

## Data on the fauna of flower flies (Diptera: Syrphidae) of the South Urals

### К фауне сирфид (Diptera: Syrphidae) Южного Урала

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КЛЮЧЕВЫЕ СЛОВА: Diptera, Syrphidae, фауна, Южный Урал.

**ABSTRACT:** The list of flower fly species (Diptera: Syrphidae) is presented for the first time for the South Urals with the description of ecology, distribution and examined material. 100 species from 42 genera were found. The presented list composes half of expected species in this region approximately. A brief characteristic of the main localities is given. Detected species richness of flower flies of the South Urals is compared with one in the neighboring regions. An analysis of biotopes preferred to flower flies and prognosis of further study of Syrphidae in the South Urals is given.

**РЕЗЮМЕ:** Впервые для Южного Урала приводится список видов мух-журчалок (Diptera: Syrphidae) с описанием экологии, распространения и изученного материала. Выявлено 100 видов сирфид из 42 родов. Представленный список составляет примерно половину ожидаемых в данном регионе видов. В работе дана краткая характеристика основных мест сбора мух-журчалок. Проведено сравнение выявленного видового богатства сирфид Южного Урала и близлежащих регионов. Дан анализ предпочитаемых мухами-журчалками биотопов и прогноз дальнейшего изучения сирфид на Южном Урале.

### Introduction

Fauna of flower flies (Diptera: Syrphidae) of the South Urals is studied extremely insufficiently till now. The faunistic list is composed for Ilmen State Reserve only and it contains 16 species [Lagunov, 2001]. However the nature-territorial conditions of the region give the possibilities for higher species richness of this family. The present work is a first directional attempt to study of flower flies fauna of the South Urals.

The major part of material is collected at three protected areas: in Ilmen State Reserve, in Museum-Reserve “Arkaim” and in State Natural Reserve “Shulgan-Tash”.

Ilmen State Reserve is situated in the Chelyabinsk Area, in forest zone on the eastern slope of the South-Ural range [Kolesnikov, 1961]. Climate is typically continental. Reserve territory is occupied by forest vegetation mostly or one derived from it. The pine and birch forests are predominant. The areas of natural meadow, steppe and scrub vegetation are small, dispersed on reserve territory and everywhere are surrounding by woods. Considerable reserve area is occupied by lakes and bogs, which are numerous but relatively small.

Museum-Reserve “Arkaim” is situated in the south of the Chelyabinsk Area (Bredy District). Its territory is in borders of steppe zone on eastern slope of the South Urals. There is steppe on the bigger part of reserve. The woods occupy insignificant part of its territory and represent the birch forests mostly [Eremchenko, Taranov, 1999].

State Natural Reserve “Shulgan-Tash” is situated on the western slope of the South Urals, in borders of the Byrsjan administrative District of Republic Bashkortostan. The reserve territory is in broad-leaved-forest zone of the mountain-forest area of the South Urals. Landscapes are composed by the peculiar mosaic of the different vegetation sites namely southern taiga, broad-leaved and small-leaved forests, dry and bottomland meadows, vegetation of the calcareous and shale rocks, relict-mountain steppe, isolated spruce forest [Gordiyuk, 2000]. Climate is continental.

The list of flower fly species with the description of material is given below. In total 100 species from 42 genera were found. We believe that the presented list is not complete and expect its considerable increase (ap-

proximately half) during further researches. This statement found on the data of flower fly species richness of the neighboring region such as Kurgan Area. The area of last is much less than South Urals, nevertheless 175 species of Syrphidae were found here (original data).

All material studied is kept in collections of the Siberian Zoological Museum, Institute of Animal Systematics and Ecology, Novosibirsk and in Ilmen State Reserve, Miass.

The arrangement of genera in the list is given according to L.V. Peck [Peck, 1988]. The distribution of the species borrowed from V.A. Mutin and A.V. Barkalov [Mutin, Barkalov, 1999].

In the present work, the following abbreviations are used: ChA — Chelyabinsk Area; EuP — Europe part of Russia; FE — Far East of Russia; ISR — Ilmen State Reserve; RB — Republic Bashkortostan, Sh-T — State Natural Reserve “Shulgan-Tash”.

## List of Syrphidae of the South Urals

### Familia SYRPHIDAE

#### Genus *Dasysyrphus* Enderlen, 1938

##### 1. *Dasysyrphus albostratus* (Fallén, 1817)

Flies were observed at herblike glades in a pine-birch forest and also at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 1.07.98, 1 spec., Zakharova leg.; 5.07.98, 1 spec., Chashchina leg.; 8.07.00, 1 spec., Dubovoy leg.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Kazakhstan, Caucasus; Asia: Mongolia, Japan.

##### 2. *Dasysyrphus arcuatus* (Fallén, 1817)

Flies were collected on the flowers of *Padus* sp.

MATERIAL: ChA, ISR: 3.07.00, 1 spec., Chashchina leg.; RB: Byrsjan Distr., near Akbulatovo, 5.06.00, 3 spec., Chashchina leg.

DISTRIBUTION: all Siberia on east up to Kurile Isls, Kamchatka, Chukotka.

##### 3. *Dasysyrphus lunulatus* Meigen, 1822

MATERIAL: ChA, ISR: 12.07.00, 1 spec., Rudoiskatel leg.; RB: Sh-T, 10.06.00 1 spec., Chashchina leg.

DISTRIBUTION: from Urals to Yakutiya.

##### 4. *Dasysyrphus tricinctus* (Fallén, 1817)

Flies were observed at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 6.07.98, 3 spec., Zakharova leg.; 28.07.00 2 spec., Rudoiskatel leg.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus; Middle Asia (Turkmenistan); Asia: Mongolia, Japan, Korea.

##### 5. *Dasysyrphus venustus* (Meigen, 1822)

Flies were caught at herblike glades in a pine-birch forest and also at dry meadow.

