



Occasional papers published by the Museum of Zoology, Lund University, Sweden

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Issue 3

Lund, Sweden 5 December 1994

ISSN 1104-5957

New species and new records of Chloropidae from Afghanistan (Diptera)

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Nartshuk, E. P.: New species and new records of Chloropidae from Afghanistan (Diptera). *Stobaeana* 1994(3):1–5. Lund, Sweden 25 November 1994. ISSN 1104-5957.

An annotated list of 14 species of Chloropidae from Afghanistan is given. Ten of the species are new to the area. At present 33 species of the family are known from the country. The two species *Meromyza lindbergi* n. sp. and *Epiclorops afghanicus* n. sp. are described as new. The genus *Chlorops* Meig. is a new record for Afghanistan.

E. P. Nartshuk, Zool. Inst., Acad. Sci., 199034 St. Petersburg, Russia

The Chloropidae of Afghanistan have not been studied sufficiently. There are only two publications with small lists of species. Sabrosky (1961) has studied a collection made by Dr. Knut Lindberg, Lund, Sweden, in 1957–1958 and Nartshuk (1973) a collection made by some Czechoslovakian entomologists in 1963–1967. In the two papers 23 species of Chloropidae from Afghanistan are recorded and four are determined only to genus.

This paper is based on material collected by K. Lindberg in 1959–1962. It contains 87 specimens representing

nine genera and 14 species. Two species are described as new. Two are determined only to genus because the material is insufficient. Four species belong to subfamily Oscinellinae and ten to Chloropinae. Only four of the species have been recorded from Afghanistan previously and thus ten species are new to the country. The 33 species of Chloropidae now known from Afghanistan seems to be not more than 1/5 of the expected number.

It is worth to mention the find of two species of the large genus *Chlorops* Meigen. This genus has not been

recorded from Afghanistan before. Most specimens, especially of *Ch. persicus* Beck., are found in mountains at a height of more than 2000 m.

A preliminary zoogeographic analysis of the previously known 23 species was done in my preceeding paper (Nartshuk 1973). The main body of the Chloropid fauna consists of widespread Mediterranean species, lesser parts are represented by widespread Palaearctic and Holarctic species. In the east of the country the fauna is enriched by tropical Oriental elements. After 10 species have been added to the list the relation of the different zoogeographical elements change insignificantly. Of the species added to the fauna one, *Diploptoxa messoria* Fall. is Holarctic, 2, *Oscinella pusilla* Meig. and *Incertella albipalpis* Meig. are widespread in Palaearctic. *Chlorops finitimus* Beck. is European-Mediterranean in distribution while *Meromyza conifera* Fed. and the two new species represent a turanic element.

The bulk of the material, including holotypes and paratypes of the new species, are deposited in the Museum of Zoology, University, Lund, Sweden, but one paratype of *Meromyza lindbergi* n. sp. and some other specimens in the Zoological Institute, Academy of Sciences of Russia, St. Petersburg.

I am greatly indebted to Dr. H. Andersson for sending this interesting material to me, helped me to interpret the labels and corrected the English.

Subfamily Oscinellinae

Trachysiphonella sp. aff. *scutellata* v. Roser

Material studied: Doab, alt. 1460 m, 31.7.1959, A 728, 1♀.

Incertella albipalpis Meigen

Material studied: Sar Kondou, 46 km NW Djelalabad, 25.5.1962, A 1119, 1♀.

The species is widespread in Palaearctic, rather common in dry meadow and in agrocenosis. New to Afghanistan.

Oscinella frit Linnaeus, s. l.

Material studied: Paghman, 11.5.1962, A 1163, 1♀; Mandigak, 200 km W Kaboul, 23.7.1962, A 1101, 1♀; Dahan-e-Doulana, 27.7.1962, A 1152, 1♀.

The species is widespread in Holarctic, occurs also in Oriental Region (India, Pakistan).

Oscinella pusilla Meigen

Material studied: Dahan-Abdali, 100 km W Kaboul, 22.7.1962, A 1052, 2♀; Terbolag, 280 km E Herat, alt 2600 m, 27.7.1962, A 1142, 1♀; Doab, alt. 1460 m, 31.7.1959, A 728, 1♀; Mandigak, 200 km W Kaboul, 23.7.1962, A 1101, 1♂ 1♀.

