

## Checklist of the hover-flies (Diptera, Syrphidae) of Russia

### Список видов мух-журчалок (Diptera, Syrphidae) России

A.V. Barkalov\*, V.A. Mutin\*\*  
А.В. Баркалов\*, В.А. Мутин\*\*

\* Institute of Systematics and Ecology of Animals, Russian Academy of Sciences, Siberian Branch, Frunze Str. 11, Novosibirsk 630091 Russia.

\* Институт систематики и экологии животных СО РАН, ул. Фрунзе 11, Новосибирск 630091 Россия. E-mail: bark@eco.nsc.ru.

\*\* Amur State University of Humanities and Pedagogy, Kirova Str. 17/2, Komsomolsk-na-Amure 681000 Russia.

\*\* Амурский гуманитарно-педагогический государственный университет, ул. Кирова 17/2, Комсомольск-на-Амуре 681000 Россия. E-mail: valerimutin@mail.ru.

**Key words:** list of species, family Syrphidae, fauna, Russia, synonyms, bibliography.

**Ключевые слова:** список видов, семейство Syrphidae, фауна, Россия, синонимы, библиография.

**Abstract.** A checklist of 951 hover-fly species in the Russian fauna is compiled. In descending order, the species number in the subfamilies Eristalinae, Syrphinae, Pipizinae and Microdontinae in the fauna of Russia is 565, 314, 63, and 9 correspondingly. While compiling the checklist, the following new synonyms have been established: *Sphegina (Sphegina) spheginea* (Zetterstedt, 1838) = *Sphegina atra* Violovitsh, 1980, **syn. nov.**, *Helophilus lapponicus* Wahlberg, 1844 = *Helophilus limosus* Violovitsh, 1977, **syn. nov.**, *Criorhina brevipila* Loew, 1871 = *Criorhina thompsoni* Violovitsh, 1982, **syn. nov.**, *Melangyna coei* Nielsen, 1971 = *Melangyna stackelbergi* Violovitsh, 1980, **syn. nov.**, *Baccha elongata* (Fabricius, 1775) = *Baccha sachalinica* Violovitsh, 1976, **syn. nov.**, *Baccha elongata* (Fabricius, 1775) = *Baccha sibirica* Violovitsh, 1976, **syn. nov.**, *Platycheirus perpallidus* (Verrall, 1901) = *Platycheirus perpallidus paramushiricus* Mutin, 1998, **syn. nov.**, *Cheilosia gorodkovi* Stackelberg, 1963 = *Cheilosia kuznetzovae* Skufjin, 1977 **syn. nov.**, and *Melangyna compositarum* (Verrall, 1873) = *Syrphus kolomietzi* Violovitsh, 1965, **syn. nov.**, *Anasimyia interpuncta* (Harris, 1776) = *Anasimyia oblonga* Violovich, 1979, **syn. nov.**

All the literature sources containing descriptions and/or comments on species from the modern territory of Russia are included.

**Резюме.** Составлен список видов мух-журчалок фауны России. К настоящему времени он насчитывает 951 вид. В порядке убывания числа видов в подсемействах Eristalinae, Syrphinae, Pipizinae и Microdontinae в фауне России насчитывается соответственно 565, 314, 63 и 9. В процессе подготовки списка были установлены новые синонимы — *Sphegina (Sphegina) spheginea* (Zetterstedt, 1838) = *Sphegina atra* Violovitsh, 1980, **syn. nov.**, *Helophilus lapponicus* Wahlberg, 1844 = *Helophilus limosus* Violovitsh, 1977, **syn. nov.**, *Criorhina brevipila* Loew, 1871 = *Criorhina thompsoni* Violovitsh, 1982, **syn. nov.**, *Melangyna coei* Nielsen, 1971 = *Melangyna stackelbergi* Violovitsh, 1980, **syn. nov.**, *Baccha elongata* (Fabricius, 1775) = *Baccha sachalinica* Violovitsh, 1976, **syn. nov.**, *Baccha elongata* (Fabricius, 1775) = *Baccha sibirica* Violovitsh, 1976, **syn. nov.**, *Platycheirus perpallidus* (Verrall, 1901) = *Platycheirus perpallidus paramushiricus* Mutin, 1998, **syn. nov.**, *Cheilosia*

*gorodkovi* Stackelberg, 1963 = *Cheilosia kuznetzovae* Skufjin, 1977, **syn. nov.** и *Melangyna compositarum* (Verrall, 1873) = *Syrphus kolomietzi* Violovitsh, 1965 **syn. nov.**, *Anasimyia interpuncta* (Harris, 1776) = *Anasimyia oblonga* Violovich, 1979, **syn. nov.**

Представлены все литературные источники, в которых описываются новые виды или приводится упоминаемые виды с территории России.

### Introduction

Hover-flies, or the Syrphidae, is one of the large Diptera families occurring worldwide except for the Antarctic. Thanks to large sizes, bright coloration and huge abundance, representatives of this family have along attracted the attention of researchers. To date, the hover-fly fauna of the European part of the Palaearctic Region is fairly well-studied. There is a number of excellent guides to the syrphids of Great Britain [Stubbs, Falk, 1983], north-west Europe [van Veen, 2004], Finland [Haarto, Kerppola, 2007], and Sweden [Bartsch et al., 2009a, b], allowing European entomologists to easily contribute to the study of this group of insects. The situation with hover-fly studies in Russia is somewhat different, as currently there are only three unequal identification keys to Syrphidae of the European part [Stackelberg, 1970], Siberia [Violovich, 1983] and the Russian Far East [Mutin, Barkalov, 1999]. The first two are largely of a bibliographic value due to numerous taxonomic and nomenclatural changes introduced since the dates of their publication. The latter key allows users to identify the syrphids of eastern territories of Russia only. Thus, at present there is a need to conduct a comprehensive investigation of Syrphidae of the territory of Russian Federation. The first step in achieving this could be compiling a complete checklist of hover-fly species, including their synonyms, described from the territory at hand, with comments on their distribution across Russia and worldwide. The aim of the present

paper is to present the most comprehensive and updated checklist of hover-flies of Russia.

## Material and methods

The present checklist contains hover-fly species that have been recorded/described from the territory of Russia by various authors since the work by Osten Sacken [1858]. Junior synonyms are mentioned only if type localities of the corresponding species lie within the limits of the Russian Federation. Species, subgenera and genera in the subfamilies are listed in an alphabetic order. Species distribution is first described within the limits of Russia, then (after hyphen) overseas.

Fifteen species hitherto reported from the territory at hand were not found in the examined museum collections. Such species have been included in the checklist, with additional 'Remarks' pointing out that their taxonomy is in need of further study. Occasionally, taxonomic comments on particular species are also given. If a cited Russian paper has an original English translation of its title, the latter is used despite some/possible mistakes in the English style. 'References' contain only those sources that are devoted to the systematics and distribution of hover-flies from the territory of Russia. The family taxonomy and species composition of supraspecific taxa follow Mutin and Barkalov [1999], with the latest changes by Hippa, Nielsen, Steenis [2001], Vujic et al. [2013], Speight [2016], etc.

The following abbreviations have been used in presenting distributional data:

**Russia:** **Am** — Amurskaya Province, **Cr** — Crim, **Eup** — European part of Russia, **FE** — Russian Far East, **Kh** — Khabarovskij Krai, **KI** — Kuril Islands, **Km** — Kamchatka, **NC** — Northern Caucasus, **Prim** — Primorie, **Sib** — Siberia, **Skh** — Sakhalin, **Trb** — Transbaikalia, **Ya** — Yakutiya.

**Others:** **Af** — Afrotropical Region, **Afg** — Afghanistan, **C** — central, **Ch** — China, **E** — eastern, **EA** — Eastern Asia, **Eu** — Europe, **Ge** — Georgia, **Ir** — Iran, **J** — Japan, **K** — Korea, **Kir** — Kirgisia, **Kz** — Kazakhstan, **MA** — the Middle Asia, **Mn** — Mongolian People's Republic, **N** — northern, **NA** — Northern America, **NAf** — Northern Africa, **Or** — Oriental region, **S** — southern, **SW** — Sweden, **SF** — Finland, **TC** — Transcaucasus, **Tj** — Tajikistan, **Tr** — Turkey, **Tu** — Turkmenistan, **Uz** — Uzbekistan, **W** — western.

## A history of the study of the hover-fly fauna of Russia

Only those authors who discovered particular species from the territory of Russia are included/discussed in this chapter. Papers dealing with additional records of the already known species from the studied territory are excluded. The entire period of the investigation of Russian hover-flies can be divided in three main stages: the first stage — accumulation of primary information;

the second — the research works by A.A. Stakelberg and N.A. Violovich; and the third — modern studies.

Chronologically, the first stage began in the mid-19th century with the publication of C.R. Osten Sacken's work devoted to the syrphids of the vicinities of Saint-Petersburg [Osten Sacken, 1858], followed by the paper by Fedchenko [1868] about the syrphids of Moscow Province that appeared 10 years later. In the 70s of the 19th century, two works were published by I.A. Portsinski [1874, 1877], surveying the syrphids of Gdov District of Saint-Petersburg and those of the northern Caucasus. Later, L. Krulikowsky [1897] published a list of Diptera from the vicinities of Vyatka in which the syrphids were also mentioned. The works by Th. Becker [1894, 1915, 1921] stood slightly apart from those of the aforementioned authors, because in addition to new faunistic data from Russia they also included descriptions of new species, particularly from the genera *Cheilosia*, *Sphegina*, *Eumerus*, *Heringia* (described as *Pipizella*), *Chrysotoxum* and *Dasysyrphus*. Between the first and second stages of the investigation of Russian hover-flies there was an intermediate period when the following major publications appeared: R. Frey [1915, 1918], W. Hellén [1914, 1930], E. Kanervo [1934, 1938], S. Matsumura [1905, 1911, 1916, 1919, 1931], S. Matsumura, J. Adachi [1916, 1917a,b, 1919] and T. Shiraki [1930]. The works by Matsumura and Shiraki contained not only new faunistic data but also descriptions of many new species and genera. These papers were of crucial importance because they comprised essential information on the taxonomy of Far-Eastern species, hence laying the foundation for further taxonomic studies of the Russian Far East.

The truly focused investigations of the Russian syrphids began with a small note published by A.A. Stackelberg in 1914. In the following years, until 1974, despite severe adversity endured by the country, this author with the co-authors published over 40 taxonomic papers, reviews and monographs devoted to the syrphids of the former Soviet Union. All syrphidologists of the former Soviet Union, and then of Russia, in one way or another were students and/or co-authors of Stackelberg.

Since Stackelberg was a Petersburger, he paid much attention to the Diptera fauna of Saint-Petersburg Province, and then Leningrad Area [Stackelberg, 1915, 1916, 1954, 1958b, 1965a]. Thanks to his papers, the state of knowledge of Syrphidae of that area had long been a standard for other, roughly equal in size territories of the temperate zone, both in Russia and overseas. He published numerous revisions and reviews of hover-fly genera from the modern territory of Russia [1925a, 1927, 1928a, b, 1950, 1952b, 1953a, b, 1955a, b, 1956, 1958a, 1959, 1961, 1964] and two identification keys to the syrphids of the European part of the USSR [Stackelberg, 1933, 1970]. Moreover, his faunistic and taxonomic works laid the foundation for further studies of the syrphids from other regions of Russia (see in a list of his publications, Stackelberg, 1914–1974).

In 1923, E.S. Smirnov published a review of the genus *Helophilus* Mg. Yet, the following works of this famous dipterologist were devoted to insects of Middle Asia and therefore are not considered in the present review. Two faunistic papers were published by V.V. Vnukovskij [1928, 1934], who surveyed the syrphid faunas of one of the regions of West Siberia and of Chyuvash Republic.

In 1932 and 1936, two faunistic papers on the syrphids of the Middle Urals appeared [Kolosov, Popov, 1932; Kolosov, 1936]. A list of Diptera, including Syrphidae, of Chyuvash Republic was prepared and published by M.I. Volkova [1934]. At the same time, the Crimean fauna was first inventoried by V.I. Bykovskij [1936, 1940; Bykovskij, Stackelberg, 1932].

The research activity of N.A. Violovich [1935–1980] began with a small faunistic paper devoted to the syrphids of Moscow Area. In 1952–1960, he studied the syrphids of Far East [Violovitsh, 1952, 1955, 1956a,b, 1957, 1960a,b] and obtained the materials that formed the basis of his PhD thesis entitled as “Fauna of Syrphidae (Diptera) of Sakhalin Island and the Kurile Islands and its origin” [Violovitsh, 1956c]. Later, Violovich published numerous papers on the taxonomy and fauna of syrphids from Siberia and the Russian Far East (see in a list of his publications, 1964–1988). With regards to understanding of the scope of Siberian and Far Eastern fauna of Syrphidae, three of his major works are of particular importance [Violovitsh, 1976, 1982, 1983].

From 1952 to 1989, L.B. Zimina — a staff member of the Zoological Museum of the Moscow University — published her dipterological works [Zimina, 1952–1989], of which 19 papers were devoted to the syrphids of Russia, both on their fauna [Zimina, 1954, 1957, 1964, 1968a,b, 1972a,b, 1975, 1976, 1979, 1981a, b, 1986a; Zimina, Olshvang, 1976] and taxonomy [Zimina, 1952, 1961, 1982, 1986b, 1989].

Since 1964, K.V. Skufjin — a professor of the Voronezh State University — began to study the syrphids of Russia by publishing a list of the syrphids pollinating flowering plants in the «Galichya Gora» Reserve [Skufjin, 1964]. One of the many directions of his research was a inventory of Syrphidae of the central part of European Russia [Skufjin, 1977a,b, 1979b] and the northern Caucasus [Skufjin, 1967, 1976, 1979a]. In 1980, he published a species review of *Sphaerophoria* Lep. et Serv. [Skufjin, 1980], and later descriptions of two new species of the genus *Platycheirus* Lep. et Serv. [Skufjin, 1987]. In total, Skufjin and co-authors published 16 papers on hover-flies.

Two papers on syrphids were published by the famous Russian explorer of the Arctic, Yu.I. Tshernov [1958, 1963]. Of them, the first was devoted to the Syrphidae of Moscow Area, and the second to those of the tundra zone. In 1974, in a checklist of animals of Kirov Area, some information about syrphids was also presented by Shernin [1974].

The third, modern period of the investigation of Russian hover-flies could be marked by the appearance

of works by A.K. Bagatshanova [1976–1990], A.B. Barkalov [1978–2018] and V.A. Mutin [1984–2018]. Simultaneously with the aforementioned authors, the syrphids were studied by L.B. Peck, although her works were primarily devoted to the fauna of Middle Asia. However, her catalogue [Peck, 1988] contained the exhaustive for those times information about taxonomy and distribution of the syrphids of Russia. The works by Bagatshanova scrutinized the syrphids of Yakutia, both their fauna, geographic distribution and ecology [1976, 1978, 1985, 1987, 1988, 1990, Barkalov, Bagatshanova, 1985], and descriptions of new taxa [Bagatshanova, 1980, 1984; Bagatshanova in Mutin, 1990]. The syrphid fauna of the Polar Urals was published by V.N. Olshvang [1980], that of Gorki Area by Anufriev and Soshnikov [1983], and that of the southern Primorie by Cherkashina [1973a,b].

The works by Barkalov were primarily devoted to the systematic and distribution of the Palearctic taxa of the genus *Cheilosia* Mg. [Barkalov, 1978, 1979, 1980a, 1981a–c, 1982, 1983a–c, 1984, 1985, 1987, 1988, 1990a, 1993b–d, 1997, 1998a, 2002, 2005, 2007a,d, 2008, 2009a; Barkalov, Bagatshanova, 1985; Barkalov, Ichige K. 2016; Barkalov, Ståhls, 1997, 2005; Ståhls, Barkalov, 2017]. Of them, the identification keys to *Cheilosia* of Siberia [Barkalov in Violovitsh, 1983] and the Russian Far East [Mutin, Barkalov, 1999] are particularly important. Yet, in addition to *Cheilosia*, Barkalov studied systematics of other taxa [Barkalov, 1980b, 1990b, 1993a, 2007b,c, 2009b; Barkalov, Goguzokov, 2001; Barkalov, Kropacheva, 2005; 2012; Barkalov, Mutin, 2014; Barkalov, Nielsen, 2010; Barkalov, Popov, 2000; Mutin, Barkalov, 1990, 1995]. Of particular significance are his generic reviews of *Sphaerophoria* Le Pelet. et Serv. [Barkalov, 2011, 2012a]; *Platycheirus* Le Pelet. et Serville, 1828 [Barkalov, Nielsen, 2007a, b, 2008, 2009, 2012; Nielsen, Barkalov, 2017; Barkalov, 2013] and *Blera* Billb. [Barkalov, Mutin, 1991a, b; Barkalov, Cheng, 2011; Ichige, Barkalov, 2017]. A number of Barkalov’s publications are devoted to the fauna and distribution of the syrphids in certain regions of Siberia [Barkalov, 1998b, Barkalov, Kropacheva, 2012; Barkalov, Mutin, 2017a, b; Barkalov et al., 2010; Barkalov, Sorokina, 2006; Barkalov, Zinchenko, 2009], including the hover-flies of the Russian sector of Arctics [Violovitsh, Barkalov, 1980; Barkalov, 2012b, 2015a, b; Barkalov, Mutin, 2015, 2016].

The Syrphidae of West Siberia were surveyed by V.S. Sorokina [2002, 2003, 2005, 2006; Sorokina, Chashchina, 2003], who furthermore undertook a taxonomic revision of the genus *Paragus* [Sorokina, 2009].

V.A. Mutin started to publish his works since 1983. From the beginning of his academic career, he devoted his research interests mainly to three areas, such as (1) systematics, (2) faunistics and ecology, and (3) chorology. The first area includes numerous works dedicated to descriptions of new species and genera, as well to the clarification of taxonomic position of some species [Mutin, 1983c, 1984a,b,d, 1985, 1986, 1987a,c, 1990a,b, 1998a–c, e, 1999, 2001a–c, 2002a, 2016b; Mutin,

Barkalov, 1990, 1995, 2018b; Mutin, Ichige, 2014]. Apart from alpha-taxonomic works, he also published taxonomic reviews of particular genera within the scope of the Russian Far East or the entire Palaearctic: viz., *Graptomyza* Wied. [Mutin, 1983c]; *Sphagina* Mg. [Mutin, 1984b]; *Neocnemodon* Goffe [Mutin, 1988]; *Parasyrphus* Mats. [Mutin, 1990a]; *Brachyopa* Mg. [Mutin, 1998e]; *Pipiza* Fall. [Mutin, 2001c]; and *Xylota* [Mutin Gilbert, 1999]. As a result of such long-term taxonomic research, an identification key to the syrphids of the Russian Far East was published in 1999 [Mutin, Barkalov, 1999]. The second area of interests includes 34 papers by Mutin and the co-authors [Mutin, 1983a, b, 1984c, 1987b,d, 1992, 1997a,b, 1998d, 2002b, 2003b,c, 2006a–c, 2009a, b, 2010a, b, 2011a, 2012a, b, d, 2014, 2015, 2016a, c; Mutin, Barkalov, 2018a; Mutin, Bogunova, 2010; Mutin et al., 2016; Mutin, Gritskevich, 1998; Mutin, Gilbert, Gritskevich, 2009; Mutin, Syachina, 2007; Mutin Tridrih, 2016]. The paper devoted to the syrphids of Sakhalin and the Kurile Islands [Mutin, Barkalov, 1997] lies in between the first and the second areas of Mutin's interests. In the latter work, apart from providing purely faunistic information he also described two new species and synonymised 15 species and one generic names. Six papers by Mutin are devoted a chorological analysis of Syrphidae of the Russian Far East [Mutin, 2003a, c, 2005, 2011a, b, 2012]. Besides V.A. Mutin, the fauna and ecology of the Far Eastern syrphids is currently studied by his students [Gritskevich, 1996, 1997, 1998; Barsukova, 2010a, b, 2011a, 2012a, b, 2013; Barsukova, Mutin, 2012].

Since 1985, a rather active research on Syrphidae have been undertaken by S.Yu. Kuznetsov, who published numerous papers on larval stages of many syrphid species, but also devoted nine of his papers to taxonomy of species from the territory of Russia [Kuznetsov, 1985, 1987, 1990a–d, 1992, 1994, 1997] and six works to new faunistic records from various regions of the country, from Krasnodar Territory to Magadan Area [Kuznetsov et al., 1997; Kuznetsov, Viklund, 1999; Kuznetsov, Lyubvina, 2001; Kuznetsov, Kustov, 2000; Kuznetsov, Kuznetzova, 2004a, b]. The fauna of the north-east of the European part of Russia is now studied by S.M. Pestov, who with the co-authors has published 11 papers dealing with the hover-fly faunistics and ecology [Pestov, 2004a, b, 2005a–c, 2006, 2007; Pestov, Dolgin, 2006; Dolgin, Pestov, 2007; Pestov, Yuferev, 2009; Pestov, Yuferev, Tselishcheva, 2010]. In the list of insects of Kirov Area, G.I. Yuferev also provided data on the syrphids [Yuferev, 2004]. In the preliminary list of Diptera of the Ilmen' Reserve, A.V. Lagunov [2001] listed hover-flies as well.

Hover-flies with xylobiontic larvae are studied by N.P. Krivosheina [1972a,b; 1974a,b,c, 2002, 2003, 2004, 2012; Krivosheina, Mamaev, 1962], whereas various aspects of biology and systematics of other xylobiontic hover-flies are studied by her daughter M.G. Krivosheina [2001, 2002, 2003, 2005; Krivosheina M., Krivosheina N., 1996].

In 1998–2006, the fauna and conservation of syrphids of Krasnodar Territory were studied by S.Yu. Kustov [2003, 2005, 2006; Kustov, Yaroshenko, 1998]. The syrphids of Kabardino-Balkaria are inventoried by T.Kh. Goguzokov and the co-authors [2002a,b, Goguzokov, Barkalov, 2000; Goguzokov, Ketenchiev, 2002a, b], those of the Zhyguli Reserve are considered in the paper by I.V. Lyubvina [1998]. Several papers on the syrphids of the Crimea and southern regions of the European Russia have been published by G.V. Popov [1997, 1998, 2009; Prokhorov, Popov, 2016].

Two works with descriptions of new species from the territory of Siberia were also published by Polish scientists [Lukasz, 2013; Soszyński et al., 2013], and two papers on the genus *Platycheirus* were published by T. Nielsen [1981; Nielsen, Barkalov, 2017].

Finally, S.Yu. Kuznetsov and N.V. Kuznetsova [Kuznetsov, Kuznetsova, 2004] published a list of hover-flies of the Russian Federation and neighbouring countries compiled on the basis of an «analysis of collection and literature-derived data for the period 1758–2003». Their list consists of 850 (sub)species, but unfortunately the authors did not clarify whether one or the other taxon do occurs in the fauna of Russia. As a result, their list contains many species, of which occurrence in Russia is impossible to confirm by re-examination of museum collections and/or published literature. We have excluded these species from our list; yet, later some of them might be found in the territory of Russia, especially in the northern Caucasus and southern regions of the European Russia. A list of these species is provided below.