MATERIAL: ChA, ISR: 18.20.06.98, 2 spec., leg. Zakharova, Chashchina; RB: Byrsjan Distr., Akbulatovo, 9.06.00, 1 spec., Chashchina leg.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus; Asia: Mongolia; Nearctic Region.

#### Genus *Didea* Macquart, 1834

##### 6. *Didea alneti* (Fallén, 1817)

Flies were observed at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR, 16.07.98, 20.07.98, 2 spec., Zakharova leg.  
DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Kazakhstan; Middle Asia (Kyrgyzstan); Asia: Mongolia, Korea, Japan; Nearctic Region: North America.

##### 7. *Didea fasciata* Macquart, 1834

MATERIAL: RB: Sh-T, 4.06.00, 1 spec., Chashchina leg.  
DISTRIBUTION: Western Europe; Russia: Siberia, EuP, FE; Caucasus; Asia: Japan, Korea.

#### Genus *Doros* Meigen, 1822

##### 8. *Doros conopseus* (Fabricius, 1775)

Flies were caught at steppe vegetation on the serpentine hills and also at herblike glades.

MATERIAL: ChA, ISR: 12.07.98, 1 spec., leg. Zakharova; 27.06.00, 1 spec., Chashchina leg.

DISTRIBUTION: Western Europe; Russia: South Siberia, EuP, FE; Kazakhstan; Caucasus; Korea.

#### Genus *Epistrophe* Walker, 1852

##### Subgenus *Epistrophe* Walker, 1852

##### 9. *Epistrophe diaphana* (Zetterstedt, 1843)

MATERIAL: ChA, ISR, 27.06.00, 1 spec., Chashchina leg.  
DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Kazakhstan; Caucasus; Middle Asia (Kyrgyzstan).

##### 10. *Epistrophe glossulariae* (Meigen, 1822)

Flies were caught at herb wet meadow near the lake, at dry meadow and also at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 24–28.06.98, 7 spec., leg. Chashchina & Zakharova; 1.07.98, 1 spec., leg. Zakharova; 4.08.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus; Asia: Mongolia, Japan, Korea; Nearctic Region: North America.

##### 11. *Epistrophe nitidicollis* (Meigen, 1822)

Material: RB: Sh-T, 3.06.00, 1 spec., leg. Chashchina.  
DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; south of the Kazakhstan; Asia: Japan, Korea; Nearctic Region: North America.

#### Genus *Episyrphus* Matsumura and Adachi, 1917

##### 12. *Episyrphus balteatus* (De Geer, 1776)

Material: ChA, ISR, 4–6.08.00, 5 spec., leg. Tuylenev & Rudoiskatel.

DISTRIBUTION: all Europe; Russia: EuP, Siberia; Kazakhstan, Caucasus; Asia: Afghanistan, Mongolia, China, Japan; North Africa; Canary Islands; Australia.

#### Genus *Ischyrosyrphus* Bigot, 1882

##### 13. *Ischyrosyrphus glaucius* (Linnaeus, 1758)

Specimens were collected at herblike glades in a pine-birch forest and also at steppe meadow.

MATERIAL: ChA, ISR: 22.06.98, 1 spec., Chashchina leg.; 12.07.98, 1 spec., Chashchina leg.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Asia: Mongolia, Japan, Korea.

##### 14. *Ischyrosyrphus laternarius* (Müller, 1776)

Flies were caught at herb mesophytic meadows and herb wet meadow near the lake.

MATERIAL: ChA, ISR: 25–29.06.98, 3 spec., leg. Rudoiskatel; 23.06.00, 1 spec., leg. Chashchina; 12.07.00, 2 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Asia: Mongolia, China, Japan, Korea.

#### Genus *Leucozona* Schiner, 1860

##### 15. *Leucozona lucorum* (Linnaeus, 1758)

Flies were observed at steppe meadow.

MATERIAL: ChA, ISR: Lysaya Mountain, 8.06.98, 1 spec., leg. Chashchina; 22–24.06.98, 4 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Caucasus, Kyrgyzstan, Mongolia, Korea, Japan; Russia: Siberia, EuP, FE; Nearctic Region: North America.

#### Genus *Megasyrphus* Dušek & Láska, 1967

##### 16. *Megasyrphus erraticus* (Linnaeus, 1758)

MATERIAL: ChA, ISR: 16.07.00, 2 spec., leg. Rudoiskatel; RB: Byrsjan Distr., Akbulatovo, 5.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan); Asia: Mongolia.

#### Genus *Melangyna* Verrall, 1901

##### Subgenus *Melangyna* Verrall, 1901

##### 17. *Melangyna umbellatarum* (Fabricius, 1794)

Flies were observed at herb mesophytic meadows.

MATERIAL: ChA, ISR: 25–29.06.98, 5 spec., leg. Chashchina; 11.07.00, 1 spec., leg. Rudoiskatel; RB: Byrsjan Distr., Sh-T, 17.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Middle Asia (Kyrgyzstan); Asia: Mongolia; Nearctic Region: North America.

#### Genus *Meliscaeva* Frey, 1946

##### 18. *Meliscaeva cinctella* (Zetterstedt, 1843)

Specimens were collected at steppe meadow.

MATERIAL: ChA, ISR: 22.06.98, 25.06.98, 2 spec., leg. Zakharova & Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus; Turkmenistan; Mongolia, Korea, Japan; Nearctic Region: North America.

#### Genus *Eupeodes* Osten Sacken, 1877

##### Subgenus *Eupeodes* Osten Sacken, 1877

##### 19. *Eupeodes corollae* (Fabricius, 1794)

MATERIAL: RB: Byrsjan Distr., Akbulatovo, 5.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia; Kazakhstan, Caucasus; Asia: Iran, Mongolia, Northern China, Japan; North Africa; Tasmania.

