

## Chloropid flies (Diptera, Chloropidae) of Cyprus

E. P. Nartshuk

Nartshuk, E. P. 1990: Chloropid flies (Diptera, Chloropidae) of Cyprus. — Entomol. Fennica 1:227–232.

A small collection of chloropids collected by H. Lindberg on Cyprus in 1939 contains 18 species. *Speccafrons cypria* sp. n. is described. A lectotype is designated for *Scoliophthalmus trapezoides* Becker. Most of the species have a Mediterranean distribution.

E. P. Nartshuk, Zoological Institute, Academy of Sciences USSR, Leningrad, USSR

The chloropids of Cyprus have not been studied before. As regards adjacent countries, chloropids have been thoroughly investigated in Bulgaria (Beschovsky, 1985), but in Israel they are less well known (Kaplan 1977). Some records exist in regard to the chloropid fauna of Egypt (Becker 1903, Collin 1949). Only a few species have been described or recorded from Greece, including the islands of Crete, Rhodes and others (Tsacas 1959, Nartshuk 1984).

A small collection of chloropids was made on 2.VI–25.VII.1939 by H. Lindberg in different parts of Cyprus. The collecting sites have been described by H. Lindberg (1948), whose abbreviations will be used here. Chloropids were collected at 13 places, from the highest summit of the Troodos mountains, i.e. the peak of Chionistra (alt. 2134 m) (in text Ch) to the coast, including the Troodos mountain zone (Ts), the hilly zone of the Troodos mountains (Ti), the hilly zone of Pentadactylos (Pe), the Mesaoria plain (M), the north coast (K), the east coast (F), the south coast (L) and the west coast (Pa). Cyprus has a typical Mediterranean flora and fauna. The island is characterized by comparatively high temperatures and drought. The mean annual temperature in Nicosia is 19.1°C (Lindberg 1948).

The chloropid collection is not large, but contains nearly 250 specimens. Represented in the collection are 15 genera and 16 species, of which one, *Speccafrons cypria*, is described as new, and 2 species are referred to genus only because of insufficient material. One species belongs to the Rhodesiellinae, 11 to the Oscinellinae and 6 to the Chloropinae. Three species are abundant in the present collection, viz. *Aphanotrigonum favillaceum*, 111 exs., *Trachysiphonella pori*, 51 exs., and *Thaumatomyia notata*, 47 exs.

The zoogeographical definition of each species is based on the Catalogue of Palearctic Chloropidae (Nartshuk 1984). The chloropid fauna of Cyprus contains 7 different zoogeographic elements.

- 1) Mediterranean — *Aphanotrigonum favillaceum*, *Tricimba meridiana*, *Trachysiphonella pori*, *Speccafrons cypria*.
- 2) Mediterranean-Afrotropical — *Scoliophthalmus trapezoides*.
- 3) South-European-Mediterranean — *Elachiptera bimaculata*, *E. megaspis*, *Oscinimorpha arcuata*, *Camarota curvipennis*.
- 4) Mediterranean-Afrotropical-Oriental — *Si-phunculina ornatifrons*.

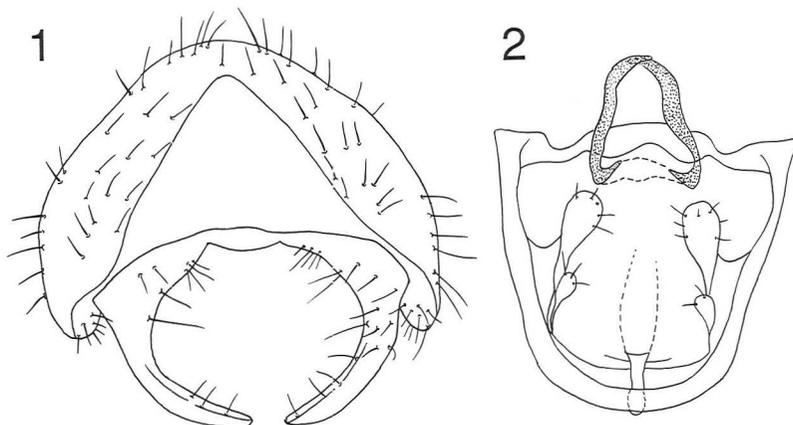


Fig. 1–2. Male genitalia of *Scolioththalmus trapezoides* Becker, lectotypus. — 1: epandrium; 2: hypandrium.