### Species of which presence in the territory of Russia is doubtful

*Eupeodes aino* (Matsumura, [1918]); *E. asiaticus* (Peck, 1972); *E. tjanshanicus* (Peck, 1966); *E. tshatkalensis* (Peck, 1972); *Parasyrphus montanus* (Peck, 1972); *Scaeva dignota* (Rondani, 1857); *S. latimaculata* (Brunetti, 1923); *Sphaerophoria pictopes* Boheman, 1863; *Xanthogramma caucasicum* Violovitsh, 1975; *X. hissaricum* Violovitsh, 1975; *X. kirgistanum* Enderlein, 1938; *X. maculipenne* Mik, 1887; *Chrysotoxum bactrianum* Violovitsh, 1973; *C. cisalpinum* Rondani, 1845; *C. flaveolum* Violovitsh, 1973; *C. kirgizorum* Peck, 1974; *C. montivagum* Violovitsh, 1973; *C. parmense* Rondani, 1845; *C. robustum* Portschiński, 1887; *C. stackelbergi* Violovitsh, 1953; *C. tjanshanicum* Peck, 1974; *C. verae* Violovitsh, 1973; *Platycheirus jaerensis* Nielsen, 1971; *Pseudoplatycheirus peteri* Doesburg, 1955; *Rohdendorfia dimorpha* Smirnov, 1924; *Spazigaster nostra* Zimina, 1963; *Paragus azureus* Hull, 1949; *P. cinctus* Schiner et Egger, 1853; *P. flammeus* Goeldlin, 1971; *P. majoranae* Rondani, 1857; *P. milkoii* Sorokina, 2002; *Pipizella curvitibia* Stackelberg, 1960; *Trichopsomyia ochrozona* (Stackelberg, 1952); *Macropeleco-*

*cera paradoxa* Stackelberg, 1952; *M. pulchella* Kuznetsov, 1990; *M. stackelbergi* Kuznetsov, 1990; *Cheilosia acutilabris* Becker, 1894; *Ch. arkita* Zimina, 1970; *Ch. armeniaca* Stackelberg, 1960; *Ch. asiomontana* Peck, 1971; *Ch. aterrima* Sack, 1927; *Ch. bakurianiensis* Kuznetsov, 1987; *Ch. caucasogenita* Kuznetsov, 1997; *Ch. erratica* Barkalov et Peck, 1997; *Ch. exigua* Barkalov et Peck, 1997; *Ch. grisella* Becker, 1894; *Ch. heptapotamica* Stackelberg, 1963; *Ch. impudens* Becker, 1984; *Ch. kirgizorum* Peck, 1971; *Ch. kiritshenkoi* Stackelberg, 1963; *Ch. latigena* Barkalov et Peck, 1994; *Ch. lola* Zimina, 1970; *Ch. longistyla* Barkalov et Peck, 1994; *Ch. nartshukae* Barkalov et Peck, 1997; *Ch. nudifacies* Becker, 1921; *Ch. pilifacies* Peck, 1971; *Ch. rufiventris* Peck, 1969; *Ch. songarea* Becker, 1894; *Ch. stackelbergi* Barkalov et Peck, 1994; *Ch. thalassica* Peck, 1971; *Ch. thalhammeri* (Szilady, 1938); *Ch. tyanshanica* Barkalov et Peck, 1994; *Ch. vtorovi* Peck, 1969; *Ch. xanthella* Barkalov et Peck, 1997; *Ch. zlotini* Peck, 1969; *Ferdinandea aurea* Rondani, 1844; *Callicara porrii* Rondani, 1857; *Chrysogaster kirgizorum* Stackelberg, 1952; *C. tadjikorum* Stackelberg, 1952; *Melanogaster tumescens* (Loew, 1873); *Myolepta obscura* Becher, 1882; *M. potens* (Harris, 1780); *Neoascia monticola* Stackelberg, 1960; *Orthonevra hissarica* (Stackelberg, 1952); *O. pilifacies* (Stackelberg, 1952); *O. regalis* Violovitsh, 1956; *Sphegina latifrons* Egger, 1865; *S. platychira* Szilady, 1937; *S. smirnovi* Violovitsh in Stackelberg, 1953; *Volucella bella* Barkalov, 2003; *Arctophila bequaerti* Hervé-Bazin, 1913; *Eumerus ammophilus* Paramonov, 1927; *E. aristatus* Peck, 1969; *E. arkitensis* Peck, 1969; *E. armenorum* Stackelberg, 1960; *E. arnoldi* Stackelberg, 1952; *E. bactrianus* Stackelberg, 1952; *E. coeruleithorax* Peck, 1969; *E. coeruleus* (Becker, 1913); *E. ferulae* Stackelberg, 1965; *E. graecus* Becker, 1921; *E. grandis* Meigen, 1822; *E. griseus* Becker, 1921; *E. gussakovskii* Stackelberg, 1949; *E. gissaricus* Stackelberg, 1949; *E. jacobsoni* Becker, 1913; *E. kazanovskya* Paramonov, 1927; *E. kirgizorum* Peck, 1966; *E. kondarensis* Stackelberg, 1952; *E. longitarsis* Peck, 1979; *E. lucidus* Loew, 1848; *E. merodonoides* Stackelberg, 1964; *E. mesasiaticus* Stackelberg, 1949; *E. nigrifacies* Becker, 1921; *E. niveitibia* Becker, 1921; *E. pamiroorum* Stackelberg, 1949; *E. pavlovskii* Stackelberg, 1964; *E. persicus* Stackelberg, 1949; *E. reichardti* Stackelberg, 1952; *E. rezvoi* Stackelberg, 1952; *E. richteri* Stackelberg, 1960; *E. rufipilus* Peck, 1969; *E. rufomaculatus* Peck, 1966; *E. rushanicus* Stackelberg, 1952; *E. rusticus* Sack, 1932; *E. sarybulunis* Peck, 1972; *E. selevini* Stackelberg, 1949; *E. smirnovi* Stackelberg, 1949; *E. stackelbergi* Peck, 1971; *E. tadjikorum* Stackelberg, 1949; *E. tjanshanicus* Peck, 1972; *E. transcaspicus* Stackelberg, 1952; *E. tshatkalensis* Peck, 1971; *E. tugajorum* Stackelberg, 1952; *E. turanica* Stackelberg, 1952; *E. turanicus* Stackelberg, 1952; *E. urartorum* Stackelberg, 1960; *E. ursiculus* Stackelberg, 1949; *E. zaitzevi* Kuznetsov, 1992; *Merodon aberrans flavitibius* Paramonov, 1925; *M. alagozicus* Paramonov, 1925; *M. annulatus* (Fabricius, 1794); *M. batumicus*

Paramonov, 1927; *M. brevis* Paramonov, 1925; *M. caucasicus* Portschiński, 1877; *M. clavipes* (Fabricius, 1781); *M. clavipes album* Paramonov, 1926; *M. clavipes ater* Paramonov, 1926; *M. clavipes niger* Paramonov, 1926; *M. dichopticus* Stackelberg, 1968; *M. distinctus* Palma, 1863; *M. erivanicus* Paramonov, 1925; *M. fulcratus fulcratus* (Becker, 1913); *M. gudaurensis* Portschiński, 1877; *M. smirnovi* Paramonov, 1927; *M. tarsatus* Sack, 1913; *M. turkestanicus* Paramonov, 1927; *M. velox* Loew, 1869; *Ceriana brunetti* (Shannon, 1927); *C. caesarea* (Stackelberg, 1928); *C. caucasica* (Paramonov, 1927); *C. naja* Violovitsh, 1974; *C. sartorum* Smirnov, 1924; *Anasimya subtransfuga* Stackelberg, 1963; *Eristalinus quinquelineatus* (Fabricius, 1781); *E. taeniops* (Wiedemann, 1818); *Eristalis acutifacies* Peck, 1971; *E. arashanica* Violovitsh, 1982; *E. griseus* Sack, 1931; *E. transcaucasica* Kuznetsov, 1994; *Helophilus turanicus* Smirnov, 1923; *Mallota bucharica* Stackelberg, 1950; *M. fuciformis* (Fabricius, 1794); *M. parvula* Stackelberg, 1926; *M. sogdiana* Stackelberg, 1950; *M. tadjikorum* Stackelberg, 1950; *Criorhina talysheensis* (Stackelberg, 1960); *Brachypalpus zugmayeriae* Mik, 1887; *Caliprobola aurea* (Sack, 1910); *Chalcosyrphus eunotus* (Loew, 1873); *Ch. pannonicus* (Oldenberg, 1916); *Milesia semilucifera* (Villers, 1789); *Palumbia eristaloides* (Portschiński, 1887); *Spilomyia annulata* Sack, 1910; *S. digitata* (Rondani, 1865); *S. gussalovskii* Stackelberg, 1958; *S. sulphurea* (Fabricius, 1794); *Temnostoma sericomylaeforme* (Portschiński, 1886); *Tropidia fasciata* Meigen, 1822.

## List of species

### Syrphidae

#### Eristalinae

#### Brachyopini

#### *Brachyopa* Meigen, 1822

*Brachyopa bicolor* (Fallén, 1817)

**Distribution.** Eup. — Eu.

*Brachyopa cineria* Wahlberg, 1844

**Distribution.** Eup, Sib, S FE. — Eu, J.

*Brachyopa dorsata* Zetterstedt, 1837

= *Brachyopa sibirica* Violovitsh, 1982.

**Distribution.** Eup, Sib, S FE. — Eu, J.

*Brachyopa insensilis* Collin, 1939

**Distribution.** Eup (Low Volga). — Eu, TC, MA.

**Remarks.** Material from the territory of Russia was not found.

*Brachyopa maritima* Violovitsh, 1980

**Distribution.** S FE. — J.

*Brachyopa obscura*

Thompson and Torp, 1982

**Distribution.** N Eup. — Eu.

*Brachyopa ornamentosa* Violovitsh, 1977

**Distribution.** S FE. — E Ch, J.

- Brachyopa panzeri* Goffe, 1945  
**Distribution.** Eup, S FE. — Eu.
- Brachyopa pilosa* Collin, 1939  
**Distribution.** Eup, Sib — Eu.
- Brachyopa pivanica* Mutin, 1984  
**Distribution.** Sib, S FE.
- Brachyopa plena* Collin, 1939  
**Distribution.** Eup. — Eu.
- Brachyopa primorica* Mutin, 1998  
**Distribution.** S FE.
- Brachyopa testacea* (Fallén, 1817)  
**Distribution.** Eup, Sib, FE — Eu, Mn, K.
- Brachyopa violovitshi* Mutin, 1985  
**Distribution.** S FE — J.
- Brachyopa vittata* Zetterstedt, 1843  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Brachyopa zhelochovtsevi* Mutin, 1998  
**Distribution.** Sib, FE — N Eu.
- Chrysogaster** Meigen, 1803  
*Chrysogaster cemiteriorum* (Linnaeus, 1758)  
**Distribution.** Eup, W Sib — Eu, MA.
- Chrysogaster musatovi* Stackelberg, 1952  
**Distribution.** Eup — TC, MA.
- Chrysogaster solstitialis* (Fallén, 1817)  
**Distribution.** Eup — Eu.
- Chrysosyrphus** Sedman, 1965  
*Chrysosyrphus alaskensis* (Shannon, 1922)  
= *Chrysosyrphus tundrarum* Violovitsh, 1978.  
= *Chrysosyrphus montanus* Violovitsh, 1978.  
**Distribution.** Sib, FE—NA (Alaska).
- Chrysosyrphus nasuta* (Zetterstedt, 1838)  
**Distribution.** Sib, N FE — N Eu.
- Chrysosyrphus niger* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, FE. — Eu.
- Eulejogaster** Kassebeer, 1994  
*Eulejogaster nigricans* (Stackelberg, 1922)  
**Distribution.** Eup — S Eu.
- Hammerschmidtia** Schummel, 1834  
*Hammerschmidtia ferruginea* (Fallén, 1817)  
**Distribution.** Eup, Sib, S FE — Eu, NA.
- Hammerschmidtia ingraca* Stackelberg, 1952  
**Distribution.** Eup, Sib, S FE.
- Lejogaster** Rondani, 1857  
*Lejogaster metallina* (Fabricius, 1776)  
**Distribution.** Eup, Sib — Eu, NA.
- Lejogaster tarsata* Meigen, 1822  
= *Orthoneura tuvensis* Violovitsh, 1979.  
**Distribution.** Eup, Sib, FE — Eu, Kz, Mn, MA, Afg, Ir.
- Melanogaster** Rondani, 1857  
*Melanogaster aerea* (Loew, 1843)  
**Distribution.** Eup, NW Sib — Eu.
- Melanogaster aliniensis* Mutin, 1999  
**Distribution.** Prim.
- Melanogaster hirtella* Loew, 1843  
**Distribution.** Eup — Eu.
- Melanogaster jaroslavensis* (Stackelberg, 1922)  
**Distribution.** Eup.
- Melanogaster nuda* (Macquart), 1829  
**Distribution.** Eup — Eu.
- Melanogaster pollinifacies* (Violovitsh, 1956)  
**Distribution.** S FE — J.  
**Remarks.** Hitherto, females from Primorie were mistakenly reported by us as *Lejogaster nigricans* [Mutin, Barkalov, 1999].
- Melanogaster stackelbergi* (Violovitsh, 1978)  
**Distribution.** S Sib.
- Myolepta** Newman, 1838  
*Myolepta dubia* (Fabricius), 1805  
**Distribution.** Eup — Eu, TC.
- Myolepta nigratarsis* Coe, 1957  
**Distribution.** Eup — Eu.
- Myolepta pulverum* Mutin, 1999  
**Distribution.** S FE.
- Myolepta vara* (Panzer, 1798)  
**Distribution.** Eup, S FE — Eu.
- Neoascia** Williston, 1886  
*Neoascia (Neoascia) Williston, 1886*  
*Neoascia (Neoascia) annexa* (Müller, 1776)  
**Distribution.** Eup — Eu.
- Neoascia (Neoascia) longiscutata* (Shiraki, 1930)  
**Distribution.** Skh, S KI — J.
- Neoascia (Neoascia) pavlovskii* Stackelberg, 1955  
**Distribution.** NC — Tr, MA, Afg.
- Neoascia (Neoascia) podagrica* (Fabricius, 1775)  
**Distribution.** Eup, Sib — Eu, Tr., TC, Israel, N Af.
- Neoascia (Neoascia) tenur* (Harris, 1780)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, Ch, J.
- Neoascia (Neoasciella) Stackelberg, 1965*  
*Neoascia (Neoasciella) amurensis* Mutin, 1990  
**Distribution.** S FE.

- Neoascia (Neoasciella) carinicauda*  
Stackelberg, 1955  
**Distribution.** W Sib — Kz, MA.
- Neoascia (Neoasciella) confusa* Mutin, 1990  
**Distribution.** S FE.
- Neoascia (Neoasciella) geniculata*  
(Meigen, 1822)  
= *Neoascia geniculata orientalis* Violovitsh, 1957.  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn.
- Neoascia (Neoasciella) interrupta* (Meigen), 1822  
**Distribution.** Eup, W Sib — Eu, ÒÑ.
- Neoascia (Neoasciella) meticulousa* (Scopoli), 1763  
**Distribution.** Eup, Sib — Eu, Kz, Mn.
- Neoascia (Neoasciella) obliqua*  
Coe, 1940  
**Distribution.** Eup — Eu, Tr, Israel, N Af.
- Neoascia (Neoasciella) sphaerophoria* Curran, 1925  
**Distribution.** Ya, N FE — NA.
- Neoascia (Neoasciella) subchalybea*  
(Curran, 1925)  
= *Neoascia petsamoensis* Kanervo, 1934.  
**Distribution.** Eup, Sib, FE — N Eu, NA.
- Neoascia (Neoasciella) tuberculifera*  
Violovitsh, 1957  
**Distribution.** S FE — J.  
**Remarks.** The record of this species from Yakutia [Violovich, 1983] could not be verified by the pertinent museum material.
- Orthonevra* Macquart, 1829  
*Orthonevra ahngeri* Kanervo, 1938  
**Distribution.** C Sib.  
**Remarks.** We have been unable to re-examine the type of this species. However, A.A. Stakelberg [1953a: 351] argued that the differences provided by Kanervo «do not give an opportunity to reliably separate this species from *O. plumbago* Lw.».
- Orthonevra brevicornis* (Loew, 1843)  
**Distribution.** Eup, W Sib — Eu, T.
- Orthonevra ceratura* (Stackelberg, 1952)  
**Distribution.** Sib — Mn, Ch (Gobi).
- Orthonevra elegans* Schummel, 1843  
**Distribution.** Eup, Sib, S FE — Eu, Mn, Ch, J.
- Orthonevra erythrogona* (Malm, 1863)  
**Distribution.** Eup, S Sib, FE — Eu, Mn.
- Orthonevra frontalis* (Loew, 1843)  
**Distribution.** Eup — Eu.
- Orthonevra gemmula* (Violovitsh, 1979)  
**Distribution.** W Sib — S Eu.
- Orthonevra geniculata* (Meigen, 1830)  
= *Orthoneura linnaniemii* Kanervo, 1938.  
**Distribution.** Eup, Sib, S FE — Eu, Mn.
- Orthonevra incisa* (Loew, 1840)  
**Distribution.** W Sib — Eu.
- Orthonevra intermedia* Lundbeck, 1916  
= *Orthoneura rossica* Stackelberg, 1953.  
**Distribution.** Eup — Eu.
- Orthonevra inundata* (Violovitsh, 1979)  
**Distribution.** Tuva.
- Orthonevra karumaiensis* (Matsumura, 1916)  
= *Orthoneura ussuriانا* Stackelberg, 1930.  
**Distribution.** S FE — K, J.
- Orthonevra nobilis* (Fallén, 1817)  
**Distribution.** Eup, W Sib — Eu, MA.
- Orthonevra plumbago* (Loew, 1840)  
**Distribution.** Eup, S Sib — Eu.  
**Remarks.** The record of this species from Siberia [Violovich, 1979] could not be verified by the pertinent museum material.
- Orthonevra recurrens* (Loew, 1871)  
**Distribution.** S Sib — Mn.
- Orthonevra sachalinensis* (Violovitsh, 1956)  
**Distribution.** Skh.
- Orthonevra stackelbergi*  
Thompson et Torp Pedersen, 1982  
**Distribution.** Eup, Sib, FE — Eu.
- Orthonevra subincisa* (Violovitsh, 1979)  
**Distribution.** Sib (Tuva), S FE.
- Orthonevra vagabunda* (Violovitsh, 1979)  
**Distribution.** Tuva.
- Orthonevra varga* (Violovitsh, 1979)  
**Distribution.** S Sib.
- Riponnensia* Maibach, Goeldlin et Speight, 1994  
*Riponnensia splendens* (Meigen, 1822)  
**Distribution.** S Eup — Eu, Tr.
- Sphegina* Meigen, 1822  
*Sphegina (Asiosphegina)* Stackelberg, 1975  
*Sphegina (Asiosphegina) anatolii* Mutin, 1998  
**Distribution.** S Prim.
- Sphegina (Asiosphegina) elongata*  
Shiraki et Edashige, 1953  
= *Sphegina hennigiana* Stackelberg, 1956.  
**Distribution.** Skh, S KI — J.
- Sphegina (Asiosphegina) freyana* Stackelberg, 1956  
**Distribution.** Skh, S KI — J.

- Sphegina (Asiosphegina) grunini*  
Stackelberg, 1953  
**Distribution.** S Prim.
- Sphegina (Asiosphegina) japonica*  
Shiraki et Edashige, 1953  
= *Sphegina macrocerca* Stackelberg, 1956.  
**Distribution.** S FE — K, J.
- Sphegina (Asiosphegina) nitidifrons*  
Stackelberg, 1956  
**Distribution.** Skh, S KI — J.
- Sphegina (Asiosphegina) sibirica*  
Stackelberg, 1953  
= *Sphegina sibirica flavescens* Stackelberg, 1953.  
**Distribution.** Eup, Sib, FE — Eu, MA, J.
- Sphegina (Sphegina) Meigen*, 1822  
*Sphegina (Sphegina) alaoglu* Hayat, 1997  
= *Sphegina pontica* Mutin, 1998.  
**Distribution.** NC — Tr.
- Sphegina (Sphegina) amurensis* Mutin, 1984  
**Distribution.** S FE.
- Sphegina (Sphegina) aterrima* Stackelberg, 1953  
**Distribution.** S Sib.
- Sphegina (Sphegina) brevisterna* Violovitsh, 1980  
**Distribution.** Tuva.
- Sphegina (Sphegina) calthae* Mutin, 1984  
**Distribution.** N Eup, FE.
- Sphegina (Sphegina) carbonaria* Mutin, 1998  
**Distribution.** S FE.
- Sphegina (Sphegina) claviventris* Stackelberg, 1956  
**Distribution.** S Sib, S FE — J.
- Sphegina (Sphegina) clunipes* (Fallén, 1816)  
**Distribution.** Eup — Eu, TC.  
**Remarks.** The records of this species from the Far East [Violovich, 1983] were based on a misidentification.
- Sphegina (Sphegina) dogieli* Stackelberg, 1953  
**Distribution.** S Eup.
- Sphegina (Sphegina) elegans* Schummel, 1843  
**Distribution.** S Eup — Eu.
- Sphegina (Sphegina) kurenzovi* Mutin, 1984  
**Distribution.** S Sib (Altai), FE.
- Sphegina (Sphegina) melancholica* Stackelberg, 1956  
= *Sphegina hodosa* Violovitsh, 1981.  
**Distribution.** S Sib, S FE.
- Sphegina (Sphegina) montana* Becker, 1921  
= *Sphegina eoa* Stackelberg, 1953.  
**Distribution.** Eup, Sib, S FE — Eu, Mn, K.
- Sphegina (Sphegina) negrobovi* Skufjin, 1976  
**Distribution.** NC.
- Sphegina (Sphegina) obscurifacies* Stackelberg, 1956  
**Distribution.** Eup, Sib, S FE — E Eu, K.
- Sphegina (Sphegina) spheginea*  
(Zetterstedt, 1838)  
= *Sphegina atra* Violovitsh, 1980, **syn. nov.**  
**Distribution.** Eup, Sib, FE. — Eu, Mn.  
**Remarks.** A comparison of the holotype (female) of *Sphegina atra* Violovitsh, 1980 with the specimens of *Sphegina spheginea*, including topotypes (from nr. Labytnangi), is evidence that both species names are to be synonymised.
- Sphegina (Sphegina) spiniventris*  
Stackelberg, 1953  
**Distribution.** S Sib, S FE — J.
- Sphegina (Sphegina) stackelbergi*  
Violovitsh, 1980  
**Distribution.** S FE — J.
- Sphegina (Sphegina) tenuifemorata*  
Mutin, 1984  
**Distribution.** Prim.
- Sphegina (Sphegina) tuvinica* Violovitsh, 1980  
**Distribution.** S Sib (Tuva), S FE.
- Sphegina (Sphegina) verae* Mutin, 1984  
**Distribution.** Prim.
- Sphegina (Sphegina) verecunda* Collin, 1937  
**Distribution.** Eup — Eu.
- Sphegina (Sphegina) violovitshi*  
Stackelberg, 1956  
**Distribution.** Skh, S KI — J.
- Callicerini  
*Callicera* Panzer, 1809  
*Callicera aenea* (Fabricius, 1781)  
**Distribution.** Eup, Sib, S FE — Eu, Ch, K, J.
- Callicera aurata* (Rossi), 1790  
**Distribution.** S Eup — Eu, Tr, TC.
- Callicera exigua* Smit, 2014  
**Distribution.** Altai.
- Callicera macquarti* Rondani, 1844  
**Distribution.** S Eup — S Eu, Tr.
- Callicera rohdendorfi* Zimina, 1982  
**Distribution.** Cr — TC.
- Callicera spinolae* Rondani, 1844  
**Distribution.** NC — Eu, MA.
- Callicera zhelochovtsevi* Zimina, 1982  
**Distribution.** NC — Eu, TC, Tr.



## Ceriodini

**Ceriana** Rafinesque, 1815*Ceriana conopsoides* (Linnaeus, 1758)= *Ceriodes uralensis* Becker, 1921.**Distribution.** Eup, Sib — Eu, TC, Ch., NAF.*Ceriana gibbosa* Violovitsh, 1980**Distribution.** S Prim.*Ceriana nigerrima* Violovitsh, 1974**Distribution.** S FE — J.**Monoceromyia** Shannon, 1922*Monoceromyia stackelbergi* Mutin, 1999**Distribution.** S FE.**Remarks.** Specimens from the type series are smaller than those of *M. pleuralis* (Coquillett, 1898): no visible differences are between specimens from Japan and Korea.**Primoceroides** Shannon, 1927*Primoceroides petri* (Hervé-Bazin, 1914)**Distribution.** S FE — K, J.**Sphiximorpha** Rondani, 1850*Sphiximorpha rachmaninovi*  
(Violovitsh, 1981)**Distribution.** S Prim — K.*Sphiximorpha subsessilis* (Illiger in Rossi, 1807)**Distribution.** Eup — Eu.

## Eristalini

**Anasimyia** Schiner, 1864*Anasimyia contracta* Claussen et Torp, 1980**Distribution.** Eup, S Kh — Eu.*Anasimyia interpuncta* (Harris, 1776)= *Anasimyia oblonga* Violovitsh, 1979 **syn. nov.****Distribution.** Eup, S Sib., S FE — Eu, Kz.**Remarks.** Mutin and Barkalov [1997] already mentioned about the conspecificity of *A. oblonga* and *A. interpuncta*, but no nomenclatural decision in that paper was made.*Anasimyia lineata* (Fabricius, 1787)**Distribution.** Eup, Sib, FE — Mn, Eu.**Remarks.** Some specimens of this species were reported as *Eurimyia japonica* for the Kurile Islands and Sakhalin [Violovich, 1976, 1979, 1982, 1983], and then as *Anasimyia japonica* [Mutin, Barkalov, 1997, 1999]. The specimens with the more or less darkened basoflagellomer occur in the southern Kurile Islands together with the typical form having the brightly yellow basoflagellomer.*Anasimyia lunulata*  
(Meigen, 1822)= *Helophilus (Anasimyia) pygmaeus* Violovitsh, 1979.= *Helophilus (Parhelophilus) insignis* Violovitsh, 1979.= *Helophilus (Anasimyia) inundatus* Violovitsh, 1982.**Distribution.** Eup, Sib, FE. — Eu, TC, MA, K, J, NA.*Anasimyia smirnovi* (Stackelberg, 1924)**Distribution.** S Sib — Mn.*Anasimyia transfuga* (Linnaeus, 1758)**Distribution.** Eup, Sib — Eu, Mn.**Arctosyrphus** Frey, 1918*Arctosyrphus willingii* (Smith, 1912)= *Arctosyrphus nitidulus* Frey, 1918.**Distribution.** Eup, Sib, FE — NA.**Eristalinus** Rondani, 1845*Eristalinus aeneus* (Scopoli, 1763)**Distribution.** Eup, Sib, S FE — Eu, Kz, MA, Mn, K, Ch, Afg., United Arab Emirates., Syria, N Af, Canary Is., J, NA, Or, Australia.**Remarks.** The record of this species from Sakhalin [Mutin, 2012] is based on a misidentification.*Eristalinus megacephalus* (Rossi), 1794**Distribution.** NC — S Eu, Tr, NAF, J, Or.*Eristalinus sepulchralis* (Linnaeus, 1758)= *Eristalinus riki* Violovitsh, 1957**Distribution.** Eup, Sib, FE — Eu, Syria, Kz, MA, Mn, Ch, K, J, NAF; Or.*Eristalinus tarsalis* (Macquart, 1855)**Distribution.** S KI (Kunashir) — Ch, J, Or.*Eristalinus velox* Violovitsh, 1966**Distribution.** Tuva.**Eristalis** Latreille, 1804**Eristalis (Eristalis)** Latreille, 1804*Eristalis (Eristalis) chipsanii* Matsumura, 1911**Distribution.** Skh — ?J.**Remarks.** Peck [1988: 192] placed this species name among «doubtful species» of the genus *Eristalis*. In the catalogue of Japanese Diptera [2014] and Catalogue of Life [2017], *E. chipsanii* Matsumura, 1911 is mentioned as a representative of the nominal subgenus. However, the collection material from Sakhalin and other regions of the Far East studied by us contains the genotype only.*Eristalis (Eristalis) tenax* (Linnaeus, 1758)= *Eristalis rubix* Violovitsh, 1977.**Distribution.** Eup, Sib, S FE — Cosmopolitan.**Eristalis (Eoseristalis)** Kanervo, 1938*Eristalis (Eoseristalis) abusivus* Collin, 1931**Distribution.** Eup, Sib, FE — Eu, J.*Eristalis (Eoseristalis) alpina* (Panzer, 1798)= *Eristalis kamshatica* Violovitsh, 1977.**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J.*Eristalis (Eoseristalis) anthophorina* (Fallén, 1817)= *Eristalis pacifica* Violovitsh, 1977.**Distribution.** Eup, Sib, FE — Eu, Mn, J, NA.*Eristalis (Eoseristalis) arbustorum* (Linnaeus, 1758)**Distribution.** Eup, Sib, FE — Azores, Eu, Kz, MA, NAF, K, J, NA; Or.

