

## To the hover-flies fauna of the Zhigulevsky Nature Reserve (Diptera, Syrphidae)

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A small collection of syrphids of the Zhigulevsky State Nature Reserve collected by I.V. Lyubvina in 1984—2000 is determined and annotated checklist is given. 120 Syrphidae species discovered from the Zhigulevsky Nature Reserve.

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### Introduction

The Zhigulevsky Nature Reserve located in the northern part of Samarskaya Luka of Volga River in the Samara Province, Russia, was founded in 1927 on the territory of Morkva-shinskoye forestry with coniferous-deciduous forest.

Situated in the central part of Zhiguly Mountains and Samarskaya Luka plateau, large northern part of the Zhigulevsky Nature Reserve with the numerous scree and rocks, and southern part – plains. In the northern mountain part grow forests with *Pinus* and *Quercus*, and with wormwood and feather grass in herbaceous shrubs stage. On the steep slope of southern exposition situated area with stony steppe. On the northern slopes grow linden forest with oaks, maples, aspens, birch etc. Flora contains endemics (27 species) and relicts of the tertiary and glacial ages.

A collection of syrphids caught by I.V. Lyubvina in 1984—2000 in the various part of the Zhigulevsky State Nature Reserve (stony steppe, herbaceous shrubs stage, water-meadow of Seredysh Isl., edges of a forest, arid steppe meadow in the central part of Zhiguly plateau and ravines on the southern borders of Nature Reserve) is determined and checked and annotated checklist is given below. 120 Syrphidae species discovered from the Zhigulevsky Nature Reserve. The most part of species has wide distribution.

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***Dasysyrphus albostriatus* (Fallén, 1817)**

*Material.* 1♂, Zhigulevskyy State reserve, stony steppe, Strel'naya Mountain, 6.06.1989; 1♂, stony steppe, Zmeinaya Mountain, 22.06.1993; 1♀, the same place, 28.05.1996; 1♀, B. Polyana, 20.09.1990 (Lubvina leg.).

*Distribution.* all parts of Europe; Russia (excl. north parts); Asia: Mongolia, Japan.

***Dasysyrphus hilaris* (Zetterstedt, 1843)**

*Material.* 1♀, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 20.05.1996; 1♀, 1♂, dry meadow, Chmelevoy ravine, 8.08.1996; 2♀, stony steppe, Zmeinaya Mountain, 28.05.1996 (Lubvina leg.).

*Distribution.* Europe: Sweden, Great Britain, Netherlands, Poland, Belgium, Czechia; Russia: Central European territory, East Siberia, Far East; Asia: Mongolia.

***Dasysyrphus venustus* (Meigen, 1822)**

*Material.* 2♀, Zhigulevskyy State reserve, dry meadow, 16.06.1992; 1♀, deciduous forest, 20.05.1993; 1♀, stony steppe, Mountain M. Bahilova, 4.06.1996 (Lubvina leg.).

*Distribution.* Distribution. All parts of Europe; Russia: North, Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: Mongolia; Nearctic Region.

***Dasysyrphus postclaviger* (Stys et Moucha, 1962)**

*Material.* 1♀, Zhigulevskyy State reserve, stony steppe, Mountain B. Bahilova, 12.06.1991; 1♀, dry meadow, 17.05.1995; 1♂, border of deciduous forest, the same date; 1♀, dry meadow, 2.06.1994 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Czechia, Italy; Russia: North, Central European territories, East Siberia; Far East.

***Dasysyrphus lunulatus* (Meigen, 1822)**

*Material.* 1♀, Zhigulevskyy State reserve, deciduous forest, side of the road, 4.09.1990; 1♀, dry meadow, 18.06.1991 (Lubvina leg.).

*Distribution.* All parts of Europe; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Mongolia, Japan, China (E Tibet); Nearctic Region.

***Dasysyrphus trilineatus* (Fallén, 1817)**

*Material.* 1♂, Zhigulevskyy State reserve, stony steppe, Mountain B. Bahilova, 10.08.1989; 1♀, dry

meadow, 11.08.1992; 1♂, stony steppe, Mountain B. Bahilova, 9.08.1994; 1♀, B. Polyana, 8.08.1996 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, Switzerland, Roumania, Yugoslavia, Transcaucasus; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Turkmenistan, Mongolia, Japan.

***Didea fasciata* Macquart, 1834**

*Material.* 1♀, Zhigulevskyy State reserve, 16.06.1989; 1♀, forest meadow, KW 10, 26.05.1993; 1♀, stony steppe, Zmeinaya Mountain, 2.10.1999 (Lubvina leg.).

*Distribution.* Europe: Finland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Roumania, Portugal, Italy, Yugoslavia; Russia: North, Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: Japan; Oriental Region.

***Didea intermedia* Loew, 1854**

*Material.* 1♂, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 2♂, stony steppe, Mountain B. Bahilova, 29.05.1996; 1♀, stony steppe, Mountain M. Bahilova, 28.05.1998 (Lubvina leg.).

*Distribution.* Europe: Czechia; Russia: East Siberia.

***Doros profuges* (Harris, 1780) *trichomycterus* <sup>1</sup>**

*Material.* 1♀, Zhigulevskyy State reserve, dry meadow, Churokayka, 13.06.1996 (Lubvina leg.).

*Distribution.* Europe, Transcaucasus; Russia: North, Central and South European territories, East Siberia, Far East; Asia: Kazakhstan, Mongolia, Japan.

***Epistrophe ochrostoma* (Zetterstedt, 1849)**

*Material.* 1♂, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 19.07.1991 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, Switzerland, Roumania, Portugal, Spain, Bulgaria; Russia: Central European territory, Transcaucasus, West and East Siberia, Far East (Khabarovsk Territory); Nearctic Region.

***Episyrphus balteatus* (De Geer, 1776)**

*Material.* 2 ♂, Zhigulevskyy State reserve, 11-12.08.1992; 3 ♂, 1 ♀, dry meadow, 18.07.1991; 1 ♂, deciduous forest, road, 30.07.1991; 1 ♂, 1 ♀, border of deciduous forest, 15.08.1994; 1 ♂, stony steppe, Mountain B. Bahilova, 8.08.1994 (Lubvina leg.).

*Distribution.* All parts of Europe and Russia; Asia: Afghanistan, Mongolia, China, Japan; North Africa: Algeria, Egypt; Azores, Canary Is; Oriental Region, Australia.

***Melangyna (Mellgramma) guttata* (Fallén, 1817)**

*Material.* 1 ♀, Zhigulevskyy State reserve, stony steppe, Strel'naya Mountain, 2.06.1989 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Great Britain, Denmark, Norway, Belgium, Germany, Poland, Switzerland, Roumania; Russia: North, Central and South European territories, Transcaucasus, West Siberia, Spain, Far East; Middle Asia (Kirghizstan), Nearctic Region.

***Eupeodes (Metasyrphus) latifasciatus* (Macquart, 1829)**

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, KV 10, 12.05.1996 (Lubvina leg.).

*Distribution.* All parts of Europe and Russia; Asia: Syria, Afghanistan, Mongolia; Nearctic and Oriental Regions.