##### 20. *E. latifasciatus* Macquart, 1829

Specimens were collected in steppe.

MATERIAL: ChA, Bredy Distr., “Arkaim”, 29–31.05.99, 2 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Middle Asia, Syria, Afghanistan, Mongolia; Oriental Region; Nearctic Region: North America.

#### Genus *Parasyrphus* Matsumura, 1917

##### 21. *Parasyrphus lineolus* (Zetterstedt, 1843)

One specimen was caught at dry meadow.

MATERIAL: ChA, ISR, 20.06.98, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: Siberia, EuP, FE; Mongolia, China.

##### 22. *Parasyrphus vittiger* (Zetterstedt, 1843)

MATERIAL: ChA, ISR, 6.07.00, 1 spec., leg. Tyulenev.

DISTRIBUTION: Western Europe; Russia: Siberia, EuP, FE; Caucasus; Mongolia.

#### Genus *Scaeva* Fabricius, 1805

##### 23. *Scaeva pyrastris* (Linnaeus, 1758)

Flies were caught at steppe vegetation on serpentine hills and also at herblike glades in pine-birch forest, at mesophytic meadows and in steppe.

MATERIAL: ChA, ISR: 28.06.98, 1 spec., leg. Chashchina; 1.07.98, 5.07.98, 2 spec., leg. Zakharova & Chashchina; ChA, Bredy Distr., “Arkaim”: 10.06.99, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia, Afghanistan, Mongolia, North of China, Japan, Korea; North America; North Africa, Madeira, Canary Isls.

##### 24. *Scaeva selenitica* (Meigen, 1822)

MATERIAL: ChA, National Park “Taganay”, mountain “Kruglitsa”, 1100 m, 1.08.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus; Asia: Afghanistan, Mongolia, China.

#### Genus *Sphaerophoria* Le Peletier & Serville, 1828

##### 25. *Sphaerophoria scripta* (Linnaeus, 1758)

Flies were caught at herb meadows near the lake, at bottomland of the river and in steppe. Also they were observed on flowers of the dandelion (*Taraxacum* sp.).

MATERIAL: ChA, ISR: 29.06.98, 1 spec., leg. Zakharova; 3.07.00, 28.07.00, 5 spec., leg. Rudoiskatel; 3.08.00, 6.08.00, 8 spec., leg. Tyulenev & Rudoiskatel; ChA, Bredy Distr., “Arkaim”: 31.05.99, 3 spec., 11.06.99, 2 spec., leg. Chashchina; RB: Byrsjan Distr., Akbulatovo, 5.06.00, 1 spec., leg. Chashchina; Sh-T, 5.06.00, 16.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia, Syria, Afghanistan, Mongolia; North Africa; Azores, Canary Isls, Madeira, Greenland; Oriental Region.

##### 26. *Sphaerophoria taeniata* (Meigen, 1822)

MATERIAL: ChA, ISR, 6.08.00, 1 spec., leg. Tyulenev.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Central Asia, Mongolia, China, Japan; Canary Isls.

#### Genus *Syrphus* Fabricius, 1775

##### 27. *Syrphus ribesii* (Linnaeus, 1758)

Flies were observed at dry and steppe meadows.

MATERIAL: ChA, ISR: 8–24.06.98, 4 spec., leg. Chashchina & Zakharova; 14.07.98, 1 spec., leg. Chashchina; 27.06.00, 2 spec., leg. Chashchina; 4–28.07.00, 6 spec., leg. Chashchina & Rudoiskatel; 1–6.08.00, 5 spec., leg. Tyulenev & Rudoiskatel; RB: Sh-T, 5.06.00, 11.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia; Afghanistan, Mongolia, Korea, Japan; North America.

28. *Syrphus vitripennis* Meigen, 1822

Flies were caught at mesophytic meadows near the lake and at steppe meadow.

MATERIAL: ChA, ISR: 25–28.06.98, 2 spec., leg. Chashchina & Zakharova; 27.06.00, 1 spec., leg. Chashchina; 3–6.08.00, 16 spec., leg. Tyulenev & Rudoiskatel; mountain “Lysaya”, 16.07.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Middle Asia; Mongolia, Iran, Afghanistan, Korea, Japan; North America; Oriental Region.

Genus *Xanthogramma* Schiner, 186029. *Xanthogramma citrofasciatum* (De Geer, 1776)

MATERIAL: RB, Sh-T, 11.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan).

30. *Xanthogramma pedissequum* (Harris, [1776])

Flies were caught at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 25–29.06.98, 2 spec., leg. Zakharova & Chashchina; 5–14.07.98, 5 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Middle Asia.

Genus *Chrysotoxum* Meigen, 180331. *Chrysotoxum arcuatum* (Linnaeus, 1758)

Flies were observed at steppe meadow and in the bottomland of the river.

MATERIAL: ChA, ISR: 8.06.98, 1 spec., leg. Chashchina; RB: Sh-T, 5.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan); Japan, Mongolia; Oriental Region.

32. *Chrysotoxum bicinctum* (Linnaeus, 1758)

Flies were observed at steppe meadows.

MATERIAL: ChA, ISR: 29.06.98, 2 spec., leg. Podgorbunskikh; 18–20.07.98, 2 spec., leg. Chashchina; mountain “Lysaya”, 7.07.00, 1 spec., leg. Dubovoy.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan); Mongolia; North Africa.

33. *Chrysotoxum cautum* (Harris, [1776])

The single specimen was caught in steppe.

MATERIAL: ChA, Bredy Distr., “Arkaim”, 11.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan).

34. *Chrysotoxum festivum* (Linnaeus, 1758)

Flies were observed at steppe and mesophytic meadows near the lake, at steppe vegetation on the serpentine hills and in steppe.