*Eristalis (Eoseristalis) argentata*  
Violovitsh, 1982

**Distribution.** Tuva?

*Eristalis (Eoseristalis) cerealis* Fabricius, 1805

= *Eristalis sachalinensis* Matsumura, 1916.

**Distribution.** S FE. — Ch, K, J, Or.

*Eristalis (Eoseristalis) cryptarum* (Fabricius, 1794)

**Distribution.** Eup, Sib, S Kh — Mn, Eu.

*Eristalis (Eoseristalis) fratercula* (Zetterstedt, 1838)

= *Eristalis vallei* Kanervo, 1934.

= *Eristalis tammensis* Bagatshanova, 1980.

**Distribution.** N Eup, N Sib, N FE — N Eu.

*Eristalis (Eoseristalis) gomojunovae* Violovitsh, 1977

**Distribution.** N Sib, N FE — N Eu.

*Eristalis (Eoseristalis) hirta* Loew, 1866

= *Eristalis tundrarum* Frey, 1932.

**Distribution.** NEup, Sib, N FE — N Eu, NA.

**Remarks.** The species is given sensu Hippa et al. (2001).

*Eristalis (Eoseristalis) interrupta*  
(Poda, 1761)

= *Eristalis toyoharae* Matsumura, 1911.

= *Eristalis toyoharensis* Matsumura, 1916.

= *Eristalis nemorum* var. *carelica* Kanervo, 1938.

**Distribution.** Eup, Sib, FE — Eu, Kz, Ki, J, Mn, NA.

**Remarks.** The species is given sensu Hippa et al. [2001].

*Eristalis (Eoseristalis) intricaria* (Linnaeus, 1758)

**Distribution.** Eup, Sib — Eu, C, Kz, Ki.

*Eristalis (Eoseristalis) japonica*  
van der Goot, 1964

**Distribution.** S FE, Skh, S K –K, J.

*Eristalis (Eoseristalis) jugorum* Egger, 1858

**Distribution.** NC — Eu.

*Eristalis (Eoseristalis) lineata* (Harris, 1776)

**Distribution.** Eup — Eu, TR, Naf.

*Eristalis (Eoseristalis) obscura* Loew, 1866

= *Eristalis pseudorupium* Kanervo, 1938.

**Distribution.** Eup, Sib, FE — Eu, MA.

*Eristalis (Eoseristalis) oestracea* (L.), 1758

**Distribution.** Eup, W Sib — Eu, Kz.

*Eristalis (Eoseristalis) pertinax* (Scopoli), 1763

**Distribution.** Eup — Eu, NC.

*Eristalis (Eoseristalis) picea* (Fallén, 1817)

**Distribution.** Eup, N Sib, Km — Eu.

*Eristalis (Eoseristalis) rabida* Violovitsh, 1977

**Distribution.** S FE, Ya.

*Eristalis (Eoseristalis) rossica* Stackelberg, 1958

**Distribution.** Eup, Sib, FE — Mn, Ch, K, J.

*Eristalis (Eoseristalis) rupium* Fabricius, 1805

= *Eristalis pigaliza* Violovitsh, 1983.

**Distribution.** Eup, Sib, FE — Canary, Eu, Mn, J, NA.

*Eristalis (Eoseristalis) similis* (Fallén, 1817)

**Distribution.** Eup, Sib (Altai, Yamal) — Eu.

**Remarks.** The species is given sensu Hippa et al. [2001].

**Helophilus** Meigen, 1822

*Helophilus affinis* Wahlberg, 1844

**Distribution.** Eup, Sib, FE — Eu, Mn.

*Helophilus altaicus* Violovitsh, 1973

**Distribution.** Altai.

*Helophilus bottnicus* Wahlberg, 1844

**Distribution.** Sib, FE — N Eu.

*Helophilus continuus* Loew, 1854

**Distribution.** Eup., S Sib, FE — Eu., Kz, MA, Afg, Mn.

*Helophilus eristaloidea* (Bigot, 1882)

**Distribution.** S FE — Ch, K, J.

*Helophilus groenlandicus* (Fabricius, 1780)

**Distribution.** Eup, N Sib, FE — Eu, NA.

*Helophilus hybridus* Loew, 1846

**Distribution.** Eup, Sib, FE — Eu, Mn, NA.

*Helophilus lapponicus* Wahlberg, 1844

= *Helophilus limosus* Violovitsh, 1977, **syn. nov.**

**Distribution.** N Eup, Sib, FE — N Eu, J, NA.

**Remarks.** A comparison of the type of *Helophilus limosus* and numerous specimens of *Helophilus limosus* from Northern Europe and Asia revealed their identity. Therefore *Helophilus limosus* Violovitsh, is considered a junior synonym (**syn. nov.**) of *Helophilus lapponicus*.

*Helophilus trivittatus* (Fabricius, 1805)

**Distribution.** Eup, Sib, FE — Eu, KZ, MA, Mn, Ir, Afg, Ch, J.

*Helophilus pendulus* (Linnaeus, 1758)

**Distribution.** Eup, NC, Sib, FE — Eu.

*Helophilus sapporensis* Matsumura, 1911

**Distribution.** S FE — K, J.

*Helophilus sibiricus* Smirnov, 1923

= *Helophilus roerichi* Violovitsh, 1977.

**Distribution.** S Sib — Mn.

**Lejops** Rondani, 1857

*Lejops vittatus* (Meigen, 1822)

**Distribution.** Eup, Sib — Eu, MA.

**Mallota** Meigen, 1822

*Mallota bicolor* Sack, 1910

= *Mallota citrea* Violovitsh, 1978.

= *Mallota subcitrea* Violovitsh, 1978.

**Distribution.** S FE — K, NE Ch, J.

- Mallota cimbiciformis* (Fallén, 1817)  
**Distribution.** Cr — Eu, N Af, Iran.
- Mallota eristaliformis* Sack, 1910  
= *Mallota dimorpha* Shiraki, 1930  
= *Mallota floreae* Violovitsh, 1952.  
**Distribution.** S FE, Skh, S KI — J, K, NE Ch, J.
- Mallota eurasiatica* Stackelberg, 1950  
**Distribution.** Eup, Sib, FE — J, K.
- Mallota inopinata* Violovitsh, 1975  
**Distribution.** Skh — J.
- Mallota megilliformis* (Fallén, 1817)  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Mallota munda* Violovitsh, 1955  
**Distribution.** S KI — J.
- Mallota rossica* Portschinsky, 1877  
= *Mallota auricoma* Sack, 1910.  
= *Mallota aino* Violovitsh, 1952.  
**Distribution.** Eup, Sib, FE — N Ch (Altai), Mn, K, J.
- Mallota rubripes* Matsumura, 1916  
**Distribution.** S FE — K, J.  
**Remarks.** In the Russian literature this species was earlier reported as *Mallota japonica* [Stakelberg, 1950; Violovich, 1983; Mutin, Barkalov, 1999].
- Mallota shatalkini* Mutin, 1999  
**Distribution.** S FE — ?Ch, K.
- Mallota tricolor* Loew, 1871  
**Distribution.** Eup, Sib, FE — Eu, Tr, Mn, Ch, K, J.
- Mallota ussuriensis* Mutin, 1999  
**Distribution.** S Prim.
- Mesembrius* Rondani, 1857  
*Mesembrius flavipes* (Matsumura, 1905)  
**Distribution.** S FE — K, J.
- Mesembrius peregrinus* Loew, 1846:  
**Distribution.** Eup, Sib — Eu, Kz, MA, N Ch.
- Myathropa* Rondani, 1845  
*Myathropa florea* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, S FE — Canary Is., Asores, N Af, Eu, MA, Afghanistan.
- Myathropa semenovi* (Smirnov, 1925)  
**Distribution.** S Ural, Altai — MA.
- Pararctophila* Hervé-Bazin, 1914  
*Pararctophila oberthueri* Hervé-Bazin, 1914  
**Distribution.** S FE; Trb — Mn, Ch; Or.  
*Parhelophilus* Girschner, 1897
- Parhelophilus consimilis* (Malm, 1863)  
**Distribution.** Eup, Sib, S FE — Eu.
- Parhelophilus frutetorum* (Fabricius, 1775)  
**Distribution.** Eup, Sib — Eu, Kz.
- Parhelophilus kurenzovi* Violovitsh, 1960  
= *Parhelophilus obscurior* Violovitsh, 1960.  
**Distribution.** Skh, S KI — J.
- Parhelophilus sibiricus* (Stackelberg, 1924)  
**Distribution.** Sib, N FE — N Eu.
- Parhelophilus versicolor* (Fabricius, 1794)  
**Distribution.** Eup, W Sib — Eu, Kz, MA.
- Phytomyia* Guérin-Méneville, 1834  
*Phytomyia zonata* (Fabricius, 1787)  
**Distribution.** S FE — Ch, K, J, Or.
- Pseudovolucella* Shiraki, 1930  
*Pseudovolucella decipiens* (Hervé-Bazin, 1914)  
**Distribution.** Skh, Moneron, S KI — K, J.
- Sericomyia* Meigen, 1803  
*Sericomyia arctica* Schirmer, 1913  
**Distribution.** N Eup, Sib, FE — N Eu, NA.
- Sericomyia bequaerti* Hervé-Bazin, 1913  
**Distribution.** S Eup — Eu, Tr, TC.
- Sericomyia bombiforme* (Fallén), 1810  
**Distribution.** Eup — Eu, Cyprus, Tr.
- Sericomyia dux* (Stackelberg, 1930)  
**Distribution.** S FE — K.
- Sericomyia jakutica* (Stackelberg, 1927)  
**Distribution.** Ya, FE — N Eu, NA.
- Sericomyia lappona* (Linnaeus, 1758)  
= *Cinxia lappona orientalis* Stackelberg, 1927.  
**Distribution.** Eup, Sib, FE — Eu, MA, NE Ch, J, NA.
- Sericomyia nigra* Portschinsky, 1873  
**Distribution.** Eup, Sib, FE — Eu, NA.
- Sericomyia sachalinica* Stackelberg, 1926  
= *Sericomyia japonica* Shiraki, 1930.  
= *Sericomyia nigripes* Shiraki, 1930.  
**Distribution.** Skh, KI — K, J.
- Sericomyia silentis silentis* (Harris, [1776])  
**Distribution.** Eup — Eu.
- Sericomyia silentis ciscaucasica* (Stackelberg, 1927)  
**Distribution.** S Eup.
- Sericomyia superbiens* (Müller, 1776)  
**Distribution.** CET — Eu.
- Sericomyia tolli* (Frey, 1915)  
**Distribution.** N Sib — NA.

- Sericomyia volucellinus* (Portschinsky, 1881)  
**Distribution.** NC — Tr, TC.
- Eumerini  
*Azpeytia* Walker, 1895  
*Azpeytia shirakii* Hurkmans, 1993  
**Distribution.** S KI — J.  
**Remarks.** In the fauna of Russia, this species was recorded by Kuznetsov [1992] as *Eumerus scutellaris* (Shiraki, 1968).
- Eumerus* Meigen, 1822  
*Eumerus amoenus* Loew, 1848  
**Distribution.** Cr — Eu, Tr, MA, Mn, NAF.  
*Eumerus argyropus* Loew, 1848  
**Distribution.** S Eup — Eu, TC, Tu.  
*Eumerus arkadii* Mutin, 1999  
**Distribution.** S Sib, S FE.  
*Eumerus armenorum* Stackelberg, 1960  
**Distribution.** NC — TC.  
*Eumerus basalis* Loew, 1848  
**Distribution.** Cr — Eu, Tr, MA, Mn, NAF.  
*Eumerus chrysopigus* Sack, 1941  
= *Eumerus dux* Violovitsh, 1981.  
= *Eumerus inopinatus* Violovitsh, 1981.  
**Distribution.** S FE — NE Ch.  
*Eumerus clavatus* Becker, 1921  
**Distribution.** Cr — Eu, NAF.  
*Eumerus montanum*  
Grkovia, Radenkoviæ et Vujia, 2017  
**Distribution.** W Sib — Eu.  
*Eumerus djakonovi* Stackelberg, 1952  
**Distribution.** S FE; Trb — K, Mn.  
*Eumerus ehimensis* Shiraki et Edashige, 1953  
**Distribution.** S FE — K, J.  
**Remarks.** In the fauna of Russia, it was mistakenly reported by Mutin and Barkalov [1999] as *Eumerus japonicus*.  
*Eumerus elegantissimus* Stackelberg, 1930  
**Distribution.** S Prim.  
*Eumerus flavitarsis* Zetterstedt, 1843  
**Distribution.** Eup, S Sib, S FE — Eu, Kz, MA, J.  
*Eumerus funeralis* Meigen, 1822  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, J, NA, S America, New Zeland, Australia.  
*Eumerus japonicus* Matsumura, 1916  
**Distribution.** S FE — K, J.  
*Eumerus leleji* Mutin, 2016  
**Distribution.** S Sib, S FE.
- Eumerus longicornis* Loew, 1855  
**Distribution.** Eup. — Eu.  
*Eumerus nanus* Mutin, 1999  
**Distribution.** S FE.  
**Remarks.** The validity of this species names needs a verification by additional studies.  
*Eumerus ornatus* Meigen, 1822  
**Distribution.** Eup — Eu, TC, NAF.  
*Eumerus ovatus* Loew, 1848  
**Distribution.** Eup — Eu.  
*Eumerus pauper* Becker, 1921  
**Distribution.** Eup — S Eu.  
*Eumerus pulchellus* Loew, 1848  
**Distribution.** Cr — Canary Is., S Eu, NAF, Tr.  
*Eumerus roborovskii* Stackelberg, 1952  
**Distribution.** Tuva, Trb — MA, Ch.  
*Eumerus ruficornis* Meigen, 1822  
**Distribution.** Eup — Eu.  
*Eumerus sabulonum* (Fallén), 1817  
**Distribution.** Eup — Eu, NAF.  
*Eumerus sibiricus* Stackelberg, 1952  
**Distribution.** Trb.  
*Eumerus sinuatus* Loew, 1855  
**Distribution.** W Sib — Eu, N Kz.  
*Eumerus sogdianus* Stackelberg, 1952  
= *Eumerus arat* Violovitsh 1981.  
**Distribution.** Eup., Sib — Eu, TC, MA, Mn, Ch.  
*Eumerus strigatus* (Fallén, 1817)  
**Distribution.** Eup., Sib, S FE — Azory, NAF, Eu, Kz, MA, Mn, Ch, K, J, NA, New Zeland, Australia.  
*Eumerus sulcitibius* Rondani, 1868  
**Distribution.** Cr — S Eu, TC.  
*Eumerus tarsalis* Loew, 1848  
**Distribution.** Eup, S Sib — Eu, Mn, NAF.  
*Eumerus tauricus*  
Stackelberg, 1952  
= *Eumerus carasukensis* Barkalov, 1990.  
**Distribution.** Cr, S Sib — S Eu.  
*Eumerus tricolor* Meigen, 1822  
**Distribution.** Eup, WSib — Eu, TC, MA.  
*Eumerus turkmenorum* Paramonov, 1927  
**Distribution.** Tuva. — Kz, MA.  
*Eumerus ussuriensis* Stackelberg, 1952  
**Distribution.** S FE.

- Merodon** Meigen, 1803  
**Merodon (Exmerodon)** Becker, 1913  
*Merodon (Exmerodon) aberrans aberrans* Egger, 1860  
**Distribution.** S Eup — Eu, TC, Tr, N Af.
- Merodon (Merodon)** Meigen, 1803  
*Merodon (Merodon) aeneus* Megerle in Meigen, 1822  
**Distribution.** NC.  
**Remarks.** Reported for the fauna of Russia by Kuznetsov and Kustov [1997]. According to Speight [2016], all the identifications of this species are in need of verification to avoid a confusion with other representatives of the species complex *aeneus*.
- Merodon (Merodon) albifrons* Meigen, 1822  
**Distribution.** Cr — Eu, TC.
- Merodon (Merodon) alexandri* Popov, 2010  
**Distribution.** S Eup — Ukraine.
- Merodon (Merodon) armipes* Rondani, 1843  
**Distribution.** S Eup — Eu, Iran, Israel, N Af.
- Merodon (Merodon) avidus* (Rossi, 1790)  
**Distribution.** S Eup — Eu.  
**Remarks.** The collection material from Russia is in need of re-identification.
- Merodon (Merodon) bessarabicus* Paramonov, 1924  
**Distribution.** S Eup — Eu, Tr.
- Merodon (Merodon) caucasicus* Portschinsky, 1877  
**Distribution.** NC — Eu, TC.
- Merodon (Merodon) cinereus* (Fabricius), 1794  
**Distribution.** S Eup — Eu, Tr.
- Merodon (Merodon) chalybeatus* Sack, 1913  
**Distribution.** Cr — S Eu, N Af.
- Merodon (Merodon) constans* (Rossi), 1794  
**Distribution.** Cr — Eu.
- Merodon (Merodon) crassifemoris* Paramonov, 1925  
**Distribution.** Cr — S Eu, Tr, TC.  
*Merodon (Merodon) crymensis* Paramonov, 1925  
**Distribution.** Cr — Eu, Tr.
- Merodon (Merodon) dzhaliatae* Paramonov, 1927  
**Distribution.** Cr.
- Merodon (Merodon) equestris* (Fabricius, 1794)  
**Distribution.** Eup, W Sib, Km — Eu, K, J, NA.
- Merodon (Merodon) femoratoides* Paramonov, 1925  
**Distribution.** S Eup — S Eu, Tr., N Af.  
*Merodon (Merodon) femoratus* Sack, 1913  
**Distribution.** Eup — Eu, Tr.
- Merodon (Merodon) fulcratus rufitarsis* Sack, 1913  
**Distribution.** Altai.
- Merodon (Merodon) italicus* Rondani, 1845  
**Distribution.** Cr — S Eu, Tr., Near East, N Af.
- Merodon (Merodon) kiritshenkoi* (Stackelberg, 1960)  
**Distribution.** NC — TC.  
*Merodon (Merodon) loewi* van der Goot, 1964  
**Distribution.** S Eup — Eu, Tr, TC, Israel.
- Merodon (Merodon) nanus* (Sack, 1931)  
**Distribution.** Cr — Greece, TC, Tr, Iran, Near East.  
*Merodon (Merodon) nigritarsis* Rondani, 1845  
**Distribution.** Cr — Eu, Tr.  
*Merodon (Merodon) obscuritarsis* Strobl, 1909  
= *Merodon karadaghensis* Zimina, 1989  
**Distribution.** Cr — Eu., TC, N Af.
- Merodon (Merodon) pruni* (Rossi, 1790)  
**Distribution.** Cr — S Eu, Tr, MA, Near East, Iraq, N Af.
- Merodon (Merodon) ruficornis* Meigen, 1822  
**Distribution.** Cr — Eu, TC, N Af.
- Merodon (Merodon) rufus* Meigen, 1838  
**Distribution.** Eup — Eu, N Af, Kz, MA.
- Merodon (Merodon) serrulatus*  
Wiedemann ex Meigen 1822  
**Distribution.** S Sib — Eu, Tr, Near East, Mn, N Af.  
*Merodon (Merodon) tener* Sack, 1913  
**Distribution.** S Eup — Ukraine.
- Merodon (Merodon) trebevicensis* Strobl, 1900  
**Distribution.** Cr — Eu, Tr.
- Merodon (Merodon) tricinctus* Sack, 1913  
**Distribution.** Cr — Eu, TC, Tr, Near East.  
*Psilota* Meigen, 1822
- Psilota anthracina* Meigen, 1822  
**Distribution.** NC — Eu.
- Psilota brevicornis* Shiraki, 1968  
= *Psilota dersu* Violovitsh, 1980.  
**Distribution.** S Prim — K, J.
- Psilota innupta* Rondani, 1857  
= *Psilota sibirica* Violovitsh, 1980.  
**Distribution.** Eup, Sib, S FE — Eu.
- Psilota kroschka* Mutin, 1999  
**Distribution.** Sib, FE.
- Milesiini**  
**Blera** Billberg, 1820  
**Blera (Blera)** Billberg, 1820  
*Blera (Blera) fallax* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Eu, N Ch (Altai), J.  
*Blera (Blera) japonica* (Shiraki, 1930)  
**Distribution.** S FE — K, J.

- Blera (Blera) nitens* (Stackelberg, 1923)  
**Distribution.** Ural, Sib, FE — Ch, K.
- Blera (Blera) ochrozona* (Stackelberg, 1928)  
**Distribution.** S FE.
- Blera (Blera) violovitshi*  
Mutin ex Barkalov et Mutin, 1991  
**Distribution.** C, E Sib, FE.
- Blera (Silvina)*** Barkalov et Mutin, 1991  
*Blera (Silvina) eoa* (Stackelberg, 1928)  
= *Blera velox* Violovitsh, 1976.  
**Distribution.** Sib, FE — N Eu, J.
- Blera (Silvina) yudini*  
Barkalov ex Barkalov et Mutin, 1991  
**Distribution.** Ya, FE.  
***Brachypalpoidea*** Hippha, 1978
- Brachypalpoidea flavifacies* (Shiraki, 1930)  
**Distribution.** S KI — J.
- Brachypalpoidea lentus* (Meigen), 1822  
**Distribution.** Eup — Eu, TC, Asia Minor.
- Brachypalpoidea simplex*  
(Shiraki, 1930)  
= *Zelima nigerrima* Violovitsh, 1955.  
= *Zelima nox* Violovitsh, 1956.  
**Distribution.** Skh, S KI — J.
- Brachypalpus*** Macquart, 1834  
*Brachypalpus chrysites* Egger 1859  
**Distribution.** Eup — Eu, Tr.
- Brachypalpus laphriformis* (Fallén, 1816)  
**Distribution.** Eup — Eu.
- Brachypalpus nigrifacies* Stackelberg, 1965  
**Distribution.** NC — TC.
- Brachypalpus nipponicus* Shiraki, 1952  
**Distribution.** S FE, W Sib — J, K.
- Brachypalpus valgus* (Panzer), 1798  
**Distribution.** Eup — Eu.
- Caliprobola*** Rondani, 1845  
*Caliprobola speciosa* (Rossi, 1790)  
**Distribution.** Eup — Eu, Tr.
- Chalcosyrphus*** Curran, 1925  
***Chalcosyrphus (Chalcosyrphus)*** Curran, 1925  
*Chalcosyrphus (Chalcosyrphus) admirabilis*  
Mutin, 1984  
**Distribution.** Sib, S FE.
- Chalcosyrphus (Chalcosyrphus) tuberculifemur*  
(Stackelberg, 1963)  
**Distribution.** Ural, Sib, FE.
- Chalcosyrphus (Dimorphoxylota)*** Hippha, 1978  
*Chalcosyrphus (Dimorphoxylota) eumerus*  
(Loew, 1869)  
= *Xylota pictipes* Loew, 1871.  
**Distribution.** Eup, Sib, S FE — Kz, Ch.
- Chalcosyrphus (Xylotina)*** Hippha, 1978  
*Chalcosyrphus (Xylotina) carbonus*  
(Violovitsh, 1975)  
**Distribution.** S FE.
- Chalcosyrphus (Xylotina) eugenei* Mutin, 1987  
**Distribution.** S Sib, S FE — K.
- Chalcosyrphus (Xylotina) nemorum*  
(Fabricius, 1805)  
= *Xylota arsenjevi* Violovitsh, 1980.  
**Distribution.** Eup, Sib, FE — Eu, Kz, J, NA.  
**Remarks.** In the fauna of Russia, the species was reported as *Chalcosyrphus interruptus* [Mutin, Gritsevich, 1998].
- Chalcosyrphus (Xylotina) nigricans*  
(Shiraki, 1968)  
**Distribution.** Skh, S KI (Kunashir) — J.
- Chalcosyrphus (Xylotina) nigripes*  
(Zetterstedt, 1838)  
**Distribution.** Sib, S FE. — N Eu, J.
- Chalcosyrphus (Xylotina) nitidus*  
(Portschinsky, 1879)  
**Distribution.** Eup, Sib, FE — N Ch, J.
- Chalcosyrphus (Xylotina) perplexus*  
(Violovitsh, 1978)  
= *Lejota femorata* Violovitsh, 1980.  
= *Xylota aldanica* Bagatshanova, 1984.  
**Distribution.** Sib, S FE.
- Chalcosyrphus (Xylotina) rerichi*  
(Violovitsh, 1975)  
**Distribution.** Altai.  
**Remarks.** The species remains known from the holotype only; the latter might be just a melanistic morph of *Chalcosyrphus nemorum*.
- Chalcosyrphus (Xylotina) violovitshi*  
Bagatshanova, 1984  
**Distribution.** Sib (Ya.), S FE.
- Chalcosyrphus (Xylotodes)*** Shannon, 1926  
*Chalcosyrphus (Xylotodes) jacobsoni* (Stackelberg, 1921)  
= *Myiolepta helophiloides* Kanervo, 1938.  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Chalcosyrphus (Xylotodes) piger* (Fabricius, 1794)  
**Distribution.** Eup, Sib, FE — Eu, N Ch, NA.
- Chalcosyrphus (Xylotomima)*** Shannon, 1926  
*Chalcosyrphus (Xylotomima) amurensis*  
(Stackelberg, 1925)  
**Distribution.** S FE — NE Ch.