***Scaeva pyrastris* (Linnaeus, 1758)**

*Material.* 2 ♀ 6 ♂, Zhigulevskyy State reserve, border of deciduous forest, 15.08.1994; 1 ♂, stony steppe, Mountain B. Bahilova, 9.08.1994 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden to Spain, Italy, Bulgaria, Transcaucasus; Russia: from Leningrad Province to South European territory, West and East Siberia, Far East; Middle Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Afghanistan, Mongolia, North China; Japan; North Africa: Algeria, Egypt; Madeira, Canary Is; Nearctic Region.

***Sphaerophoria rueppelli* (Wiedemann, 1830)**

*Material.* 1 ♂, Zhigulevskyy State reserve, national park "Samarskaya Luka", stony steppe, KW 1, part 8, 13.07.1999 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden to Spain, Italy, Bulgaria, Transcaucasus; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Syria, Afghanistan, Mongolia, China, Korea; North Africa: Algeria, Egypt; Canary Is.

***Sphaerophoria scripta* (Linnaeus, 1758)**

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Botanichka, 10.08.1987; 3 ♂, 3 ♀, dry meadow, Gudronny, 15.08.1987; 1 ♀, dry meadow, Chumelevoy ravine, 20.03.1996; 3 ♂, deciduous forest, meadow, 16.06.1989; 2 ♂, meadow, 18.08.1989; 3 ♂, stony steppe, Zmeinaya Mountain, 16.08.1989 (Lubvina leg.).

*Distribution.* Europe: from Iceland, Norway, Sweden to Spain, Italy, Bulgaria, Transcaucasus; Russia: from Kola peninsula to South European territory, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Syria, Afghanistan, Mongolia; North Africa: Morocco, Algeria, Tunisia, Egypt; Azores, Madeira, Canary Is; Nearctic and Oriental Regions.

***Syrphus torvus* Osten-Sacken, 1875**

*Material.* 1 ♂, Zhigulevskyy State reserve, road in deciduous forest, 28.06.1989; 1 ♀, dry meadow, Yagodnoe Pole, 4.07.1990; 1 ♀ 1 ♂ dry meadow, 30.06.1992 (Lubvina leg.).

*Distribution.* Europe: from Iceland and Finland to Spain, Italy and Bulgaria; Russia: from Leningrad Province to Transcaucasus, West Siberia, East Siberia, Far East; Asia: Kazakhstan, Mongolia, China, Japan; Nearctic and Oriental Regions.

***Syrphus ribesii* (Linnaeus, 1758)**

*Material.* 2 ♀, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 16.06.1989; 2 ♀, dry meadow, Kochkarka, 30.05.1989; 1 ♂, forest meadow, 13.07.1992 (Lubvina leg.).

*Distribution.* Europe: from Iceland and Finland to Spain and Bulgaria, Transcaucasus; Russia: from Kola peninsula to South European territory, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Afghanistan, Mongolia, Japan; Nearctic Region.

*Syrphus vitripennis* Meigen, 1822

*Material.* 4♀, Zhigulevskyy State reserve, stony steppe, Strel'naya Mountain, 2.06.1989; 1♀, dry meadow, Kochkarka, 30.05.1989; 1♀ 5♂, forest meadow, 13.07.1992 (Lubvina leg.).

*Distribution.* Europe: from Norway, Finland to Portugal, Spain, Italy, Bulgaria, Transcaucasus; Russia: from Kola peninsula to South European territory, Siberia, Far East; Asia: Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Mongolia, Iran, Afghanistan, Japan; Nearctic and Oriental Regions.

*Epistrophe grossulariae* (Meigen, 1822)

*Material.* 1♀, Zhigulevskyy State reserve, B. Polyana, 20.09.1990; 1♂, stony steppe, Mountain B. Bahilova, 12.06.1991; 2♂, dry meadow, 7.07.1992; 2♀, dry meadow, 11.08.1992; 1♀, stony steppe, Mountain B. Bahilova, 9.08.1994 (Lubvina leg.).

*Distribution.* Europe: Finland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, Switzerland, Hungary, Italy, Yugoslavia, Roumania, Transcaucasus; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Mongolia, Japan; Nearctic Region.

*Epistrophe nitidicollis* (Meigen, 1822)

*Material.* 1♀, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 11.06.1991 (Lubvina leg.).

*Distribution.* Europe: Norway, Finland, Great Britain, Denmark, Netherlands, Belgium, Luxembourg, Germany, Poland, Czechia, Slovakia, Switzerland, Hungary, Spain, Italy, Yugoslavia, Roumania; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Japan; Nearctic Region.

*Eupeodes (Metasyrphus) corollae* (Fabricius, 1794)

*Material.* 1♂, Zhigulevskyy State reserve, stony steppe, Mountain Sheludyak, 9.06.1987; 1♂, 1♀, dry meadow, 12.08.1992; 1♂, 1♀, dry meadow, 28.08.1993; 4♂, 5♀, border of deciduous forest, 15.08.1994 (Lubvina leg.).

*Distribution.* All parts of Europe and Russia; Asia: Iran, Mongolia, North China, Japan; North Africa: Morocco, Algeria, Tunisia, Egypt; Oriental Region, Tasmania.

*Eupeodes (Metasyrphus) nitens* (Zetterstedt, 1843)

*Material.* 1♂, Zhigulevskyy State reserve, dry meadow, 25.06.1992; 1♂, bank shore of river Wolga, 1.07.1992 (Lubvina leg.).

*Distribution.* All parts of Europe and Russia; Asia: Afghanistan, Mongolia, Korea, Japan.

*Eupeodes (Metasyrphus) latifasciatus* (Macquart, 1829)

*Material.* 1♂, Zhigulevskyy State reserve, B. Polyana, garden 2.08.1994 (Lubvina leg.).

*Distribution.* All parts of Europe and Russia; Asia: Syria, Afghanistan, Mongolia; Nearctic and Oriental Regions.

*Eupeodes (Metasyrphus) punctifer* (Frey, 1934)

*Material.* 1♂, Zhigulevskyy State reserve, bank shore of lake by the Mountain Strel'naya, 26.06.1989 (Lubvina leg.).

*Distribution.* Europe: Finland, Latvia, Lithuania; Russia: North and Central European territories, West and East Siberia, Far East; Asia: Mongolia.

*Xanthogramma citrofasciatum* (De Geer, 1776)

*Material.* 1♀, Zhigulevskyy State reserve, stony steppe, Mountain M. Bahilova, 1.06.1994; 1♀, dry meadow, Kamennaya Chasha, 21.05.1996 (Lubvina leg.).

*Distribution.* Europe: from Sweden, Finland to Spain, Bulgaria; Russia: from Leningrad Province to Transcaucasus, West Siberia; Middle Asia: Kazakhstan, Kirghizia.

*Xanthogramma pedisequum* (Harris, 1776)

*Material.* 1♀, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 16.06.1989; 1♀, dry meadow, 5.08.1992; 1♀, stony steppe, Zmeinaya Mountain, 1.08.1994, 1♂, the same place, 26.05.1994; 1♀, stony steppe, KW 74, 27.06.2000 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Portugal, Spain, Bulgaria; Russia: from Leningrad Province to Transcaucasus, West and East Siberia, Far East; Kazakhstan.