- 5) South-palaeartic–Mediterranean — *Polyodaspis sulcicollis*, *Assuania thalhammeri*, *Thaumatomyia sulcifrons*, *Tricimba humeralis*; the last species is found in the Afrotropical Region (Sudan).
- 6) Holarctic–Oriental — *Oscinella frit*.
- 7) Palaeartic–Afrotropical–Oriental — *Thaumatomyia notata*.

The material, including the type specimens of new species, is deposited in the Zoological Museum of the University of Helsinki (Finland).

### Subfamily Rhodsiellinae

#### *Scolioththalmus trapezoides* Becker

Figs. 1–2

L: Limassol, 2.7.1939, 1♀, on the shore of a salt lake.

The species was described from Egypt, and occurs in Israel and the Afrotropical Region.

I had the opportunity to compare the specimen from Cyprus with syntypes (1♂, 1♀) from Egypt (Fayum). The Cyprus specimen has more light colouring in the legs: base and tops of tibia and 1–3 joints of tarsi yellow, the 4th and 5th joints lightly darkened. It seems that the small difference in colour represents seasonal variation, because the darker syntypes were collected in March, and the Cyprus specimen in July. Unfortunately

the Cyprus specimen is a female. I studied the genitalia in a male from Egypt and designate the specimen the lectotype: “♂ Fayum III 47789”. The male genitalia of the lectotype are figured in Figs. 1 and 2. I find some differences from the drawing of the same species by H. Andersson (1977, fig. 26). In the lectotype the surstyli are connected below the anal opening and the sclerotised parts of the phallus have another form (Figs. 1, 2). I also studied the male specimen from Ethiopia (Ambo, 8 km W Addis-Ababa) from the collections of the Zoological Institute, Academy of Sciences of USSR in Leningrad and can find no differences from the lectotype. It is possible that the specimen H. Andersson had for study came from another part of the Afrotropical Region and thus represents another undescribed species of *Scolioththalmus*.

### Subfamily Oscinellinae

#### *Elachiptera bimaculata* Loew

Pa: Paphos Ayios Neophytos, 21–22.7.1939, 3♂, 2♀.  
— Ti: Stavros tis Psokas, 18–19.7.1939, 1♂; Kambos, 15.7.1939, 1♂, 1♀. — Pe: Lapithos, 13.6.1939, 1♂.

The species was described from Rhodes, and occurs in South Europe and North Africa.

The species is rather variable in colour. All the specimens I have studied are of the typical colour,