- Chalcosyrphus (Xylotomima) femoratus* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Eu, Kz, Ki, K, J.
- Chalcosyrphus (Xylotomima) longus* (Coquillett, 1898)  
**Distribution.** S FE — K, J.
- Chalcosyrphus (Xylotomima) rufipes* (Loew, 1873)  
**Distribution.** Eup, Sib, FE — Eu, Mn, J.
- Chalcosyrphus (Xylotomima) unicus* (Violovitsh, 1977)  
**Distribution.** Prim — K.
- Chalcosyrphus (Xylotomima) valgus* (Gmelin, 1790)  
**Distribution.** Eup, Sib, FE — Eu, Tc, Kz, MA, N Ch, J.
- Criorhina** Meigen, 1822  
*Criorhina aino* (Stackelberg, 1955)  
 = *Criorhina stackelbergi* Violovitsh, 1973.  
 = *Criorhina tsherepanovi* Violovitsh, 1974.  
**Distribution.** S Sib, S FE — J.
- Criorhina alexandri* Mutin, 1999  
**Distribution.** S FE.
- Criorhina asilica* (Fallén), 1816  
**Distribution.** Eup — Eu.
- Criorhina berberina* (Fabricius, 1805)  
**Distribution.** Eup — Eu, TC.
- Criorhina brevipila* Loew, 1871  
 = *Criorhina thompsoni* Violovitsh, 1982, **syn. nov.**  
**Distribution.** FE; Sib, Eup — Mn, K.  
**Remarks.** An examination of the original description of *Criorhina thompsoni* and its paratype collected together with the holotype from the vicinity of Spassk-Dal'nii, are evidence of its identity with *Criorhina brevipila* Loew, 1871. The paratype is distinct by its pale pigmentation and deformed legs, which is typical of the specimens that were caught and pinned soon after they had emerged from the pupa.
- Criorhina floccosa* (Meigen, 1822)  
**Distribution.** Eup — Eu, TC.
- Criorhina konakovi* (Stackelberg, 1955)  
**Distribution.** S KI (Urup).
- Criorhina kurilensis* Mutin, 1999  
**Distribution.** S KI.
- Criorhina narumii* (Shiraki, 1952)  
**Distribution.** S KI (Kunashir) — K, J.
- Criorhina montivaga* (Violovitsh, 1973)  
**Distribution.** Skh, S KI — J.  
**Remarks.** This species was mistakenly reported for the Russian fauna as *Criorhina takaoensis* [Mutin, 1998].
- Criorhina portschinskyi* (Stackelberg, 1955)  
**Distribution.** NC — TC.
- Criorhina ranunculi* (Panzer, 1804)  
**Distribution.** Eup — Eu.
- Criorhina sichotana* (Stackelberg, 1955)  
**Distribution.** S FE.
- Criorhina ussuriana* (Stackelberg, 1955)  
**Distribution.** S FE.  
**Hadromyia** Williston 1882
- Hadromyia (Chrysosomidia)** Curran, 1934  
*Hadromyia (Chrysosomidia) cimbiciformis* (Portschinsky, 1879)  
**Distribution.** Sib, S FE — J.
- Lejota** Rondani, 1857  
**Lejota (Lejota)** Rondani, 1857  
*Lejota (Lejota) ruficornis* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, S FE — Eu.
- Lejota (Lejota) villosa* Violovitsh, 1982  
**Distribution.** S FE.
- Lejota (Blerina)** Mutin, 1991  
*Lejota (Blerina) korsakovi* (Stackelberg, 1955)  
**Distribution.** Ural, Sib, S FE. — J.
- Macrozelima** Stackelberg, 1930  
*Macrozelima hervei* (Shiraki, 1930)  
**Distribution.** S FE — K, J.
- Matsumyia** Shiraki, 1949  
*Matsumyia jesoensis* (Matsumura, 1911)  
**Distribution.** Skh, S KI — J, K.
- Matsumyia nigrofacies* Shiraki, 1949  
**Distribution.** S FE — J, K.
- Milesia** Latreille, 1804  
*Milesia crabroniformis* (Fabricius, 1775)  
**Distribution.** NC — Eu, Tr, NAF.
- Milesia undulata* Vollenhoven, 1863  
**Distribution.** ?Skh — K, J.
- Pocota** Le Peletier et Serville, 1828  
*Pocota personata* (Harris, 1780)  
**Distribution.** Eup — Eu.
- Pseudopocota** Mutin et Barkalov, 1995  
*Pseudopocota stackelbergi* (Violovitsh, 1957)  
**Distribution.** S FE — J.
- Pterallastes** Loew, 1863  
*Pterallastes unicolor* (Shiraki, 1930)  
**Distribution.** S FE. — K, J.
- Rhinotropidia** Stackelberg, 1930  
*Rhinotropidia rostrata* (Shiraki, 1930)  
**Distribution.** S FE. — J.

- Sphecomyia*** Latreille, 1829  
*Sphecomyia vespiformis* (Gorski, 1852)  
**Distribution.** Eup, Sib, S FE — N Eu.
- Spheginoides*** Szilady, 1939  
*Spheginoides obscurus* Szilady, 1939  
**Distribution.** Eup, S Sib, S FE — Eu (Ukraine), J.
- Spilomyia*** Meigen, 1803  
*Spilomyia diophthalma*  
 (Linnaeus, 1758)  
**Distribution.** Eup, Sib, S FE — Eu, N Kz, Mn, NAF.
- Spilomyia manicata* (Rondani, 1865)  
**Distribution.** Eup., NC — Eu, TC.
- Spilomyia maxima* Sack, 1910  
**Distribution.** FE, S Sib, Eup — Mn.
- Spilomyia panfilovi* Zimina, 1952  
**Distribution.** S Prim.  
**Remarks.** Known only by type specimen.
- Spilomyia permagna*  
 Stackelberg, 1958  
**Distribution.** Skh, S KI — K, J.
- Spilomyia saltuum* (Fabricius, 1794)  
**Distribution.** § Eup, NC — Eu, TC, Tr.
- Spilomyia suzuki* Matsumura, 1916  
**Distribution.** S FE — J, K.
- Spilomyia xanthosticta* Stackelberg, 1958  
**Distribution.** S FE.
- Syritta*** Lapeletier et Serville, 1828  
*Syritta pipiens* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Eu, Madeira, Canary Is., Tr, Kz, MA, Iran, Afg, Mn, Ch, K, J, NAF; NA; Or.
- Syritta vittata* Portschinsky, 1875  
**Distribution.** Eup — S Eu, MA, Iran, Pakistan.
- Takaomyia*** Hervé-Bazin, 1914  
*Takaomyia sexmaculata* (Matsumura, 1916)  
**Distribution.** Skh, S KI — J.
- Temnostoma*** Lapeletier et Serville, 1828  
*Temnostoma angustistriatum*  
 Krivosheina, 2002  
**Distribution.** Eup, Sib, S FE — N Eu, K, J.  
**Remarks.** The specimens hitherto reported from Siberian and the Far East as *Temnostoma bombylans* actually belong to *T. angustistriatum*.
- Temnostoma apiforme* (Fabricius, 1794)  
 = *Temnostoma pallidum* Sack, 1910.  
**Distribution.** Eup, Sib, FE — Eu, K, J.  
**Remarks.** It is a polymorphic species, of which far-eastern and Siberian specimens sometimes are considered a separate species *T. pallidum* [Violovich, 1976; Krivosheina, 2003].
- Temnostoma bombylans* (Fabricius, 1805)  
**Distribution.** ?Eup — Eu.  
**Remarks.** This species is unknown to the east of the Urals.
- Temnostoma carens* (Gaunitz, 1936)  
**Distribution.** N Eup — N Eu.
- Temnostoma meridionale*  
 Krivosheina et Mamayev, 1962  
**Distribution.** S Eup — Eu, TC.
- Temnostoma nitobei* Matsumura, 1916  
**Distribution.** S FE — J.  
**Remarks.** Kuznetsov [2004] reported on this species under the name of *T. takahasii* Violovitsh, 1976, which is now considered a junior synonym of *T. nitobei*.
- Temnostoma sericomylaeforme* (Portschinsky, 1887)  
**Distribution.** N. Eup. — Eu.
- Temnostoma vespiforme* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Eu, Kz, K, J; NA.  
**Remarks.** The specimens of this species from the eastern Palaearctic are referred by N.P. Krivosheina [2004] to a separate species *T. sibirica* (Portschinsky, 1887), whereas the specimens from Tuva and Altai as distinct subspecies. The prolem is in need of additional study, including a DNA analysis.
- Tropidia*** Meigen, 1822  
*Tropidia scita* (Harris, 1780)  
**Distribution.** Eup, Skh, S KI — Eu, Kz, J.
- Xylota*** Meigen, 1822  
*Xylota (Haploxyloa) sichotana* Mutin, 1985  
**Distribution.** Sib (W Sayan, Ya), S FE.
- Xylota (Xylota) abiens* Meigen, 1822  
 = *Xylota subabiens* Stackelberg, 1952  
**Distribution.** Eup, Sib, S FE — Eu, Kz, K, J.
- Xylota (Xylota) danieli* Mutin et Ichige, 2014  
**Distribution.** S FE — Ch, K, J.
- Xylota (Xylota) atricoloris* Mutin, 1987  
**Distribution.** S FE.
- Xylota (Xylota) caeruleiventris* Zetterstedt, 1838  
**Distribution.** Eup, Sib, FE — N Eu, J.
- Xylota (Xylota) coquilletti* Hervé-Bazin, 1914  
 = *Xylota silvicola* Mutin, 1987.  
**Distribution.** S FE — Ch, K, J.
- Xylota (Xylota) filipjevi* (Stackelberg, 1952)  
**Distribution.** S FE.
- Xylota (Xylota) florum* (Fabricius, 1805)  
**Distribution.** Eup, Sib — Eu.
- Xylota (Xylota) fo* Hull, 1944  
**Distribution.** Trb, S FE — Or (Yunan).



*Xylota (Xylota) hisamatsui*  
(Shiraki et Edashige, 1953)

**Distribution.** S KI — J.

**Remarks.** This species is interpreted *sensu* Hippa [1968, 1978].

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

= *Xylota basalis* Matsumura, 1911.

**Distribution.** Eup, Sib, FE — Eu, TC, Kz, MA, Mn, Ch, K, J.

*Xylota (Xylota) isokoeae* Shiraki, 1968

**Distribution.** Skh, S KI — J.

*Xylota (Xylota) jakutorum* Bagatshanova, 1980

**Distribution.** Eup, Sib, S FE — Eu, ?Mn.

*Xylota (Xylota) lapsa* Mutin, 1990

**Distribution.** Trb, S FE.

*Xylota (Xylota) meigeniana* Stackelberg, 1964

**Distribution.** Eup, Sib, S FE — Eu, J.

*Xylota (Xylota) nartshukae* Bagatshanova, 1984

**Distribution.** Sib, FE — Mn.

**Remarks.** From the territory of Russia, it was hitherto reported as *X. japonica* (Stackelberg, 1952).

*Xylota (Xylota) pseudoignava* Mutin, 1984

**Distribution.** Sib, FE — Mn, Ch.

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

**Distribution.** Eup, Sib — Eu, TC, Kz, N Ch, NAF, NA.

*Xylota (Xylota) sibirica* Loew, 1871

**Distribution.** Sib, S FE — Mn, N Ch.

*Xylota (Xylota) suecica* (Ringdahl, 1943)

**Distribution.** N Eup, Sib, FE — N Eu.

*Xylota (Xylota) sylvarum* (Linnaeus, 1758)

**Distribution.** Eup, W Sib — Eu, Tr.

*Xylota (Xylota) tarda* Meigen, 1822

**Distribution.** Eup, Sib, FE — Eu, TC, N Kz, Ch.

*Xylota (Xylota) triangularis* Zetterstedt, 1838

**Distribution.** Ñ Eup, Sib, FE — Eu, Mn.

*Xylota (Xylota) umbrosa* Violovitsh, 1975

**Distribution.** S FE.

*Xylota (Xylota) xanthocnema* Collin, 1939

**Distribution.** Eup — Eu.

*Xylota (Xylota) zeya* Mutin et Gilbert, 1999

**Distribution.** S FE (Am).

#### Psarini

*Psarus* Latreille 1804

*Psarus abdominalis* (Fabricius, 1794)

**Distribution.** Eup — Eu, Tr.

#### Rhingini

*Cheilosia* Meigen, 1822

*Cheilosia (Cheilosia)* Meigen, 1822

*Cheilosia (Cheilosia) abagoensis* Skufjin, 1979

**Distribution.** NC.

*Cheilosia (Cheilosia) abbreviata* Shiraki, 1953

= *Cheilosia tsherepanovi* Barkalov, 1988

**Distribution.** Prim., S KI; K — J.

*Cheilosia (Cheilosia) aerea* Dufour, 1848

**Distribution.** S Eup — Eu, TC, Kz, Tj., Ki, Iran.

*Cheilosia (Cheilosia) albipila* Meigen, 1838

**Distribution.** Eup, Sib — Eu, Kz.

*Cheilosia (Cheilosia) albitarsis* (Meigen, 1822)

**Distribution.** Eup, Sib — Eu, Kz.

*Cheilosia (Cheilosia) albohirta* (Hellen, 1930)

**Distribution.** S FE, Trb. — Mn, Ch.

*Cheilosia (Cheilosia) annulifemur*  
(Stackelberg, 1930)

**Distribution.** S Sib, FE.

*Cheilosia (Cheilosia) antennalis*  
Hervé-Bazin, 1929

= *Cheilosia ussuriana* Barkalov, 1980.

**Distribution.** Prim — E Ch.

*Cheilosia (Cheilosia) atypica* Barkalov, 1993

**Distribution.** NC.

*Cheilosia (Cheilosia) barbata* Loew, 1857

**Distribution.** Eup, W Sib — Eu, Kz.

*Cheilosia (Cheilosia) barovskii*  
Stackelberg, 1930

**Distribution.** Eup — SF.

*Cheilosia (Cheilosia) bergenstammi* Becker, 1894

**Distribution.** S Eup — Eu, TC.

*Cheilosia (Cheilosia) brunnipennis* Becker, 1894

= *Chilosia sareptana* Becker, 1894

**Distribution.** S Eup., NC — Eu, Israel.

*Cheilosia (Cheilosia) canicularis* (Panzer, 1801)

**Distribution.** Eup, W Sib — Eu.

*Cheilosia (Cheilosia) carbonaria* Egger, 1860

**Distribution.** Eup, S Sib — Eu, Kz.

*Cheilosia (Cheilosia) chipsanii* Matsumura, 1911

**Distribution.** Skh — J.

**Remarks.** The species was recorded by Matsumura [1911] from Sakhalin. We have been unable to examine specimens of this species.

*Cheilosia (Cheilosia) chloris* (Meigen, 1822)

**Distribution.** Eup — Eu.

- Cheilosia (Cheilosia) christophori* Becker, 1894  
**Distribution.** Krasnoarmeysk near Volgograd.  
**Remarks.** The species was recorded by Becker [1894] from Volgograd Area. We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) corydon* (Harris, 1780)  
**Distribution.** Eup, W Sib — Eu, Kz, Uz, Ki, NA.
- Cheilosia (Cheilosia) cynocephala* Loew, 1840  
**Distribution.** Eup, W Sib — Eu.
- Cheilosia (Cheilosia) diminuta* Shiraki, 1930  
**Distribution.** Skh.  
**Remarks.** The species was recorded by Shiraki [1930] from Sakhalin. We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) flavipes* (Panzer, 1798)  
**Distribution.** Eup, W Sib — Eu, TC, Kz, Ki.
- Cheilosia (Cheilosia) fraterna* (Meigen, 1830)  
**Distribution.** Eup. — Eu.
- Cheilosia (Cheilosia) frontalis* Loew, 1857  
**Distribution.** Eup, W Sib — Eu, Kz.
- Cheilosia (Cheilosia) gigantea* (Zetterstedt, 1838)  
**Distribution.** Eup, Sib, FE — Eu, TC, Kz, Ki, Iran.
- Cheilosia (?Cheilosia) hypena* (Becker, 1894)  
**Distribution.** Kazan — Eu.  
**Remarks.** We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) impressa* Loew, 1840  
= *Cheilosia (Cheilosia) kusunaii* Matsumura, 1911.  
**Distribution.** Eup, Sib, FE — Eu, Kz, Ki.
- Cheilosia (Cheilosia) ingrlica* Stackelberg, 1958  
**Distribution.** Leningrad Region.  
**Remarks.** The holotype of this species seems to have been lost. We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) iwawakiensis* (Shiraki, 1930)  
**Distribution.** Prim, Skh, S KI — J.
- Cheilosia (Cheilosia) jacutica* Barkalov, 1988  
= *Cheilosia calva* Barkalov, 1990.  
**Distribution.** Ya, Kh, Prim.
- Cheilosia (Cheilosia) japonica* (Hervé-Bazin, 1914)  
**Distribution.** Skh, S KI — J.
- Cheilosia (Cheilosia) lasiopa* Kowarz, 1885  
**Distribution.** Eup, W, C Sib — Eu, Kz, Mn.
- Cheilosia (Cheilosia) latifrons* (Zetterstedt, 1843)  
**Distribution.** Eup, W Sib — Eu, N Af, Ki, Kz.
- Cheilosia (Cheilosia) longipennis* (Shiraki, 1930)  
**Distribution.** S KI — J.
- Cheilosia (Cheilosia) matsumurana* (Shiraki, 1930)  
= *Cheilosia moneronica* Violovitsh, 1971.  
**Distribution.** S Prim., Skh, S KI — K, J.
- Cheilosia (Cheilosia) melanopa melanopa* (Zetterstedt, 1843)  
= *Cheilosia kamtschatica* Hellén, 1930.  
**Distribution.** Eup, Sib, N FE, N KI — Eu, Tu, Mn, Ir.
- Cheilosia (Cheilosia) melanura melanura* Becker, 1894  
**Distribution.** Eup, W, C Sib — Eu.
- Cheilosia (Cheilosia) mutabilis* (Fallén, 1817)  
**Distribution.** Eup, Sib, FE — Eu, TC, Kz, Ir.
- Cheilosia (Cheilosia) nebulosa* (Verrall, 1871)  
**Distribution.** W, C Sib — Eu.
- Cheilosia (Cheilosia) nikkoensis* (Shiraki, 1930)  
**Distribution.** Skh, S KI — J.
- Cheilosia (Cheilosia) occulta* Barkalov, 1988  
**Distribution.** N Ural, Ya, S FE — E Ch.
- Cheilosia (Cheilosia) ochripes* Shiraki, 1930  
**Distribution.** Skh — J.
- Cheilosia (Cheilosia) omissa* Becker, 1894  
**Distribution.** NC — Eu.
- Cheilosia (Cheilosia) pascuorum* Becker, 1894  
**Distribution.** Eup — Eu.  
**Remarks.** We didn't see specimens of this species.
- Cheilosia (Cheilosia) pagana* (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Eu, TC, Kz, N-E Ch, Mn, J, NA.
- Cheilosia (Cheilosia) paragigantea* Barkalov, 1993  
**Distribution.** NC.
- Cheilosia (Cheilosia) pollinata* Barkalov, 1982  
**Distribution.** C, E Sib, S FE — Mn.
- Cheilosia (Cheilosia) pollinosa* Becker, 1894  
**Distribution.** Prim.  
*Cheilosia (Cheilosia) primoriensis* Barkalov, 1990  
**Distribution.** S FE,
- Cheilosia (Cheilosia) proxima* (Zetterstedt, 1843)  
**Distribution.** Eup, NC, Sib, FE — Eu, Kz, Ki, W Ch.
- Cheilosia (Cheilosia) pseudogrossa* Stackelberg, 1968  
**Distribution.** NC.
- Cheilosia (Cheilosia) psilophthalma* Becker, 1894  
**Distribution.** Eup — Eu.

- Cheilosia (Cheilosia) reniformis* (Hellén, 1930)  
**Distribution.** Sib, S Kh.
- Cheilosia (Cheilosia) rhynchops* Egger, 1860  
**Distribution.** NC — Eu.
- Cheilosia (Cheilosia) richterae* Barkalov, 2007  
**Distribution.** S Kh, S KI.
- Cheilosia (Cheilosia) rotundiventris* Becker, 1894  
**Distribution.** Eup. — Eu.  
**Remarks.** The species was recorded by Kuznetsov, Lyubvina [2001] from the European part of Russia. We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) rufimana* Becker, 1894  
**Distribution.** Eup, Sib, Kh — Eu, Kz.
- Cheilosia (Cheilosia) sapporensis* (Shiraki, 1930)  
**Distribution.** S Sib, Ya, S FE — Mn, J.
- Cheilosia (Cheilosia) schnabli* Becker, 1894  
**Distribution.** S Eup. — S Eu.
- Cheilosia (Cheilosia) sichotana* (Stackelberg, 1930)  
**Distribution.** Sib, Km, S FE, Skh, S KI.
- Cheilosia (Cheilosia) sootryeni* Nielsen, 1970  
**Distribution.** W, C Sib — N Eu.
- Cheilosia (Cheilosia) strigillata* Becker, 1894  
**Distribution.** Krasnoarmeysk near Volgograd.  
**Remarks.** We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) subarctica* Hellén, 1955  
**Distribution.** S W, C Sib — N Eu.
- Cheilosia (Cheilosia) superba* Becker, 1894  
**Distribution.** Kh.
- Cheilosia (Cheilosia) teberdensis* Barkalov, 1993  
**Distribution.** NC.
- Cheilosia (Cheilosia) tokushimaensis* Shiraki, 1968  
**Distribution.** S Prim — J.
- Cheilosia (Cheilosia) transcaucasica* Stackelberg, 1960  
**Distribution.** NC — TC, Ir.  
**Remarks.** This species was recorded by Kuznetsov, Lyubvina [2001] from the European part of Russia. We have been unable to examine specimens of this species.
- Cheilosia (Cheilosia) tumidilabris* Becker, 1894  
**Distribution.** Kh.
- Cheilosia (Cheilosia) urakawensis* (Shiraki, 1930)  
**Distribution.** Skh, S KI — J.
- Cheilosia (Cheilosia) urbana* (Meigen 1822)  
**Distribution.** Eup, Sib, S FE, Skh — Eu, Ir.
- Cheilosia (Cheilosia) variabilis* (Panzer, 1798)  
**Distribution.** Eup, W Sib — Eu, Kir, Ir.
- Cheilosia (Cheilosia) velutina* Loew, 1840  
**Distribution.** Eup, Sib, FE — Eu, Kz, Mn, Ch.
- Cheilosia (Cheilosia) vernalis* (Fallén, 1817) = *Cheilosia rotundicornis* (Hellén, 1914)  
**Distribution.** Eup, Sib, FE — Eu, TC, Kz, Mn.
- Cheilosia (Cheilosia) vulpina* (Meigen, 1822)  
**Distribution.** Eup, Sib — Eu, Kz, Ir.
- Cheilosia (Cheilosia) yesonica* Matsumura, 1905  
**Distribution.** Skh, S KI — J.
- Cheilosia (Conicheila)* Barkalov, 2002  
*Cheilosia (Conicheila) conifacies* Stackelberg, 1963  
**Distribution.** S FE.
- Cheilosia (Convocheila)* Barkalov, 2002  
*Cheilosia (Convocheila) cumanica* Szilady, 1938  
**Distribution.** Eup — Eu, Ir.
- Cheilosia (Convocheila) laticornis* Rondani, 1857  
**Distribution.** Eup — Eu, TC, N Af, Ki., Afg, Ir.
- Cheilosia (Convocheila) verae* Stackelberg, 1968  
**Distribution.** NC — TC.
- Cheilosia (Endoiasimyia)* (Bigot, 1882)  
*Cheilosia (Endoiasimyia) formosana* (Shiraki, 1930)  
**Distribution.** S FE — J, Ch.
- Cheilosia (Eucartosyrphus)* Barkalov, 2002  
*Cheilosia (Eucartosyrphus) aokii* Shiraki, 1953 = *Chilosia plumuliseta* Violovitsh, 1956.  
**Distribution.** S FE — Ch, J.
- Cheilosia (Eucartosyrphus) flavissima* Becker, 1894  
**Distribution.** Eup, FE, Sib — Eu, Mn, J, NA.  
**Remarks.** This species was hitherto reported for the fauna of Russia as *Cheilosia pallipes* Loew, 1863.
- Cheilosia (Eucartosyrphus) josankeiana* (Shiraki, 1930)  
= *Chilosia kunashirica* Violovitsh, 1956.  
= *Chilosia plumuliseta* Violovitsh, 1956.  
**Distribution.** Prim, Skh, S KI — J, Ñ, S-W Ch.
- Cheilosia (Eucartosyrphus) latifaciella* (Shiraki, 1930)  
**Distribution.** S KI — J.
- Cheilosia (Eucartosyrphus) longula* (Zetterstedt, 1838)  
**Distribution.** Eup, Sib, FE — Eu, Kz, Mn, K, Ch.