MATERIAL: ChA: Chelyabinsk, 13.06.77, 1 spec., leg. Lagunov; ISR: 21–28.06.98, 13 spec., leg. Chashchina & Zakharova; 5.07, 16.07.98, 2 spec., leg. Chashchina; 29.05.99, 1 spec., leg. Chashchina; 27.07, 28.06.00, 4 spec., leg. Chashchina; Bredy Distr., “Arkaim”, 11.06.00, 1 spec., leg. Chashchina; RB: Sh-T, 17.06.00, 1 spec., leg. Chashchina; 4.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia; Mongolia, Japan.

35. *Chrysotoxum octomaculatum* Curtis, 1837

Flies were caught at steppe meadow (woodless slope of mountain “Lysaya”) and at mesophytic meadows near the lake Big Tatkul.

MATERIAL: ChA, ISR: 29–30.06.98, 2 spec., leg. Chashchina; 18.07.98, 1 spec., leg. Chashchina; mountain “Lysaya”, 7.07.00, 1 spec., leg. Dubovoy.

DISTRIBUTION: Europe; Russia: EuP, Western Siberia; Caucasus, Kazakhstan.

36. *Chrysotoxum vernale* Loew, 1841

Flies were observed in steppe.

MATERIAL: ChA: Bredy Distr., “Arkaim”, 29–31.05.99, 7 spec.; 1–10.06.99, 1 spec., leg. Chashchina; RB: Sh-T, 4.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan, Turkmenistan); Iran.

Genus *Melanostoma* Schiner, 186037. *Melanostoma mellinum* (Linnaeus, 1758)

MATERIAL: ChA, ISR, 6.08.00, 4 spec., leg. Tyulenev.

DISTRIBUTION: North America; Russia: EuP, Siberia; Mongolia, Iran, Afghanistan, Korea, Japan; North Africa, Canary Isls, Madeira.

Genus *Platycheirus* Le Peletier and Serville, 182838. *Platycheirus clypeatus* (Meigen, 1822)

Flies were caught near the lake (at mesophytic and wet meadows), and also at steppe meadow.

MATERIAL: ChA, ISR: 22.06.98, 1 spec., leg. Chashchina; 18.07.98, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Mongolia, Korea, Japan, Kyrgyzstan, Afghanistan, Caucasus; North America.

39. *Platycheirus peltatus* (Meigen, 1822)

Flies were observed on a coast of the lake and also at dry meadow.

MATERIAL: ChA, ISR: 20–28.06.98, 4 spec., leg. Chashchina; 22.06.98, 2 spec., leg. Zakharova & Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Kyrgyzstan, Caucasus; Mongolia, Korea, Japan.

Genus *Pipiza* Fallén, 181040. *Pipiza austriaca* Meigen, 1822

Flies were observed at herblike glade in pine-birch forest, at steppe meadow and at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 24–29.06.98, 5 spec., leg. Chashchina; 12.07, 18.07.98, 3 spec., leg. Chashchina; mountain “Lysaya”, 30.06.98, 2 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Japan.

41. *Pipiza quadrimaculata* (Panzer, 1802)

MATERIAL: ChA, ISR: 22–27.06.00, 6 spec., leg. Chashchina; RB: Sh-T, 11.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Mongolia; North America.

Genus *Pipizella* Rondani, 185642. *Pipizella annulata* (Macquart, 1829)

Flies were observed at the bottomland of the river Belaya (RB), and also at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 24.06.99, 1 spec., leg. Zakharova; RB: Sh-T, 5.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Western Siberia; Caucasus, Kazakhstan.

#### 43. *Pipizella brevis* Lucas, 1976

Flies were caught at dry meadow.

MATERIAL: ChA, ISR, 20.06.98, 2 spec., leg. Chashchina.

DISTRIBUTION: Europe, Russia: South Urals, Western Siberia, Altai.

#### Genus *Trichopsomyia* Williston, 1888

#### 44. *Trichopsomyia flavitarsis* (Meigen, 1822)

Flies were observed at herblike glades in pine-birch forest.

MATERIAL: ChA, ISR: 5–12.07.98, 3 spec., leg. Chashchina; ChA, Bredy Distr., “Arkaim”, 4.06.99 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe, Russia: EuP, Siberia, FE; Kazakhstan, Mongolia.

#### Genus *Cheilosia* Meigen, 1822

#### 45. *Cheilosia albitarsis* (Meigen, 1822)

MATERIAL: RB, Sh-T, 3–4.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Western Siberia; Caucasus; North Africa.

#### 46. *Cheilosia carbonaria* Egger, 1860

MATERIAL: ChA, ISR: 13.07.00, 1 spec., leg. Rudoiskatel; RB: Sh-T, 10.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia.

#### 47. *Cheilosia chrysocoma* (Meigen, 1822)

Specimen was caught at steppe meadow.

MATERIAL: ChA, ISR, mountain “Lysaya”, 8.06.98, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia.

#### 48. *Cheilosia flavipes* (Panzer, [1798])

Specimen was caught at steppe.

MATERIAL: ChA, Bredy Distr., “Arkaim”, 1.06.99, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Middle Asia (Kyrgyzstan).

#### 49. *Cheilosia gigantea* (Zetterstedt, 1838)

Flies were collected at dry and steppe meadows and at steppe vegetation on serpentine hills.

MATERIAL: ChA, ISR: 8.06, 20.06.98, 4 spec., leg. Chashchina; 24.06.99, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus, Middle Asia (Kyrgyzstan).

#### 50. *Cheilosia longula* (Zetterstedt, 1838)

One specimen was collected at meadow near the lake Big Tatkul.

MATERIAL: ChA, ISR, 25.06.98, 1 spec., leg. Zakharova.

DISTRIBUTION: Golarctic Region.

#### 51. *Cheilosia mutabilis* (Fallén, 1817)

Flies were collected at herblike glade in the pine-birch forest.

MATERIAL: ChA, ISR, 12.07.98, 2 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus.