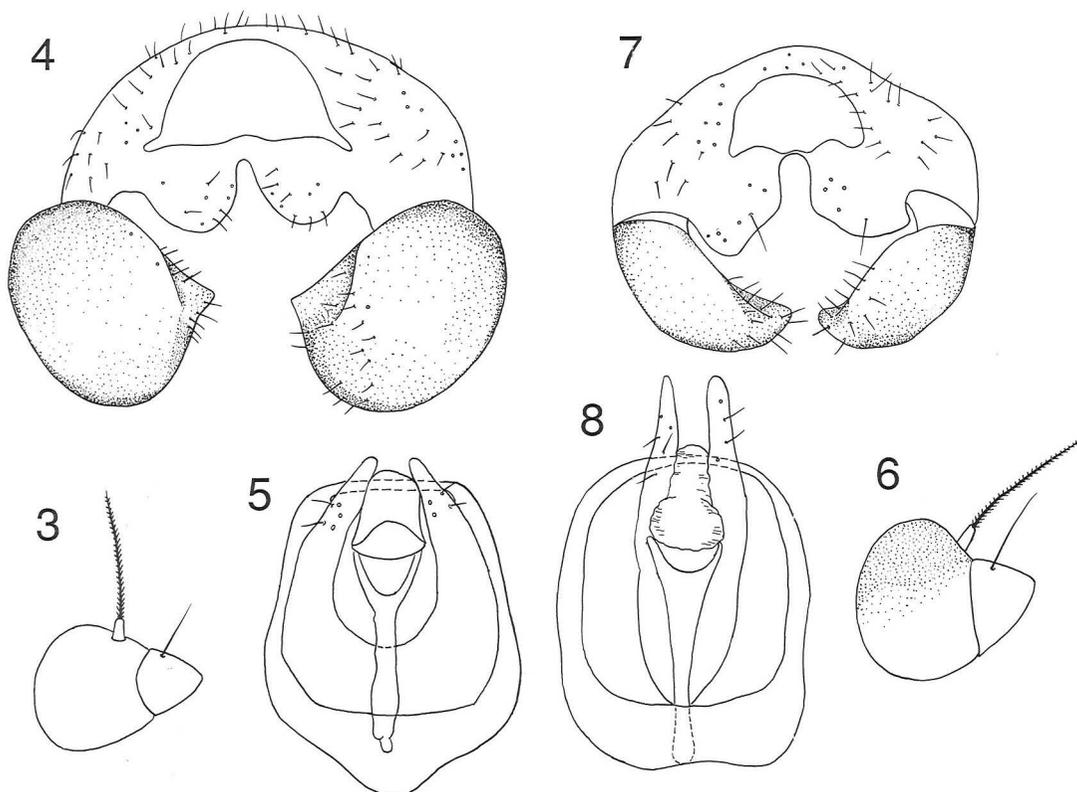


Fig. 3–8. *Speccafrons* Sabrosky. — 3–5: *S. cypria* sp. n. — 6–8: *S. halophila* Duda. — 3, 6: antenna; 4, 7: epandrium; 5, 8: hypandrium.

with 2 dark brown spots on the side of the posterior part of the mesonotum.

***Elachiptera megaspis* Loew**

Ti: Kambos, 15.7.1939, 1♀.

A widely distributed species in southern Europe to south of the British Isles; occurs in Israel, North Africa, the Canaries and the Azores.

***Siphunculina ornatifrons* Loew**

M: Kouklia, 26.6.1939, 1♂, 2♀.

A widely distributed species, described from Italy and Sicily, occurring in Israel, Madeira, the Canaries, North Africa, the Afrotropical and Oriental Region and the Pacific islands.

***Speccafrons cypria* sp. n.**

Fig. 3–5

Holotype: ♂ Cyprus, west coast, Paphos, Ayios Neophitos, 21–22.7.1939, H. Lindberg. Paratype: 1♀, same place and date.

**Differential diagnosis**

In general appearance and colour the new species is similar to *S. halophila* Duda. The differences are: mesonotum shiny, almost without polinosity, cheek more narrow, no more than diameter of fore tibia, the third antennal segment smaller and a little wider than the second. In male genitalia surstyli larger and rounder, cerci smaller, as long as broad, gonites shorter. For comparison drawings of male genitalia and antenna of *S. halophila* are given in Fig. 6–8.

**Description**

Frons a little longer than wide and as broad as

an eye, dull. Frontal triangle dusted, nearly or half the length of frons, behind widely separated from eyes. Bristles *vte* the longest, *vti* and *pooc* equal, 3/4 length of *vte*. *Orb* 8 moderately long, reclined. Cheek narrow, not more than diameter of fore tibia with small *vi* on the round vibrissal angle. The third antennal segment a little wider than the second segment, round, nearly as long as wide. Arista shorter than the length of frons. Eyes with dense pilosity.

Mesonotum shiny, with dense moderately long pilosity. Scutellum nearly subrounded, with 2 long apical bristles and a number of rather long hairs.

Pleura shiny except for dusted upper part of anepimeron. Notopleural bristles 1+2. Relation of costal sectors are 62 : 48 : 20 : 12. Vein  $R_{4+5}$  and  $M_{1+2}$  subparallel. The distance between crossveins is 2 times longer than the near cross vein.

Male genitalia. Epandrium large. Cerci round, as long as broad, the distance between cerci distinctly smaller than breadth of one cercus. Surstyli nearly spherical, with small pointed prominence directed medially. Hypandrium closed, gonite pointed at the top, shorter than in *S. halophila*. Phallus short, bell-shaped.

Colour. Head brownish yellow, frontal triangle dusted with blackish-grey. Palpi yellow. Thorax black, abdomen dark brown. Legs yellow with dark spots in the middle of all femora and tibia. Halteres yellow. Bristles and hairs yellow.

