

**RESULTS OF THE CZECHOSLOVAK-IRANIAN ENTOMOLOGICAL
EXPEDITIONS TO IRAN****(Together with results of collections made in Anatolia)****Diptera: Bombyliidae**

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Up to now very poor data have been obtained about the Bombyliidae fauna of Iran and Turkey.

Becker (1912) was the first who has summarized the information about Bombyliidae from Iran. He has investigated the collections of N. Zarudny from Iran of 1898 and 1901. Before his work the list of Bombyliidae from Iran had contained 59 species only. Becker has increased this list by 44 species, 24 of them were new.

The indication of the location of some Bombyliidae species in Iran and Turkey has been contained in the books by Paramonov (1940) and Engel (1932—1937). The more recent work of Abbassian-Lintzen (1965) has added 19 more species to those previously known for the fauna of Iran. Five of these species were new.

So the literature data show the total of 156 Bombyliidae species from Iran.

In 1970 the Czechoslovak entomologists collected in Iran 150 specimens of Bombyliidae. The author investigated all this material which had been kindly sent him by Dr. L. Hoberlandt.

The study of this material shows that all specimens belong to 50 species. 14 of them are new for the fauna of Iran and Turkey.

Most of these 50 species are common for either Palaearctic or Mediterranean region (10 and 19 species respectively). The group of Mediterranean-Iranian species is also numerous enough. It contains 9 species: *Anastoechus zimini* Param., *Exoprosopa melaena* Loew etc. Two more species — *Bombylius minor* Linné and *Villa cingulata* (Meigen) are common in Europe. In the USSR they are found up to the latitude of Leningrad. One can often meet both of these species on the mountains in the south areas such as Transcaucasia, Iran, and Soviet part of Central Asia up from the altitude 1500 m.

Iran and Transcaucasia are the eastern borders of the areals of two other species — *Systoechus autumnalis* Pallas and *Thyridanthrax argentifer* (Becker).

The next four species — *Hemipenthes tusheticus* Zaitzev, *Exoprosopa punctinervis* Becker, *Thyridanthrax albinus* (Becker), *Spongostylum cinereum* Zaitzev — are known only from Transcaucasia and Iran. The first of them inhabits mainly the xerofit south slopes not lower than 2000 m.

There are two species — *Anthrax persicus* Paramonov and *Anthrax sacki* Paramonov in the mountains of Iran and Soviet part of Central Asia on the altitude 2000 — 3000 m. *Exoprosopa efflatounia* Bezzi is of special interest. It had been previously found in Egypt only, now has been also found in Iran. We had collected it before in Turkmenia.

Thus, about 170 species of Bombyliidae are now registered in the fauna of Iran. We think, the Bombyliid fauna of Iran really is more abundant since about 300 species of them are known to the neighbouring Transcaucasia.

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Bombylius fulvescens Wiedeman, 1820

N. W. Iran, Marand, 20. VI. 1970, 2 ♂, 17 ♀; W. Iran, Eskandari, 2000 m., 1. VII. 1970, 1 ♀; Turkey, W. Anat., Sapanca gölü, 13. VI. 1970, 1 ♂.

Distribution: Mediterranean region.

Bombylius modestus Loew, 1873

W. Iran, Organ, 2000 m., 1. VII. 1970, 1 ♀.

Distribution: Mediterranean region to Central Asia.

Bombylius minor Linné, 1758

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1 ♂.

Distribution: Mediterranean region to Transcaucasia.

Bombylius citrinus Loew, 1855

W. Iran, Organ, 2000 m., 1. VII. 1970, 2 ♂.

Distribution: Mediterranean region.

Bombylius discoideus Fabricius, 1794

N. Iran, East Elburz, Veresk, 800 m., 2. VIII. 1970, 1 ♀.

Distribution: south part of Palaearctic.

Systoechus ctenopterus Mikan, 1796

N. W. Iran, Kivi Bala, W. Khalkhal, 1500 m., 16. VIII. 1970, 1 ♀.

Distribution: widely distributed in the Palaearctic region.

Systoechus gradatus Wiedemann, 1820

Turkey, Central Anat., Balaban, 16. VI. 1970, 1 ♂.

Distribution: widely distributed in the Palaearctic region.

Systoechus autumnalis Pallas

N. Iran, C. Elburz, Kandavan, val. 2545 m., 10.—11. VIII. 1970, 1 ♀.

Distribution: west part of Palaearctic region.