The species is widespread in Palaearctic and new to Afghanistan.

Subfamily Chloropinae

Meromyza conifera Fedoseeva

Material studied: Baréki, Djazhouri, 25 km NE Orozgan, alt. 2490 m, 16.6.1960, A 949, 1♂; Doab, alt. 1460 m, 31.7.1959, A 728, 2♂, 2♀; Dahan-Abdali, 100 km W Kaboul, 22.7.1962, A 1052, 1♀.

The species was described from Uzbekistan and Tajikistan, found also in Mongolia. New to Afghanistan.

Meromyza lindbergi n. sp.

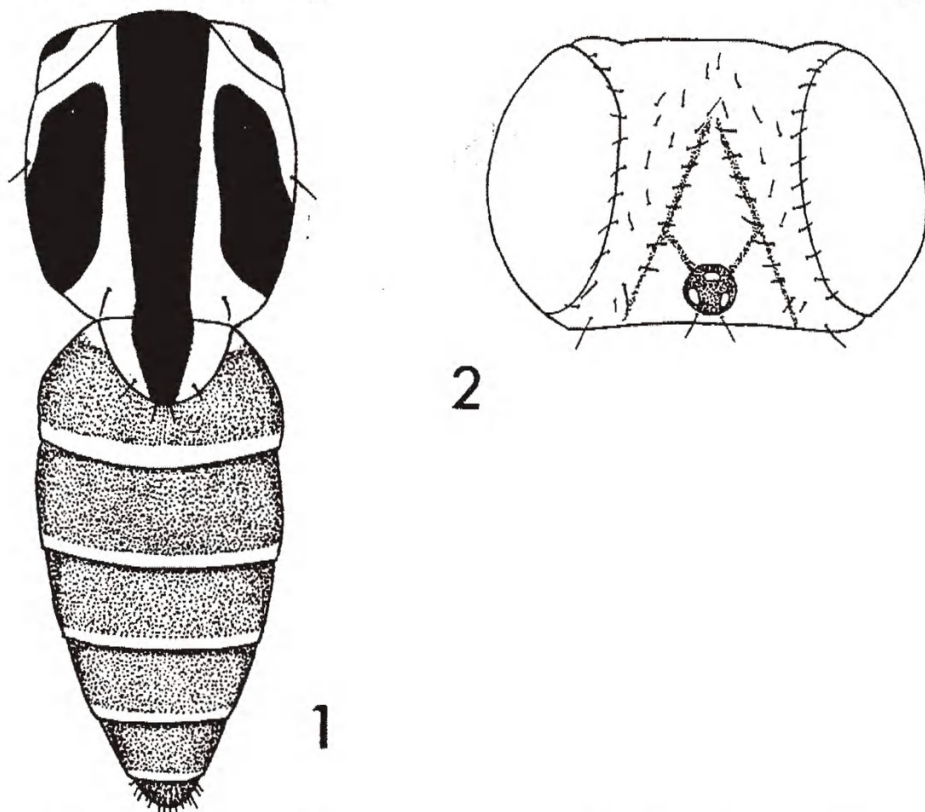
Figs. 1-6.

Type material: *Holotype:* ♂ Afghanistan, Mandigak, 200 km W Kaboul, 23.7.1962, A 1101, K. Lindberg. — *Paratypes:* 1♂ with the same label; 1♂ Bamian, 13.7.1962, A 1145, K. Lindberg; 2♀ Deval, 40 km NW Qal'eh Vazir, 17.7.1962, A 1093, K. Lindberg. *Diagnosis.* The species is similar in external appearance and colour to the spring forms of *M. nigriventris* Macq., *M. cephalata* Fed. and *M. lucida* Péterfi. It has like *M. lucida* two dark stripes on the frontal triangle from the fore ocellus to the side of the triangle. The frontal triangle is darkened along sides and rugose in the fore part. Differences from *M. lucida* are: the frontal triangle is not equilateral, its height is longer than the base, it is not darker than the frons. The anterior process of the gonite of the new species is not narrow as in *M. nigriventris* and concave on the lower margin, not convex as in *M. lucida* (Fig. 6). The gonite of the new species is in side view slightly similar to that of *M. cephalata* and *M. pallida* Fed. From both these species *M. lindbergi* is distinguished by anterior process of gonite less expanded laterally at tip, by surstylus more narrow without expanded interior corner, and by phallus wider at middle. The new species differs from *M. pallida* by dark palpi, shorter head and wrinkled front of frontal triangle. From dark spring form of *M. cephalata* it is distinguished by shorter head and abdomen dorsally yellow with three lines of dark spots. *M. cephalata* has head as long as thorax and the spring form of that species has abdomen dorsally black.

