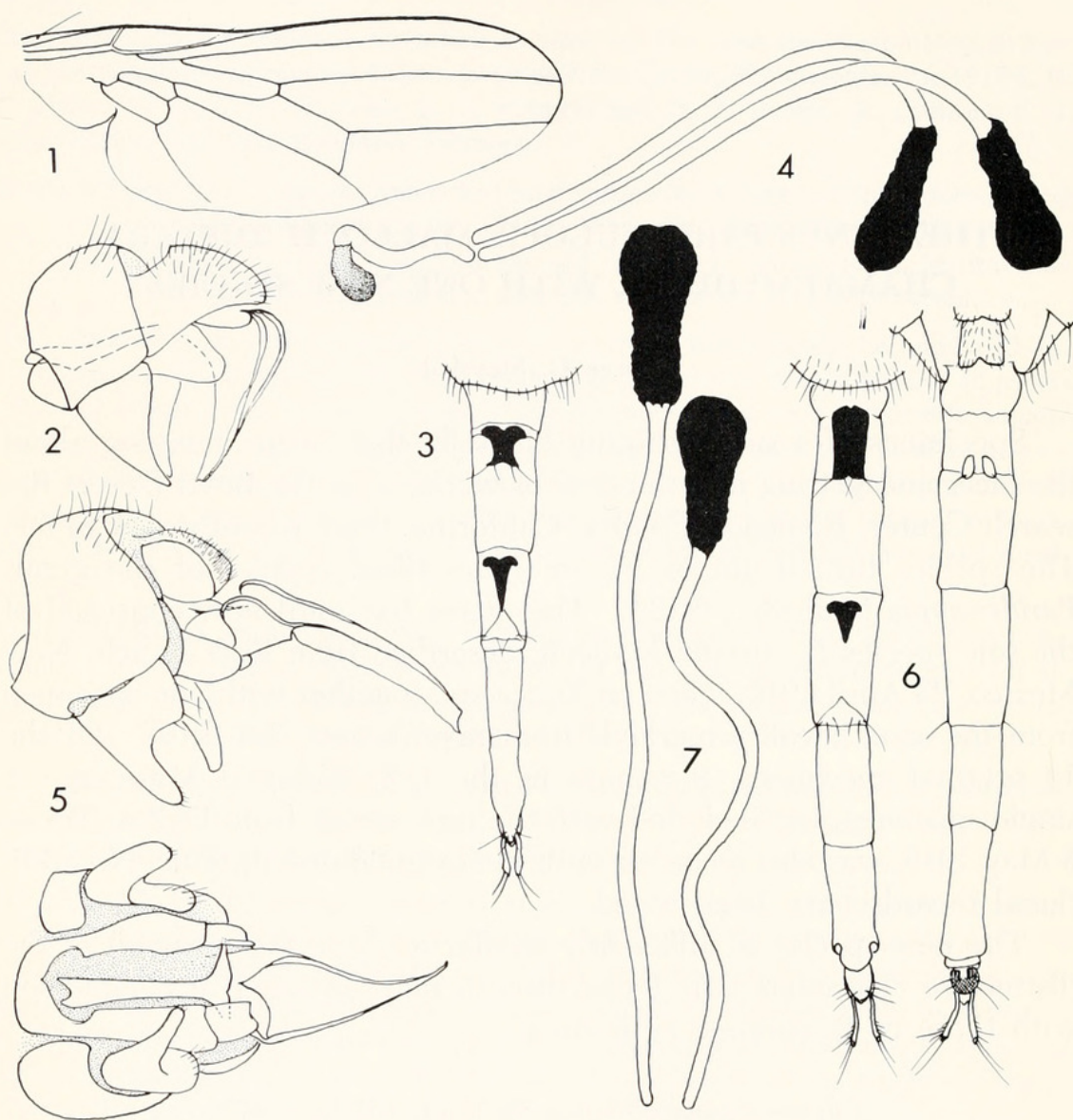
Paraleucopis corvina Malloch (1913: 149)

(FIGURES 1-4)

Legs yellow; femora piceous medially; hind tibia sometimes brownish. Front as long as wide at level of anterior ocellus, orbits converging anteriorly at angle of 10-15° with each other, 1 small upper *fo*. Wing as in Fig. 1, length in male

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FIGURES. 1-7, Details of *Paraleucopis* species. *Paraleucopis corvina* Malloch—1, wing; 2, oblique lateral view of male postabdomen (in plane of greatest expanse of surstylus); 3, dorsal view of female postabdomen; 4, spermathecae. *Paraleucopis boydensis*, n. sp.—5, lateral and ventral views of male postabdomen; 6, dorsal (left) and ventral views of female postabdomen; 7, spermathecae.