#### 52. *Cheilosia motodomariensis* Matsumura, 1916

Flies were observed at serpentine hills and at steppe meadow.

MATERIAL: ChA, ISR: 5–20.07.98, 5 spec., leg. Podgorbunskikh; 4–20.07.00, 5 spec., leg. Rudoiskatel; mountain “Lysaya”, 16.07.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Russia: Siberia, FE; Japan, Mongolia.

#### 53. *Cheilosia pagana* (Meigen, 1822)

MATERIAL: ChA, ISR, 31.05.99, 1 spec., leg. Chashchina.

DISTRIBUTION: North America; Russia: Siberia, EuP, FE; Mongolia, Japan, Kazakhstan, Azerbaijan, Armenia, Georgia.

#### 54. *Cheilosia proxima* (Zetterstedt, 1843)

Specimen was collected at bottomland of the river on osier (*Salix* sp.).

MATERIAL: RB, Sh-T, 17.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: Siberia, FE; north of Kazakhstan, Kyrgyzstan, Armenia, Georgia.

#### 55. *Cheilosia variabilis* (Panzer, 1798)

Flies were collected at the bottomland meadow and at serpentine hills.

MATERIAL: ChA, ISR: 16.07.98, 2 spec., leg. Zakharova; 4.07.00, 1 spec., leg. Dubovoy; RB: Byrsjan Distr., Sh-T, 5.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Kyrgyzstan.

#### 56. *Cheilosia vulpina* (Meigen, 1822)

Flies were observed at dry meadow, at herblike glades in the pine-birch forest and at bottomland of the river.

MATERIAL: ChA, ISR: 17–21.06.98, 2 spec., leg. Chashchina & Zakharova; RB, Distr., Sh-T: 5.06.00, 2 spec., leg. Chashchina; 3.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Western Siberia.

#### Genus *Volucella* Geoffroy, 1762

#### 57. *Volucella bombylans* (Linnaeus, 1758)

Flies were caught at serpentine hills and at steppe meadows.

MATERIAL: ChA, ISR: 24.06.99, 1 spec., leg. Chashchina; 23–28.06.00, 10 spec., leg. Chashchina; 28.07.00, 1 spec.; Mt. “Lysaya”, 26.06.00, 1 spec.; 4–16.07.00, 4 spec., leg. Rudoiskatel & Dubovoy; RB: Sh-T, 3–17.06.00, 7 spec., leg. Chashchina; Akbulatovo, 5.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: North America; Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia, Mongolia, China.

#### 58. *Volucella inanis* (Linnaeus, 1758)

Specimens were collected at steppe meadow and at serpentine hills.

MATERIAL: ChA, ISR: 14–16.07.98, 3 spec., leg. Chashchina & Zakharova; 12.07.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Turkmenistan, Uzbekistan, Kyrgyzstan, Syria, Afghanistan, Mongolia, China.

#### 59. *Volucella pellucens* (Linnaeus, 1758)

Flies were observed at steppe meadows.

MATERIAL: ChA, ISR: 22.06.98, 3 spec., leg. Chashchina; 18–25.06.98, 3 spec., 12.07, 14.07.98, 2 spec., 20.08.98, 1 spec., leg. Zakharova & Chashchina; 11–28.07.00, 7 spec., leg. Podgorbunskikh & Rudoiskatel; Mt. “Lysaya”, 16.07.00, 1 spec., leg. Rudoiskatel; RB: Sh-T, 6.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia, Mongolia, China, Korea, Japan; North Africa; Oriental Region.

Genus *Ferdinandea* Rondani, 1844

60. *Ferdinandea cuprea* (Scopoli, 1763)

MATERIAL: RB, Distr., Sh-T, 9.06.00, 1 spec., leg. Chashchina.  
DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus, Japan.

Genus *Orthoneura* Macquart, 1829

61. *Orthoneura intermedia* Lundbeck, 1916

Flies were observed at meadows near the lake Big Tatkul (ISR).

MATERIAL: ChA, ISR: 24–29.06.98, 3 spec., leg. Chashchina; 18.07.98, 1 spec., leg. Chashchina; 27.06.00, 1 spec., leg. Chashchina; 3.08.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE.

Genus *Neoascia* Williston, 1886

Subgenus *Neoasciella* Stackelberg, 1965

62. *Neoascia (Neoasciella) aenea* (Meigen, 1822)

Specimens were collected near the lake on willow (*Salix* sp.) and on flowers of *Pyrus* sp.

MATERIAL: ChA, ISR: 31.05.99, 2 spec., leg. Chashchina; 3.07.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan); Mongolia.

Subgenus *Neoascia* Williston, 1887

63. *Neoascia (Neoascia) tenur* (Harris, [1780])

Flies were caught in steppe, near the lake on willow (*Salix* sp.) and at mesotrophic bog.

MATERIAL: ChA, ISR: 20.06.98, 1 spec., leg. Chashchina; 3.07.00, 3 spec., leg. Chashchina; ChA, Bredy Distr., “Arkaim”, 29.05.99, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Kyrgyzstan, Tadzhikistan, Mongolia, China.

Genus *Sphegina* Meigen, 1822

Subgenus *Asiosphegina* Stackelberg, 1953

64. *Sphegina (Asiosphegina) sibirica* Stackelberg, 1953

One specimen was collected at dry meadow.

MATERIAL: ChA, ISR, 20.06.98, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: Siberia, FE; Korea.

Genus *Eumerus* Meigen, 1822

65. *Eumerus strigatus* (Fallén, 1817)

Specimen was caught on a coast of the lake Big Tatkul.

MATERIAL: ChA, ISR, 18.07.98, 1 spec., leg. Chashchina.

DISTRIBUTION: North America; Western Europe; Russia: EuP, Siberia, FE; Kazakhstan, Middle Asia (Kyrgyzstan); Mongolia, China, Japan; North Africa, Azores.