*Baccha elongata* (Fabricius, 1775)

*Material.* 1♀, Zhigulevskyy State reserve, dry meadow, KV 10, 06.09.1989 (Lubvina leg.).

*Distribution.* Europe: from Ireland and Finland to Portugal, Italy, Bulgaria, Transcaucasus; Russia: from Leningrad Province to South European territory; Nearctic Region.

*Chrysotoxum cautum* (Harris, [1776])

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, Kochkarka, 3.06.1987; 1 ♂, dry meadow, Botanichka, 12.06.1991; 1 ♀, dry meadow, 16.06.1992; 2 ♀, dry meadow, Chmelevoy ravine, 18.06.1997 (Lubvina leg.).

*Distribution.* Europe: from Great Britain, Finland to Spain, Italy, Bulgaria, Transcaucasus; Russia: from Leningrad Province to South European territory, West Siberia (Altai); Kazakhstan, Kirghizia.

*Chrysotoxum arcuatum* (Linnaeus, 1758)

= *festivum* Linnaeus, 1758

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Strel'naya Mountain, 31.05.1989; 1 ♀, stony steppe, Zmeinaya Mountain, 9.06.1989; 1 ♂, 2 ♀, dry meadow, Churokayka, 13.06.1996; 1 ♂, the same place, 22.07.1998; 1 ♀, dry meadow, Chmelevoy ravine, 18.06.1997 (Lubvina leg.).

*Distribution.* Europe from Ireland, Great Britain, Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria; Russia: from Kola peninsula to Transcaucasus, Siberia, Far East; Kazakhstan, Middle Asia; Asia: Mongolia, Japan; Oriental Region.

*Chrysotoxum intermedium* Meigen, 1822

*Material.* 1 ♀, Zhigulevskyy State reserve, national park "Samarskaya Luka", Dubki, 25.06.1999 (Lubvina leg.).

*Distribution.* Europe: Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Hungary, Roumania, Portugal, Spain, Italy, Yugoslavia, Bulgaria, Albania, Greece; Russia: South European territory, Transcaucasus, Kazakhstan, Middle Asia; Asia: Afghanistan; North Africa: Morocco, Algeria, Tunisia.

*Chrysotoxum vernale* Loew, 1841

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, Gudronny, 6.06.1989; 1 ♀, the same place, 9.06.1989; 2 ♂, stony steppe, Zmeinaya Mountain, 26.05.1994; 1 ♂, forest meadow, KW 10, 24.05.1994; 1 ♀, border of deciduous forest, 27.06.1995 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Great Britain, Denmark, Netherlands, Germany, Poland, Belgium, Luxemburg, Czechia, Slovakia, France, Switzerland, Hungary, Portugal, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: Central and South European territories, Transcaucasus, West Siberia, East Siberia, Far East; Kazakhstan, Middle Asia; Kirghizia, Turkmenistan, Iran.

*Chrysotoxum elegans* Loew, 1841

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, 12.08.1992; 1 ♂, stony steppe, Strel'naya Mountain, 25.06.1992; 1 ♂, stony steppe, Mountain M. Bahilova, 20.07.1993; 3 ♂, 1 ♀, dry meadow, Churokayka, 13.06.1996 (Lubvina leg.).

*Distribution.* Europe: from Great Britain, Finland to Spain, Italy, Bulgaria; Russia: Central and South European territories, Transcaucasus; Kazakhstan.

*Melanostoma mellinum* (Linnaeus, 1758)

*Material.* Zhigulevskyy State reserve, 2 ♀, dry meadow, 10.07.1987; 1 ♂, stony steppe, 19.05.1993; 3 ♀, 2 ♂, water-meadow, 18.08.1989 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Bulgaria; all parts of Russia; Asia: Mongolia, Iran, Afghanistan, Japan; North Africa: Morocco; Madeira, Canary Is; Nearctic Region.

*Melanostoma scalare* (Fabricius, 1794)

*Material.* 1 ♀, Zhigulevskyy State reserve, deciduous forest, Gudronny, 15.05.1990; 1 ♀, Zhigulevskyy State reserve, Gubino, border of forest, 15.08.1994 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Italy, Bulgaria, Transcaucasus; Russia: from Leningrad Province to South European territory, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Mongolia, Afghanistan, China (Szechuan, E Tibet), Japan; Afro-tropical and Oriental Regions.

*Xanthandrus comtus* (Harris, 1780)

*Material.* 1 ♂, Zhigulevskyy State reserve, border of deciduous forest, 15.08.1994 (Lubvina leg.).

*Distribution.* Europe from Scandinavia to Spain, Italy, Bulgaria; Russia from Leningrad

Province to Transcaucasus, Kazakhstan, West Siberia, East Siberia, Far East; Asia: Mongolia, Korea, Japan; Oriental Region.

*Platycheirus aiblmanus* (Fabricius, 1781)

*Material.* 1 ♀, Zhigulevskyy State reserve, deciduous forest, Gudronny, 17.05.1990; 1 ♂, dry meadow, 05.08.1992 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Bulgaria, Transcaucasus; Russia: from Kola peninsula to South European territory, West and East Siberia, Far East; Asia: Kazakhstan, Tadjikistan, Kirghizia; Mongolia; Nearctic and Oriental Regions.

*Platycheirus angustatus* (Zetterstedt, 1843)

*Material.* 1 ♀, Zhigulevskyy State reserve, Gubino, border of forest, 18.06.1990; 1 ♂, Zhigulevskyy State reserve, Yagodnoe Pole, dry meadow, 23.06.1993 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Moldavia; Russia: North, Central European territories, West and East Siberia, Far East; Asia: Tadjikistan, Kirghizia, Mongolia, Japan; Nearctic Region.

*Platycheirus clypeatus* (Meigen, 1822)

*Material.* 1 ♀, Zhigulevskyy State reserve, Pohvistnevskyy Reg., Isakovo, meadow, 10.08.1993 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Bulgaria, Ukraine; Russia: from Leningrad Province to South European territory, Transcaucasus, West Siberia, East Siberia, Far East; Asia: Kirghizia, Mongolia, Afghanistan, Japan; Nearctic Region.

*Platycheirus immarginatus* (Zetterstedt, 1849)

*Material.* 1 ♂, Zhigulevskyy State reserve, Pohvistnevskyy Reg., Isakovo, meadow, 10.08.1993 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, France, Switzerland, Portugal, Roumania; Russia: North and Central European territories, Transcaucasus, West and East Siberia, Far East (Sakhalin); Nearctic Region.

*Platycheirus fulviventris* (Macquart, 1829)

*Material.* 1 ♂, Zhigulevskyy State reserve, Pohvistnevskyy Reg., Isakovo, meadow, 10.08.1993 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Bulgaria, Latvia, Ukraine; Russia: Central European territory (Moscow Province), South European territory (Krasnodar Territory), Far East (Primorye Territory); Asia: Tadjikistan, Kirghizia, Mongolia.

*Platycheirus sticticus* Meigen, 1822

*Material.* 1 ♂, Zhigulevskyy State reserve, border of deciduous forest, 15.08.1994 (Lubvina leg.).

*Distribution.* Europe: Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, France, Italy, Yugoslavia, Roumania; Russia: North and Central European territories, West Siberia (Tuva), East Siberia (Yakutia).

