

DESCRIPTION OF A NEW SPECIES OF TACHINIDAE (DIPTERA) FROM  
ISRAEL AND REMARKS ON THREE LITTLE KNOWN SPECIES

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ABSTRACT

A new species, *Wardarina kugleri*, is described from Israel. The species of *Simoma* found in Israel is apparently conspecific with *S. grahami* Aldrich from China and India. The hitherto unknown male of *Acemyia fishelsoni* Kugler was collected in Turkey. Characters separating both sexes from *A. pyrrocera* Villeneuve are listed. *Wagneria lacrimans* Rondani is a valid species in the cunctans-complex. It is redescribed here.

**KEY WORDS:** Diptera, Tachinidae, new species, Israel.

*Wardarina kugleri* Herting n.sp.

The genus *Wardarina* and its type-species *melancholica* were described by Mesnil in Lindner, p. 481 (1956), from a single ♂ collected near Skopje (Macedonia, Yugoslavia). A ♀ bred from caterpillars of *Archon (Doritis) apollinus* Herbst (Lep., Papilionidae) in Jerusalem was presumed by Mesnil to be the other sex of *W. melancholica*, although there were some significant morphological differences.

Recently, W. Schacht found a ♀ of *Wardarina* in south-eastern Turkey (Prov. Mardin, near Midyat, 23.V.1983). This specimen fits much better with the ..... holotype of *W. melancholica*. For comparison, Prof. Kugler sent me a ♂ of the *Archon-parasite*, and it proved to be clearly different from Mesnil's species. The putative sexual differences in the description of 1956 are thus, in fact, specific differences. The two species of *Wardarina* differ as follows:

1. Face 1.4 times as long as the frons, third antennal segment in the ♀ 5 times, in the ♂ 7 times as long as the second. Facial ridges with a row of small setulae in the lower 2/5. Mid tibia with one single anterodorsal bristle. Posterior margins of the abdominal tergites shining black (narrow on the tergites 3 and 4, up to 2/5 on tergite 5) .....*melancholica* Mesnil  
— Face only 1.1 times as long as the frons, third antennal segment (.....) 3.5 to 4 times as long as the second. Facial ridges with only a few small setulae in the lower 1/5. Two smaller, but conspicuous setae in addition to the large seta on the anterodorsal side of the mid tibia. Abdomen without shining black bands on the posterior margin of the tergites .....*kugleri* n.sp.

MATERIAL EXAMINED: Holotype ♂, Israel Jerusalem, 22.III.1971, bred from larvae of *Archon apollinus* Herbst. Paratypes, 2♂♂, 1♀, same data as holotype; 1♂, Israel, Arad, 21.III.1980, bred from *A. apollinus bellargus* Staudinger. The type-series is deposited in the Department of Zoology, Tel Aviv University, except for 1♂ paratype which is kept in the Museum für Naturkunde, Stuttgart.

The species is named in honour of Prof. J. Kugler, who has collected and studied the Tachinidae of Israel for many years.

### *Simoma grahami* Aldrich

The species was described by Aldrich (1926, p. 21) from Szechwan, China. It occurs also in Japan, Vietnam, Malaya and India. Moreover, Mesnil in Lindner, p. 286-288 (1953), reported it from Palestine (Mt. Scopus, 30.VII.1947). The latter material consists of 2 specimens: 1 ♀ kept in the Department of Zoology, Tel Aviv University, and 1 ♂ in the British Museum, London. In letters to me, Prof. J. Kugler and Dr. R.W. Crosskey expressed the opinion, that the Palestine specimens might not be conspecific with *S. grahami*, because there were differences in the width of the frons and the length of the petiole of  $R_5$ . Another ♂ *Simoma* was recently collected by W. Schacht in south-eastern Turkey (Prov. Hakkari, Habur Deresi valley, south of Beytisebap, 1100 m, 10.VIII.1983). For comparison, I borrowed 3 specimens from the British Museum, including the one from Mt. Scopus. I found, that differences in the above mentioned characters exist, but they are not correlated with each other. The petiole of the wing cell  $R_5$  is in the Near East specimens much shorter (less than half) than in the two ♂ from India (Namkum) and Malaya (Penang hills). But the width of the frons of the ♂ (compared with the width of one eye seen from above) is almost the same in the Turkish and Oriental specimens (0,48 to 0,50) and different only in the one from Mt. Scopus (0,72). A careful study of other characters did not show any significant difference, and we must therefore conclude, that only one species of *Simoma, grahami* Aldrich, exists in the Near East and the Oriental region.