Genus *Ceriana* Rafinesque, 1815

66. *Ceriana conopsoides* (Linnaeus, 1758)

Flies were observed at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 24 29.06.98, 4 spec., leg. Zakharova; 27.06.00, 1 spec., leg. Chashchina; 11.07.00, 1 spec., leg. Rudoiskatel; RB: Byrsjan Distr., Akbulatovo, 5.06.00, 2 spec., leg. Chashchina; Sh-T, 17.06.00, 3 spec., leg. Chashchina; Sh-T, 4.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Trans-Caucasus region; Asia: China; North Africa.

Genus *Eristalinus* Rondani, 1845

Subgenus *Eristalinus* Rondani, 1845

67. *Eristalinus sepulchralis* (Linnaeus, 1758)

Specimens were collected at meadows near the lake Big Tatkul and at serpentine hills.

MATERIAL: ChA, ISR: 1.07.98, 1 spec., leg. Zakharova; 24–29.06.98, 5 spec., leg. Zakharova & Chashchina; 16–28.07.00, 4 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia; Asia: Syria, Mongolia, Japan, Korea, China; North Africa; Oriental Region.

Genus *Eristalis* Latreille, 1804

68. *Eristalis abusiva* Collin, 1931

MATERIAL: ChA, ISR: 20.07 98, 1 spec., leg. Zakharova; 27.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE.

69. *Eristalis anthophorina* (Fallén, 1817)

Flies were caught at steppe vegetation on the serpentine hills, and also at mesophytic meadows near the lake.

MATERIAL: ChA, ISR: 28–29.06.98, 2 spec., leg. Chashchina; 1.07, 18.07.98, 4 spec., leg. Zakharova.

DISTRIBUTION: North America; Western Europe; Russia: EuP, Siberia, FE; Mongolia, Japan.

70. *Eristalis arbustorum* (Linnaeus, 1758)

MATERIAL: ChA, Bredy Distr., “Arkaim”, 4.06.99, 1 spec., leg. Chashchina; ISR: 4.07.00, 1 spec., leg. Dubovoy; 6.08.00, 3 spec., leg. Tyulenev.

DISTRIBUTION: North America; Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia; Syria, Iran, Afghanistan; North Africa, Azores; Oriental Region.

71. *Eristalis horticola* (Degeer, 1776)

Specimens were collected at steppe and mesophytic meadows.

MATERIAL: ChA, ISR: 22.06.98, 1 spec., leg. Chashchina; 4.07.00, 1 spec., leg. Dubovoy; 6.08.00, 3 spec., leg. Tyulenev

DISTRIBUTION: Europe; Russia: EuP, Siberia, FE; Caucasus; North Africa; Oriental Region.

72. *Eristalis intricaria* (Linnaeus, 1758)

Flies were observed at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 24–28.06.98, 5 spec., leg. Chashchina & Zakharova; 1.07, 18.07.98, 3 spec., leg. Zakharova; 24–28.06.00, 5 spec., leg. Chashchina; 4.07, 16.07.00, 2 spec., leg. Dubovoy.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan).

73. *Eristalis interrupta* (Poda, 1761)

Specimens were collected at mesophytic meadow near the lake, at steppe meadow and also at serpentine hills.

MATERIAL: ChA, ISR: 8–25.06.98, 7 spec., leg. Chashchina & Zakharova; 1.07, 5.07.98, 2 spec., leg. Zakharova; 27.06.00, 3 spec., leg. Chashchina; 4–28.07.00, 5 spec., leg. Podgorbunskikh; 6.08.00, 5 spec., leg. Tyulenev.

DISTRIBUTION: North America; Western Europe; Russia EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan); Mongolia.

74. *Eristalis oestracea* (Linnaeus, 1758)

Flies were observed at steppe meadow and at serpentine hills.

MATERIAL: ChA, ISR: 1.07, 18.07.98, 2 spec., leg. Zakharova; 27.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Western Siberia; Kazakhstan; Nearctic Region.

75. *Eristalis rossica* Stackelberg, 1958

Specimens were collected at herb mesophytic meadows and in steppe.

MATERIAL: ChA, ISR: 16–25.06.98, 6 spec., leg. Chashchina & Zakharova; 27.06.00, 2 spec., leg. Chashchina; 4.07.00, 1 spec., leg. Dubovoy; ChA, Bredy Distr., “Arkaim”, 10.06.99, 1 spec., leg. Chashchina; RB: Sh-T, 3.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Russia: EuP, Siberia, FE; Mongolia, China, Korea.

76. *Eristalis rupium* Fabricius, 1805

Flies were observed at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 16–25.06.98, 12 spec., leg. Chashchina & Zakharova; 23–27.06.00, 8 spec., leg. Chashchina; 4.07, 26.07.00, 4 spec., leg. Rudoiskatel; 3–6.08.00, 10 spec., leg. Tyulenev & Rudoiskatel; mountain “Lysaya”, 7.07.00, 3 spec., leg. Dubovoy.

DISTRIBUTION: North America; Western Europe, Russia: EuP, Siberia, FE; Caucasus, Mongolia; Canary Isls.

77. *Eristalis tenax* (Linnaeus, 1758)

MATERIAL: ChA, mountain “Kruglitsa”, 1100 m, 2.08.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: cosmopolite.

78. *Eristalis tundrarum* Frey, 1946

Specimen was caught at steppe meadow near the lake Big Tatkul.

MATERIAL: ChA, ISR, 16.06.98, 1 spec., leg. Chashchina.

DISTRIBUTION: Finland; Russia: EuP, Siberia, Altai, FE.

