

New data on the silver-flies of Afghanistan (Diptera: Chamaemyiidae)

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Tanasijtshuk, V.N. 1998. New data on the silver-flies of Afghanistan (Diptera: Chamaemyiidae). *Zoosystematica Rossica*, 7(1): 189-191.

Material of Chamaemyiidae collected in Afghanistan by Dr. L. Papp is described. It contains 10 species, three of which are new for Afghanistan and one, *Leucopis afghanica*, is a new species.

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Until the present time the fauna of Afghanistan silverflies was known only from the North Afghanistan collection of Prof. E.S. Sugonyaev (Tanasijtshuk, 1986). 10 species were found: *Parochthiphila (Euestelia) nigripes* (Strobl), *P. (E.) decipia* Tanas., *P. (E.) stackelbergi* Tanas., *P. (E.) gracilipyga* Tanas., *P. (E.) elegantella* Tanas., *Chamaemyia hypsophila* Tanas., *Leucopomyia sogdiana* Tanas., *Leucopis ulmicola* Tanas. (now *L. palumbi* Rond.), *L. ninae* Tanas., and *L. glyphiniivora* Tanas.

Through the courtesy of Dr. L. Papp (Hungarian Natural History Museum, Budapest) I had an opportunity to examine the Chamaemyiidae collected by him in Afghanistan in April-May 1974. All information regarding this expedition and its detailed itinerary have been published (Papp, 1975).

The material contains more than 200 males and females collected by sweeping. Because of the lack of criteria for identification of the females of most species, I identified in most cases male specimens only. I distinguished 10 species; three of them are new for Afghanistan, one is a new species.

Parochthiphila (Euestelia) nigripes (Strobl)

1 ♂, Koreze Mir, 1950 m, Kabul prov., 1.V.1974.

Widely distributed Mediterranean species; has been found earlier in the northern part of Afghanistan (Baglan).

Parochthiphila (Euestelia) stackelbergi Tanas.

1 ♂, Pul-e Charkhi, 22 km ENE of Kabul, 1780 m, Kabul prov., 19.VI.1974.

Afghano-Turkestanian species, has been found earlier in the northern part of Afghanistan (Baglan, Bamian).

Parochthiphila (Euestelia) gracilipyga Tanas.

1 ♀, Tsheheltan, 17 km WSW of Kabul, 1950-2000 m, prov. Parvan, 15.IV.1974.

Caucaso-Turkestanian species, was found earlier in the northern part of Afghanistan (Baglan).

Chamaemyia juncorum (Fall.)

1 ♀, Hari Rud, 15 km SE from Herat, 950 m, prov. Herat, 21.V.1974.

Widespread Transpalearctic species not found in Afghanistan before. Larvae prey on coccids feeding on roots and in sheaths of grasses.