Length 2 mm.

### *Polyodaspis sulcicollis* Meigen

M: Kouklia, 26.6.1939, 2♀.

Widespread in southern and central parts of Palaearctic.

The species is very variable in colour of head, legs and hairs. Specimens studied have white bristles and hairs but black frons and yellow tibia and tarsi. In *P. amicalis* Becker (I investigated the type-specimens, females) the frons is yellow in front.

### *Fiebrigella* sp.

K: Kyrenia Bellanais, 13.7.1939, 1 ex.

### *Trachysiphonella pori* Harkness & Ismay

M: Kouklia, 26.6.1939, 50 exs. — F: Tricomo 10.6.1939, 1 ex.

The species was described from Greece, where it was found near an ant nest and dead ants *Cataglyphus bicolor* F. killed by a spider *Zodarium* (Harkness & Ismay 1976). It is the second record of the species. This species is the second most abundant in the collection.

### *Oscinimorpha arcuata* Duda

K: Kyrenia, 19.6.1939, 1♀.

The species is known from central and southern Europe and Israel.

### *Aphanotrigonum favillaceum* Becker

Figs. 9–10

L: Larnaka, 25.6.–1.7.1939, 2 exs., on the shore of salt lake. — M: Kouklia, 26.6.1939, 109 exs., salt marsh.

The species was described from Egypt, and is also found in the Canaries. The most abundant species in the collection.

This species is omitted from a revision of the Palaearctic species of *Aphanotrigonum* Duda by A. Dely-Draskovits (1981). I include here drawings of the male genitalia of the Cyprus specimen (Fig. 9, 10). The species is closely related to *A. fasciellum* Zetterstedt and *A. femorellum* Collin. Three species have apical scutellar bristles wide apart, only one posterior notopleural bristle, bristles and hairs yellow and abdomen with dark brown transverse stripes. *A. favillaceum* has no finger-like process on surstylus of male genitalia as opposed to *A. femorellum* and *A. fasciellum*.

### *Tricimba humeralis* Loew

M: Kouklia, 26.6.1939, 3♂, 2♀. — F: Famagusta, Salamis, 8.7.1939, 1♀.

Widespread in southern Palaearctic from the Canaries and the Azores to Mongolia; also found in Afrotropical Region (Sudan).

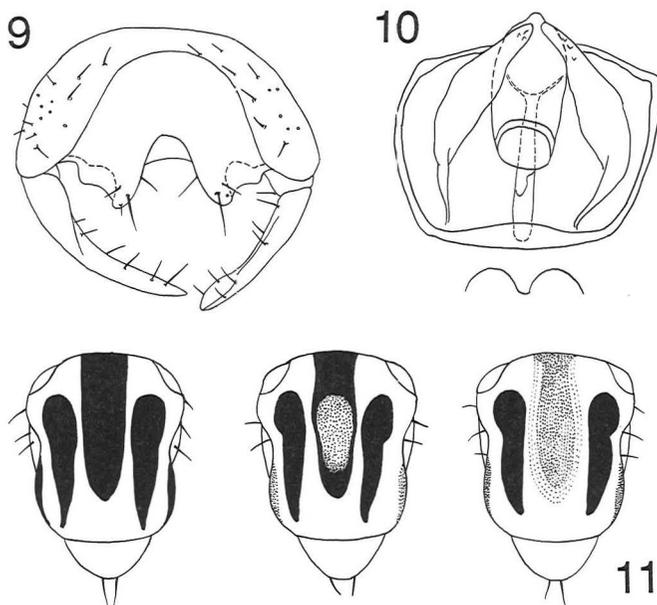


Fig. 9–10. Male genitalia of *Aphanotrigonum favillaceum* Becker. — 9: epandrium; 10: hypandrium. Fig. 11. Variability of colour of mesonotum of *Thaumatomyia notata* Meigen.

***Tricimba meridiana* Dely-Draskovits**

Pa: Paphos, Ayios Neophitos, 21–22.7.1939, 2♂, 1♀. — F: Famagusta 9–12.7.1939, 1♀.

The species was described from Israel; the specimens from Cyprus represent the second record.