- Cheilosia (Eucartosyrphus) lugubris* (Zetterstedt, 1838)  
**Distribution.** Eup, NC, Sib, S FE — Eu, Kz.
- Cheilosia (Eucartosyrphus) nuda* (Shiraki, 1930)  
= *Chilosia nox* Stackelberg, 1952.  
= *Cheilosia tshyl* Violovitsh, 1960.  
**Distribution.** S FE, Skh, S KI — J, N-E Ch.
- Cheilosia (Eucartosyrphus) posjetica* Barkalov, 1981  
**Distribution.** S Prim.
- Cheilosia (Eucartosyrphus) polja* Barkalov, 1990  
**Distribution.** Prim.
- Cheilosia (Eucartosyrphus) rufipes* (Preysslner, 1793)  
**Distribution.** S Eup — Eu, Ir.
- Cheilosia (Eucartosyrphus) scutellata* (Fallén, 1817)  
= *Cheilosia scutellaris* Matsumura, 1911.  
**Distribution.** Eup, Sib, FE — Eu, TC, Kz, Ki, Ir, Mn, Ch.
- Cheilosia (Eucartosyrphus) zinovievi* Stackelberg, 1963  
**Distribution.** S FE — Ch.
- Cheilosia (Floccocheila)*** Barkalov, 2002
- Cheilosia (Floccocheila) eurodes* (Shiraki, 1930)  
= *Chilosia melancholica* Violovitsh, 1956.  
**Distribution.** Skh, S KI — J.
- Cheilosia (Floccocheila) illustrata illustrata* (Harris, 1780)  
**Distribution.** Eup, Sib — Eu, Kz.
- Cheilosia (Floccocheila) illustrata magnifica* (Hellen, 1930)  
**Distribution.** Km, N KI.
- Cheilosia (Floccocheila) illustrata portschinskiana* Stackelberg, 1960  
**Distribution.** NC.
- Cheilosia (Floccocheila) motodomariensis* Matsumura, 1916  
= *Cheilosia subillustrata* Stackelberg, 1963.  
**Distribution.** Sib, S FE, Skh, S KI — N Kz, Mn, K, Ch, J.
- Cheilosia (Montanocheila)*** Barkalov, 2002
- Cheilosia (Montanocheila) alpina* (Zetterstedt, 1838)  
= *Cheilosia akela* Violovitsh, 1973.  
**Distribution.** S Sib — Eu.
- Cheilosia (Montanocheila) caucasogenita* Kuznetsov, 1997  
**Distribution.** N C — Armenia.
- Cheilosia (Montanocheila) balu balu* Violovitsh, 1966  
**Distribution.** Altai.
- Cheilosia (Montanocheila) balu jugirica* Barkalov, 1993  
**Distribution.** N Sib.
- Cheilosia (Montanocheila) chrysocoma* (Meigen, 1822)  
**Distribution.** Eup, Sib — Eu.
- Cheilosia (Montanocheila) gorodkovi* Stackelberg, 1963  
= *Cheilosia kuznetzovae* Skuffin, 1977 **syn. nov.**  
**Distribution.** Eup, Sib, N FE.  
**Remarks.** A comparison of the types of *Cheilosia gorodkovi* and *Cheilosia kuznetzovae* revealed their identity. Therefore *Cheilosia kuznetzovae* is considered a junior synonym (**syn. nov.**) of *Cheilosia gorodkovi*.
- Cheilosia (Montanocheila) lutea* Barkalov, 1979  
**Distribution.** N Sib.
- Cheilosia (Montanocheila) nudiseta* (Becker, 1894)  
**Distribution.** S FE.
- Cheilosia (Montanocheila) pictipennis* Egger, 1860  
**Distribution.** NC — Eu.
- Cheilosia (Montanocheila) subalbipila* (Violovitsh, 1956)  
**Distribution.** S FE, Skh, SKI.
- Cheilosia (Montanocheila) zmilampis* Violovitsh, 1975  
**Distribution.** Sib — Mn.
- Cheilosia (Neocheilosia)*** Barkalov, 1983
- Cheilosia (Neocheilosia) convexifrons* Stackelberg, 1963  
**Distribution.** Ya, FE.
- Cheilosia (Neocheilosia) morio* (Zetterstedt, 1838)  
**Distribution.** Eup, W Sib, Ya — Eu, Mn.
- Cheilosia (Neocheilosia) komabaensis* Shiraki, 1968  
= *Cheilosia mutini* Barkalov, 1984.  
**Distribution.** S Sib, S FE — J.
- Cheilosia (Neocheilosia) shiranesana* Barkalov et Ichige, 2016  
**Distribution.** S Prim.
- Cheilosia (Nephomyia)*** (Matsumura, 1916)
- Cheilosia (Nephomyia) bombiformis* (Matsumura, 1916)  
= *Cheilosia sachtlebeni* Stackelberg, 1963.  
**Distribution.** S FE — Ch, K, J.
- Cheilosia (Nephomyia) edashigei* Shiraki, 1968  
**Distribution.** S Prim — J.
- Cheilosia (Nephomyia) longiptera* Shiraki, 1968  
**Distribution.** S KI — K, J, S-W Ch.

- Cheilosia (Pollinocheila)*** Barkalov, 2002  
*Cheilosia (Pollinocheila) chukotana*  
 Barkalov et Mutin, 2014  
**Distribution.** Chukotka.
- Cheilosia (Pollinocheila) lithophila* Barkalov, 1985  
**Distribution.** Altai
- Cheilosia (Pollinocheila) parafasciata*  
 Barkalov, 1990  
**Distribution.** S FE, ?S KI.
- Cheilosia (Pollinocheila) semifasciata* Becker, 1894  
**Distribution.** NC — Eu.
- Cheilosia (Taeniochilosia)*** (Oldenberg, 1916)  
*Cheilosia (Taeniochilosia) aenigmatica*  
 Barkalov, 1993  
**Distribution.** NC.
- Cheilosia (Taeniochilosia) aratica* Barkalov, 1978  
**Distribution.** Altai — Kz.
- Cheilosia (Taeniochilosia) austrosibirica*  
 Barkalov, 2005  
**Distribution.** S Sib.
- Cheilosia (Taeniochilosia) caeruleascens calculosa*  
 Skuffin, 1977  
**Distribution.** Eup.
- Cheilosia (Taeniochilosia) changaica*  
 Peck ex Stackelberg et Peck, 1979  
**Distribution.** S of C Sib — Mn.
- Cheilosia (Taeniochilosia) circassica*  
 Ståhls et Barkalov, 2017  
**Distribution.** NC.
- Cheilosia (Taeniochilosia) galinae*  
 Barkalov, 2005  
**Distribution.** Altai — Kz.
- Cheilosia (Taeniochilosia) kolomietsi*  
 Barkalov, 1999  
**Distribution.** Altai — Kz.
- Cheilosia (Taeniochilosia) loewi* Becker, 1894  
**Distribution.** Ural — Eu.
- Cheilosia (Taeniochilosia) lukashovae*  
 Barkalov, 1993  
**Distribution.** NC.
- Cheilosia (Taeniocheilosia) nigripes*  
 (Meigen, 1822)  
**Distribution.** Eup, Sib, S FE — Eu, Kz, Ir, Mn, N-E Ch.
- Cheilosia (Taeniochilosia) pollinifacies*  
 Stackelberg, 1968  
**Distribution.** NC.
- Cheilosia (Taeniochilosia) pubera*  
 (Zetterstedt, 1838)  
**Distribution.** Eup — Eu.
- Cheilosia (Taeniochilosia) sahlbergi*  
 Becker, 1894  
**Distribution.** N Eup, Altai — N Eu.
- Cheilosia (Taeniochilosia) sibirica*  
 Becker, 1894  
**Distribution.** Sib — Kz, Mn.
- Cheilosia (Taeniochilosia) vicina*  
 (Zetterstedt, 1849)  
**Distribution.** Eup — Eu.
- Cheilosia (Taeniochilosia) violovitshi*  
 Barkalov, 1979  
**Distribution.** S Ural, N Sib.
- Ferdinandea*** Rondani, 1844  
*Ferdinandea cuprea* (Scopoli, 1763)  
**Distribution.** Eup — Eu, Tr.
- Ferdinandea luteola* Mutin, 1999  
**Distribution.** Prim.  
**Remarks.** The species is close to *Ferdinandea suzukii* Matsumura, 1916 known from Japan and South Korea, but differs from it in the presence of black hairs in the posterior parts of 2–3 tergites.
- Ferdinandea ruficornis* (Fabricius, 1775)  
**Distribution.** Eup, Sib, FE — Eu, MA, N Ch.  
*Pelecocera* Meigen, 1822
- Pelecocera caledonicus* (Collin, 1940)  
**Distribution.** Eup — Eu.
- Pelecocera latifrons* Loew, 1856  
**Distribution.** Eup. — Eu, Lebanon.
- Pelecocera lusitanicus* Mik, 1898  
**Distribution.** Eup. — Eu.
- Pelecocera scaevoides* (Fallén, 1817)  
**Distribution.** Eup, Ya, FE — Eu.
- Pelecocera tricincta* Meigen, 1822  
**Distribution.** Eup, Sib — Eu.
- Portevinia*** Goffé, 1944  
*Portevinia altaica* (Stackelberg, 1925)  
**Distribution.** S Sib.
- Portevinia dispar*  
 (Hervé-Bazin, 1929)  
 = *Chilosia lunulifera* Stackelberg, 1930.  
**Distribution.** S Prim — Ch, K, J.
- Psarochilosia*** Stackelberg, 1952  
*Psarochilosia djakonovi* Stackelberg, 1952  
**Distribution.** S FE — J.

**Rhingia** Scopoli, 1763*Rhingia borealis* Ringdahl, 1928**Distribution.** Eup, Sib, FE — Eu.*Rhingia campestris* Meigen, 1822**Distribution.** Eup, Sib, FE — Mn, Eu.*Rhingia laevigata* Loew, 1858**Distribution.** S FE — K, J.*Rhingia rostrata* (Linnaeus, 1758)**Distribution.** Eup, W Sib — Eu.**Volucellini****Graptomyza** Wiedemann, 1820*Graptomyza alabeta* Séguy, 1948**Distribution.** Prim. — J.*Graptomyza subflavonotata* Mutin, 1983**Distribution.** Prim.*Graptomyza takeuchii* Shiraki, 1954= *Graptomyza eoa* Violovitsh, 1955.**Distribution.** S KI — J.**Volucella** Geoffroy, 1762*Volucella abdita* Violovitsh, 1978= *Volucella jeddona* var. *nigrithorax* Zimina, 1961.**Distribution.** Trb, S FE — Mn, N Ch.*Volucella bombylans* (Linnaeus, 1758)**Distribution.** Eup, Sib, FE. — Eu, Kz, MA, Mn, Ch, J, NA.*Volucella inanis* (Linnaeus, 1758)**Distribution.** Eup, W, E Sib, FE — Eu, Syria, MA, Afghanistan, Mn, Ch.*Volucella inflata* (Fabricius, 1794)**Distribution.** Eup — Eu.*Volucella jeddona* Bigot, 1875= *Volucella brevipila* Portschinsky, 1887.**Distribution.** S FE — ?Mn, Ch, K, J.*Volucella nigropicta* Portschinsky, 1884**Distribution.** S FE — K, J.*Volucella bivitta* Huo, Ren et Zheng, 2007**Distribution.** S Prim — K.*Volucella pellucens pellucens* (Linnaeus, 1758)**Distribution.** Eup, Sib, NC — Eu, Kz, MA, NAF, ?Mn, ?Ch, Or.*Vollucella pellucens tabanoides* Motschulsky, 1859**Distribution.** S FE — ?Mn, Ch, K, J, Or.*Volucella plumatoides* Hervé-Bazin, 1923**Distribution.** Sib, FE — Kz, MA, Mn, Ch? J.*Volucella zonaria* (Poda, 1761)**Distribution.** Eup, Sib — Eu, Tr, Iran, Mn.**Microdontinae****Microdontini****Microdon** Meigen, 1803*Microdon analis* (Macquart), 1842= *Microdon lateus* Violovitsh, 1976.**Distribution.** Eup, Sib, S FE — Eu, MA, Mn.**Remarks.** Another species — *Microdon major* Andries, 1912 — could also occur in the territory of Russia. By the somatic characters suggested by Speit [2016b] in the identification key to European species, it is impossible to distinguish far-eastern specimens, which have lite pubescence of legs only regardless their coloration.*Microdon devius* (Linnaeus, 1761)**Distribution.** Eup, Sib — Eu, Tr.*Microdon ignotus* Violovitsh, 1976**Distribution.** Prim.*Microdon lehri* Mutin, 1999**Distribution.** S Prim — K.*Microdon maritimus* Violovitsh, 1976**Distribution.** S FE.*Microdon miki* Doczkal et Schmid, 1999**Distribution.** Eup, Sib, S FE — Mn, Eu.*Microdon mutabilis* (Linnaeus, 1758)**Distribution.** Eup, Sib, S FE — Eu, TC, Kz.**Remarks.** At least in Europe, this species co-occurs with *Microdon myrmicae* Schönrogge, Barr, Wardlaw, Napper, Gardner, Breen, Elmes, Thomas, 2002, which is indistinguishable from it by imago. The distribution of both species in Russia requires further study.*Microdon myrmicae* Schönrogge, Barr, Wardlaw, Napper, Gardner, Breen, Elmes et Thomas, 2002**Distribution.** Karelia — Mn, Eu.*Microdon mysa* Violovitsh, 1971**Distribution.** Altai.*Microdon ursitarsis* Stackelberg, 1926**Distribution.** S Prim.**Pipizinae****Pipizini****Cryptopipiza** Mutin, 1998*Cryptopipiza notabilis* (Violovitsh, 1985)**Distribution.** N Eup, Sib, S FE — N Eu.**Heringia** Rondani, 1856*Heringia heringi* (Zetterstedt, 1843)**Distribution.** Eup — Eu, Tr, Mn.*Heringia punctipennis* (Becker, 1921)**Distribution.** Krasnoarmeysk near Volgograd.**Neocnemodon** Goffe, 1944*Neocnemodon brevidens* (Egger, 1865)**Distribution.** Eup, Sib, S FE — Eu, NA.

- Neocnemodon eugenei* Mutin, 1988  
**Distribution.** S Kh.
- Neocnemodon fulvimanus* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib — Eu.
- Neocnemodon jakutorum* (Stackelberg, 1952)  
**Distribution.** Sib, FE — J.
- Neocnemodon latitarsis* (Egger, 1865)  
**Distribution.** Eup — Eu, TC, NA.
- Neocnemodon pubescens*  
(Dellucchi et Pschorn-Walcher, 1955)  
**Distribution.** Eup, S FE — Eu, NA.
- Neocnemodon simplicipes* (Stackelberg, 1952)  
**Distribution.** Prim — K, J.
- Neocnemodon tsherepanovi* Mutin, 1988  
**Distribution.** S FE — J.
- Neocnemodon verrucula* (Collin, 1931)  
**Distribution.** Eup, Sib, FE — Mn, Eu.
- Neocnemodon vitripennis* (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Eu, Mn, Ch, J.
- Pipiza** Fallén, 1810  
*Pipiza accola* Violovitsh, 1985  
= *Pipiza alba* Violovitsh, 1985.  
= *Pipiza magadanica* Violovitsh, 1985.  
**Distribution.** FE — Eu.
- Pipiza aurea* Violovitsh, 1985  
**Distribution.** Prim.
- Pipiza austriaca* Meigen, 1822  
= *Pipiza austriaca nigricans* Violovitsh, 1988.  
**Distribution.** Eup, Sib, FE — Eu, Kz, K, J.
- Pipiza convexifrons* Violovitsh, 1985  
**Distribution.** S Sib, FE.
- Pipiza cuprea* Violovitsh, 1985  
**Distribution.** N C.
- Pipiza fasciata* Meigen, 1822  
**Distribution.** Eup — Eu.
- Pipiza festiva* Meigen, 1822  
**Distribution.** Eup — Eu, TC.
- Pipiza flavimaculata* Matsumura, 1918  
**Distribution.** Trb, S FE.  
**Remarks.** The species was mistakenly reported from the fauna of Russia as *Pipiza fenestrata* [Mutin, 2002].
- Pipiza lesovik* Mutin, 2002  
**Distribution.** S Kh.
- Pipiza lugubris* (Fabricius, 1775)  
**Distribution.** Eup, Sib, S FE — Eu, MA, Mn, J.
- Pipiza luteitarsis* Zetterstedt, 1843  
**Distribution.** Eup, Trb — Eu.
- Pipiza magnomaculata*  
Violovitsh, 1985  
**Distribution.** S FE.
- Pipiza maritima* Mutin, 2002  
**Distribution.** Skh, S Kl.
- Pipiza nielseni* Violovitsh, 1985  
**Distribution.** Prim.
- Pipiza nitidifrons* Mutin, 2002  
**Distribution.** S FE.
- Pipiza noctiluca* (Linnaeus, 1758)  
**Distribution.** Eup, W Sib — Eu.
- Pipiza notata* Meigen, 1822  
= *Neocnemodon nox* Violovitsh, 1978.  
= *Pipiza humilifrons* Violovitsh, 1985  
= *Pipiza sachalinica* Violovitsh, 1988.  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J.  
**Remarks.** Earlier in our publications [Mutin, 2002, Barkalov, Mutin, 2015, 2016; Mutin, Barkalov, 2017], this species was reported as *Pipiza bimaculata* Meigen, 1822.
- Pipiza podya* Mutin, 2002  
**Distribution.** S Kh.
- Pipiza quadrimaculata*  
(Panzer, 1804)  
= *Pipiza insolata* Violovitsh, 1985.  
= *Pipiza mutini* Violovitsh, 1985.  
**Distribution.** Eup, Sib, S FE, Skh, KI — Eu, Mn, Ki NA.
- Pipiza singular* Violovitsh, 1985  
**Distribution.** S. Prim.
- Pipiza tristis* Violovitsh, 1988  
**Distribution.** W Sib.
- Pipiza tuvunica* Violovitsh, 1988  
**Distribution.** Tuva.
- Pipiza westsibirica* Violovitsh, 1985  
**Distribution.** W Sib.
- Pipizella** Rondani, 1856  
*Pipizella altaica* Violovitsh, 1981  
= *Pipizella adentata* Violovitsh, 1981.  
**Distribution.** Altai — Mn.
- Pipizella annulata*  
(Macquart, 1829)  
**Distribution.** Cr, S W Sib — Eu, Kz.
- Pipizella antennata* Violovitsh, 1981  
**Distribution.** Prim — Tr.
- Pipizella barkalovi* Violovitsh, 1981  
**Distribution.** Prim.

- Pipizella caucasica* Skufjin, 1976  
**Distribution.** NC — Ge, Tr, Iran.
- Pipizella cauta* Violovitsh, 1981  
**Distribution.** Altai.
- Pipizella certa* Violovitsch, 1981  
**Distribution.** Sib — SW, SF.
- Pipizella cornuta* S. Kuznetsov, 1987  
**Distribution.** NC — TC.
- Pipizella brevis* Lucas, 1976  
**Distribution.** Sib — N Eu.
- Pipizella cornuta* S. Kuznetsov, 1987  
**Distribution.** NC — TC.
- Pipizella dentata* Violovitsh, 1981  
**Distribution.** Altai.
- Pipizella divicoi* (Goeldlin de Tiefenau, 1974)  
= *Pipizella opaca* Violovitsh, 1981.  
**Distribution.** Eup, S Sib, S FE — Eu, Tr, TC, MA, Mn.
- Pipizella inversa* Violovitsh, 1981  
**Distribution.** W Sib.
- Pipizella leleji* S. Kuznetsov, 1990  
**Distribution.** Trb, S FE.
- Pipizella maculipennis* (Meigen, 1822)  
= *Pipizella sibirica* Violovitsh, 1981.  
**Distribution.** Eup, Sib, ?Prim — Eu, Kz.
- Pipizella mongolorum* Stackelberg, 1952  
**Distribution.** Sib, S FE — Eu, Mn.
- Pipizella nartshukae* S. Kuznetsov, 1990  
**Distribution.** S FE — Mn.
- Pipizella nataliae* S. Kuznetsov, 1990  
**Distribution.** NC — Tr.
- Pipizella richterae* S. Kuznetsov, 1990  
**Distribution.** Trb.
- Pipizella ussuriana* Violovitsh, 1981  
= *Pipizella surstilonga* Violovitsh, 1981.  
**Distribution.** Prim.
- Pipizella viduata* (Linnaeus, 1758)  
**Distribution.** Eup, S Sib, S FE — Eu, Ki, Tj, Mn, Algeria.
- Pipizella virens* (Fabricius), 1805  
**Distribution.** Eup — Eu, TC.
- Trichopsomyia** Williston, 1888  
*Trichopsomyia flavitarsis* (Meigen, 1822)  
= *Neocnemodon buka* Violovitsh, 1978.  
**Distribution.** Eup, Sib, S FE — Eu, Kz, Mn.
- Trichopsomyia tshapigou* S. Kuznetsov, 1990  
**Distribution.** Prim.
- Triglyphus** Loew, 1840  
*Triglyphus aureus* Violovitsh, 1980  
**Distribution.** S FE — J.
- Triglyphus ikezakii* S. Kuznetsov, 1990  
**Distribution.** S Prim — K, J.
- Triglyphus primus* Loew, 1840  
**Distribution.** Eup, Sib, S FE — Eu, K, J.
- Syrphinae**  
**Paragini**  
**Paragus** Latreille, 1804  
**Paragus (Paragus)** Latreille, 1804  
*Paragus (Paragus) absidatus* Goeldlin, 1971  
**Distribution.** S Sib, FE — Eu.
- Paragus (Paragus) albifrons* (Fallén, 1817)  
**Distribution.** Eup, S FE — Kz, MA, Mn, Ch.
- Paragus (Paragus) asiaticus* Peck, 1979  
**Distribution.** S Sib — Kz, MA.
- Paragus (Paragus) balachonovae*  
Sorokina et Cheng, 2007  
**Distribution.** Altai — Ch.
- Paragus (Paragus) bicolor* Fabricius, 1794  
**Distribution.** Eup, Sib — Eu, Kz, MA, Iran.
- Paragus (Paragus) bradescui* Stănescu, 1981  
**Distribution.** Eup, W Sib — Eu, MA.
- Paragus (Paragus) claussemi* Mutin, 1999  
**Distribution.** S Prim — Ch, K, J.
- Paragus (Paragus) compeditus*  
Wiedemann, 1830  
**Distribution.** W Sib, Tuva — Kz, MA, Iran, Ch.
- Paragus (Paragus) fasciatus* Coquillett, 1898  
**Distribution.** S Prim — K, J.
- Paragus (Paragus) finitimus* Goeldlin, 1971  
**Distribution.** Eup, Sib — Eu, Kz, MA, Iran, Mn.
- Paragus flammeus* Goeldlin  
**Distribution.** Eur. — Eu, Kz, MA, Iran.
- Paragus (Paragus) gulangensis* Li et Li, 1990  
= *Paragus dauricus* Mutin, 1999.  
**Distribution.** S, E Sib — Mn, Ch.
- Paragus (Paragus) ketenchievi*  
Barkalov et Goguzokov, 2001  
**Distribution.** NC.
- Paragus (Paragus) kopdagensis*  
Hayat et Clausen, 1997  
**Distribution.** NC — Tr.