Leucopis argentata Heeger

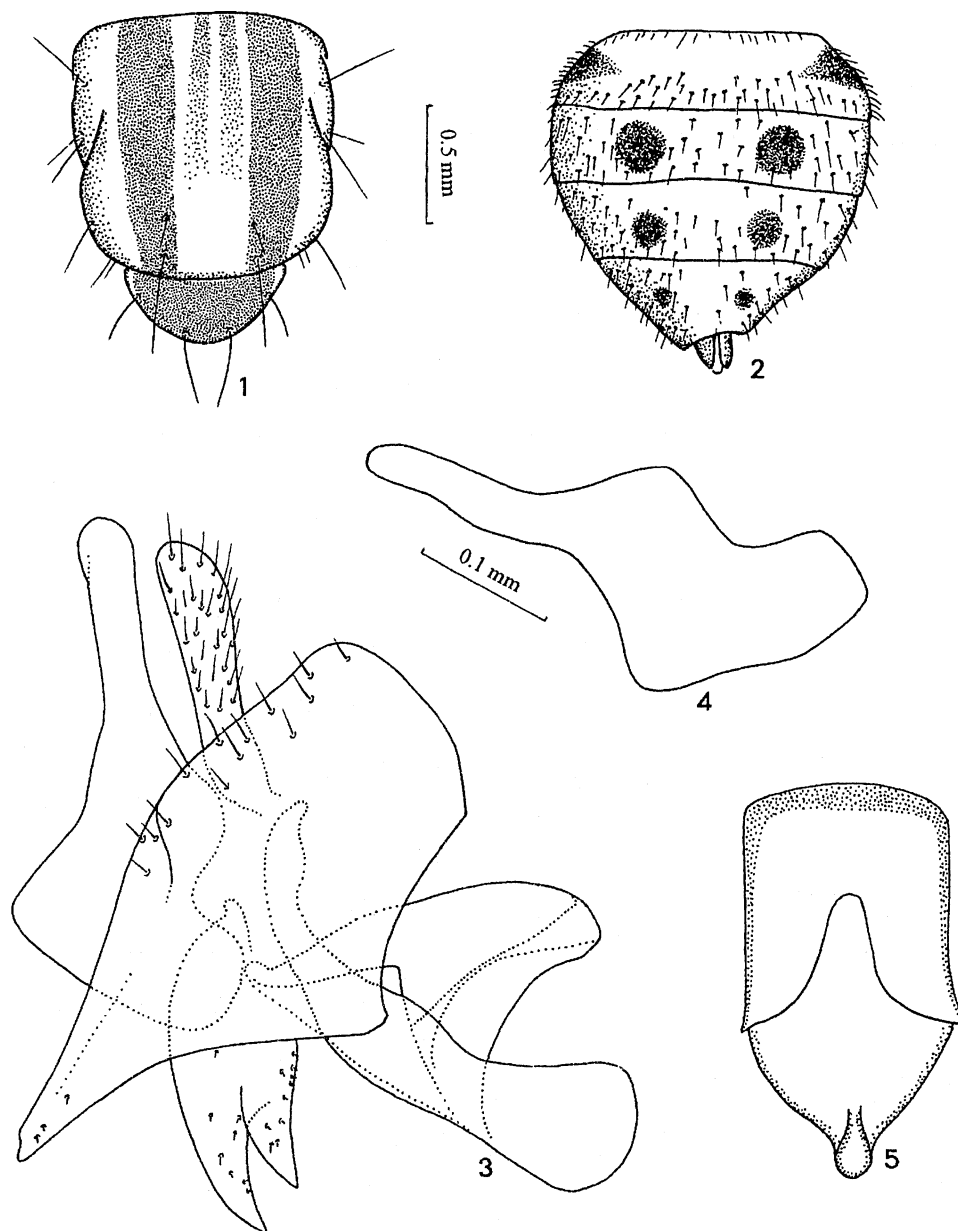
1 ♂, Pul-e Charkhi, 22 km ENE of Kabul, 1780 m, prov. Kabul, 2.VI.1974.

Cosmopolitan species, has been found in northern part of Afghanistan. Larvae monophagous on *Hyalopterus pruni*.

Leucopis compacta Tanas.

1 ♂, Dast-e Gamberay, 8 km of Band-e Darunta, 670 m, prov. Nangarhar, 8.V.1974; 1 ♂, southern slopes of Paropamisus Mts., about 10 km N of Herat, 1150 m, prov. Herat, 21.V.1974; 2 ♂, Kabul, Tshelsotun, 1820 m, 27.V.1974.

South-Palaearctic species, not found in Afghanistan before. Larvae oligophagous, reared from 7 species of aphids.



Figs 1-5. *Leucopis afghanica* sp. n.: 1, mesonotum; 2, abdomen; 3, genitalia of male; 4, 5, phallus in profile and from apex.

***Leucopis ninae* Tanas.**

77 ♂ from many localities in provinces Kabul, Parvan, Nangarhar, Balkh, Paktya, Logar, Ghazni, 470-2950 m, 15.IV.-19.VI.1974.

South-Palaeartic species, has been found from Afghanistan (Baglan, southern slope of Hindu Kush, Kabul). Larvae reared from

more than 50 species of aphids and 1 species of coccids.

***Leucopis glyphinivora* Tanas.**

1 ♂, Kabul, Tshelsotun, 1950 m, 27.V.1974; 1 ♂, Pul-e Charkhi, 22 km ENE of Kabul, 1780 m, prov Kabul, 19.VI.1974.

Holarctic species, has been found from Afghanistan (Kabul). Larvae reared from more than 70 species of aphids.