79. *Eristalis vitripennis* Strobl, 1893

Flies were observed at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 17–25.06.98, 5 spec., leg. Chashchina & Zakharova; 22.06.98, 2 spec., leg. Chashchina; mountain “Lysaya”, 8.06.98, 1 spec., leg. Chashchina; 27.06.00, 1 spec., leg. Chashchina; 19.07.00, 2 spec., leg. Podgorbunskikh; 3.6.08.00, 6 spec., leg. Tyulenev.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Kyrgyzstan, Mongolia.

Genus *Helophilus* Meigen, 1822Subgenus *Helophilus* Meigen, 182280. *Helophilus hybridus* Loew, 1846

Flies were caught at herblike glades in the pine-birch forest.

MATERIAL: ChA, ISR: 18–21.06.98, 3 spec., leg. Chashchina; 23–28.06.00, 8 spec., leg. Chashchina; 4.07, 8.07, 28.07.00, 4 spec., leg. Rudoiskatel & Dubovoy.

DISTRIBUTION: North America; Western Europe, Russia: EuP, Siberia, FE; Mongolia.

81. *Helophilus parallelus* (Harris, [1776])

Flies were observed at herb mesophytic, steppe and dry meadows, and also at bottomland of the river Belaya (RB).

MATERIAL: ChA, near the station “Poletaevo”, 15.07.75, 3 spec., leg. Lagunov; ISR: 22.06.98, 1 spec., leg. Chashchina; 27.06.00, 10 spec., leg. Chashchina; 4–11.07.00, 2 spec., leg. Podgorbunskikh; RB: Sh-T, 5–17.06.00, 8 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia; Mongolia, China, Iran, Afghanistan.

82. *Helophilus pendulus* (Linnaeus, 1758)

Flies were observed at herblike glades in the pine-birch forest and at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 22.06, 24.06, 29.06.98, 3 spec., leg. Chashchina; 27.06.00, 2 spec., leg. Chashchina; 28.07.00, 1 spec., leg. Rudoiskatel; 6.08.00, 1 spec., leg. Tyulenev; mountain “Lysaya”, 7.07.00, 1 spec., leg. Dubovoy; ChA, Mt. “Kruglitsa”, 1100 m, 1.08.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Crimea, Caucasus.

Subgenus *Parhelophilus* Girschner, 189783. *Helophilus (Parhelophilus) frutetorum* (Fabricius, 1775)

Specimen was collected in steppe.

MATERIAL: ChA, Bredy Distr., “Arkaim”, 11.06.99, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus, Kazakhstan, Kyrgyzstan.

84. *Helophilus (Parhelophilus) versicolor* (Fabricius, 1794)

Flies were caught at dry meadow.

MATERIAL: ChA, ISR: 20.06.98, 2 spec., leg. Chashchina; 20–25.06.00, 3 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Western Siberia, Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan).

Genus *Mallota* Meigen, 182285. *Mallota bicolor* Sack, 1919

Flies were observed at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR, 25.06.98, 1 spec., leg. Zakharova; RB, Sh-T: 5.06, 17.06.00, 2 spec., leg. Chashchina; 3.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Russia: Western Siberia, FE; Korea, China.

86. *Mallota megilliformis* (Fallén, 1817)

Specimens were collected at mesophytic and bottomland meadows (river Belaya, RB).

MATERIAL: ChA, ISR: 26–28.06.00, 4 spec., leg. Chashchina; RB, Sh-T: 5.06, 17.06.00, 5 spec., leg. Chashchina; 3.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Western Europe, Russia: EuP, Siberia, FE.

87. *Mallota tricolor* Loew, 1871

Flies were caught at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 25.06.98, 1 spec., leg. Zakharova; 26–27.06.00, 2 spec., leg. Zakharova & Chashchina; 3.08.00, 1 spec., leg. Rudoiskatel; RB: Sh-T, 11.17.06.00, 3 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Southern Siberia, FE; Korea.

Genus *Myathropa* Rondani, 184588. *Myathropa florea* (Linnaeus, 1758)

Flies were collected at herblike glades and meadows.

MATERIAL: ChA, ISR: 22–23.06.00, 3 spec., leg. Chashchina; 12.07.98, 1 spec., leg. Chashchina; RB: Sh-T, 17.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, Turkmenistan, Tadzhikistan, Afghanistan; North Africa; Canary Isls, Azores.

89. *Myathropa semenovi* Smirnov, 1924

Specimens were collected at herb mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 27.06.00, 2 spec., leg. Chashchina; 11.07.00, 1 spec., leg. Rudoiskatel; RB: Sh-T, 17–18.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Russia: Siberia; Kazakhstan, Caucasus, Middle Asia.

Genus *Sphecomyia* Latreille, 182990. *Sphecomyia vespiformis* Gorski, 1852

Flies were observed at bottomland of the river Belaya.

MATERIAL: RB, Sh-T, 5.06.00, 2 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE.

Genus *Spilomyia* Meigen, 180391. *Spilomyia diophthalma* (Linnaeus, 1758)

Specimens were collected at herb mesophytic and steppe meadows and also at steppe vegetation on the serpentine hills.

MATERIAL: ChA, ISR: 24–28.06.98, 9 spec., leg. Zakharova & Chashchina; 22.06.98, 2 spec., leg. Chashchina; Mt. "Lysaya", 30.06.00, 3 spec., leg. Zakharova; 16.07.00, 3 spec., leg. Rudoiskatel; 12–17.07.98, 9 spec., leg. Zakharova; 4.07.00, 1 spec., leg. Rudoiskatel; 6.08.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Caucasus, north of Kazakhstan, Mongolia; North Africa.

Genus *Syritta* Le Peletier and Serville, 182892. *Syritta pipiens* (Linnaeus, 1758)

Flies were observed at herb mesophytic and wet meadows.

MATERIAL: ChA, ISR: 29.06.98, 2 spec., leg. Chashchina; 6.08.00, 10 spec., leg. Tyulenev; ChA, near Miass, 6.07.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: North America; Western Europe; Russia; Mongolia, China, Turkey, Iran, Afghanistan; North Africa; Madeira, Canary Isls; Oriental Region.