- Paragus (Paragus) leleji* Mutin, 1986  
**Distribution.** Sib, FE — Kz, Mn, Ch.
- Paragus (Paragus) mariae* Sorokina, 2002  
**Distribution.** E Sib, S FE.
- Paragus (Paragus) marusiki* Sorokina, 2002  
**Distribution.** S, E Sib
- Paragus (Paragus) oltenicus* Stănescu, 1981  
**Distribution.** Eup — Eu, Kz, MA, Ch.
- Paragus (Paragus) pecchiolii* Rondani, 1857  
**Distribution.** Eup, Sib, S FE — Eu, Kz, MA, E Ch, Mn, Iran, Afganistan.
- Paragus (Paragus) quadrifasciatus* Meigen, 1822  
**Distribution.** Eup, W Sib — Kz, MA, Iran, Ch.
- Paragus (Paragus) stackelbergi* Bańkowska, 1968  
**Distribution.** S Sib — Mn, N Ch.
- Paragus (Paragus) strigatus* Meigen, 1822  
**Distribution.** S Eup — Eu, N Af, MA, Mn.
- Paragus (Pandasyophthalmus) Stuckenberg, 1954**  
*Paragus (Pandasyophthalmus) constrictus* Šimič, 1986  
**Distribution.** NC, Sib, FE — Eu, Tu, J.
- Paragus (Pandasyophthalmus) expressus* Sorokina et Cheng, 2007  
**Distribution.** Altai, E Sib — Kz, MA, Ch.
- Paragus (Pandasyophthalmus) haemorrhous* Meigen, 1822  
 = *Paragus pallipes* Matsumura, 1916.  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, Afganistan, Ch, K, J, N Af, NA, Af.
- Paragus (Pandasyophthalmus) tibialis* (Fallén, 1817)  
**Distribution.** Eup, Sib (to Yakutiya) — Kz, MA, Iran, Ch, K, Or.
- Bacchini**
- Baccha** Fabricius, 1805  
*Baccha elongata* (Fabricius, 1775)  
 = *Baccha tvinica* Violovitsh, 1976.  
 = *Baccha sibirica* Violovitsh, 1976, **syn. nov.**  
 = *Baccha sachalinica* Violovitsh, 1976, **syn. nov.**  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, NA.  
**Remarks.** A re-examination of the holotypes of *Baccha sibirica* and *Baccha sachalinica* has revealed their identity with *Baccha elongata*.
- Baccha laphrieformis* Violovitsh, 1976  
**Distribution.** S FE — K, J.
- Baccha maculata* Walker, 1852  
 = *Baccha eoa* Violovitsh, 1976.  
 = *Baccha pulla* Violovitsh, 1976.  
**Distribution.** S FE — K, J, Or.
- Melanostoma** Schiner, 1860  
*Melanostoma boreomontanum* Mutin, 1986.  
**Distribution.** Sib, FE.
- Melanostoma claussemi* Barkalov, 2009  
**Distribution.** Altai.
- Melanostoma fimbriatum* (Loew, 1817)  
**Distribution.** Baikal — Mn.  
*Melanostoma interruptum* Matsumura, 1919  
**Distribution.** S FE — J.
- Melanostoma mellinum* (Linnaeus, 1758)  
 = *Melanostoma sachalinense* Matsumura, 1919.  
 = *Melanostoma ochiaianum* Matsumura, 1919.  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Afganistan, Iran, Mn, Ch, K, J, N Af, Madeira, Canary Is., NA.  
**Remarks.** The species is interpreted *sensu* the majority of dipterologists. The nomenclatural changes introduced to the genus *Melanostoma* by Haarto, Ståhls [2014] needs additional study. Earlier, Mutin and Barkalov [1997] argued that *Melanostoma sachalinense* Matsumura, 1919 could be a synonym of *Melanostoma ochiaianum* Matsumura, 1919. However, the types of both species names remained unrevised, and therefore the synonymy follows Peck [1988].
- Melanostoma orientale* (Wiedemann, 1824)  
**Distribution.** S FE — J, TC, Or.
- Melanostoma scalare* (Fabricius, 1794)  
**Distribution.** Eup, Sib, FE — J, K, Ch, Kz, MA, Mn, Afganistan, Eu, N Af; Or, Af.
- Melanostoma tshernovi* Barkalov, 2009  
**Distribution.** N Sib.
- Platycheirus** Lepeletier et Serville, 1828  
**Platycheirus (Pachysphyria)** Enderlein, 1938  
*Platycheirus (Pachysphyria) abruzzensis* (van der Goot, 1969)  
**Distribution.** S Sib — Eu.
- Platycheirus (Pachysphyria) ambiguus* (Fallén, 1817)  
**Distribution.** Eup, Sib, S FE — Eu, Kz, MA, Afganistan, Mn, K, J; Or.
- Platycheirus (Pachysphyria) barkalovi* Mutin, 1999  
**Distribution.** S Sib, S FE.
- Platycheirus (Pachysphyria) brunnifrons* Nielsen, 2004  
**Distribution.** Sib, FE — NA.  
**Remarks.** The species was mistakenly reported for the Far East as *Platycheirus coeruleescens* Williston, 1887 [Mutin, Barkalov, 1999].
- Platycheirus (Pachysphyria) coeruleescens* Williston, 1887  
**Distribution.** N Sib — NA.
- Platycheirus (Pachysphyria) fimbriatus* (Loew, 1817)  
**Distribution.** S Sib — Mn.

- Platycheirus (Pachysphyria) immaculatus*  
Ôhara, 1980  
**Distribution.** Sib, S FE — J, K, Eu.
- Platycheirus (Pachysphyria) lundbecki*  
(Collin, 1931)  
**Distribution.** S Sib, Tuva — Eu, NA.
- Platycheirus (Pachysphyria) transbaikalicus*  
Barkalov et Nielsen, 2008  
**Distribution.** Trb.
- Platycheirus (Pachysphyria) transfugus*  
(Zetterstedt, 1838)  
**Distribution.** Altai — Eu, Kz, MA, Mn.
- Platycheirus (Pachysphyria) tuvaensis*  
Barkalov et Nielsen, 2008  
**Distribution.** Tuva.
- Platycheirus (Pachysphyria) woodi* Vockeroth, 1990  
**Distribution.** Ya.
- Platycheirus (Platycheirus)***  
Le Peletier et Serville, 1828
- Platycheirus (Platycheirus) aeratus* Coquillett, 1890  
= *Platycheirus angustitarsis* Kanervo, 1934.  
**Distribution.** N Eup, N Sib, Altai, N FE — N Eu, NA.
- Platycheirus (Platycheirus) albimanus*  
(Fabricius, 1781)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, NA, ?Or.
- Platycheirus (Platycheirus) alpigenus*  
Barkalov et Nielsen, 2008  
**Distribution.** Altai.
- Platycheirus (Platycheirus) altaicus*  
Barkalov et Nielsen, 2008  
**Distribution.** Altai.
- Platycheirus (Platycheirus) amplus*  
Curran, 1927  
**Distribution.** Sib, FE — Eu, Iceland, NA.
- Platycheirus (Platycheirus) angustatus*  
(Zetterstedt, 1843)  
= *Melanostoma elongatum* Matsumura, 1919.  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J, NA.
- Platycheirus (Platycheirus) atratus*  
Barkalov et Nielsen, 2008  
**Distribution.** S Sib.
- Platycheirus (Platycheirus) bartschi*  
Barkalov et Nielsen, 2012  
**Distribution.** Taimyr.
- Platycheirus (Platycheirus) beringiensis*  
Barkalov et Mutin, 2014  
**Distribution.** Chukotka.
- Platycheirus (Platycheirus) chilosia* (Curran, 1922)  
= *Platycheirus hirtipes* Kanervo, 1938.  
**Distribution.** N Eup, N Sib, Altai, N FE — N Eu, N NA.
- Platycheirus (Platycheirus) cejensis* Kuznetsov, 1987  
**Distribution.** NC.
- Platycheirus (Platycheirus) cheilosiaeformis*  
Smit et Barkalov, 2008  
**Distribution.** Altai.
- Platycheirus (Platycheirus) ciliatus* Bigot, 1884  
**Distribution.** S FE — W NA.
- Platycheirus (Platycheirus) claussemi* Nielsen, 2004  
**Distribution.** Altai — Eu.
- Platycheirus (Platycheirus) clypeatus*  
(Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Eu, MA, Afganistan, Mn, J, K; NA.
- Platycheirus (Platycheirus) complicatus*  
(Becker, 1889)  
= *Platycheirus katunicus* Skufjin, 1987.  
**Distribution.** Sib, FE — Eu, J.
- Platycheirus (Platycheirus) discimanus*  
(Loew, 1871)  
= *Platycheirus fumosus* Violovitsh, 1982.  
**Distribution.** Eup, Sib, FE — Eu, MA, Afganistan, N Ch, Mn, NA.
- Platycheirus (Platycheirus) dudkoi*  
Barkalov et Nielsen, 2009  
**Distribution.** Altai.
- Platycheirus (Platycheirus) dux* Violovitsh, 1957  
**Distribution.** S KI — J.
- Platycheirus (Platycheirus) europaeus*  
Goeldlin, Maibach et Speight, 1990  
**Distribution.** FE; Sib — Eu.
- Platycheirus (Platycheirus) fallax*  
Barkalov et Nielsen, 2008  
**Distribution.** Altai.
- Platycheirus (Platycheirus) fulviventris*  
(Macquart, 1829)  
**Distribution.** Eup, Altai — Eu, Tr.
- Platycheirus (Platycheirus) fuscitarsis*  
Barkalov et Nielsen, 2007  
**Distribution.** E Sib.
- Platycheirus (Platycheirus) goeldlini* Nielsen, 2004  
**Distribution.** S Sib, N FE — Eu.
- Platycheirus (Platycheirus) groenlandicus*  
Curran, 1927  
**Distribution.** N Eup, N Sib, N FE — N Eu, NA.

- Platycheirus (Platycheirus) gunillae*  
Barkalov et Nielsen, 2008  
**Distribution.** Altai.
- Platycheirus (Platycheirus) naso*  
Walker, 1849  
**Distribution.** S Sib, N FE — Eu, NA.
- Platycheirus (Platycheirus) hyperboreus*  
(Staeger, 1845)  
**Distribution.** N Eup, N Sib, Altai, N FE — N Eu, NA.
- Platycheirus (Platycheirus) immarginatus*  
(Zetterstedt, 1849)  
**Distribution.** Eup, Sib, FE. — Eu, NA.
- Platycheirus(Platycheirus) jakuticus* Violovitsh, 1978  
= *Platycheirus macrocephalus* Bagatshanova, 1980.  
**Distribution.** N Sib, FE.
- Platycheirus (Platycheirus) kittilaensis*  
Dušek et Láška, 1982  
**Distribution.** N Eup — Eu.
- Platycheirus (Platycheirus) latens* Mutin, 1999  
**Distribution.** S Sib, S FE.
- Platycheirus (Platycheirus) latimanus*  
(Wahlberg, 1845)  
**Distribution.** Eup, Sib, FE — Eu, Mn, J.
- Platycheirus (Platycheirus) magadanensis*  
Mutin, 1999  
**Distribution.** Magadan Region — N Eu.
- Platycheirus (Platycheirus) manicatus*  
(Meigen, 1822)  
= *Platycheirus rarus* Violovitsh, 1978.  
**Distribution.** Eup, S Sib — Eu, NA.
- Platycheirus (Platycheirus) melanopsis* Loew, 1856  
**Distribution.** Eup, S Sib — Eu.
- Platycheirus (Platycheirus) mongolicus*  
Stackelberg, 1974  
**Distribution.** S Sib — Mn.
- Platycheirus (Platycheirus) nielseni* Vockeroth, 1990  
**Distribution.** Eup, Sib, FE — Eu, NA.
- Platycheirus (Platycheirus) nigrofemoratus*  
Kanervo, 1934  
**Distribution.** S Sib, Altai — N Eu, NA.
- Platycheirus (Platycheirus) parmatus* Rondani, 1857  
**Distribution.** Eup, Sib, FE — Eu, MA.
- Platycheirus (Platycheirus) peckae*  
Bagatshanova, 1980  
**Distribution.** Sib, S FE — K.
- Platycheirus (Platycheirus) peltatus* (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J.
- Platycheirus(Platycheirus) pennipes* Ôhara, 1980  
**Distribution.** S FE — K, J.
- Platycheirus perpallidus* (Verrall, 1901)  
= *Platycheirus perpallidus paramushiricus* Mutin, 1998  
**syn. nov.**  
**Distribution.** Eup, Sib, FE. — Eu, MA, Mn, J, NA.  
**Remarks.** The subspecies *P. p. paramushiricus* **syn. nov.** described from Paramushir is to be treated as a melanistic morph of *Platycheirus perpallidus*. A dark male that was identical with the type of *P. p. paramushiricus* was found in the lower reaches of Anadyr' River, viz. from the area of distributon of the nominative subspecies.
- Platycheirus (Platycheirus) podagratus*  
(Zetterstedt, 1838)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J, NA.
- Platycheirus (Platycheirus) pulcherum* Mutin, 1999  
**Distribution.** S Kh.
- Platycheirus (Platycheirus) ramsarensis*  
Goeldlin, Maibach et Speight, 1990  
**Distribution.** N Sib, FE — Eu.
- Platycheirus (Platycheirus) rarus* Violovitsh, 1978  
**Distribution.** Altai.
- Platycheirus (Platycheirus) scambus* (Staeger, 1843)  
**Distribution.** Eup, Sib, S FE — Eu, Mn, NA.
- Platycheirus (Platycheirus) scutatus* (Meigen, 1822)  
**Distribution.** Eup, NC Sib, FE — Eu, MA, Afganistan, Mn, J, K; NA.
- Platycheirus (Platycheirus) setitarsis*  
Vockeroth, 1990  
**Distribution.** Ya, N FE — NA.
- Platycheirus (Platycheirus) sibiricus*  
Barkalov et Nielsen, 2007  
**Distribution.** Sib, FE.
- Platycheirus (Platycheirus) sigiktae* Mutin, 1999  
**Distribution.** Am.
- Platycheirus (Platycheirus) similis*  
Barkalov et Nielsen, 2007  
**Distribution.** NC.
- Platycheirus (Platycheirus) sticticus* (Meigen, 1822)  
**Distribution.** Eup, Sib, S FE — Eu.
- Platycheirus (Platycheirus) subordinatus*  
Becker, 1915  
= *Platycheirus arat* Violovitsh, 1975.  
**Distribution.** N Eup, N Sib, Altai, N FE — N Eu, NA.
- Platycheirus (Platycheirus) tarsalis*  
(Schummel, 1836)  
**Distribution.** Eup, Ural, Trb — Eu.
- Platycheirus (Platycheirus) torei* Barkalov, 2013  
**Distribution.** Altai.

- Platycheirus (Platycheirus) troll* Mutin, 1999  
**Distribution.** S Kh.  
*Platycheirus (Platycheirus) urakawensis* (Matsumura, 1919)  
**Distribution.** Sib, FE — N Eu, K, J, N India (Kashmir), NA.
- Platycheirus (Platycheirus) varipes* Curran, 1923  
**Distribution.** S Sib, FE — N Eu, NA.  
*Pseudoplatycheirus* van Doesburg, 1955  
*Pseudoplatycheirus glupovi* Barkalov, 2007  
**Distribution.** Altai.  
*Pyrophaena* Schiner, 1860  
*Pyrophaena granditarsa* (Foerster, 1771)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, N Ch, NA.  
*Pyrophaena platygastra* Loew, 1871  
**Distribution.** Sib, FE — N Ch, Mn.  
*Pyrophaena rosarum* (Fabricius, 1787)  
**Distribution.** Eup, Sib, FE — Eu, NA.  
*Rohdendorfia* Smirnov, 1924  
*Rohdendorfia alpina* Sack, 1938  
**Distribution.** NC, S Sib — Eu (Alps), TC.  
*Spazigaster* Rondani, 1843  
*Spazigaster ambulans* (Fabricius), 1798  
**Distribution.** NC — Eu, Tr, TC.  
*Syrphocheilosia* Stackelberg, 1864  
*Syrphocheilosia claviventris* (Strobl, 1910)  
**Distribution.** NC — Eu, Tr, TC.  
*Xanthandrus* Verrall, 1901  
*Xanthandrus comtus* (Harris, 1780)  
= *Syrphus quadriguttatus* Matsumura, 1911.  
**Distribution.** Eup, Sib, FE — Eu, Kz, Mn, K, J, Or.
- Syrphini**  
*Allobaccha* Curran, 1928  
*Allobaccha apicalis* (Loew, 1858)  
**Distribution.** S FE — K, J, Or.  
*Allograpta* Osten Sacken, 1875  
*Allograpta javana* (Wiedemann, 1824)  
**Distribution.** S FE — ?Mn, Ch, K, J, Or, Australia, Hawaii, Fiji.  
*Allograpta maritima* Mutin, 1986  
**Distribution.** S FE.  
*Asarkina* Macquart, 1842  
*Asarkina porcina* (Coquillett, 1898)  
**Distribution.** Trb, S FE — NE Ch, K, J; Or.  
*Asiodidea* Stackelberg, 1930  
*Asiodidea nikkoensis* (Matsumura, 1916)  
**Distribution.** S FE — Ch, J.
- Betasyrphus* Matsumura, 1917  
*Betasyrphus nipponensis* (van der Goot, 1964)  
**Distribution.** Trb, S FE. —?K, J, ?Ch.  
**Remarks.** The species was first mentioned by L.V. Zimina [1972] for the fauna of Russia as *B. serarius* (Wiedemann, 1830).  
*Chrysotoxum* Meigen, 1803  
*Chrysotoxum arcuatum* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Eu, Mn, J, NA.  
*Chrysotoxum bajkalicum* Violovitsh, 1973  
**Distribution.** Trb — Mn.  
*Chrysotoxum bicinctum* Linnaeus, 1758,  
**Distribution.** Eup, Sib — Eu, N Af, MA, Mn.  
*Chrysotoxum biguttatum* Matsumura, 1911  
= *Chrysotoxum subbicinctum* Violovitsh, 1956.  
**Distribution.** Trb, S FE — K, J.  
*Chrysotoxum caucasicum* Sack, 1930  
**Distribution.** NC — TC, MA.  
*Chrysotoxum cautum* (Harris, 1776)  
**Distribution.** Eup, S Sib — Eu, TC, MA.  
*Chrysotoxum chakassicum* Violovitsh, 1975  
**Distribution.** S Sib.  
*Chrysotoxum coreanum* Shiraki, 1930  
**Distribution.** ES, S FE — Iran, K, J.  
*Chrysotoxum elegans* Loew, 1841  
**Distribution.** Eup, W Sib — Eu, TC, Kz, Iran.  
*Chrysotoxum fasciolatum* (De Geer, 1776)  
= *Chrysotoxum sachalinense* Matsumura, 1911.  
**Distribution.** Eup, Sib, FE — Eu, J.  
*Chrysotoxum festivum* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, S FE — Eu, MA, Mn, K, J, Or.  
*Chrysotoxum fratellum* Shannon, 1926  
= *Chrysotoxum lanatum* Violovitsh, 1973.  
= *Chrysotoxum ochripes* Violovitsh, 1985.  
= *Chrysotoxum radha* Violovitsh, 1971.  
**Distribution.** S Sib, S FE — Ch, Mn.  
*Chrysotoxum graciosum* Violovitsh, 1975  
**Distribution.** S FE — K.  
*Chrysotoxum grande* Matsumura, 1911  
**Distribution.** S FE — K, J.  
*Chrysotoxum hameleon* Violovitsh, 1973  
**Distribution.** S Sib — Mn.  
*Chrysotoxum hirayamue* Matsumura, 1918  
**Distribution.** Sib, FE — Mn, Ch, J.  
**Remarks.** The present species name was mentioned by Pape and Thompson [2017] as 'accepted', with its synonym being reported as *Chrysotoxum asiaticum* Becker, 1921. The latter name was reported for the fauna of Russia [Violovitsh,

1974; Peck, 1988, Kuznetsov, Kuznetsova, 2004], however we failed to find any collection materials under this name. In his review of the Palearctic species and identification key to the Siberian syrphids, Violovich [1974, 1983] included *Ch. asiaticum* reasoning from Sack's description [Sack, 1932]. Earlier, Mutin and Barkalov [1999] treated *Ch. hirayamue* as *Chrysotoxum shirakii* Matsumura, 1931.

*Chrysotoxum intermedium* Meigen, 1822

**Distribution.** Cr — Eu, NC, MA, NAF.

*Chrysotoxum kozhevnikovi* Smirnov, 1925

**Distribution.** Altai — MA.

*Chrysotoxum ladakense* Shannon, 1926

**Distribution.** S Sib — MA, Kz, Ch, Or.

*Chrysotoxum lanulosum* Violovitsh, 1973

**Distribution.** Tuva.

*Chrysotoxum lineare* (Zetterstedt, 1819)

**Distribution.** Eup, W Sib — Eu, Kz.

*Chrysotoxum lydiae* Violovitsh, 1964

**Distribution.** Tuva— MA, Kz, Mn

*Chrysotoxum octomaculatum* Curtis, 1837

**Distribution.** Eup, S Sib — Eu, TC, Kz.

*Chrysotoxum parvulum* Violovitsh, 1973

**Distribution.** TC — EC.

*Chrysotoxum ramphostomus* Mutin, 1999

**Distribution.** S Prim — K.

*Chrysotoxum rasilum* Violovitsh, 1981

**Distribution.** Trb.

*Chrysotoxum rossicum* Becker, 1921

**Distribution.** Sib, S FE — Ch, Mn.

*Chrysotoxum rubzovi* Violovitsh, 1973

**Distribution.** W Sib — MA, Kz.

*Chrysotoxum sapporensis* Matsumura, 1916

**Distribution.** Trb, S FE. — K, J.

**Remarks.** Based on a series of colour images showing a variation of its abdominal and wing coloration as compared to *Ch. graciosum*, Suk, Han [2013] suggested *Chrysotoxum shirakii* Matsumura, 1931 to be a junior synonym of this species. In our opinion, the identification problem of the species belonging to the *graciosum-sapporensis* complex remains unresolved yet, as in their considerations the Korean authors did not consider such taxon as *Chrysotoxum hirayamue*.

*Chrysotoxum sibiricum* Loew, 1856

**Distribution.** S Sib, S FE — Kz, Mn, Ch, K.

*Chrysotoxum skuffini* Violovitsh, 1973

**Distribution.** NC.

*Chrysotoxum stenolomum* Violovitsh, 1973

**Distribution.** NC.

*Chrysotoxum tuberculatum* Shannon, 1926

= *Chrysotoxum amurense* Violovitsh, 1973.

**Distribution.** S FE — Ch.

*Chrysotoxum vernale* Loew, 1841

**Distribution.** Eup, S Sib — Eu, TC, MA, Iran.

*Chrysotoxum verralli* (Collin, 1940)

**Distribution.** Eup, S Sib — Eu.

**Dasysyrphus** Enderlein, 1938

*Dasysyrphus albostriatus* (Fallén, 1817)

**Distribution.** Eup, Sib, S FE — Eu, TC, MA Mn, K, J.

*Dasysyrphus bilineatus* (Matsumura, 1917)

**Distribution.** S FE — K, J, Or (Ryukyu Is., Taiwan).

*Dasysyrphus eggeri* (Schiner, 1862)

**Distribution.** S Sib — Eu, TC, MA, Mn.

*Dasysyrphus friuliensis* (van der Goot, 1960)

**Distribution.** Eup, Sib, FE — Eu, Mn.

*Dasysyrphus hilaris* (Zetterstedt, 1843)

**Distribution.** Eup, Sib, FE — Eu, Mn.

*Dasysyrphus intermedius* (Becker, 1921)

**Distribution.** Baikal Lake.

**Remarks.** The authors are not familiar with this species, and its validity requires a re-examination of the type series.

*Dasysyrphus kegalii* Violovitsh, 1975

**Distribution.** Sib, FE.

*Dasysyrphus lapidosus* Barkalov, 1990

**Distribution.** S Sib — ?Mn.

*Dasysyrphus neovenustus*  
Soszyński et Mielczarek, 2013

**Distribution.** Baikal (Olkhom Island).

*Dasysyrphus nigricornis* (Verrall, 1873)

= *Dasysyrphus lenensis* Bagatshanova, 1980

**Distribution.** Sib, S Kh — Eu, Mn.

**Remarks.** The records of this species from the Far East [Gritskevich, 1997, 1998] actually belong to a separate species that is not identical to *D. lenensis* Bagatshanova, 1980.

*Dasysyrphus pauxillus pauxillus* (Williston, 1887)

**Distribution.** Eu, Sib — Eu, NA.

*Dasysyrphus pauxillus difencilis* Barkalov, 2007

**Distribution.** Altai.

*Dasysyrphus pinastri* (De Geer, 1776)

**Distribution.** Eup, Sib, S FE — Eu, TC, NA.

*Dasysyrphus postclaviger*  
(Stys et Moucha, 1962)

**Distribution.** Eup, Sib, ? FE — Eu.

**Remarks.** The status of this species is in need of verification. Pestov [2010] found this species in north-eastern regions of the European part of Russia. We have been unable to re-examine the pertinent material yet.

- Dasysyrphus rotundiventris* (Peck, 1966)  
**Distribution.** S Sib — MA, Mn.
- Dasysyrphus shiloi* Barkalov, 2007  
**Distribution.** Altai.
- Dasysyrphus sublunulatus* (Peck, 1966)  
**Distribution.** S Sib — MA.
- Dasysyrphus tricinctus* (Fallén, 1817)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, K, J.
- Dasysyrphus venustus* (Meigen, 1822)  
= *Syrphus abayecus* Violovitsh, 1973.  
**Distribution.** Eup, Sib, FE — Eu, Mn, NA.
- Dasysyrphus zinchenkoi* Mutin et Barkalov, 1997  
**Distribution.** FE.
- Didea* Macquart, 1834  
*Didea alneti* (Fallén, 1817)  
= *Didea japonica* Matsumura, 1917.  
= *Didea sachalinensis* Matsumura, 1917.  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, K, J, NA.
- Didea fasciata* Macquart, 1834  
**Distribution.** Eup, Sib, FE — Eu, K, J, Or.
- Didea intermedia* Loew, 1854  
**Distribution.** Eup, Sib, S FE — Eu.
- Doros* Meigen, 1822  
*Doros profuges* (Harris, 1780)  
**Distribution.** Eup, Sib, S FE — Eu, Kz, Mn, K, J.
- Doros destillatorius* Mik, 1885  
**Distribution.** Cr — S Eu, Tr.
- Epistrophe* Walker, 1852  
*Epistrophe aino* (Matsumura, 1917)  
**Distribution.** S FE — J.
- Epistrophe annulitarsis* (Stackelberg, 1918)  
**Distribution.** Eup, Sib, FE — K, J.
- Epistrophe cryptica* Doczkal et Schmid, 1994  
**Distribution.** Eup, Sib, FE — Eu, J.
- Epistrophe diaphana* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, Am — Eu, TC, MA.
- Epistrophe eligans* (Harris, 1780)  
**Distribution.** Eup — Eu.
- Epistrophe flava* Doczkal et Schmid, 1994  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Epistrophe griseofasciata* (Matsumura, 1918)  
= *Syrphus angustifasciata* Violovitsh, 1956.  
**Distribution.** Skh, S KI — J.
- Epistrophe grossulariae* (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Eu, Mn, K, J, NA.
- Epistrophe latifrons* Mutin, 1990  
**Distribution.** S FE.
- Epistrophe leiophthalma* (Schiner et Egger, 1853)  
**Distribution.** NC — Eu, TC.
- Epistrophe melanostoma* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Epistrophe nitidicollis* (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Eu, K, J, NA.
- Epistrophe obscuripes* (Strobl, 1910)  
**Distribution.** Eup, Sib, S FE — Eu, W Ch.
- Epistrophe ochrostoma* (Zetterstedt, 1849)  
**Distribution.** Eup, Sib, FE — Eu, J.
- Epistrophe olgae* Mutin, 1990  
**Distribution.** Eup, FE — Eu, J.
- Epistrophe shibakawae* (Matsumura, 1917)  
**Distribution.** Trb, S FE.
- Epistrophella* Dušek et Láska, 1967  
*Epistrophella euchromus* Kowarz, 1885  
**Distribution.** Eup, Sib, S FE — Eu.
- Episyrphus* Matsumura et Adachi, 1917  
*Episyrphus balteatus* (De Geer, 1776)  
**Distribution.** Eup, Sib, FE — Azores, Canary Is., Eu, N Af, MA, Afganistan, Ch, Mn, K, J, Or, Australia.
- Eriozona* Schiner, 1860  
*Eriozona syrphoides* (Fallén, 1817)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, K, J.
- Eupeodes* Osten Sacken, 1877  
*Eupeodes abiskoensis* (Dušek et Láska, 1973)  
**Distribution.** Sib, N FE — N Eu.
- Eupeodes borealis* (Dušek et Láska, 1973)  
**Distribution.** N Eup — N Eu.  
**Remarks.** This species for the fauna of Russia was reported by Kuznetsov [2004].
- Eupeodes bucculatus* (Rondani, 1857)  
= *Eupeodes latilunulatus* Collin, 1931.  
**Distribution.** Sib, FE — Eu, Mn, K, J.
- Eupeodes corollae* (Fabricius, 1794)  
**Distribution.** Eup, Sib, FE — Eu, Iran, MA, Ch, Mn, K, J, Af, Or, Tasmania.
- Eupeodes curtus* (Hine, 1922)  
**Distribution.** N FE — Eu.
- Eupeodes flaviceps* (Rondani, 1857)  
**Distribution.** Cr, Altai — Eu.
- Eupeodes goeldini* Mazánek, Láska et Bièik, 1999  
**Distribution.** Prim. — Eu.