***Leucopis pseudomelanopus* Tanas.**

2 ♂, Kabul, Tshelsotun, 1850 m, 27.V.1974.

South-Palaearctic species, had never been found from Afghanistan. Larvae reared from 6 species of aphids and 1 species of coccids.

***Leucopis afghanica* sp. n.**

(Figs 1-5)

Holotype: ♂, labelled "Afghanistan, Kabul prov., 30.V.1974, Tshemtala, 10 km NW of Kabul, 1900 m. N 139, L. Papp"; deposited in the Hungarian Museum of Natural History, Budapest.

Paratype: 1 ♂, similarly labelled, deposited in the Zoological Institute, St. Petersburg.

Description. Male. Body light grey, its length 2.8-3.0 mm. Head 1.8 times as high as long. Frons smoothly widened anteriorly, 2.3-2.4 times narrower than head. Frontal stripe grey in the middle; on edges with two dark grey longitudinal stripes reaching lunule. Orbital stripes light grey with sparse light and grey bristles. Ocellar plate slightly raised, its outlines not demarcated. OT index (ratio of the distance between posterior ocelli and the distance between any posterior ocellus and the anterior one) 1.7. Lunule medium-sized, arch-shaped. Antennae and arista black, with silvery pruination. 3rd arisal segment 2.5-3 times as long as 2nd. Cheek height 3.3 times less than eye height; a chain of small bristles present on cheeks, the foremost bristle the largest. Palpi black. Mesonotum with two dark grey medial stripes reaching beyond its middle (Fig. 1) and with two extremely wide (exceeding one-fifth of the width of mesonotum) dark brown lateral stripes stretching as long as posterior edge of mesonotum and almost not tapering posteriad. Intervals between stripes devoid of bristles. Scutellum of the same coloration as lateral stripes. Two pairs of dorsocentral bristles present, the anterior pair several times shorter than the posterior ones. Legs black; apices of femora, bases of tibiae and first tarsomeres brighter, yellowish. Veins *M* and *R*₄₊₅ parallel or somewhat converging at tips; ultimate section of *Cu* 1.6 times as long as *tp*. Two dark spots present on sides of 1st+2nd abdominal tergite (Fig. 2); rounded paired spots diminishing posteriad present on 3rd-5th tergites near the middle.

Genitalia of male (Figs 3-5). Epandrium wide, with 12-15 relatively small bristles on

either side along rear edge. Passage to edites smooth, without constriction; edites rather short, smoothly tapering towards apex. Hypandrium widened in anterior part, widening near the middle faintly outlined. Parameres massive, fused near the middle. Phallus (Fig. 4-5) in profile with massive base, smoothly curved; its basal part strongly widened transversally.

Taxonomic notes. The species is distinguished from the other *Leucopis* primarily by the presence of paired dark spots on 3rd-5th tergites. This character is plesiomorphic, encountered earlier only in two species of *Leucopis*: *L. szepligetii* Aczel and *L. grandis* Tanas. In the absence of dark fields on lower edges of anterior abdominal tergites, the new species is similar to *L. szepligetii*, however sharply differing from it in the genitalic structure. *L. afghanica* is also notably distinguished in the coloration of mesonotum and scutellum: lateral stripes in this species are extremely wide and conspicuous in dark brown coloration passing over onto the scutellum. Mesonotum, scutellum and abdomen are so characteristically coloured that the species may easily be identified without examination of genitalia.

According to the genitalic structure and absence of dark fields on the edges of 1st+2nd and 3rd tergites in males, the species is provisionally included in the group *glyphinivora*.

Distribution. The species is so far known only from Afghanistan.

Mode of life. Papp (1975) described the place of collecting as "overgrazed steppe vegetation". Very probably the larvae of *L. afghanica*, like the larvae of *L. szepligetii* Aczel, prey on coccids on cereals.

Acknowledgements

The author is grateful to Dr. Laszlo Papp (Zoological Department, Hungarian Nat. Hist. Museum, Budapest) for loaning the material for study. The work was fulfilled using the financial support from Russian Basic Research Foundation (grant codes 96-04-48804 and 95-15-97910) and from Russian Federal Science and Technology Programme (grant "Biological Diversity", code 76).

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 Received 6 October 1997