

A new species of *Parochthiphila* (Diptera: Chamaemyiidae) from Israel and Egypt

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ABSTRACT

Parochthiphila freidbergi n. sp. (Diptera: Chamaemyiidae) is described from the deserts of Israel and Egypt (Sinai peninsula). The generic placement of the new species is problematic and discussed relative to species groups of *Parochthiphila* and closely related genera. Illustrations of the head, thorax, and male terminalia are provided.

INTRODUCTION

The material of silver-flies (Chamaemyiidae) collected in Israel and Egypt and preserved in the entomological collection, Department of Zoology, Tel Aviv University, was studied and found to contain a series of flies that are superficially reminiscent of species of *Acrometopia* Schiner (Chamaemyiidae), but with notable differences. When Dr. J.F. McAlpine examined the first collected specimen in 1978, he labeled it as "N. gen.? n. sp.". This was the basis for Freidberg's (1988) record of "an apparently undescribed genus and species from northern Sinai". I also first regarded this species as a representative of a new genus, but a closer study of a longer series suggests an affinity to the *nigripes* group of *Parochthiphila* Czerny (subgenus *Euestelia* Enderlein). Terminology follows McAlpine (1981) with modifications proposed by White et al. (1999).

TAXONOMY

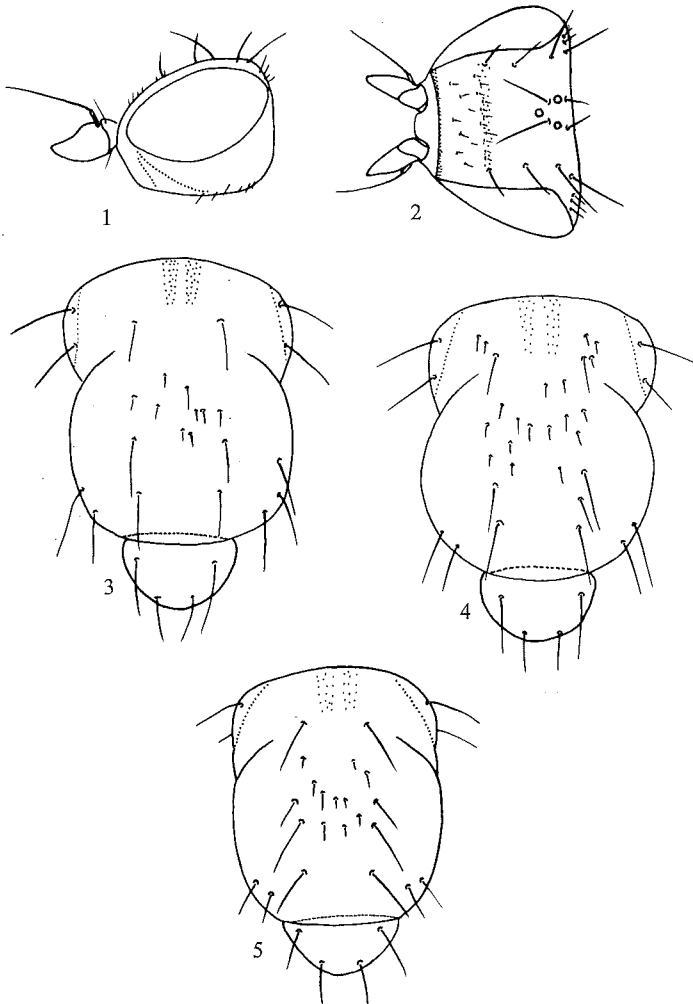
Parochthiphila (Euestelia) freidbergi n. sp.

Body length 2.2-3.5mm. Body silvery gray, whitish in appearance.

Head: (Figs. 1-2) slightly elongated, 1.1-1.2times as long as high; frons 0.55-0.63 times as wide as head, concolorous with rest of body, with very slight transverse darkening between anterior orbital setae, and 10-15 short setulae strewn along or alongside this darkening; lunule bare, low, posterior border straight; small coal-black