There are a few inaccuracies in Mesnil's redescription of *S. grahami*: The frontal stripe is much narrower than one parafrenal. The apical bristles on the scutellum are not absent, but thin, hairlike and divergent. Patches of dense recumbent hair are present on the venter of the tergites 4 and 5 in the ♂ (not only on tergite 4). The fringe of anterodorsal bristles on the hind tibia is not dense and not very regular. In the ♀, the frons is hardly broader than in the ♂, as wide as 1/2 to 2/3 of one eye.

### *Acemyia fishelsoni* Kugler

The species was described by Kugler (1968, p. 65) from a single ♀, that was reared from *Xerohippus savignyi* Uvarov (Orth. Acrididae) collected at Metulla in northern Israel. The ♂ was unknown, but now I have obtained from W. Schacht 3♂♂ that he has collected in south-eastern Turkey (Prov. Urfa, Birecik, 22.V.1983). The two sexes of *A. fishelsoni* differ from the closely related species *A. pyrrhocera* Villeneuve by the characters listed in the following key:

1. Legs yellow. Abdominal tergite 2 without marginal setae. Peristome much narrower than the mouth opening, in ♂ only 1/2 as broad as the latter. Frons of ♂ as broad as 0,75-0,80 of one eye seen from above. Upper part of occiput largely bare behind the postocular row . . . . . *fishelsoni* Kugler
  - Legs brownish black, only tips of femora and trochanters brownish yellow. Tergite 2 with 2 dorsal marginal bristles. Peristome in ♂ as broad as the mouth opening, in ♀ slightly broader. Frons in ♂ only 1/2 as wide as one eye. No large bare space between postocular row and upper border of the white pilosity of the occiput . . . . . *pyrrhocera* Villeneuve
- The width of the frons in ♀ is not clearly different in these two species (about as broad as one eye seen from above).

### *Wagneria lacrimans* Rondani

The species belongs to the *W. cunctans*-complex, but it is not conspecific with *W. cunctans* Meigen, as I wrongly stated in my paper on Rondani's Tachinid types (Herting 1969, p. 195). A more careful study of the complex has shown that *W. lacrimans* is a valid species. The ♀ holotype is damaged, the abdomen and the fore and hind legs are missing. Its origin is the island of Malta. Another ♀ of the same species was recently collected by H. Schmalfuss on the island of Santorin in Greece. The ♂ is unknown. I give here a redescription of the species:

Frons 1,1 times as wide as one eye seen from above. The width of the frontal stripe equals 1/2 of the distance between the lunula and the anterior ocellus. Parafrontalia in their major part not pollinose, but only a little shining. Third antennal segment 2,2 times as long as the second segment. The maximum width of the third segment (near its end) equals about 1/3 of its length. Peristome in profile nearly 1/2 as large as the vertical diameter of the eye. Presutural part of the mesonotum with a whitish-pollinose median stripe that covers nearly half the space between the dc (similar to *W. micronychia* Mesnil, but narrower). One pair of presutural acr, 2 + 3 dc, 0 + 3 ia, pre-alar seta small, hairlike. Only 2 humerals, only 2 sternopleurals. Propleuron haired. Scutellum on upper surface with erected, bristle-like hairs. Costal spine of the wing about half as long as the second costal sector (cs<sub>2</sub>). r<sub>1</sub> bare, r<sub>4+5</sub> setulose from base to r-m (with one bristlet standing beyond the latter). Petiole of R<sub>5</sub> slightly more than half as long as the apical cross vein (m<sub>1</sub>). Distance between m-cu and r-m 1,8 times as great as the distance between m-cu and the bend of m. Abdomen without pruinosity, but not much shining. Tergites 2 and 3 without median marginal bristles. Pilosity on tergite 5 erected (in contrast to the preceding segments).

Information on the other species of the *Wagneria cunctans*-complex has been given by Kugler 1977, p. 10-12 (*W. cunctans* Meigen, *W. albifrons* Kugler and *W. dilatata* Kugler) and Herting 1982, p. 10-12 (*W. heterocera* Robineau-Desvoidy and *W. micronychia* Mesnil).

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