Etymology: The species is dedicated to the collector, Dr. K. Lindberg, who has contributed much to the elucidation of the fauna of Afghanistan.

Description.

Male, female. Height of frontal triangle a little longer than width of base. Frontal triangle along sides bordered by dark, sometimes it is darker than frons. Two dark stripes



Figs. 1-2. *Meromyza lindbergi* n. sp. — 1. Thorax and abdomen, dorsally. — 2. Frons.

go from fore ocellus to sides of frontal triangle and limit a diamond-shaped anterior area which is rugose and whitish. Head bristles weakly developed; vte and pooc a little longer than hairs along sides of frontal triangle. Cheek equals breadth of third antennal segment. Vibrissal angle nearly right. Parafacialia one half of cheek breadth. Ocellar triangle, vertex and apical half of palpi black.

Thorax nearly square. Mesonotal stripes wide, black, dusted. Lateral stripes fused. Central stripe continues along scutellum. Mesophragma black, dusted. Spot on anepimeron small, dark brown. Spot on katepisternum yellow with brownish upper margin. Hind femora 3x broader than tibia. Relations of costal sectors: 35:25:20. Abdomen dark brown, dorsally with narrow yellow hind margin of tergites. Legs yellow. Last segments of tarsi darkened. A dark mark in the middle of hind tibia.

Male genitalia. Surstylus wide, almost square, lower margin oblique. Gonite brown, anterior process concave on lower margin and a little expanded laterally at tip, posterior process directed ventrally. Phallus with rounded base and wide at middle.

Length 4 mm.

Meromyza nigriventris Macquart

Material studied: Faisabad, 15.8.1960, alt. nearly 1000 m, A 956, 1♂; Deval, 40 km NW Qal'eh Vazir, 17.7.1962, A 1093, 1♂; Masdjed-Tchoubi, 16.6.1959, A 757, 1♂ 1♀; Doavi, alt. 2250 m,

13.8.1960, A 936, 1♀; Bamian, 13.7.1962, A 1145, 2♀.

All the specimens except 1♂ collected in Masdjed-Tshoubi in June represent summer form colour: frontal triangle yellow with black ocellar mark, occiput yellow with weak reddish lines, mesonotal stripes reddish brown. The male from Masdjed-Tchoubi has black mesonotal stripes.

Holarctic species.

Cryptoneura sp. aff. *tarsata* Fallén

Material studied: Doab, 31.7.1959, alt. 1460, A 728, 1♀.

Epichlorops Becker

Figs. 7-8.

The differences between *Chlorops* Meig. and *Epichlorops* Becker are insufficient. *Epichlorops* is distinguished only by punctured surface of mesonotum and the shape of the frontal triangle. The male genitalia are very similar in structure. However, because *Chlorops* is very large, it is practically convenient to consider *Epichlorops* as a separate genus. Only one species of *Epichlorops* is known from Palaearctic. The present new species is rather well characterized by external features so I decide to describe it in spite of having only one female.

Epichlorops afghanicus n. sp.