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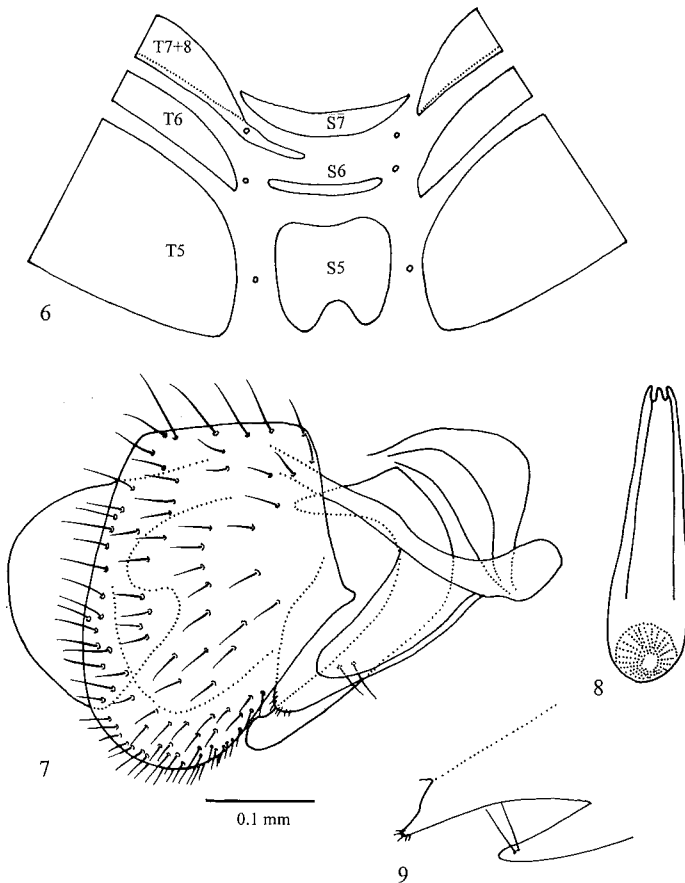
spot between anterior end of eye and base of antenna, extended as thin black line along dorsal border of face; smaller black spot near dorsolateral corner of lunule, often extended as thin black line along ptilinial fissure. Ocellar plate slightly elevated, distances between ocelli subequal. Postocellar and large ocellar setae present; two orbital setae, slightly reclinate and lateroclinate, anterior seta located slightly posterior of first third of frons; vertical setae well-developed, medial vertical seta appears as third orbital seta, but slightly mesoclinate; postocellar seta rather small. Antenna predominantly black, pedicel dorsally paler, covered by dense silvery microtrichia; 1st



Figs. 1-5. *Parochthiphila (Euestelia) freidbergi* n. sp. 1. head, lateral view; 2. head, dorsal view; 3-5. variation of mesonotum, dorsal view.

flagellomere elongate, about 1.5 times as long as high, with sparse microtrichia; 1st aristomere and base of 2nd aristomere yellow, remaining part of 2nd aristomere and equally long basal part of 3rd aristomere blackish; remaining 3rd aristomere whitish; 3rd aristomere 5–7 times as long as 2nd aristomere. Eye oval, elongate, 1.6–1.8 times as long as high. Palpus black.

Thorax: Mesonotum as in Figs. 3–5. Gray median stripes weak, nearly absent, usually visible with difficulty at anterior half of scutum. Prescutellar acrostichal seta and katepisternal seta absent; three (pairs) dorsocentral setae usually present—one presutural and two postsutural, with long gap between first and second pairs (Fig. 3), although several specimens have additional odd seta (Fig. 4) or pair of such setae (Fig. 5) in this gap; scattered setulae present between or near dorsocentral setae. Femora and



Figs. 6–9. 6. pregenital sclerites; 7. male genitalia, lateral view; 8. phallus, ventral view; 9. parameres, ventral view.

tibiae black with yellow apices; tarsi darkened distally. Wing colorless; veins M and R₄₊₅ parallel; apical section of vein Cu₁ 1.2–1.4 times as long as crossvein DM–Cu.

Abdomen: Tergite 3 dorsally with two small, often barely distinct, black spots, and larger spots on tergites 4 and 5. Syntergites 1 + 2 and tergites 3–5 laterally with elongate black spots, the latter larger.

Male terminalia: Pregenital sclerites (Fig. 6) typical for tribe Acrometopiini, being asymmetrical; right 7th spiracle imbedded in syntergite 7–8, whereas left spiracle imbedded in membrane; epandrium (Fig. 7) rounded in lateral view; phallus (Fig. 8) simple, tubular; parameres (Fig. 9): one narrow and one wide.

Taxonomic notes

Characters of *Parochthiphila* in this species include the pale transverse darkening between anterior orbital setae, as in *P. (P.) kirilli* Tanasijtshuk, *P. (Euestelia) pallidovittata* Tanasijtshuk, and *P. (E.) lucidifrons* Tanasijtshuk, in which this band is also pale or absent (Tanasijtshuk, 1986). The presence of median scutal stripes, though reduced, may suggest the subgenus *Parochthiphila*, whereas gaps in the dorsocentral setae suggest the subgenus *Euestelia, nigripes* group, to which this species seems to belong. The long head in profile is not typical for *Parochthiphila*, but occurs in other genera, such as *Acrometopia*, *Melametopia*, and some species of *Toropamecia* (Tanasijtshuk, 1992). As a whole, the species is very aberrant for *Parochthiphila*.

Material examined: Holotype: ISRAEL: Nahal Lavan, 30.iv.1996, (I. Yarom). Paratypes: ISRAEL: Same collection data as holotype, 14 males, 6 females; Sede Halamish, 29.iii.1996, 8 males, 4 females, 30.iv.1996, 7 males, 2 females (A. Freidberg); EGYPT, Sinai: Romani, 13.iv.1973, 1 male (A. Freidberg) (this specimen has two additional labels: 'n.genus? n. sp. det J.F. McAlpine 1978' and 'genus B sp. 1. Slide 7442'); Sinai Mts., Mt. Katharina 2500 m., 13.vii.1974, 1 female (A. Freidberg). The holotype and most paratypes are deposited at the National Collection of Insects, Department of Zoology, Tel Aviv University; 12 paratypes are deposited at the Zoological Institute, Russian Academy of Sciences, St. Petersburg.

Some paratypes are deposited at the Natural History Museum, London, and National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Etymology: This species is named after Dr. Amnon Freidberg, who collected the first specimens and most of the type series.

ACKNOWLEDGMENTS

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