***Oscinella frit* Linnaeus, s.l.**

C: Troodos, Chionistra, 17.6.1939, 2 exs. — Ts: Platania, 18–23.6.1939, 1 ex.; Troodos, 16–22.6.1939, 1 ex.; Livadia, 18.6.1939, 3 exs.

A Holarctic species, known also from the Oriental Region. On Cyprus the species is found only in the mountains and upper zones (2134 m).

**Subfamily Chloropinae**

***Camarota curvipennis* Latreille**

Pe: Lapithos, 13.7.1939, 1♂. — M: Kythrea, 5.7.1939, 1♂.

The species is known from southern Europe, Israel and North Africa (Morocco).

***Meromyza* sp.**

Pe: Ayios Hilarion, 7.6.1939, 1♀. — L: Limassol, 2.7.1939 1♀.

Specific identification is impossible because only females are available.

***Assuania thalhammeri* Strobl**

M: Kouklia, 26.6.1939, 1♀.

The species is widespread in the southern Palaearctic, from South Europe to Afghanistan.

***Thaumatomyia notata* Meigen**

Fig. 11

Ts: Troodos, 16–22.6.1939, 5 exs.; Platania, 18–23.6.1939, 30 exs. — Ti: Milikouri, 16.7.1939, 3 exs.; Stavros, 18–19.7.1939 9 exs.

The species is widespread in the Palaearctic, and also known from the Oriental and Afrotropical Regions. On Cyprus the species is found only in the mountain zone. The third most abundant species in the collection.

Most specimens (43 exs.) have typical colour, all five stripes on mesonotum black and spot on katapisternum black or partly brownish. Four specimens have the most lateral small stripes on mesonotum yellow, the next black, the middle stripe yellow or partly yellow, spot on katapisternum yellow (Fig. 11).

### *Thaumatomyia sulcifrons* Becker

M: Kouklia, 26.6.1939, 2♂.

The species is widespread in the southern Palaearctic from the Canaries and North Africa to China (Tibet).

*Acknowledgements.* I express my sincere thanks to Dr. B. Lindeberg for making this interesting collection available to me for study and to Dr. H. Wendt (Zoological Museum, Humboldt, University in Berlin) for the loan of some type specimens for comparison.

### References

- Andersson, H. 1977: Taxonomic and phylogenetic studies on Chloropidae (Diptera) with special reference to Old World genera. — *Entomol. Scand.*, Suppl. 8. 200 pp.
- Becker, Th. 1903: Aegyptische Dipteren. — *Mitt. Zool. Mus. Berlin* 2(3):67–195.
- Beschovsky, V. 1985: Diptera, Chloropidae. (In Bulgarian) — *Fauna of Bulgaria* 14. Sofia. 219 pp.
- Collin, J. E. 1949: Results of the Armstrong College Expedition to Siwa Oasis (Libyan Desert), 1935 under the leadership of Prof. J. Omer-Cooper. Diptera, Empididae, Dolichopodidae, Aschiza and Acalypterae. — *Bull. Soc. Found I Entomol.* 33:175–225.
- Dely-Draskovits, A. 1981: Revision der palaearktischen Arten der Gattung *Aphanotrigonum* Duda, 1932, and *Aphanotrigonella* Nartshuk, 1964 (Diptera, Chloropidae). — *Acta Zool. Hung.* 27(1–2):115–138.
- Harkness, R. D. & Ismay, J. W. 1976: A new species of *Trachysiphonella* (Dipt. Chloropidae) from Greece associated with an ant *Cataglyphis bicolor* (F.) (Hym., Formicidae). — *Entomol. Mon. Mag.* 111:205–209.
- Kaplan, F. 1977: The Chloropidae of Israel. — M.Sc. thesis. Tel-Aviv University.
- Lindberg, H. 1948: On the insect fauna of Cyprus. Results of the expedition of 1939 by Harald, Håkan and P. H. Lindberg. I. Introduction. — *Comment. Biol.* 10(7):3–22.
- Nartshuk, E. P. 1984: Chloropidae. — *Catalogue of Palaearctic Diptera. Clusiidae–Chloropidae.* 10:222–298.
- Tsacas, L. 1959: Contribution à la connaissance des Diptères de Grèce. — *Bull. Soc. Entomol. France* 64:123–130.

Received 29.V.1990