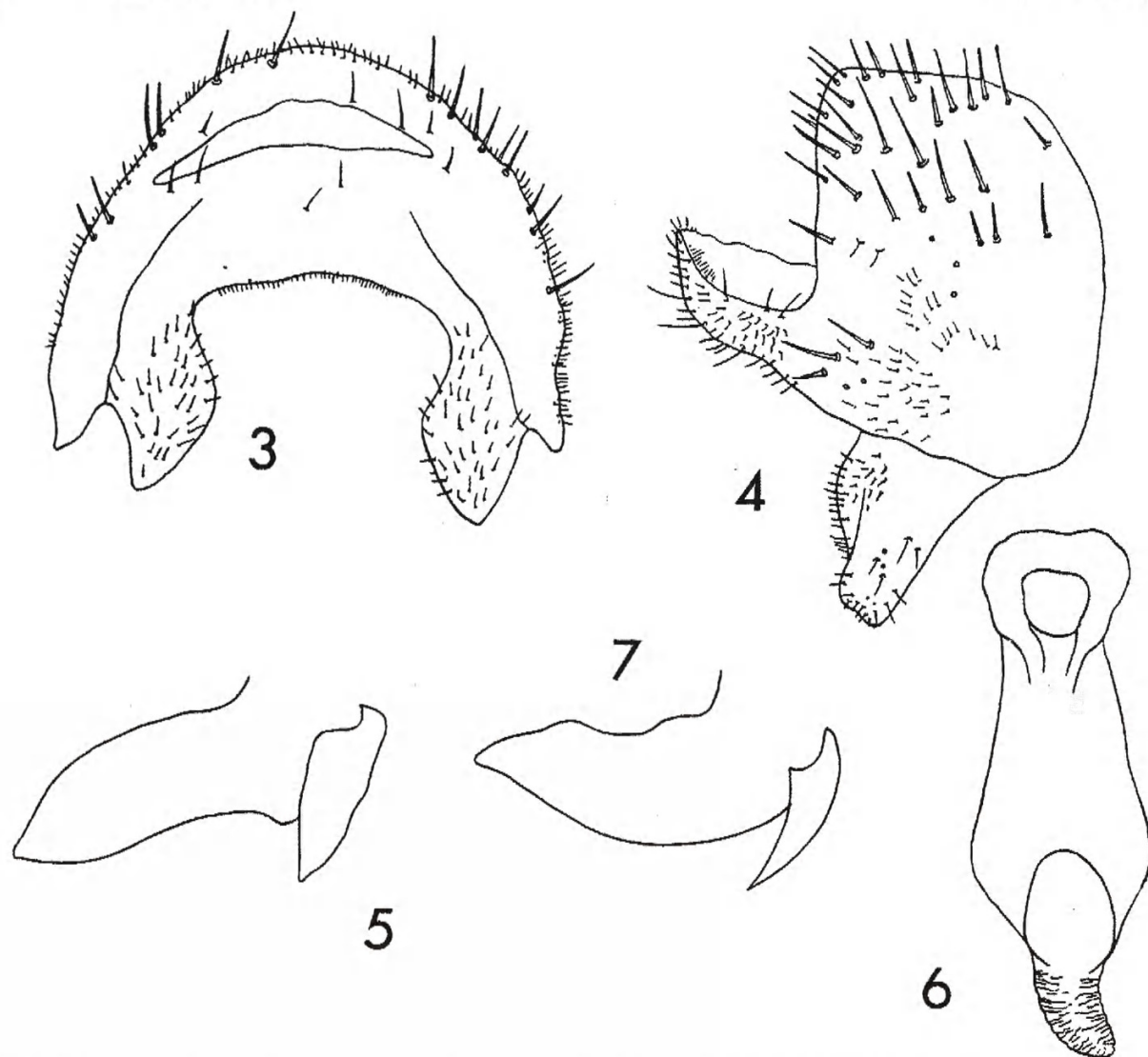
Fig. 7

Type material: Holotype: ♀ Afghanistan, Bend-Amir, Bend-Zolfiqar, alt. 2900 m, 14.7.1962, A 1058, K. Lindberg

Diagnosis. The new species is similar in colour to *E. puncticollis* Zett. It is distinguished by nearly square mesonotum, frontal triangle without narrow anterior part, surface of frontal triangle with short wrinkles along sides and by shorter and wider antennal segment 3 (cf. Figs. 7-8).

Description.