Anastoeccus zimini Paramonov, 1936

N. Iran, C. Elburz, Kandavan, val. 2545 m., 10.—11. VIII. 1970, 1 ♂, 1 ♀.

Distribucion: Transcaucasia, Central Asia.

Conophorus anatolicus sp. n.

(Fig. 1), ♀

Closely allied to *Conophorus syriacus* Paramonov and *C. brunneus* Zaitzev. It differs from *C. syriacus* by black knobs of halteres and black bristles on hind borders of all segments of abdomen; *C. anatolicus* differs from *C. brunneus* by larger size of body (8 mm.) and long first joint of antennae. Wings with 3 radial cells and two small fuscous spots on *rm* and *mcu*. Scutellum shining black.

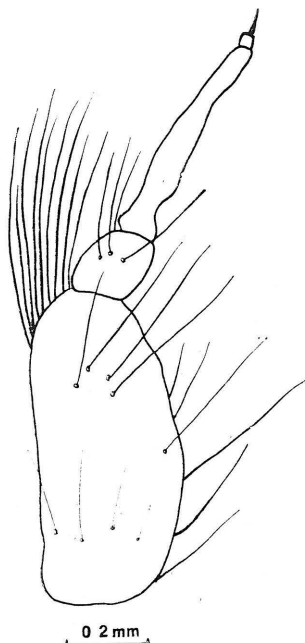


Fig. 1: *Conophorus anatolicus* sp n., antenna.

♀. — Frons clothed with long black bristly hairs and short golden-yellowish hairs. Face clothed with yellow hairs, only on sides above with a few black ones. First antennal joint elongated, as long as the next two joints together; first joint with golden-yellow and black hairs above and thick black ones below. Occiput clothed with long black bristly hairs and soft yellow hairs above and short yellow hairs below with a few black ones. Back of thorax clothed with short golden-yellow and long erect black hairs. There are some black bristles, on hind border of thorax and postalar calli. Scutellum shining black. Bristles on hind border of scutellum yellowish. Pleurae and coxae clothed with whitish-yellowish hairs. Legs black, with white hairs and scale. Wings greyish hyaline. Basal part of vein R_{2+3} straight. Halteres with black knobs. Abdomen clothed with whitish hairs; all segments on their hind borders have black bristles. Venter clothed with white hairs.

Length of body 8 mm., of wings 6,5 mm.

Holotypus: ♀, Turkey, N. E. Anat., Erzurum, 1900 m., 18. VI. 1970 (National Museum in Prague, Cat. No. 32883).

***Geron gibbosus* (Olivier, 1789)**

N. W. Iran, 23 km. S. W. Marand, 17. VIII. 1970, 1 ♂.

Distribution: Mediterranean region to Central Asia.

***Cytherea pallasi* (Loew, 1859)**

Turkey, N. W. Anatolia, Bolu daglari, Gerece, 14. VI. 1970, 1 ♂.

Distribution: Mediterranean region.

***Cytherea obscura* Fabricius, 1794**

W. Iran, Organ, 2000 m., 1. VII. 1970, 1 ♂.

Distribution: Mediterranean region to Central Asia.

***Callistoma desertorum* Loew, 1873**

W. Iran, Organ, 2000 m., 1. VII. 1970, 1 ♂, 2 ♀.

Distribution: Iran, Central Asia.

***Amictus validus* Loew, 1869**

Turkey, N. E. Anat., Erzurum, 1900 m., 18. VI. 1970, 1 ♂.

Distribution: Mediterranean region to Central Asia.

***Lomatia polyzona* Loew, 1869**

Turkey, Central Anat., Ürgüp 15. VI. 1970, 1 ♀.

Distribution: Mediterranean region to Central Asia.

***Anthrax persicus* Paramonov, 1936**

N. Iran, Central Elburz, Damavand, East, 3000—3500 m., 22. VII. 1970, 2 ♂, 1 ♀.

Distribution: It is known from desert of Pamir and Iran (2000—4000 m.).

***Anthrax sacki* Paramonov, 1936**

N. Iran, Central Elburz, val. Darband Sar, 2000—2500 m., 15. VII. 1970, 1 ♂.

Distribution: Central Asia.

***Spongostylum cinereum* Zaitzev, 1967**

N. W. Iran, Maku, 19.—20. VI. 1970, 1 ♀.

Distribution: Transcaucasia.

Exoprosopa punctinervis Becker, 1912

SW. Iran, Shiraz, (north), 4. VII. 1970, 1♂.