*Paragus albifrons* (Fallén, 1817)

*Material.* 1 ♂, 1 ♀, Zhigulevskyy State reserve, stony steppe, Olenyy deer, KV 13, 30.07.1997 (Lubvina leg.).

*Distribution.* Europe: from Sweden, Finland to Portugal, Spain, Italy, Yugoslavia, Bulgaria, Transcaucasus; Russia from Leningrad Province to South European territory, West and East Siberia, Far East (Primorye Territory); Asia: Kazakhstan, Kirghizia, Mongolia, Iran, Afghanistan.

*Paragus bicolor* (Fabricius, 1794)

*Material.* 1 ♂, 1 ♀, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 17.05.1990; 1 ♂, Zhigulevskyy State reserve, Mountain M. Bahilova, stony steppe, 20.07.1993; 1 ♀, Orenburgskaya Province, Buzulukskyy pine forest, Panino, lake, 07.06.1997 (Lubvina leg.).

*Distribution.* Europe: from Sweden to Portugal, Spain, Italy, Bulgaria; Russia: North, Central and South European territories, Transcaucasus, West and East Siberia; Asia: Kazakhstan, Mongolia, Iran, Afghanistan; North Africa: Morocco, Algeria, Tunisia, Egypt; Nearctic Region.

*Paragus finitimus* Goeldlin de Tiefenau, 1971

*Material.* 1 ♀, Syzranskyy Province, Smolkino, Racheyskie rocks, 1-5.07.1996 (Lubvina leg.).

*Distribution.* Europe: Finland, Denmark, Netherlands, Switzerland; Russia: Central and South European territories, West and East Siberia; Asia: Kazakhstan, Kirghizia, Tadjikistan, Mongolia, Iran.

***Paragus quadrfasciatus* Meigen, 1822**

*Material.* 1 ♂, Samarskaya Luka, Usinskyy gulf, KV 1, part 8, stony steppe, 13.07.1999 (Lubvina leg.).

*Distribution.* Europe: France, Switzerland, Austria, Hungary, Portugal, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: Central and South European territories, Transcaucasus, Asia: Kazakhstan, Kirghizia, Turkmenia, Uzbekistan, Tadjikistan); North China, Korea, Japan, Iran, Afghanistan; North Africa: Morocco.

***Paragus tibialis* (Fullén, 1817)**

*Material.* 1 ♀ 2 ♂, Zhigulevskyy State reserve, stony steppe, 6.08.1987; 1 ♂, dry meadow, 22.06.1997; 1 ♀, forest meadow, KW 10, 16.06.1989 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Italy, Yugoslavia, Bulgaria; widespread in Russia; Asia: Mongolia, Korea, Japan, China, Iran, Afghanistan; North Africa: Algeria, Tunisia, Egypt; Madeira, Canary Is; Nearctic and Oriental Regions.

***Neocnemodon fulvimanus* (Zetterstedt, 1843)**

*Material.* 1 ♀, Zhigulevskyy State reserve, national park "Samarskaya Luka", meadow, birch wood, 25.06.1999 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Denmark, Netherlands, Poland, Belgium, France, Switzerland, Austria, Roumania; Russia: North and Central European territories, East Siberia (Yakutia, Transbaikal).

***Pipiza notata* Meigen, 1822**

*Material.* 1 ♀, Zhigulevskyy State reserve, Gubino, border of forest, 18.06.1990; 1 ♀, dry meadow, Chmelevoyy ravine, 8.08.1996 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Germany, Poland; Russia: North, Central and South European territories; Asia: Kirghizia, Mongolia.

***Pipiza quadrimaculata* (Panzer, [1804])**

*Material.* 1 ♂, Zhigulevskyy State reserve, meadow, B. Polyana, 16.05.1990; 2 ♂, 1 ♀, forest meadow, KW 10, 26.05.1993; 2 ♀, stony steppe, Zmeinaya Mountain, 28.05.1996 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Denmark, Netherlands, Germany, Po-

land, Czechia, Slovakia, Belgium, Luxemburg, France, Switzerland, Hungary, Roumania, Italy, Yugoslavia, Bulgaria; Russia: North and Central European territories, East Siberia, Far East; Asia: Mongolia, Nearctic Region.

***Pipiza noctiluca* (Linnaeus, 1758)**

*Material.* 3 ♀, Zhigulevskyy State reserve, forest meadow, KW 10, 26.05.1993; 1 ♂, stony steppe, Mountain Sheludyak, 16.06.1993; 1 ♀, stony steppe, Mountain B. Bahilova, 29.07.1997; 1 ♀, dry meadow, Chmelevoyy ravine, 20.05.1996 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria, Transcaucasus; Russia: North, Central and South European territories, West Siberia, Far East; Asia: Kirghizia.

***Pipizella divicoi* Goeldlin de Tiefenau, 1971**

*Material.* 1 ♀, Zhigulevskyy State reserve, Zheludyak, stone steppe, 12.05.1994 (Lubvina leg.).

*Distribution.* Europe: Germany, Belgium, Czechia, Slovakia, France, Switzerland, Austria, Italy, Yugoslavia, Greece; Russia: Central and South European territories, Transcaucasus, West and East Siberia, Far East (Primorye Territory); Asia: Kirghizia, Mongolia.

***Pipizella viduata* (Linnaeus, 1758)**

*Material.* 1 ♂, Zhigulevskyy State reserve, Gubino, border of forest, 15.05.1990; 1 ♀, border of deciduous forest, 15.08.1994 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Denmark, Netherlands, Belgium, Luxemburg, Germany, Poland, Czechia, Slovakia, France, Austria, Hungary, Spain, Italy, Yugoslavia, Bulgaria, Transcaucasus; Russia: Central and South European territories.

***Pipizella virens* (Fabricius, 1805)**

*Material.* 2 ♂, Zhigulevskyy State reserve, dry meadow, Gudronny, 15.08.1987; 1 ♂, dry meadow, Kochkarka, 3.06.1987; 1 ♂, 1 ♀, stony steppe, Mountain M. Bahilova, 9.06.1987; 2 ♂, stony steppe, Mountain B. Bahilova, 18.05.1993 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: from Kola peninsula to Transcaucasus, West Siberia, East Siberia, Far East; Asia: Kazakhstan, Kirghizia, North Iran, Mongolia.



***Pipizella* sp. 1**

*Material.* 1 ♂, Samarskaya Luka, Askul'sky Obozr., steppe, 13.06.1990 (Lubvina leg.).

***Pipizella* sp. 2**

*Material.* 1 ♀, Zhigulevskyy State reserve, Mountain B. Bahilov, stone steppe, 03.08.1994; 1 ♀, stone steppe, Zmeinyaya Mountain, 16.05.1994 (Lubvina leg.).

***Trichopsomyia flavitarse* (Meigen, 1822)**

*Material.* 1 ♀, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Germany, Poland, Belgium, France, Switzerland, Austria, Italy, Yugoslavia, Roumania, Bulgaria; Russia: North and Central European territories, Kazakhstan, West Siberia, East Siberia, Far East (Primorye Territory).

***Chellosia angustigenis* (Becker, 1894)**

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, Churakayka, 15.05.1996 (Lubvina leg.).

*Distribution.* Europe: Norway, Finland; Russia: North and Central European territories, West Siberia, East Siberia, Far East.