- Eupeodes karafutonis* (Matsumura, 1917)  
**Distribution.** Skh.  
**Remarks.** We are not familiar with this species, and its taxonomic status requires further study.
- Eupeodes kawuguchii* (Matsumura, 1917)  
**Distribution.** Skh.  
**Remarks.** We are not familiar with this species, and its taxonomic status requires further study.
- Eupeodes latifasciatus* (Macquart, 1829)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Afganistan, Syria, Mn, J, NA, Or.
- Eupeodes latimacula* (Peck, 1969)  
**Distribution.** Tuva — Ki, Mn.  
**Remarks.** This species is reported for the territory of Russia for the first time.
- Eupeodes lundbecki* (Soot-Ryen, 1946)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, J.
- Eupeodes luniger* (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Canary Is., Eu, Naf, Kz, MA, Afganistan, Mn, K, J, NA, Or.
- Eupeodes nielseni* (Dušek et Láška, 1976)  
**Distribution.** N Sib, FE — Eu.
- Eupeodes nitens* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Afganistan, Mn, K, J.
- Eupeodes nuba* (Wiedemann, 1830)  
**Distribution.** Altai — S Eu, Af, TC, MA, Afg, Mn.  
**Remarks.** This species is reported for the territory of Russia for the first time.
- Eupeodes punctifer*  
 (Frey in Kanervo, 1934)  
**Distribution.** Eup, Sib, N FE — Eu, Mn, NA.
- Fagisyrrhus* Dušek et Láška, 1967  
*Fagisyrrhus cincta* (Fallén, 1817)  
**Distribution.** Eup, S FE — Eu, J.
- Ischiodon* Sack, 1913  
*Ischiodon scutellaris* (Fabricius, 1805)  
**Distribution.** S Eup, S FE — Tr, Kz, MA, Iran, Afganistan, Mn, Ch, J, Or, New Guinea, Oceania, Australia.
- Lapposyrphus* Dušek et Láška, 1967  
*Lapposyrphus lapponicus* (Zetterstedt, 1838)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, NA.
- Leucozона* Schiner, 1860  
*Leucozона beybienkoi* Violovitsh, 1982  
**Distribution.** S Sib, S FE.
- Leucozона inopinata* Doczkal, 2000  
**Distribution.** Eup, Sib, FE — Eu, MA, J.
- Leucozона glaucia* (Linnaeus, 1758)  
 = *Musca depressa* Swederus, 1787.  
 = *Chamaesyrrhus myiakei* Matsumura, 1911.  
**Distribution.** Eup, Sib, FE — Eu, Mn, K, J.
- Leucozона laternaria* (Müller, 1776)  
 = *Karasyrrhus sachalinensis* Matsumura, 1918.  
**Distribution.** Eup, Sib, FE — Eu, Ch, Mn, K, J.
- Leucozона lucorum* (Linnaeus, 1758)  
**Distribution.** Sib, FE — Eu, ?K, NA.
- Leucozона ussuriensis* (Stackelberg, 1930)  
**Distribution.** Trb, Prim.
- Megasyrrhus* Dušek et Láška, 1967  
*Megasyrrhus erratica* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, J.
- Melangyna* Verrall, 1901  
*Melangyna arctica* (Zetterstedt, 1838)  
**Distribution.** N, Eup, Sib, N FE — Eu, J (Hokkaido), NW NA.
- Melangyna barbifrons* (Fallén, 1817)  
**Distribution.** Eup, Sib, FE — Eu, J.
- Melangyna basarukini* Mutin, 1998  
**Distribution.** N Sib, FE — J (Hokkaido).
- Melangyna coei* Nielsen, 1971  
 = *Melangyna stackelbergi* Violovitsh, 1980, **syn. nov.**  
**Distribution.** Sib, FE — N Eu, K, J, NA.  
**Remarks.** We failed to find the holotype of *M. stackelbergi* in the collections of Zoological Institute of Russian Academy of Sciences (St. Petersburg) (ZIN) and Institute of Systematics and Ecology of Animals Siberian Branch of RAS (Novosibirsk); apparently, it should have been lost. Based on the original description of *Melangyna stackelbergi* and its paratype that is retained in ZIN and labelled as «Хакассии, Большой Он 14.06.1972 (Челяев) [Khakassii, Bolschoi On 14.06.1972 (Chelyaev)]» and «label 686», this species name is to be considered a junior synonym of *Melangyna coei*.
- Melangyna compositarum* (Verrall, 1873)  
 = *Syrphus kolomietzi* Violovitsh, 1965 **syn. nov.**  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Mn, K, J.  
**Remarks.** *Syrphus kolomietzi* was described on bases of two males without designation of the holotype (Violovich, 1965). In the collection of ZIN, we studied a specimen (male) with a red label «Syntypus *Melangyna kolomyietzi* Violovitsh», with the gray label «718 / *Syrphus* / *kolomyietzi* / N. Violovitsh «and with the white label in a black frame» Тува, Чагытай, тайга, 3.VIII.1963 кол. Н. Виолович [Tuva, Chagytai, taiga, 3.VIII.1963 coll. N. Violovitsh]». Based on the study of this syntype, it can be unequivocally asserted that this specimen does not differ in principle from typical specimens of *M. compositarum* (Verrall, 1873).
- Melangyna lasiophthalma* (Zetterstedt, 1843)  
 = *Stenosyrphus saghalinensis* Matsumura, Adachi, 1917.  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, K, J, NA.

- Melangyna lucifera* Nielsen, 1980  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Melangyna macromaculata* Mutin, 1998  
**Distribution.** S Prim.
- Melangyna motodomariensis* (Matsumura, 1917)  
= *Melangyna arsenjevi* Mutin, 1986.  
**Distribution.** NW Eup, S FE — J.
- Melangyna olsuffjevi* (Violovitsh, 1956)  
**Distribution.** S FE — J.
- Melangyna pavlovskiyi* (Violovitsh, 1956)  
**Distribution.** S FE — J.
- Melangyna quadrimaculata* (Verrall, 1873)  
**Distribution.** Eup, E Sib, FE — Eu, J.
- Melangyna soszynskii* Mielczarek, 2013  
**Distribution.** Sayan.
- Melangyna tsherepanovi*  
(Violovitsh, 1965)  
**Distribution.** Tuva.  
**Remarks.** The species remains known from the original description only. The type series seems to have been lost. The specimens from the lower reaches of Yenisei (vil. Nosok) identified by N.A. Violovich as *Melangyna tsherepanovi* (ISEA's collection) actually belong to *M. arctica*.
- Melangyna umbellatarum* (Fabricius, 1794)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J, NA.
- Meligramma* Frey, 1946  
*Meligramma cingulatum* (Egger, 1860)  
**Distribution.** Eup, Sib, S FE — Eu.
- Meligramma guttatum* (Fallén, 1817)  
= *Syrphus savchenkoi* Violovish, 1965.  
= *Syrphus sayanica* Violovish, 1975.  
**Distribution.** Eup, Sib, FE — Eu, MA, J, NA.
- Meligramma trianguliferum* (Zetterstedt, 1843)  
= *Melangyna nielsenii* Violovitsh, 1982.  
**Distribution.** Eup, Sib, FE — Eu, J, NA.
- Meliscaeva* Frey, 1946  
*Meliscaeva auricollis* (Meigen, 1822)  
**Distribution.** Eup — Eu, TC, MA, NAF.
- Meliscaeva cinctella* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, K, J, NA, Or.
- Parasyrphus* Matsumura, 1917  
*Parasyrphus altimontanus*  
Barkalov et Kropacheva, 2005  
**Distribution.** Altai, N Sib.
- Parasyrphus ammosovi*  
Bagatshanova ex Mutin, 1990,  
**Distribution.** Ya — J (Hokkaido).
- Parasyrphus annulatus* (Zetterstedt, 1838)  
**Distribution.** Eup, Sib, FE — Eu, Mn, K, J.
- Parasyrphus dryadis* (Holmgren, 1869)  
**Distribution.** N Eup, N Sib, N FE (Vrangel I.) — N Eu, Spitsbergen, NA.
- Parasyrphus iraidae* Mutin, 1987  
**Distribution.** FE — J.
- Parasyrphus kirgizorum* (Peck, 1969)  
**Distribution.** Altai — Eu (Alps), MA.
- Parasyrphus lineolus* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, S FE, Skh, S KI — Eu, Ch, Mn, J.
- Parasyrphus macularis* (Zetterstedt, 1843)  
**Distribution.** Eup, FE — Eu, J, NA.
- Parasyrphus magadanensis* Mutin, 1990  
**Distribution.** Yamal, N FE.
- Parasyrphus makarkini* Mutin, 1990  
**Distribution.** Skh, S KI — J, Nepal.
- Parasyrphus malinellus* (Collin, 1952)  
**Distribution.** Eup, Sib, FE — Eu, J.
- Parasyrphus nigratarsis*  
(Zetterstedt, 1843)  
**Distribution.** Eup, Sib, FE — Eu, MA, Mn, J, NA.
- Parasyrphus proximus* Mutin, 1990  
**Distribution.** Eup, S FE — N Eu.
- Parasyrphus punctulatus* (Verrall, 1873)  
= *Mesosyrphus levinae* (Violovitsh, 1975).  
**Distribution.** Eup, Sib, S FE — Eu, J.
- Parasyrphus tarsatus* Zetterstedt, 1838  
**Distribution.** Eup, Sib, FE — Eu, Mn, J, NA.
- Parasyrphus vittiger* (Zetterstedt, 1843)  
**Distribution.** Eup, Sib, NC — Mn, Eu.
- Scaeva* Fabricius, 1805  
*Scaeva albomaculata*  
(Macquart, 1842)  
**Distribution.** Eur, S Sib — Eu, TC, Afg, Mn, N Ch.
- Scaeva caucasica* S. Kuznetsov, 1985  
**Distribution.** NC.
- Scaeva komabensis* (Matsumura, 1917)  
**Distribution.** S FE — Ch, K, J.
- Scaeva lagodechiensis* Kuznetsov, 1985  
**Distribution.** N C. — TC.
- Scaeva pyrastris* (Linnaeus, 1758)  
**Distribution.** Eup, Sib, FE — Canary Is., Madeira, Eu, Kz, MA, Afganistan, Mn, Ch, K, J, NAF, Or, NA.



- Scaeva selenitica* (Meigen), 1822  
 = *Scaeva baltica* S. Kuznetzov, 1985.  
 = *Scaeva rossica* S. Kuznetzov, 1985.  
**Distribution.** Eup, Altai — Eu.
- Sphaerophoria* Lepeletier et Serville, 1828  
*Sphaerophoria (Knutsoniana)*  
 Barkalov et Mutin, 2017  
*Sphaerophoria (Knutsoniana) reginae*  
 Claussen et Mutin, 2007  
**Distribution.** S Sib, Ya, S FE — Ch, Mn, K, J.
- Sphaerophoria (Knutsoniana) shirchan*  
 Violovitsh, 1957  
**Distribution.** Sib, S FE — Eu, Mn, J.
- Sphaerophoria (Knutsoniana) tuvunica*  
 Violovitsh, 1966  
**Distribution.** S Sib, Ya, S FE — Mn.
- Sphaerophoria (Prospheerophoria)* Barkalov, 2012  
*Sphaerophoria (Prospheerophoria) loewi*  
 Zetterstedt, 1843  
**Distribution.** Eup, WSib — Eu, MA, Mn.
- Sphaerophoria (Sphaerophoria)*  
 Lepeletier et Serville, 1828  
*Sphaerophoria (Sphaerophoria) abbreviata*  
 Zetterstedt, 1859  
**Distribution.** Eup, Sib, ?Kamtschatka — Eu, NA.
- Sphaerophoria (Sphaerophoria) bankowskiae*  
 Goeldlin, 1989  
**Distribution.** Altai, W Sayan — Eu.
- Sphaerophoria (Sphaerophoria) batava*  
 Goeldlin, 1974  
**Distribution.** Ya, Am — Eu.
- Sphaerophoria (Sphaerophoria) borealpina*  
 Goeldlin, 1989  
**Distribution.** S Sib (Yamal Peninsular) — Eu.
- Sphaerophoria (Sphaerophoria) chongjini*  
 Bankowska, 1964  
 = *Sphaerophoria tinae* Violovitsh, 1976.  
**Distribution.** Eup, Sib, S FE — Eu, K, J.
- Sphaerophoria (Sphaerophoria) ciceica*  
 Skuffin, 1980  
**Distribution.** N NC.
- Sphaerophoria (Sphaerophoria) indiana*  
 Bigot, 1884  
**Distribution.** S Sib, S FE — Afganistan, Mn, Ch, K, J, Or.
- Sphaerophoria (Sphaerophoria) interrupta*  
 (Fabricius, 1805)  
 = *Sphaerophoria altaica* Violovitsh, 1976  
**Distribution.** Eup, Sib — Eu.
- Sphaerophoria (Sphaerophoria) kaa*  
 Violovitsh, 1960  
**Distribution.** FE — N Eu, Mn.
- Sphaerophoria (Sphaerophoria) lauriae*  
 Goeldlin, 1989  
**Distribution.** NC, Altai. — Eu.
- Sphaerophoria (Sphaerophoria) macrogaster*  
 (Thomson, 1869)  
 = *Sphaerophoria krocha* Violovitsh, 1976.  
 = *Sphaerophoria nana* Violovitsh, 1976.  
**Distribution.** S FE — Mn Ch, K, J, Or.
- Sphaerophoria (Sphaerophoria) makarkini*  
 Mutin, 1999  
**Distribution.** Trb, N FE
- Sphaerophoria (Sphaerophoria) pallidula*  
 Mutin, 1999  
**Distribution.** Sib, FE — N Eu.
- Sphaerophoria (Sphaerophoria) philantha*  
 (Meigen, 1822)  
**Distribution.** Eup, Sib, FE. — J, Mn, Eu, NA.  
*Sphaerophoria (Sphaerophoria) potentillae* Claussen,  
 1984  
**Distribution.** S Sib, S FE — Eu.
- Sphaerophoria (Sphaerophoria) rueppellii*  
 (Wiedemann, 1830)  
 = *Sphaerophoria montivaga* Violovitsh, 1985  
**Distribution.** Eup, Sib, S FE — Canary Is., Eu, Afganistan, Syria, Mn, Ch, K, J, Af.
- Sphaerophoria (Sphaerophoria) scripta*  
 (Linnaeus, 1758)  
**Distribution.** Eup, Sib, S FE — Canary Is., Madeira, Eu, N Af, Syria, Afganistan, MA, Mn, J, NA; Or.
- Sphaerophoria (Sphaerophoria) taeniata*  
 (Meigen, 1822)  
**Distribution.** Eup, Sib, FE — Canary Is., Eu, MA, Mn, Ch, K, ?J.
- Sphaerophoria (Sphaerophoria) turkmenica*  
 Bankowska, 1964  
**Distribution.** NC — MA, Arabian.
- Sphaerophoria (Sphaerophoria) virgata*  
 Goeldlin, 1974  
**Distribution.** Sib, FE — Eu.
- Sphaerophoria (Sphaerophoria) ziminae*  
 Mutin, 1999  
**Distribution.** S Prim.
- Syrphus* Fabricius, 1775  
*Syrphus admirandus* Goeldlin, 1996  
**Distribution.** Sib, FE — Eu.

- Syrphus annulifemur*  
Mutin ex Mutin et Barkalov, 1997  
**Distribution.** S Sib, S FE.
- Syrphus attenuatus* Hine, 1922  
**Distribution.** Eup, Sib, FE — Eu, NA.
- Syrphus dubius* Matsumura, 1918  
**Distribution.** Skh, S KI — Ch, K, J.
- Syrphus hualasae* Mutin, 1999  
**Distribution.** S Prim — J.
- Syrphus ribesii* (Linnaeus, 1758)  
= *Syrphus kotoriensis* Matsumura, 1917.  
= *Syrphus beringi* Violovitsh, 1975.  
**Distribution.** Eup, Sib, FE — Eu, Kz, MA, Afganistan, Mn, Ch, K, J, NA.
- Syrphus sexmaculatus* (Zetterstedt, 1838)  
= *Syrphus tshakanovskiy* Kuznetsov, 1987  
**Distribution.** N Eup, Sib, FE — N Eu, NA.
- Syrphus stackelbergi* S. Kuznetsov, 1990  
**Distribution.** N Eup — N Eu, NA.
- Syrphus torvus* Osten Sacken, 1875  
**Distribution.** Eup, Sib, FE — Eu, Kz, Mn, Ch, K, J, NA, Or.
- Syrphus vitripennis* Meigen, 1822  
**Distribution.** Eup, Sib, FE — Eu, Kz, Afganistan, Iran, Mn, K, J, NA, Or.  
**Remarks.** It is a variable species as far as its leg and abdominal coloration concern. Specimens with yellow rear-femora identified as *Syrphus rectus* Osten-Sacken, 1877 [Mutin, Barkalov, 1999] seem to represent a colour aberration only. The record of *Syrphus auberti* Goeldlin, 1996 [Mutin, Barkalov, 1999] from Sakhalin is to be treated as a misidentification, for it was based on a colour aberration of *S. vitripennis*.
- Xanthogramma* Schiner, 1860  
*Xanthogramma citrofasciatum* (de Geer, 1776)  
**Distribution.** Eup, W Sib — Eu.
- Xanthogramma coreanum* Shiraki, 1930  
**Distribution.** S FE — K.
- Xanthogramma hissaricum villosa* Violovitsh, 1987  
**Distribution.** S Sib.
- Xanthogramma laetum* (Fabricius, 1794)  
= *Xanthogramma (Olbiosyrphus) eoa* Violovitsh, 1975.  
= *Xanthogramma (Olbiosyrphus) udege* Violovitsh, 1975.  
**Distribution.** Eup, S Sib, S FE — Eu.
- Xanthogramma pedissequum* (Harris, 1780)  
**Distribution.** Eup, Sib — Eu.
- Xanthogramma sapporensis* Matsumura, 1916  
= *Xanthogramma (Olbiosyrphus) sachalinica* Violovitsh, 1975.  
**Distribution.** Skh, S KI — K, J.

*Xanthogramma sichotanim* Violovitsh, 1975

**Distribution.** S FE.

*Xanthogramma stackelbergi* Violovitsh, 1975

**Distribution.** Eup — Eu.

## Acknowledgements

We are grateful to PhD. Dmitri V. Logunov for translating the manuscript. The work was conducted partly with support of the Russian Foundation for Basic Research, grant No.16-04-00194-a, and partly with support of the Federal Fundamental Scientific Research Programme for 2013–2020 (AAAA-A16-116121410121-7). The study of V.A. Mutin was partly supported by the Ministry of Education and Science of the Russian Federation, with the scope of the basic role of the state in the sphere of scientific activity (project 6.8601.2017/8.9).

## References

- Anufriev G.A., Soshnikov V.I. 1983. [Hover flies fauna of Gor'kij Region (Diptera, Syrphidae)] // Nazemye i vodnye ekosistemy. P.65–75. [In Russian].
- Bagatshanova A.K. 1976. [To hoverflies fauna of Central Yakutia] // Ivanov B.I. (Ed.). Byulleten' nauchno-tehnicheskoi informacii. Yakutsk. P.17–19. [In Russian].
- Bagatshanova A.K. 1978. [Materials on hover flies (Diptera, Syrphidae) of Yakutia. I] // Ammosov Yu.N. (Ed.). Ekologo-faunisticheskie issledovaniya nasekomykh Yakutii. Yakutsk. P.110–29. [In Russian].
- Bagatshanova A.K. 1980. New hoverflies species (Diptera, Syrphidae) from Central Yakutia // Entomologicheskoe Obozrenie. Vol.69. No.2. P.421–427. [In Russian].
- Bagatshanova A.K. 1984. New species of genus *Xylota* Mg. (Diptera, Syrphidae) from Yakutia // Tshereponov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.94–99. [In Russian].
- Bagachanova A.K. 1985. [Materials on hover flies (Diptera, Syrphidae) of Yakutia. II] // Solomonov N.G. (Ed.). Materialy po faune i ekologii nasekomykh Yakutii. Yakutsk. P.42–54. [In Russian].
- Bagachanova A.K. 1987. [Seasonal activity of the hoverflies (Diptera, Syrphidae) in the Central Yakutia] // Tsherepanov A.I. (Ed.). Ekologiya i geografiya chlenistonogikh Sibiri. Novosibirsk: Nauka. P.20–21. [In Russian].
- Bagachanova A.K. 1988. [Materials on hover flies (Diptera, Syrphidae) of Yakutia. III] // Revin Yu.V. (Ed.). Nasekomye lugovo-taezhnykh biotsenozov Yakutii. P.100–111. [In Russian].
- Bagachanova A.K. 1990. [The fauna and ecology of syrphids (Diptera, Syrphidae) of Yakutia] // Vinokurov N.N. (Ed.). Yakutsk: YaNC SO AN SSSR. P.1–164. [In Russian].
- Barkalov A.V. 1978. New species *Cheilosia* Meigen (Diptera, Syrphidae) from the Altai Region // Tsherepanov A.I. (Ed.). Taksonomiya i ecologia chlenistonogikh Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.182–183. [In Russian].
- Barkalov A.V. 1979. [New species of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) from Enisei estuary. Contribution 3] // Tsherepanov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.87–90. [In Russian].
- Barkalov A.V. 1980a. A new species *Cheilosia ussuriensis* sp.n. (Diptera, Syrphidae) from Southern Primorye. Contribution 4 // Tsherepanov A.I. (Ed.). Sistematika i ekologiya zhivotnykh.