Distribution: Transcaucasia, Iran.

Exoprosopa pleskei Paramonov, 1928

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1920, 1♂.

Distribution: Transcaucasia, Central Asia.

Exoprosopa iris Loew, 1869

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 2♀.

Distribution: Mediterranean region to Central Asia.

Exoprosopa minos (Meigen, 1804)

N. Iran, Central Elburz, Damavand, Lajran, 2400 m., 21. VII. 1970, 1♀; N. Iran, Central Elburz, Damavand, East, 2500 m., 21. VII. 1970, 1♀; N. Iran, Wildlf., Park, Vicinity of Dasht, 650 m., 27.—30. VII. 1970, 2♀; N. Iran, Central Elburz, Kandavan, val., 2545 m., 10.—11. VIII. 1970, 2♂.

Distribution: south of Palaeartic.

***Exoprosopa dedecor** Loew, 1870

N. Iran, Abyek, 24. VI. 1970, 1♀.

Distribution: Transcaucasia, Central Asia.

***Exoprosopa eflatouni** Bezzi, 1925

S. W. Iran, Lake Bakhtegan, 30 km. East of Sahl-abad, 7. VII. 1970, 2♀.

Distribution: North Africa, Central Asia.

Exoprosopa aeacus (Meigen, 1804)

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1♂.

Distribution: south of Palaeartic.

Exoprosopa megerlei (Meigen, 1820)

W. Iran, Eskandari, 2000 m., 1. VII. 1970, 1♂.

Distribution: south of Palaeartic.

Exoprosopa grandis (Meigen, 1820)

N. Iran, Central Elburz, Damavand, Lajran, 2400 m., 21. VII. 1970, 1♂; N. W. N. Iran, Kivi Bala, W. Khalkhal, 1500 m., 16. VIII. 1970, 1♀.

Distribution: south of Palaeartic.

***Exoprosopa meridionalis** Paramonov, 1928

N. Iran, Bandar-e Shah, 1. VIII. 1970, 4 ♂.

Distribution: Central Asia.

Exoprosopa melaena Loew, 1874

N. Iran, Central Elburz, Damavand, East, 2500 m., 21. VII. 1970, 1 ♂; N. Iran, Central Elburz, Kuhha-ye Tochal, 3600—3900 m., 18.—19. VII. 1970, 1 ♂.

Distribution: Iran, Transcaucasia, Central Asia.

***Exoprosopa lugens** Paramonov, 1928

N. Iran, Wildf. Park, Robat-e ghareh Bil, 1000 m., 30. VII. 1970, 1 ♀.

Distribution: Transcaucasia, Central Asia.

Thyridanthrax afer (Fabricius, 1794)

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1 ♂, 1 ♀.

Distribution: widely distributed in the Palaearctic region.

***Thyridanthrax argentifer** (Becker, 1916)

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1 ♂, 2 ♀.

Distribution: Greece.

Thyridanthrax lotus (Loew, 1869)

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1 ♀.

Distribution: Mediterranean region to Transcaucasia.

Thyridanthrax incanus (Klug, 1832)

Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 5 ♀.

Distribution: Mediterranean region to Central Asia.

Thyridanthrax obliteratus (Loew, 1862)

S. W. Iran, Kazerun, 5.—6. VII. 1970, 1 ♂, 1 ♀; S. W. Iran, Bakhtegan, 30 km. East of Sahl-abad, 7. VII. 1970, 4 ♂, 2 ♀.

Distribution: Mediterranean region to Central Asia.

***Thyridanthrax misellus** (Loew, 1869)

Turkey, East Anat., Gevas (Van gölü), 21. VIII. 1970, 1 ♂.

Distribution: southern Europe, Transcaucasia.

Thyridanthrax perspicillaris (Loew, 1869)

N. Iran, Central Elburz, Damavand, East, 2500 m., 21. VII. 1970, 1 ♀; N. Iran, Central Elburz, val. Darband Sar, 2000—2500 m., 15. VII. 1970, 1 ♂, 1 ♀; N. Iran, Central Elburz, Kandavan, val., 2545 m., 10.—11. VIII. 1970, 1 ♂; Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 3 ♂, 9 ♀.

Distribution: widely distributed in the Palaearctic region.

Thyridanthrax albinus (Becker, 1913)

N. Iran, Abyek, 24. VI. 1970, 1 ♀; S. W. Iran, Bakhtegan, 30 km. E. of Sahl-abad, 7. VII. 1970, 1 ♂, 4 ♀.

Distribution: Iran, Transcaucasia.