***Chellosia carbonaria* Egger, 1860**

*Material.* 1 ♂, Zhigulevskyy State reserve, B. Polyana, garden, 02.08.1994 (Lubvina leg.).

*Distribution.* Europe: Finland, Great Britain, Denmark, Netherlands, Germany, Poland, Belgium, France, Switzerland, Austria, Hungary, Roumania, Yugoslavia, Bulgaria; Russia: North and Central European territories, West Siberia, East Siberia.

***Chellosia chloris* Meigen, 1822**

*Material.* 1 ♂, Krasnyy Yar, Kamyshtinskyy distr., 12.07.1994 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Denmark, Netherlands, Germany, Poland, Czechia, Slovakia, Belgium, Luxembourg, France, Switzerland, Roumania, Spain, Italy, Yugoslavia; Russia: North, Central and South European territories, West Siberia.

***Chellosia flavipes* (Panzer, 1798)**

*Material.* 1 ♂, Zhigulevskyy State reserve, B. Polyana, 03.06.1985 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Netherlands, Germany, Poland, Czechia, Slovakia, Belgium, Luxembourg, France, Switzerland, Austria, Spain, Italy, Yugoslavia, Bulgaria; Russia: North, Central and South European territories, Transcaucasus, West and East Siberia; Asia: Kirghizia.

***Chellosia gigantea* (Zetterstedt, 1838)**

*Material.* 1 ♂, Zhigulevskyy State reserve, border of forest, 18.06.1990 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Denmark, Germany, Poland, Czechia, Slovakia, France, Switzerland, Roumania, Spain, Yugoslavia, Bulgaria; Russia: North, Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: Kirghizia.

***Chellosia grossa* (Fallén, 1817)**

*Material.* 1 ♀, Zhigulevskyy State reserve, river of forest lake, 25.04.1984 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Germany, Poland, Belgium, Luxembourg, France, Switzerland, Czechia, Slovakia, Roumania, Spain, Italy, Yugoslavia, Bulgaria; Russia: North, Central and South European territories, West Siberia; Asia: Uzbekistan, Kirghizia; Oriental Region.

***Chellosia lasiopa* Kowarz, 1885**

= *honestia* Rondani, 1868

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, Botanichka, 12.06.1991 (Lubvina leg.).

*Distribution.* Europe: Finland, Great Britain, Denmark, Netherlands, Germany, Poland, Czechia, Slovakia, Belgium, Luxembourg, France, Switzerland, Italy; Russia: North and Central European territories, West Siberia; Asia: Mongolia.

***Chellosia laticornis* Rondani, 1857**

= *latifacies* Loew, 1857

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, 16.05.1990; 1 ♂, forest meadow, 13.07.1992 (Lubvina leg.).

*Distribution.* Europe: Poland, Czechia, Slovakia, France, Switzerland, Spain, Italy, Yugoslavia, Roumania; Russia: South European



territory, Transcaucasus; Asia: Kirghizia, Turkey, Afghanistan; North Africa: Algeria.

***Cheilosia mutabilis* (Fallén, 1817)**

*Material.* 1 ♀, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 09.06.1989 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: from Arkhangelsk Province to Transcaucasus, West and East Siberia.

***Cheilosia proxima* (Zetterstedt, 1843)**

*Material.* 2 ♂, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 16.05.1994; 1 ♂, stony steppe, Mountain M. Bahilova, 01.06.1994 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Italy, Yugoslavia, Bulgaria; Russia: from Leningrad Province to Transcaucasus, West and East Siberia, Far East.

***Cheilosia rotundiventris* (Becker, 1894)**

*Material.* 1 ♂, Krasnyy Yar, Kamyshtinskyy distr., 12.07.1994 (Lubvina leg.).

*Distribution.* Europe: Netherlands, Germany, Poland, Belgium, Switzerland, Roumania, Estonia, Latvia; Russia: Central European territory (Leningrad Province).

***Cheilosia schnabli* (Becker, 1894)**

*Material.* 1 ♂, Zhigulevskyy State reserve, national park "Samarskaya Luka", Askul'sky Ovrage, steppe, 13.06.1990 (Lubvina leg.).

*Distribution.* Europe: Yugoslavia; Russia: South European territory, Transcaucasus.

***Cheilosia transcaucasica* Stackelberg, 1960**

*Material.* 1 ♀, Samara Province, Gubino, border of forest, 18.05.1990 (Lubvina leg.).

*Distribution.* Transcaucasus (Armenia, Azerbaijan); Russia: Central European territory (Samara Province).

***Cheilosia variabilis* (Panzer, 1798)**

*Material.* 1 ♂, Samara Province, Gubino, border of forest, 18.05.1990 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria; Russia: North, Central and South European territories, West Siberia; Asia: Kirghizia.

***Cheilosia vernallyi* (Fallén, 1817)**

*Material.* 1 ♂, Zhigulevskyy State reserve, B. Polyana, garden, 30.09.1990; 1 ♂, border of forest, 18.06.1990 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: from Estonia and Leningrad Province to Transcaucasus, West and East Siberia, Far East.

***Cheilosia illustrata* (Harris, 1780)**

*Material.* 1 ♀, stony steppe, Mountain B. Bahilova, 12.06.1991 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria; Russia: North and Central European territories, West and East Siberia; Kazakhstan.

***Cheilosia impressa* Loew, 1840**

*Material.* 1 ♀, national park "Samarskaya Luka", steppe, Askul'sky ravine, 13.06.1990 (Lubvina leg.).

*Distribution.* Europe: Sweden, Ireland, Great Britain, Denmark, Netherlands, Germany, Poland, Czechia, Slovakia, Belgium, Luxembourg, France, Switzerland, Austria, Roumania, Spain, Yugoslavia, Bulgaria, Transcaucasus; Russia: North, Central and South European territories, West and East Siberia, Far East, Kirghizia.

***Cheilosia longula* (Zetterstedt, 1838)**

*Material.* 1 ♀, Zhigulevskyy State reserve, B. Polyana, 08.08.1985; 1 ♂, stony steppe, Zmeinaya Mountain, 09.06.1989; 1 ♀, stony steppe, 29.07.1992; (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Germany, Poland, Belgium, France, Switzerland, Italy, Roumania; Russia: North and Central European territories, West and East Siberia, Far East; Asia: Kazakhstan, Mongolia.

***Cheilosia vicina* (Zetterstedt, 1849)**

= *nasutula* Becker, 1894

*Material.* 1 ♂, Meranka, Muran pine forest, 16.05.1989; 1 ♀, Zhigulevskyy State reserve, road in deciduous forest, 18.05.1993 (Lubvina leg.).

*Distribution.* Europe: Finland, Great Britain, Denmark, Netherlands, Germany, Poland, Czechia, Slovakia, Belgium, Luxemburg, France, Switzerland, Austria, Roumania, Yugoslavia; Russia: North and Central European territories, West Siberia (W Sayan, Tuva).

✓ *Chellosia pagana* (Meigen, 1822)

*Material.* 1 ♀, Zhigulevskyy State reserve, national park "Samarskaya Luka", Yablonev Ovrug, full gallop, 14.08.1990 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: from Solovets Is to Transcaucasus, West and East Siberia, Far East; Asia: Mongolia; Nearctic Region.