Female. Frons square with large frontal triangle, the base of which is nearly as broad as frons and with apex nearly reaching anterior margin of frons. Frontal triangle



Figs. 3-7. *Meromyza* spp. — 3-6. *M. lindbergi* n. sp. — 3-4. Epandrium. — 5. Gonite, laterally. — 6. Phallus. — 7. *M. lucida* Péterfi, gonite, laterally.

has no narrow, parallel-sided anterior part. The surface of it is wrinkled along side margins and smooth in central part. Cheek equals length of third antennal segment. Third antennal segment rounded, a little wider than long. Arista broken.

Thorax square; surface punctured and hairy. Pleura smooth, shining. Scutellum with short apical bristles. Relations of costal sectors: 52:50:40. Veins R_{4+5} and M_{1+2} divergent. Distance between crossveins long.

Colour. Head yellow. Frontal triangle, occiput and antenna black. Palpi dark. Mesonotum black. Scutellum yellow. Pleura yellow with conventional dark marks. Abdomen black dorsally. Femora black with yellow tips. Fore tibia yellow, middle and hind tibiae and all tarsi black. Halteres bright yellow.

Length 2.5 mm.

Chlorops finitimus Becker

Material studied: Mandigak, 200 km W Kaboul, 23.7.1962, A 1101,

23 exx; Terbolaq, 280 km E Herat, alt. 2600 m, 27.7.1962, A 1142, 2 exx; Bamian, 13.7.1962, A 1145, 2 exx.

The species is known from Europe, the Caucasus and the Central Asia. New to Afghanistan. It is by far the most abundant Chloropid in the collection.

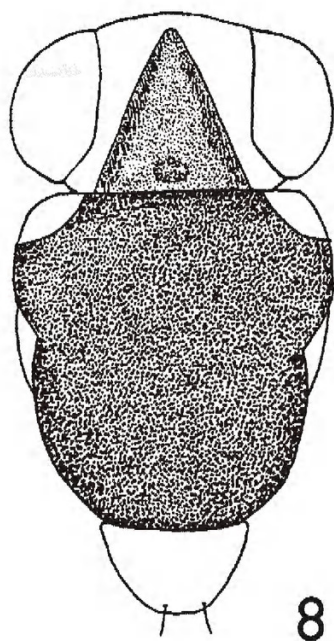
Chlorops persicus Duda

Material studied: Entre Doavi by Dad Ali, alt. nr 2700 m, 21.7.1959, A 746, 2♂ 4♀; Col. de Sabzzak, alt. 2450 m, 17.6.1959, A 756, 1♂; Bend-Amir, Bend-Kaibat, 13.7-16.7.1962, A 1109 1♂

The species was described from Iran and is found also in Transcaucasia and the Central Asia. New to Afghanistan.

Diplotoxa messoria Fallén

Material studied: Chvada Sonalin, 15.5.1962, A 1146, 1♀.



8



9

Figs. 8–9. *Epichlorops* spp. — *E. afghanicus* n. sp., head and thorax, dorsally. — 9. *E. puncticollis* Zett., head and thorax, dorsally.

Holarctic. New to Afghanistan.

Thaumatomyia notata Meigen

Material studied: Dahan–Abdali, 100 km W Kaboul, 22.7.1962, A 1052, 2♂ 1♀; Deval, 40 km NW Qal'eh Vaszir, 17.7.1962, A 1093, 3♂ 2♀; Qal'eh Vaszir, 70 km W Kaboul, alt. 2800 m, 12.7.1962, A 1079, 1♀; Oubeh, 12.6.1962, A 1021, 1♂; Mandigak, 200 km W Kaboul, 23.7.1962, A 1101, 3♂.

The species is very variable in colour of the stripes on mesonotum but most specimens have reddish mesonotal stripes.

Widespread in Palearctic. Occurs also in Oriental and Afrotropical Regions.

Thaumatomyia sulcifrons Becker

Material studied: Faizabad, alt. ca 1000 m, 15.8.1960, A 956, 3♀; Mandigak, 200 km W Kaboul, 23.7.1962, A 1101, 1♀; Terbolaq, 280 km E Herat, alt. 2600 m, 27.7.1962, A 1142, 2♀.

Widespread along southern parts of Palearctic from Canarian to China (Tibet).

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