Villa chorossani (Becker, 1912)

W. Iran, Eskandari, 2000 m., 1. VII. 1970, 2 ♀; N. Iran, Central Elburz, val. Darband Sar, 2500—3000 m., 16. VII. 1970, 1 ♂; N. Iran, Central Elburz, Kandavan, val. 2545 m., 10.—11. VIII. 1970, 1 ♂.

Distribution: Iran, Central Asia.

Villa cingulata (Meigen, 1804)

N. Iran, Central Elburz, Damavand, East, 2500 m., 21. VII. 1970, 1 ♂; N. Iran, Central Elburz, Kandavan, val. 2545 m., 10.—11. VIII. 1970, 1 ♀; N. Iran, W. Elburz, Kalardasht, pl. 1500 m., Rudbarak, 12. VIII. 1970, 2 ♂; Turkey, S. E. Anat., N. of Baskale, 2600 m., 21. VIII. 1970, 5 ♂, 4 ♀.

Distribution: central and southern Europe, Transcaucasia, mountains of Central Asia.

Villa melanura (Loew, 1869)

Turkey, S. E. Anat., N. of Baskale, 2600 m., 21. VIII. 1970, 1 ♀; N. Iran, Central Elburz, Damavand, East, 3000—3500 m., 22. VII. 1970, 1 ♂.

Distribution: Transcaucasia, Minor and Central Asia.

Villa hottentotta (Linne, 1758)

N. W. Iran, Maku, 19.—20. VI. 1970, 1 ♀; N. Iran, Robat-e Ghozlog, 500 m. S. of Gorgan, 26. VII. 1970, 1 ♂; 1 ♀; N. Iran, Central Elburz, Damavand, East, 3000—3500 m., 22. VII. 1970, 1 ♂; N. Iran, Wildlif. Park Vicinity of Dasht, 650 m., 27.—30. VII. 1970, 2 ♀; N. Iran, Wildlif. Park Robat-e Ghuareh Bil, 1000 m., 30. VII. 1970, 1 ♀.

Distribution: widely distributed in the Palaearctic region.

Villa albula (Loew, 1869)

Turkey, N. E. Anat., Agri 1640 m., 19. VI. 1970, 1 ♂; Turkey, Central Anat., Gülşehir, 15. VI. 1970, 1 ♀.

Distribution: Asia Minor, Transcaucasia.

Villa ventruosa (Loew, 1869)

N. Iran, Central Elburz, Damavand, East, 2500 m., 21. VII. 1970, 1 ♀; Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1 ♂.

Distribution: southern Europe, Asia Minor, Transcaucasia.

Villa circumdata (Meigen, 1820)

N. Iran, Central Elburz, val. Darband Sar, 2000—2500 m., 15. VII. 1970, 1 ♀; W. Iran, Eskandari, 2000 m., 1. VII. 1970, 1 ♂.

Distribution: central and southern Europe, Asia Minor, Transcaucasia.

Villa haesitans Becker, 1916

N. Iran, East Elburz, Eyn Varzan, 2000 m., 2.—3. VIII. 1970, 1 ♂.

Distribution: southern Europe, Asia Minor.

***Hemipenthes subvelutinus** Zaitzev, 1966

W. Iran, Organ, 2000 m., 1. VII. 1970, 1 ♀; N. Iran Central Elburz, val. Darband Sar, 2000—2500 m., 15. VII. 1970, 1 ♂, 1 ♀; N. Iran, Robat-e Ghozlog, 500 m. S. of Gorgan, 26. VII. 1970, 1 ♂; Turkey, East Anat., Gevas (Van gölü), 1720 m., 21. VIII. 1970, 1 ♂; Turkey, Central Anat., Ürgüp, 15. VI. 1970, 1 ♀; Turkey, N. E. Anat., Erzurum, 1900 m., 18. VI. 1970, 1 ♀.

Distribution: south part of the USSR, Mongolia.

***Hemipenthes mesasiaticus** Zaitzev, 1966

N. Iran, Central Elburz, Kandavan, val. 2545 m., 10.—11. VIII. 1970, 1 ♀.

Distribution: Central Asia.

***Hemipenthes tusheticus** Zaitzev, 1966

N. Iran, Central Elburz, Damavand, East 3000—3500 m., 22. VII. 1970, 1 ♀.

Distribution: Transcaucasia.

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