✓ *Chellosia rotundicornis* (Hellen, 1914)

*Material.* 1 ♀, national park "Samarskaya Luka", steppe, Askulakyy ravine, 26.04.1990 (Lubvina leg.).

*Distribution.* Europe: Finland, Yugoslavia, Latvia; Russia: North (Vyborg) and Central European territories (Leningrad Province).

✓ *Chellosia sareptana* (Becker, 1894)

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, 10.05.1995 (Lubvina leg.).

*Distribution.* Europe: Yugoslavia; Russia: South European territory, Transcaucasus; Asia: Israel.

✓ *Chellosia scutellata* (Fallén, 1817)

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, Yagodnoe Pole, 28.06.2000 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria; Russia: North, Central and South European territories, Transcaucasus, Kazakhstan, West and East Siberia, Far East; Asia: Kirghizia, Mongolia, Japan.

✓ *Chellosia soror* (Zetterstedt, 1843)

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, road, 18.07.1991; 1 ♂, Gudronny, road, 22.07.1993 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Great Britain, Denmark, Germany, Poland, Czechia, Slovakia, Belgium, Luxembourg, France, Spain, Italy, Yugoslavia, Transcaucasus; Russia: South European territory, Transcaucasus; Asia: Japan (Honshu).

✓ *Ferdinanda cuprea* (Scopoli, 1763)

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, 2.06.1994; 1 ♀, stony steppe, Botanichka, 27.06.2000 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Germany, Poland, Czechia, Slovakia, Bel-

gium, Luxembourg, France, Switzerland, Hungary, Spain, Italy, Yugoslavia, Roumania, Bulgaria, Transcaucasus; Russia: North, Central and South European territories, West Siberia, Far East (Primorye Territory); Asia: Japan (Hokkaido, Honshu).

✓ *Rhingia campestris* Meigen, 1822

*Material.* 2 ♂, Zhigulevskyy State reserve, dry meadow, Yagodnoe Pole, 30.05.1987; 1 ♀, meadow, Gudronny, 11.06.1990 (Lubvina leg.).

*Distribution.* Europe: Norway, Finland, Ireland, Great Britain, Denmark, Netherlands, Germany, Poland, Czechia, Slovakia, Belgium, Luxembourg, France, Switzerland, Italy, Yugoslavia, Roumania, Transcaucasus; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Mongolia.

✓ *Volucella bombylans* (Linnaeus, 1758)

*Material.* 2 ♂, 1 ♀, Zhigulevskyy State reserve, meadow, Gudronny, 18.06.1981; 1 ♀, stony steppe, Mountain B. Bahilova, 15.06.1988; 2 ♂, 2 ♀, dry meadow, Churokayka, 13.06.1996; 1 ♂, the same place, 28.06.1991, 1 ♂, dry meadow, 25.06.1992 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria; Transcaucasus; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenia, Mongolia, China; Nearctic Region.

✓ *Volucella inanis* (Linnaeus, 1758)

*Material.* 2 ♂, 1 ♀, Zhigulevskyy State reserve, 18.07.1991; 2 ♀, dry meadow, 2.08.1993; 1 ♀, stony steppe, Mountain M. Bahilova, 29.07.1993; 1 ♀, forest meadow, 16.07.1997 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria, Transcaucasus; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Syria, Afghanistan, Mongolia, China.

✓ *Volucella pellucens* (Linnaeus, 1758)

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, 26.06.1981; 1 ♀, stony steppe, Mountain B. Bahilova, 29.07.1992; 1 ♂, border of de-

ciduous forest, 15.08.1994; 1 ♂, dry meadow, Botanichka, 17.06.1993 (Lubvina leg.).

*Distribution.* Europe: from Norway, Sweden, Finland to Spain, Italy, Yugoslavia, Bulgaria; Transcaucasus; Russia: from Arkhangelsk to West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenia, Mongolia, China, Korea, Japan; North Africa: Tunisia; Oriental Region.

***Brachyopa testacea* (Fallén, 1817)**

*Material.* 1 ♀, Zhigulevskyy State reserve, forest meadow, KV 10, 19.05.1995 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Denmark, Netherlands, Belgium, Luxemburg, Germany; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Mongolia.

***Melanogaster aerea* (Loew, 1843)**

*Material.* 1 ♀, Zhigulevskyy State reserve, national park "Samarskaya Luka", Askul'sky Ovrage, steppe, 13.06.1990 (Lubvina leg.).

*Distribution.* Europe: Poland, Austria.

***Myolepta luteola* (Gmelin, 1790)**

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 11.06.1991 (Lubvina leg.).

*Distribution.* Europe: Sweden, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Austria, Spain, Italy, Yugoslavia, Bulgaria; Russia: Central European territory, Transcaucasus.

***Orthonevra brevicornis* (Loew, 1843)**

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, 02.06.1994 (Lubvina leg.).

*Distribution.* Europe: Finland, Great Britain, Denmark, Netherlands, Belgium, Luxemburg, Germany, Poland, France, Yugoslavia, Bulgaria; Russia: Central and South European territories, Transcaucasus, West Siberia.

***Eumerus ovatus* Loew, 1848**

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, 23.06.1992; 1 ♂, stony steppe, Zmeinaya Mountain, 26.05.1994; 1 ♂, dry meadow, Chmelevoy ravine, 18.06.1997 (Lubvina leg.).

*Distribution.*

***Eumerus strigatus* (Fallén, 1817)**

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, KW 10, 26.05.1993 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Italy, Yugoslavia, Bulgaria; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Kazakhstan, Kirghizia, Mongolia, China, Japan; North Africa: Morocco, Algeria; Azores; Nearctic Region (immigrant).

***Eumerus ornatus* Meigen, 1822**

*Material.* 1 ♂, national park "Samarskaya Luka", dry meadow, 17.06.1999 (Lubvina leg.).

*Distribution.* Europe: Sweden, Great Britain, Denmark, Netherlands, Belgium, Germany, Czechia, Slovakia, France, Switzerland, Austria, Hungary, Roumania, Italy, Yugoslavia; Russia: Central and South European territories, Transcaucasus; North Africa: Egypt.

***Eumerus tauricus* Stackelberg, 1952**

*Material.* 1 ♀, Krasnoyar, distr., 17.06.1992 (Lubvina leg.).

*Distribution.* Russia: South European territory (Krasnoyar, distr.); Ukraina (Crimca).

***Eumerus sogdianus* Stackelberg, 1952**

*Material.* 1 ♂, Zhigulevskyy State reserve, national park "Samarskaya Luka", Usinsky Zaliv, stony steppe, 13.07.1999 (Lubvina leg.).

*Distribution.* Europe: Lithuania; Russia: Central European territory (Samara distr.); Transcaucasus (Georgia), Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenia, Mongolia, China (Ghashunskoe Gobi, E Tsaidam).

***Eumerus tricolor* (Fabricius, 1798)**

*Material.* 2 ♂, Zhigulevskyy State reserve, stony steppe, Mountain B. Bahilova, 29.07.1997; (Lubvina leg.).