1.8-2.0 mm, in female 2.0-2.15 mm. Male postabdomen (Fig. 2) with surstylus unguiform, curved posterad. Female postabdomen as in Fig. 3; spermathecae as in Fig. 4.

Paraleucopis boydensis, NEW SPECIES

(FIGURES 5-7)

Legs yellow, femora and tibiae blackish except broadly at ends, last 2 tarsal

segments sometimes brownish. Front as long as wide, virtually parallel-sided, with 2-3 distinct upper *fo*. Wing similar to that of *P. corvina*, but usually larger, length in male 1.8-2.33 mm, in female 2.0 to 2.5 mm. Male postabdomen (Fig. 5) with surstylus showing squarish posterior shoulder and digitiform anterior process. Female postabdomen as in Fig. 6; spermathecae 2, as in Fig. 7.

Holotype (male), allotype, and 4 male and 4 female paratypes, P. L. Boyd Desert Research Center, 3.5 m. S. Palm Desert, Riverside County, California, 26 April 1970 (Suzy and Saul Frommer); 1 male paratype, same locality, 17-26 April 1970, malaise trap, dry creek near *Chilopsis*, marker no. 57 (Saul Frommer and L. LaPré). Holotype, allotype, and 1 pair of paratypes, no. 71193 in U.S. National Museum of Natural History; remainder returned to Dr. Frommer, University of California at Riverside.

Relationships: McAlpine (1963), in erecting the subfamily Cremifaniinae, referred only the genus *Cremifania* Czerny thereto, and stated that *Sciochthis* Malloch might possibly also be a member of that group. No additional data has come to hand regarding *Sciochthis*, but the genus *Paraleucopis*, retained in the subfamily Chamaemyiinae by McAlpine, with exceptions to the characters cited for that subfamily, must be referred to the Cremifaniinae. The additional data yielded by the present study show that *Paraleucopis* has all of the characters cited in McAlpine's key, except the armed aedeagus. The postocellar bristles are present, small and divergent; the proscutellum and posthumeral bristle are absent; the surstylus of the male is large and movable, and the aedeagal apodeme narrow and free, although with a short forwardly curved process, but hardly to be called fultelliform. I could find but 2 spermathecae in *P. boydensis*, but in *P. corvina* there is a small, rather rudimentary 3rd spermatheca.

The 2 genera now comprising the Cremifaniinae may be distinguished as follows:

Vein **Sc** complete and strong to costa; pterostigma more than 1/3 as long as **C** from **R**₁ to **R**₂₊₃; arista not more than 1.5 times as long as antenna, basally thickened; pteropleuron with 1 or more fine bristles; wholly dull flies with head largely yellowish

..... **Cremifania** Czerny

Vein **Sc** evanescent before attaining **C**; pterostigma very small; arista at least twice as long as antenna, slender; pteropleuron bare; shining flies, body wholly black

..... **Paraleucopis** Malloch

I am grateful to Saul Frommer for the privilege of examining the material upon which *Paraleucopis boydensis* is based and for permitting the retention of the holotype in the collections of the U.S. National Museum in company with that of the type species of its genus.

LITERATURE CITED

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2.0080. The Genus *Paraleucopis* Malloch (Diptera, Chamaemyiidae), with one new species.

ABSTRACT.—*Paraleucopis boydensis*, new species, is described from specimens that were hovering about the faces and getting into the eyes of workers at Boyd Desert Research Center, Riverside County, California. It is distinguished from the type and previously sole known species of *Paraleucopis*, *P. corvina* Malloch, principally by details of the male and female postabdomens. Notes and figures of the latter species are also given. The genus is referred to the subfamily Cremifaniinae. GEORGE C. STEYSKAL, c/o U.S. National Museum, Washington, DC 20560.

Descriptors: Diptera; Chamaemyiidae; revision of *Paraleucopis*; *Paraleucopis boydensis*, new species; California.



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