Genus *Temnostoma* Le Peletier and Serville, 182893. *Temnostoma apiforme* (Fabricius, 1794)

Specimens were collected at serpentine hills and at steppe meadow.

MATERIAL: ChA, ISR: 24.06.99, 1 spec., leg. Zakharova; Mt. "Lysaya", 7.07.00, 1 spec., leg. Dubovoy; 23.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Japan, Korea.

94. *Temnostoma bombylans* (Fabricius, 1805)

Flies were caught at herb wet, mesophytic and steppe meadows.

MATERIAL: ChA, ISR: 22.06.98, 1 spec., leg. Chashchina; 16–25.06.98, 5 spec., leg. Chashchina; 23.06.00, 3 spec., leg. Chashchina; 12.07.00, 1 spec., leg. Rudoiskatel; RB: Sh-T, 11.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Korea, Japan; North Africa.

95. *Temnostoma vespiforme* (Linnaeus, 1758)

Specimens were collected at herb wet, mesophytic and steppe meadows, and also at serpentine hills.

MATERIAL: ChA, ISR: 22.06, 30.06.98, 3 spec., leg. Rudoiskatel; 7.07.00, 1 spec., leg. Dubovoy; 15–28.06.98, 12 spec., leg. Chashchina; 24–26.06.00, 9 spec., leg. Chashchina; 4–16.07.00, 9 spec., leg. Dubovoy & Rudoiskatel; 3.08.00, 1 spec. leg. Rudoiskatel.

DISTRIBUTION: North America; Western Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan; Japan, Korea.

Genus *Brachypalpoides* Hippa, 197896. *Brachypalpoides lenta* (Meigen, 1822)

MATERIAL: RB, Sh-T, 17.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: Europe; Russia: EuP, Siberia; Caucasus.

Genus *Chalcosyrphus* Curran, 192597. *Chalcosyrphus femorata* (Linnaeus, 1758)

Flies were observed at steppe meadows and at herblike glades.

MATERIAL: ChA, ISR: 8.06.98, 1 spec., leg. Chashchina; 5.07.98, 1 spec., leg. Chashchina; 24.06.00, 1 spec.; Mt. "Lysaya", 22.06.00, 1 spec., leg. Chashchina; RB, Sh-T: 9–11.06.00, 3 spec., leg. Chashchina; 4.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: north of Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Middle Asia (Kyrgyzstan); Asia: China, Japan, Korea.

Genus *Xylota* Meigen, 182298. *Xylota coeruleiventris* Zetterstedt, 1838

Flies were caught at herb mesophytic meadow.

MATERIAL: ChA, ISR: 22.06.98, 1 SPEC., LEG. CHASHCHINA; 27.06.00, 1 spec., leg. Chashchina.

DISTRIBUTION: north of Europe; Russia: EuP, Siberia, FE.

99. *Xylota meigeniana* Stackelberg, 1964

Flies were observed at herblike glades.

MATERIAL: ChA, ISR: 26.06.00, 1 spec., leg. Chashchina; 4.07.00, 1 spec., leg. Rudoiskatel.

DISTRIBUTION: Western Europe; Russia: EuP, Siberia, FE; Japan.

100. *Xylota pigra* (Fabricius, 1794)

MATERIAL: ChA, ISR, 4.07.00, 1 spec., leg. Dubovoy.

DISTRIBUTION: North America; Europe; Russia: EuP, Siberia, FE; Caucasus, Kazakhstan, Kyrgyzstan, China.



## Discussion

According to obtained data the major part of flower fly species in the South Urals belongs to genera *Eristalis* (12 species), *Cheilisia* (12 species) and *Chrysotoxum* (6 species). Such genera as *Melangyna* (1 species), *Platycheirus* (2 species), *Eupeodes* (2 species) and *Sphaerophoria* (2 species) are presented, on the contrary, by small number of species, however they should be more rich in species in this region. It is connected that the collecting of Syrphidae was made during the summer months generally (June – August), whereas the majority of above mentioned genera fly during the spring months (namely end of April and May). Besides some biotopes which these species prefer were not investigated. As in spring the collecting was insufficient the further increase the number of species in studied region should be expected at the expense of the spring complex [Sorokina, 1999]. The greatest part of flower flies was caught in June because this month is characterized by the most richness of flower vegetation and there is a partial overlap of spring and summer species complexes at this time.

Flower flies were observed in following biotopes: herblike glades; herb mesophytic, dry and steppe meadows; herb wet meadow near the lake, bottomland of the river, mesotrophic bog, steppe vegetation on the serpentine hills and steppe. The biggest part of flower fly species was caught at herb steppe meadows (namely 38 species from 17 genera). At herb mesophytic meadows 29 species from 15 genera were collected. Among caught species at herb mesophytic and steppe meadows the representatives of tribe Eristalini prevailed. On the serpentine hills with steppe vegetation 20 species were found, the most share of which ones belongs to Eristalini and Syrphini. The less number of species was caught in all the rest of biotopes probably in consequence of insufficient investigations. Thus in the bottomland of river 9 species had been found only, however during the flowering of *Salix* sp., *Callta* sp. and *Ranunculus* sp. diversity of flower fly species should be more high undoubtedly here, especially at the expense of genera *Cheilisia*, *Melangyna*, *Dasysyrphus* and *Anasymia*. The species from genus *Paragus* have not been found yet in the South Urals. The finds of such species will be expected during further researches in steppe in the spring.

We believe by reason of experience to study of Syrphidae in Kurgan Area that the representatives of the

majority of known tribes dwell in the mesophytic meadows (Sorokina, 2000). There are great number of flower fly species usually in this type of meadows during the mass flowering of plants belonged to Apiaceae and Rosaceae.

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