*Distribution.* Europe: Netherlands, Germany, Poland, France, Switzerland, Austria, Hungary, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: Central and South European territories, West Siberia; Transcaucasus (Armenia), Kazakhstan (south), Uzbekistan, Kirghizia.

*Ceriana conopsoides* (Linnaeus, 1758)

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 1 ♀, dry meadow, 4.07.1991 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Hungary, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: China; North Africa: Algeria.

*Eristalinus neneus* (Scopoli, 1763)

*Material.* 1 ♀, Zhigulevskyy State reserve, B. Polyana, 24.04.1990; 1 ♂, stony steppe, Mountain M. Bahilova, 4.07.2000 (Lubvina leg.).

*Distribution.* Europe: Sweden, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Hungary, Portugal, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: Central and South European territories, Transcaucasus, Far East (Primorye Territory); Asia: Kazakhstan, Mongolia, China, Syria, Arabian Emirates, Afghanistan; North Africa: Morocco, Algeria, Tunisia; Canary Is.

*Eristalis abusivus* Collin, 1931

*Material.* 1 ♀, meadow, Gudronny, 30.08.1990; 1 ♀, national park "Samarskaya Luka", dry meadow, Brusino, 22.08.1990 (Lubvina leg.).

*Distribution.* Europe: Norway, Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, Czechia, Slovakia, France, Hungary; Russia: North, Central and South European territories, West and East Siberia, Far East (Khabarovsk and Primorye Territories).

*Eristalis arbustorum* (Linnaeus, 1758)

*Material.* 1 ♀, Zhigulevskyy State reserve, B. Polyana, 20.09.1990; 1 ♂, dry meadow, 08.08.1991 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Italy, Yugoslavia, Bulgaria; Transcaucasus; Russia: from Kola peninsula to South European territory, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenia, Syria, Iran, Afghanistan; North Africa: Morocco, Algeria; Azores; Neartic and Oriental Regions.

*Eristalis horticola* (DeGeer, 1776)

*Material.* 1 ♂, Zhigulevskyy State reserve, B. Polyana, 09.07.1998 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Luxemburg, Germany, Poland, Czechia, Slovakia, France, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: North, Central and South European territories, Transcaucasus, West and East Siberia, Far East (Sakhalin); North Africa: Egypt; Oriental Region.

*Eristalis intricarius* (Linnaeus, 1758)

*Material.* 1 ♂, Zhigulevskyy State reserve, meadow, road on Strel'n., 13.07.1993 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: from North European territory to Transcaucasus, West and East Siberia, Far East; Asia: Kazakhstan, Kirghizia.

*Eristalis pertinax* (Scopoli, 1763)

*Material.* 1 ♀, Zhigulevskyy State reserve, B. Polyana, 20.09.1990 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Transcaucasus; Russia: Central and South European territories.

*Eristalis tenax* (Linnaeus, 1758)

*Material.* 1 ♂, 1 ♀, Zhigulevskyy State reserve, B. Polyana, 20.09.1990 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Turkey, Yugoslavia, Greece; Russia: from Kola peninsula to South European territory and from Baltic Sea to Far East; Transcaucasus; Asia: from Turkey to Japan; North Africa: Madeira, Canary Is, Azores. Cosmopolitan.

*Eristalis interrupta* Poda, 1761

*Material.* 1 ♂, Zhigulevskyy State reserve, Gubino, border, 18.05.1990 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Transcaucasus; Russia: from North European territory to Transcaucasus, West and East Siberia, Far East; Asia: Kazakhstan, Kirghizia, Mongolia; Neartic Region.

***Eristalis rossicus* Stäckelberg, 1958**

*Material.* 1 ♂, Zhigulevskyy State reserve, road, 30.05.1991; 1 ♂, Syzranskyy distr., Smol'kino, Racheyskie skaly, 1-5.07.1996 (Lubvina leg.).

*Distribution.* Russia: Central European territory, West and East Siberia, Far East; Asia: Mongolia, China.

***Helophilus affinis* Wahlberg, 1844**

*Material.* 1 ♀, stony steppe, Mountain B. Bahilova, 8.08.1994 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Denmark, Germany, Poland; Russia: North and Central European territories, West and East Siberia, Far East; Asia: Mongolia.

***Helophilus hybridus* Loew, 1846**

*Material.* 1 ♂, Zhigulevskyy State reserve, meadow, Gudronny, 30.08.1990; 1 ♀, "Samarskaya Luka", Shelehmel', meadow, 29.07-04.08.1998 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, France, Bulgaria; Russia: North, Central and South European territories, West and East Siberia, Far East; Asia: Mongolia; Nearctic Region.

***Helophilus pendulus* (Linnaeus, 1758)**

*Material.* 1 ♂, Zhigulevskyy State reserve, 16.05.1990; 1 ♀, dry meadow, 8.08.1991; 1 ♂, the same place, 12.06.1991; 1 ♂, stony steppe, Mountain B. Bahilova, 8.08.1994; 1 ♂, stony steppe, Zmeinaya Mountain, 2.10.1999 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria, Transcaucasus, Ukraine (Crimea); Russia: from Kola peninsula to South European territory, West and East Siberia, Far East.

***Helophilus trivittatus* (Fabricius, 1805)**

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, 18.08.1993; 1 ♂, meadow, Gudronny, 30.08.1990; 2 ♂, 1 ♀, garden, B. Polyana, 20.09.1990; 1 ♀, stony steppe, KW 74, 27.06.2000 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Roumania, Transcaucasus; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadjikistan, Kirghizia, Turkmenistan, Mongolia, China, Iran, Afghanistan.

***Mallota eurasiatica* Stäckelberg, 1950**

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, 02.06.1994 (Lubvina leg.).

*Distribution.* Russia: Central European territory, West and East Siberia, Far East (Primorye Territory); Asia: ?Korea.

***Mallota megilliformis* (Fallén, 1817)**

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Strel'naya Mountain, 2.06.1989; 1 ♂, the same place, 9.06.1989; 1 ♂, stony steppe, Zmeinaya Mountain, 11.06.1991; 1 ♀, the same place, 16.06.1989; 1 ♂, forest meadow, KW 10, 26.05.1993; 1 ♂, the same place, 16.05.1990; 1 ♀, dry meadow, 24.05.1995 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Germany, Poland, France; Russia: Central and South European territories, West Siberia (Altai), East Siberia (Yakutia), Far East (Primorye and Khabarovsk Territories).

***Mallota tricolor* Loew, 1871**

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, 16.06.1992; 2 ♂, 1 ♀, the same place, 11.06.1991; 1 ♂, stony steppe, Zmeinaya Mountain, 28.05.1996 (Lubvina leg.).

*Distribution.* Europe: Poland, Germany; Russia: Central and South European territories, West and East Siberia, Far East (Sakhalin, Khabarovsk and Primorye Territories); Asia: Turkey, China.

***Myatropa florea* (Linnaeus, 1758)**

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 16.06.1989; 1 ♂, forest meadow, KW 10, the same date; 3 ♂, 2 ♀, stony steppe, Mountain B. Bahilova, 12.06.1991, 2 ♀, the same place, 29.07.1992; 1 ♂, 1 ♀, border of deciduous forest, 1.06.1995; 1 ♂, dry meadow, 2.06.1994; 1 ♀, the same place, 24.05.1995 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Italy, Yugoslavia, Bulgaria, Ukraine (Crimea), Transcaucasus; Russia: from Arkhangelsk Province to South European territory, Siberia from Ural to Southern Primorye; Asia: Tadjikistan, Turkmenistan, Afghanistan; North Africa: Algeria; Canary Is, Azores.

***Spilomyia manicata* (Rondani, 1865)**

*Material.* 1 ♂, Zhigulevskyy State reserve, B. Polyana, garden, 2.08.1994; 1 ♂, dry meadow, 9.07.1998 (Lubvina leg.).

*Distribution.* Europe: Germany, Poland, France, Spain, Italy, Yugoslavia; Russia: Central and South European territories, Transcaucasus.

*Spilomyia dlophthalma* (Linnaeus, 1758)

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Mountain M. Bahilova, 14.07.1995; 1 ♀, the same place, 8.08.1994; 1 ♀, stony steppe, Mountain B. Bahilova, 29.07.1997 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Germany, Poland, France, Italy, Bulgaria; Russia: Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: Kazakhstan (north), Mongolia; North Africa: Algeria.

*Syrphia pipiens* (Linnaeus, 1758)

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 09.06.1989; 2 ♀, the same place, 08.08.1990; 1 ♂, 1 ♀, stony steppe, Mountain B. Bahilova, 12.06.1989; 1 ♀, B. Polyana, garden, 04.08.1993; 1 ♂, stony steppe, Zmeinaya Mountain, 01.08.1993; 1 ♂, road, 18.08.1993; 1 ♀, B. Polyana, 06.09.1999 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Portugal, Spain, Italy, Yugoslavia, Greece; all parts of Russia; Asia: Mongolia, China, Turkey, Iran, Afghanistan; North Africa: Morocco, Algeria; Madeira, Canary Is; Nearctic and Oriental Regions.

*Syrphia vittata* Pertschinsky, 1875

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Zmeinaya Mountain, 01.08.1994 (Lubvina leg.).

*Distribution.* USSR: South European territory; Asia (Uzbekistan, Tadjikistan, Turkmenia).

*Temnostoma vespiforme* (Linnaeus, 1758)

*Material.* 1 ♂, Zhigulevskyy State reserve, dry meadow, Yagodnoe Pole, 16.06.1992; 2 ♂, 3 ♀, dry meadow, Churakayka, 13.06.1996 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Spain, Italy, Yugoslavia, Roumania, Transcaucasus; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Kazakhstan, Japan (Hokkaido); Nearctic Region.

*Temnostoma bombylans* (Fabricius, 1805)

*Material.* 1 ♂, Zhigulevskyy State reserve, 16.06.1989, 1 ♂, 1 ♀, forest meadow, KW 10, 8.06.1992; 1 ♂, dry meadow, 25.06.1992 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Roumania, Yugoslavia; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Korea, Japan.

*Chalcosyrphus (Xylotomima) curvipes* (Loew, 1854)

*Material.* 1 ♀, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 1 ♂, dry meadow, 16.06.1992; 1 ♂, dry meadow, Yagodnoe Pole, 22.06.1993 (Lubvina leg.).

*Distribution.* Europe: Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria; Russia: Central and South European territories, West and East Siberia, Far East; Asia: Kazakhstan, Kirghizia.

*Chalcosyrphus (Xylotomima) femoratus* (Linnaeus, 1758)

*Material.* 1 ♀, Zhigulevskyy State reserve, dry meadow, Kochkarka, 30.05.1989; 1 ♂, stony steppe, Strélnaya Mountain, 31.05.1989; 1 ♂, stony steppe, Mountain B. Bahilova, 20.05.1998 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: from Kola peninsula to South European territory, Transcaucasus, West and East Siberia, Far East; Asia: Kazakhstan, Kirghizia, China.

*Brachypalpus valgus* (Panzer, 1798)

*Material.* 1 ♂, Zhigulevskyy State reserve, stony steppe, Mountain M. Bahilova, 12.05.1993 (Lubvina leg.).

*Distribution.* Europe: Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Austria, Hungary, Italy, Yugoslavia, Roumania, Bulgaria, Ukraina; Russia: South European territory (Samara distr.). New.

***Brachypalpoides lentus* (Meigen, 1822)**

*Material.* 2 ♂, 1 ♀, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 2 ♂, dry meadow, 16.06.1992; 1 ♀, dry meadow, Chmelovoy ravine, 20.06.1987 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Ireland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Hungary, Spain, Italy, Yugoslavia, Roumania; Russia: Central and South European territories, Transcaucasus, West Siberia.

***Xylota segnis* (Linnaeus, 1758)**

*Material.* 1 ♂, 1 ♀, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 2 ♂, dry meadow, 27.06.1991 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: Central and South European territories, Transcaucasus, West and East Siberia; Asia: Kazakhstan, N China; North Africa: Morocco; Canary Is., Madeira, Azores; Neartic Region.

***Xylota abiens* Meigen, 1822**

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 1 ♀, dry meadow, 5.08.1992 (Lubvina leg.).

*Distribution.* Europe: Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, France, Switzerland, Austria, Italy, Yugoslavia, Roumania; Russia: Central and South European territories, Transcaucasus, West and East Siberia, Far East; Kazakhstan.

***Xylota meigeniana* Stackelberg, 1964**

*Material.* 1 ♀, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989; 2 ♂, dry meadow, 5.08.1992 (Lubvina leg.).

*Distribution.* Europe: Netherlands, Belgium, Roumania; Russia: Central and Southern European territories, West and East Siberia, Far East; Asia: Japan.

***Xylota ignava* (Panzer, 1798)**

*Material.* 1 ♂, Zhigulevskyy State reserve, forest meadow, KW 10, 16.06.1989 (Lubvina leg.).

*Distribution.* Europe: Sweden, Finland, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Switzerland, Austria, Spain, Italy, Yugoslavia, Roumania, Bulgaria; Russia: Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: Kazakhstan, Uzbekistan, Tadzhikistan, Kirghizia, Turkmenia, Mongolia, China (E Tibet), Korea, Japan.

***Xylota tarda* Meigen, 1822**

*Material.* 1 ♂, 1 ♀, Zhigulevskyy State reserve, 25.06.1992; 1 ♀, dry meadow, 30.06.1992; 1 ♀, B. Polyana, garden, 2.08.1994; 2 ♀, stony steppe, KW 13, 30.07.1997 (Lubvina leg.).

*Distribution.* Europe: Norway, Sweden, Finland, Great Britain, Denmark, Netherlands, Belgium, Germany, Poland, Czechia, Slovakia, France, Austria, Hungary, Italy, Yugoslavia; Russia: Central and South European territories, Transcaucasus, West and East Siberia, Far East; Asia: Kazakhstan (north).

***Microdon mutabilis* (Linnaeus, 1758)**

*Material.* 1 ♂, Zhigulevskyy State reserve, 30.05.1987; 1 ♀, dry meadow, Yagodnoe Pole, 16.06.1992 (Lubvina leg.).

*Distribution.* Europe: from Scandinavia to Spain, Italy, Yugoslavia, Bulgaria; Russia: Central and South European territories, Transcaucasus, West Siberia (Altai), Far East (Primorye Territory); Asia: Kazakhstan.

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