- (Novye i maloizvestnyye vidy fauny Sibiri). Novosibirsk: Nauka. P.132–134. [In Russian].
- Barkalov A.V. 1980b. New data on the taxonomy of the flower flies (Diptera, Syrphidae). Contribution 5 // Tsherepanov A.I. (Ed.). Sistematika i ekologiya zhivotnykh. (Novye i maloizvestnyye vidy fauny Sibiri). Novosibirsk: Nauka. P.135–136. [In Russian].
- Barkalov A.V. 1981a. New and little known species of the genus *Cheilosia* Meigen. (Diptera, Syrphidae) from Altai and Southern Primorye. Contribution 6. // Tsherepanov A.I. (Ed.). Nasekomye i kleshchi. (Novye i maloizvestnyye vidy fauny Sibiri). Novosibirsk: Nauka. P.79–84. [In Russian].
- Barkalov A.V. 1981b. Hover flies of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) of the fauna of Siberia and Far East // Entomologicheskoe Obozrenie. Vol.60. No.2. P.412–421. [In Russian].
- Barkalov A.V. 1981c. Taxonomy of species closely allied to *Cheilosia illustrata* Harris (Diptera, Syrphidae) // Izvestiya Sibirskogo otdeleniya Akademii Nauk SSSR. Seriya Biologicheskikh nauk. Issue 3. P.112–116. [In Russian].
- Barkalov A.V. 1982. A description of new Palaearctic species of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). Gelminty, kleshchi i nasekomye (Novye i maloizvestnyye vidy fauny Sibiri). Novosibirsk: Nauka. P.65–67. [In Russian].
- Barkalov A.V. 1983a. New data on systematics and distribution of hover flies of the genus *Cheilosia* Mg., 1822 (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.62. No.3. P.633–634. [In Russian].
- Barkalov A.V. 1983b. [*Cheilosia* Meigen, 1822] // N.A. Violovitsh. «Syrphidy Sibiri. Opredelitel'». Novosibirsk: Nauka. P.73–87. Figs 82–95. [In Russian].
- Barkalov A.V. 1983c. The role of structure of hypopygium in the systematics of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) // Skarlato O.A. (Ed.). Diptera (Insecta), their systematics, geographic distribution and ecology. Leningrad. Zoological Institute. P.3–7. [In Russian].
- Barkalov A.V. 1984. The description of new species *Cheilosia mutini* Barkalov, sp. n. and male *Cheilosia convexifrons* Stackelberg, 1963 (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnyye vidy fauny Sibiri). Novosibirsk: Nauka. P.83–87. [In Russian].
- Barkalov A.V. 1985. New species of the genus *Cheilosia* Mg. (Diptera, Syrphidae) from the alpine Altai // Tsherepanov A.I. (Ed.). Sistematika i biologiya chlenistonogikh i gelmintov (Novye i maloizvestnyye vidy fauny Sibiri). Novosibirsk: Nauka. P.71–73. [In Russian].
- Barkalov A.V. 1987. [Seasonal flight dynamics of hoverflies of the genus *Cheilosia* Mg. (Diptera, Syrphidae) in the Altai Mountains] // Tsherepanov A.I. (Ed.). Ekologiya i geografiya chlenistonogikh Sibiri. Novosibirsk: Nauka. P.22–23. [In Russian].
- Barkalov A.V. 1988. [Descriptions of new species of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) from Siberia and Far East] // Zolotareno G.S. (Ed.). Taksonomiya zhivotnykh Sibiri. Novosibirsk: Nauka. P.102–108. [In Russian].
- Barkalov A.V. 1990a. [Descriptions of new species of the genus *Cheilosia* Mg., 1822 (Diptera, Syrphidae)] // Zolotareno G.S. (Ed.). Redkie gelminty, kleshchi i nasekomye. Novosibirsk: Nauka. P.112–116 [In Russian].
- Barkalov A.V. 1990b. [New in taxonomy of hoverflies of Siberia and Far East (Diptera, Syrphidae)] // Zolotareno G.S. (Ed.). Taxonomiya nasekomykh i gelmintov. Novosibirsk: Nauka. P.120–128. [In Russian].
- Barkalov A.V. 1992. [Centers of species diversity of hoverflies of the genus *Cheilosia* Mg. (Diptera, Syrphidae) of the Palaearctic fauna] // Richter V.A., Zlobin V.V. (Eds). Advantages of entomology in USSR. Diptera: systematics, ecology, medical and veterinary importance. Zoological Institute. Leningrad. P.6–8. [In Russian].
- Barkalov A.V. 1993a. New data on distribution and taxonomy of Russian hoverflies (Diptera, Syrphidae) // Dipterological Research. Vol.4. P.123–137.
- Barkalov A.V., 1993b. Taxonomy and distribution of six Palaearctic *Cheilosia* species (Diptera, Syrphidae) // Entomologica Fennica. No.4. P.207–212.
- Barkalov A.V. 1993c. [New data on hoverflies taxonomy of the genus *Cheilosia* Mg. (Diptera, Syrphidae)] // Sibirskij Biologicheskij Zhurnal. Issue 3. P.36–41. [In Russian].
- Barkalov A.V. 1993d. Hover flies of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) of the Caucasus // Entomologicheskoe Obozrenie. Vo.72. No.3. P.698–727. [In Russian].
- Barkalov A.V. 1994. Hover flies of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) // Entomological Review. Vol.73. No.5. P.28–58.
- Barkalov A.V. 1997. Analysis of ranges of hover flies of the genus *Cheilosia* Mg. (Diptera, Syrphidae) // Alimov A.F. (Ed.). Mesto i rol' dvukrylykh nasekomykh v ekosistemakh. Sbornik nauchnykh statej. Sanct-Petersburg. Zoological Institute. P.22–23. [In Russian].
- Barkalov A.V. 1998a. Changes and additions to the Catalogue of Palaearctic Syrphidae. Genus *Cheilosia* Meigen, 1822 // An International Journal of Dipterological Research. Vol.9. No.2. P.69–77.
- Barkalov A.V. 1998b. Faunistic list of hover-flies (Diptera, Syrphidae) of Kurgan Region // Utkin N.A. (Ed.). In: The Invertebrates of animals of the South Transural region and the neighboring territories. The materials of the All-Russian conference April 14–16, 1998. Kurgan. P.54–61. [In Russian].
- Barkalov A.V. 2002. Spatial distribution of hover-flies of the genus *Cheilosia* Mg. (Diptera, Syrphidae) // Euroasian Entomological Journal. Vol.1. No.1. P.93–99. [In Russian].
- Barkalov A.V. 2004. Possible ways of developing the fauna of the genus *Cheilosia* (Diptera, Syrphidae) in the Old World // Zoologicheskii Shurnal. Vol.83. No.6. P.708–714.
- Barkalov A.V. 2005. Revision of Russian hover-flies of the genus *Cheilosia* Mg. (Diptera, Syrphidae), subgenus *Taeniochilosia* Oldenberg, 1916 (species-group with completely black legs) // Euroasian Entomological Journal. Vol.4. No.2. P.137–158. [In Russian].
- Barkalov A.V. 2007a. A new species, new synonyms, and new records of the hover-flies genus *Cheilosia* Meigen (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.86. No.2. P.424–433. [In Russian].
- Barkalov A.V. 2007b. Hoverflies of the genus *Dasyrphus* Enderlein, 1937 (Diptera, Syrphidae) from the Urals, Siberia and the Far East // Euroasian Entomological Journal. Vol.6. No.3. P.273–298 + VIII plates. [In Russian with English abstract and the key to species].
- Barkalov A.V. 2007c. A new for the Russian fauna genus and species of hover-flies (Diptera, Syrphidae) // Zoologicheskii Zhurnal. Vol.86. No.10. P.1275–1278. [In Russian].
- Barkalov A.V. 2007d. A new species, new synonyms, and new records of the hover-flies genus *Cheilosia* Meigen (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.86. No.2. P.424–433. [In Russian].
- Barkalov A.V. 2008. Hover-flies of the genus *Cheilosia* Mg. (Diptera, Syrphidae) of Kazakhstan // Eurasian Entomological Journal. Vol.7. No.2. P.150–160. [In Russian].
- Barkalov A.V. 2009a. A key to hover-flies of the genus *Cheilosia* Mg. (Diptera, Syrphida) of Kazakhstan // Entomologicheskoe Obozrenie. Vol.88. No.4. P.881–905. [In Russian].
- Barkalov A.V. 2009b. Hover-flies of the genus *Melanostoma* close to *Melanostoma dubium* (Diptera, Syrphidae) // Zoologicheskii Zhurnal. Vol.88. No.10. P.1271–1275. [In Russian].
- Barkalov A.V. 2011. New data on the nomenclature and fauna of the genus *Sphaerophoria* Le Pelet. et Serv., 1828 (Diptera, Syrphidae) of Siberia and adjacent territories //

- Entomologicheskoe Obozrenie. Vol.90. No.4. P.650–661. [In Russian].
- Barkalov A.V. 2012a. Subgeneric classification of the genus *Sphaerophoria* Lep. et Serv. (Diptera, Syrphidae) // Euroasian Entomological Journal. Vol.11. No.3. P. 285–290.
- Barkalov A.V. 2012b. Hover-flies (Diptera, Syrphidae) of the fauna of Ary-Mas locality (the Taimyr Biosphere Reserve) // Zoologicheskii Zhurnal. Vol.91. No.3. P.375–378. [In Russian].
- Barkalov A.V. 2013. A new *Platycheirus* Le Peletier et Serville, 1828 (Diptera, Syrphidae) species of the manicatus subgroup, from the Taimyr Peninsula (Northern Siberia) // Zootaxa. Vol.3681. No.2. P.175–181.
- Barkalov A.V. 2015a. Hover flies (Diptera, Syrphidae) of the Taimyr Peninsula, Russia. Part I // Euroasian Entomological Journal. Vol.14. No.1. P.54–62. [In Russian].
- Barkalov A.V. 2015b. [Hover flies (Diptera, Syrphidae) of the Taimyr Peninsula, Russia. Part 2] // Euroasian Entomological Journal. Vol.14. No.2. P.157–161. [In Russian].
- Barkalov A.V., Bagatshanova A.K. 1985. [To the hover flies fauna of the genus *Cheilosia* Meigen, 1822 (Diptera, Syrphidae) of Yakutia] // Zolotareno G.S. (Ed.). Chlenistonogie Sibiri i Dalnego Vostoka. Novosibirsk: Nauka. P.191–198. [In Russian].
- Barkalov A.V., Cheng X.-Y. 2011. A review of the Chinese species of the genus *Blera* (Diptera: Syrphidae) with the description of a new species // Zoosystematica Rossica. Vol.20. No.2. P.350–355.
- Barkalov A.V., Goguzokov T.N. 2001. A new species and new distributional records of genus *Paragus* (Diptera, Syrphidae) from North Caucasus. // An International Journal of Dipterological Research. Vol.12. No.1. P. 49–52.
- Barkalov A.V., Ichige K. 2016. Review of the Asian species of the subgenus *Neocheilosia* Barkalov (Diptera, Syrphidae), with description of new species // Zootaxa. Vol.4150. No.5. P.571–580.
- Barkalov A.V., Kropacheva D.Yu. 2005. A new species of the genus *Parasyrphus* Matsumura, 1917 (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.16. No.2. P.81–83.
- Barkalov A.V., Kropacheva D.Yu. 2012. Hoverflies (Diptera, Syrphidae) of the fauna of Altai Mountains. Subfamilies Eristalinae, Pipizinae and Microdontinae // Proceedings of the Russian Entomological Society. St. Petersburg. Vol.83. No.1. P.174–192. [In Russian].
- Barkalov A.V., Mutin V.A. 1991a. Revision of hover flies of the genus *Blera* Billberg, 1820 (Diptera, Syrphidae). I // Entomologicheskoe Obozrenie. Vol.70. No.1. P.204–213. [In Russian].
- Barkalov A.V., Mutin V.A. 1991b. Revision of hover flies of the genus *Blera* Billberg, 1820 (Diptera, Syrphidae). II // Entomologicheskoe Obozrenie. Vol.70. No.3. P. 737–749. [In Russian].
- Barkalov A.V., Mutin V.A. 2014. Two new species of Syrphidae (Diptera) from Chukotka (Northern Russian Far East) // Zootaxa. Vol.3846. No.2. P.285–292.
- Barkalov A.V., Mutin V.A. 2015. Hover-flies (Diptera, Syrphidae) of the Anadyr River lower reach territory, Chukotka Autonomousy Okrug of Russia // Eurasian Entomological Journal. Vol.14. No.4. P.346–359. [In Russian].
- Barkalov A.V., Mutin V.A. 2016. Hover-flies (Diptera, Syrphidae) of two local faunas of the Yamal Peninsula // Euroasian Entomological Journal. Vol.15. No.3. P.239–249. [In Russian].
- Barkalov A.V., Mutin V.A. 2017a. Hover flies (Diptera, Syrphidae) of the fauna of Russia // Materialy XV c'ezda Russkogo Entomologicheskogo Obshchestva. Novosibirsk. P.43–44. [In Russian].
- Barkalov A.V., Mutin V.A. 2017b. Hover flies (Diptera, Syrphidae) of Tsentral'nossibirskij Reserve in Krasnoyarskij Krai, Russia // Euroasian Entomological Journal. Vol.16. No.1. P.10–22. [In Russian].
- Barkalov A.V., Mutin V.A., Khruleva O.A. 2010. Syrphid fauna (Diptera, Syrphidae) of Karagynsky Island (the Bering Sea) // Zoologicheskii Zhurnal. Vol.89. No.8. P.1016–1021. [In Russian].
- Barkalov A.V., Nielsen T.R. 2007a. A new *Platycheirus* species of the manicatus subgroup (Diptera, Syrphidae) from Caucasus // Norwegian Journal of Entomology. Vol.54. P.129–134.
- Barkalov A.V., Nielsen T.R. 2007b. *Platycheirus* species (Diptera, Syrphidae) from Yakutia, Eastern Siberia, with description of two new species // Volucella. Vol.8. P.87–94.
- Barkalov A.V., Nielsen T.R. 2008. *Platycheirus* species (Diptera, Syrphidae) from the Altai Mountains, SE Siberia, with description of five new species // Norwegian Journal of Entomology. Vol. 55. P.87–100.
- Barkalov A.V., Nielsen T.R. 2009. New material of Central Palaearctic *Platycheirus* (Diptera, Syrphidae) with description of three new species // Norwegian Journal of Entomology. Vol.56. P.1–8.
- Barkalov A.V., Nielsen T.R. 2010. Revision of the genus *Rohdendorfia* Smirnov, 1924 // Norwegian Journal of Entomology. Vol. 57. P.154–161.
- Barkalov A.V., Nielsen T.R. 2012. A new *Platycheirus* species of the manicatus Meigen subgroup from the arctic Russia (Diptera, Syrphidae) // Entomologica Fennica. Vol.23. P.165–168.
- Barkalov A.V., Popov G.V. 2000. About Nomenclature of *Eumerus tauricus* (Diptera, Syrphidae) // Vestnik zoologii. Vol.34. No.4–5. P.115–118. [In Russian].
- Barkalov A.V., Sorokina V.S. 2006. Hover-flies (Diptera, Syrphidae) of the forest-steppe zone of West Siberia // Euroasian Entomological Journal. Vol.5. No.3. P.209–214. [In Russian].
- Barkalov A.V., Ståhls G. 1997. Revision of Palaearctic bare-eyed and black-legged species of the genus *Cheilosia* Meigen (Diptera, Syrphidae) // Acta Zoologica Fennica. No.208. P.1–74.
- Barkalov A.V., Ståhls G., 2005. On the status of species of the genus *Cheilosia* Mg. (Diptera: Syrphidae) described by Hervé-Bazin // Entomologica Fennica. Vol.16. P.183–192.
- Barkalov A.V., Zinchenko V.K., 2009. [To the hoverflies fauna (Diptera, Syrphidae) of Markakol'skii Reserve] // Trudy Markakol'skogo gosudarstvennogo zapovednika. Ust'-Kamenogorsk. Vol.1. Part1. P.208–211.
- Bartsch H., Binkiewicz E., Klintbjer A., Rådén A., Nasibov E., Nordin A., Östman T., Hall K., Reisborg Ch. 2009a. Nationalnyckeln till Sveriges flora och fauna, Tvåvingar: Blomflugor: Diptera: Syrphidae: Syrphinae // Artdatabanken, SLU, Uppsala. P.1–406.
- Bartsch H., Binkiewicz E., Klintbjer A., Rådén A., Nasibov E., Nordin A., Östman T., Hall K., Reisborg Ch. 2009b. Nationalnyckeln till Sveriges flora och fauna, Tvåvingar: Blomflugor: Diptera: Syrphidae: Eristalinae, Microdontinae // Artdatabanken, SLU, Uppsala. P.1–478.
- Barsukova P.S. 2010a. Hover flies (Diptera, Syrphidae) in the anthophilic complex of *Salix* in the Bolon'skij Reserve // Remizov G.M. (Ed.). Estestvenno-geograficheskie issledovaniya: nauchnyj al'monakh. Issue 8. P.49–53. [In Russian].
- Barsukova P.S. 2010b. The preference of hover-flies (Diptera, Syrphidae) at visiting of blooming Ural False Spirea (*Sorbaria Sorbifolia*) // A.I. Kurentsov's Annual Memorial Meetings. Issue 21. Vladivostok: Dalnauka. P.121–124. [In Russian].
- Barsukova P.S. 2011a. The hoverflies (Diptera, Syrphidae) visiting the flowers of *Caltha membranacea* and *Carex vesicata* in the Bolonskij State Natural Reserve // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok. Dalnauka. Issue 22. P.247–254. [In Russian].
- Barsukova P.S. 2011b. [The horological structure of hover flies fauna (Diptera, Syrphidae) of Bolon'skij Reserve] // Vestnik nauchnogo obshchestva studentov, aspirantov i molodykh uchenykh: materialy 52 nauchno-prakticheskoy konferentsii studentov, aspirantov i molodykh uchenykh. Komsomol'sk-na-Amure. Issue 1. P.51–57.

- Barsukova P.S. 2012a. The hoverfly visitors to the flowers of *Rhododendron dauricum* in the Bolonskij State Natural Reserve // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 23. P.185–191. [In Russian].
- Barsukova P.S. 2012b. [Study of anthophilous complexes of hover flies (Diptera, Syrphidae) in the Bolonskii state natural reserve] // Remizov G.M. (Ed.). Estestvenno-geograficheskie issledovaniya: nauchnyj al'monakh. Issue 9. P.9–16. [In Russian].
- Barsukova P.S. 2013. Features of fauna and ecology of hoverflies (Diptera, Syrphidae) in the Bolonskij State Natural Reserve, Khabarovskii Krai // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 24. P.200–212. [In Russian].
- Barsukova P.S., Mutin V.A. 2012. Faunistic review of hover flies (Diptera, Syrphidae) of the Bolonskij State Natural Reserve in the Khabarovsk Area of Russia // Euroasian entomological Journal. Vol.11. No.4. P.385–394. [In Russian].
- Becker T. 1894. Revision der Gattung *Chilosia* Meigen // Nova Acta Cad. Caesar Leop.-Carol. Vol.62, No.3. P.194–521.
- Becker T. 1915. Résultats scientifiques de l'expédition des frères Kuznetsov (Kouznetzov) à l'Oural arctique en 1909, sous la direction de H. Backlund // Zapiski Imperatorskoj Akademii Nauk. Vol.8. No.28(7). P.1–67.
- Becker T. 1921. Neue Dipteren meiner Sammlung // Mitteilungen aus dem Zoologischen Museum in Berlin. Bd.10. No.1. S.1–93.
- Bykovskij V.I. 1936. [Invertebrate population of Cremean beech forest (biocenological essay)] // Nauchnye trudy gosudarstvennykh zapovednikov. Seriya II. Krymskij gosudarstvennyj zapovednik. Issue 1. P.5–103. [In Russian].
- Bykovskij V.I. 1940. [List of Diptera collected in Cremean Reserve] // Trudy Krymskogo gosudarstvennogo zapovednika. Issue 2. P.189–216.
- Bykovskij V.I., Stackelberg A.A. 1932. [To the hover flies fauna (Diptera, Syrphidae) of the Krym Reserve] // Trudy Zoologicheskogo Instituta AN SSSR. Vol.1. No.2. P.211–218.
- Cherkashina A.S. 1973a. [To knowledge of hover flies fauna (Diptera, Syrphidae) of the environs of Ussurijsk Town of the Primorskij Krai] // Entomologicheskie issledovaniya na Dal'nem Vostoke. Vladivostok. Issue 2. P.24–30. [In Russian].
- Cherkashina A.S. 1973b. [To biology of some entomophagous hoverflies (Diptera: Syrphidae) in conditions of the Primorskij Krai] // Entomologicheskie issledovaniya na Dal'nem Vostoke. Vladivostok. Issue 2. P.135–139. [In Russian].
- Dolgin M.M., Pestov S.V. 2007. [Zoogeographical characteristic of the hover flies fauna (Diptera, Syrphidae) of taiga zone of the European part of North-Eastern Russia] // Vestnik Pomorskogo Universiteta. Seria Estestvennye i tochnye nauki. Issue 1(11). P.46–51. [In Russian].
- Fedchenko A.P. 1868. [List of Diptera species. (Materials on entomology of Moscow scientific region)] // Isvestiya Obshchestva lyubitel'ej estestvoznaniya. Vol.1. P.1–192.
- Frey R. 1915. Diptera Brachycera aus den arktischen Küstengegenden Sibiriens // Zapiski Imperatorskoj Akademii Nauk. Vol.8. No.29(10). P. 1–35.
- Frey R. 1918. Beitrag zur Kenntnis der Dipterenfauna des nördlichen Europäischen Russlands. II. Dipteren aus Archangelsk // Acta Societas pro Fauna et Flora fennica. Vol.46. No.2. P.1–32.
- Goguzokov T.Kh. 2002a. [Species composition, flies distribution of hover flies (Diptera, Syrphidae) of Kabardino-Balkaria] // Aktual'nye voprosy ecologii i okhrany prirody yuzhnykh regionov Rossii i sopredel'nykh territorij. Materialy XV mezhrespublikanskoj nauchno-prakticheskoi konferentsii. Krasnodar. P.180–183. [In Russian].
- Goguzokov T.Kh. 2002b. [Altitudinal distribution of hover flies (Diptera, Syrphidae) of Kabardino-Balkaria] // Vestnik KBGU. Seria Biologicheskie nauki. Nalchik. P.91–93. [In Russian].
- Goguzokov T.Kh., Barkalov A.V. 2000. [Hover flies (Diptera, Syrphidae) of Kabardino-Balkaria] // Vestnik KBGU. Seria Biologicheskie nauki. Nalchik. P.61–62. [In Russian].
- Goguzokov T.Kh., Ketenchiev Kh.A. 2002a. [Trophic connections of hover flies (Diptera, Syrphidae) of the Kabardino-Balkaria] // Biologicheskoe raznoobrazie Kavkaza. Materialy IV Mezhdunarodnoi Konferentsii. Makhachkala. P.92–94. [In Russian].
- Goguzokov T.Kh., Ketenchiev Kh.A. 2002b. [To biodiversity of hover flies fauna (Diptera, Syrphidae) of the Kabardino-Balkarian Republic] // Biologicheskoe raznoobrazie Kavkaza. Materialy IV Mezhdunarodnoi Konferentsii. Makhachkala. P.94–96. [In Russian].
- Gritskevich D.I. 1997. Activity and trophic relations of the hoverflies (Diptera, Syrphidae) in the Myaochan Range // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 7. P.125–133. [In Russian].
- Gritskevich D. I. 1998. Hover-flies (Diptera: Syrphidae) in anthophilous complexes of plants of Myaochan Range, Khabarovskii krai // Far Eastern Entomologist. No.65. P.10–14.
- Haarto A., Kerppola S. 2007. Finnish hoverflies and some species in adjacent countries // Painopaikka Otavan Kirjapaino Oy. Keuruu. P.1–647. [In Finnish].
- Haarto A., Ståhls G. 2014. When mtDNA is misleading: congruent signal of ITS2 molecular marker and morphology for North European *Melanostoma Schiner*, 1860 // Zookeys. No.431. P.93–134.
- Hellén W. 1914. Beitrag zur Kenntnis der Gattung *Chilosia* Meigen // Societas pro Fauna et Flora fennica. Vol.40. P.56–64.
- Hellén W. 1930. Zur Kenntnis der sibirischen Art der Gattung *Chilosia* Meig. (Dipt.) // Notulae Entomologicae. Vol.10. P.26–29.
- Hippa H. 1968. Classification of the palaeartic species of the genera *Xylota* Meigen and *Xylotomima* Shannon (Dipt., Syrphidae) // Annales Entomologici Fennici. Vol.34. No.4. P.179–197.
- Hippa H. 1978. Classification of Xylotini (Diptera, Syrphidae) // Acta Zoologica Fennica. Vol.156. P.1–153.
- Hippa H., Nielsen T.R., van Steenis J. 2001. The west Palaeartic species of the genus *Eristalis* Latreille (Diptera, Syrphidae) // The Norwegian Journal of Entomology. Vol.48. P.289–327.
- Ichige K., Barkalov A.V. 2017. A review of the Old World species of the genus *Blera* Billberg, 1820 (Diptera, Syrphidae), with descriptions of two new species and a subspecies // Euroasian Entomological Journal. Vol.16. No.5. P.419–431.
- ICZN. 2001. Opinion 1982 (case 3090). *Musca arcuata* Linnaeus, 1758 and *M. festiva* Linnaeus, 1758 (currently *Chrysotoxum arcuatum* and *C. festivum*) and *M. citrofasciata* De Geer, 1776 (currently *Xanthogramma citrofasciatum*) (Insecta: Diptera): specific names conserved by the designation of neotypes for *M. arcuata* and *M. festiva*. Bulletin of Zoological Nomenclature. Vol.58. P.241–242.
- Kanervo E. 1934. Einige neue Syrphiden aus Petsamo // Annales Botanici Societatis Zoologicae-Botanicæ Fennicæ «Vanamo». Vol.14. No.5. P.115–135.
- Kanervo E. 1938. Die Syrphidenfauna (Dipt.) Sibiriens in vorläufiger Zusammenstellung // Annales Entomologici Fennicæ. Vol.4. No.3. S.145–170.
- Kolosov Yu.M. 1936. [Catalogue of Diptera of the Middle Urals] // Sverdlovskij institute microbiologii i epidemiologii. P.1–27.
- Kolosov Yu.M., Popov L.V. 1932. [Catalogue of Diptera of the Middle Urals] // Sverdlovskij canitarno-bakteriologicheskij institute. Paboty entomologicheskogo otela. No.1. P.9–12.
- Krivoshina M.G. 2001. Notes on the biology of palaeartic flies of the genera *Chalcosyrphus* Curran and *Xylota* Meigen (Diptera, Syrphidae), with the description of immature stages of *Xylota atricoloris* Mutin, 1987 // An International Journal of Dipterological Research. Vol.12. No.3. P.165–172.
- Krivoshina M.G. 2002. To biology of syrphid flies of the genus *Mallota* (Diptera, Syrphidae) with description of larvae in six species // Zoologicheskii Zhurnal. Vol.81. No.7. P.811–824. [In Russian].
- Krivoshina M.G. 2003. A review of flower-flies of the genus *Hammerschmidtia* in Russia with description of *H. ingraca*

- (Diptera, Syrphidae) larva // Zoologicheskii Zhurnal. Vol.82. No.6. P.687–693. [In Russian].
- Krivosheina M.G. 2005. To biology of flower flies of the genus *Brachyopa* (Diptera, Syrphidae) // Zoologicheskii Zhurnal. Vol.84. No.6. P.681–698. [In Russian].
- Krivosheina M.G., Krivosheina N.P. 1996. Biology and immature stages of *Graptomyza alabeta* Séguy (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.7. No.4. P.267–270.
- Krivosheina N.P. 1972a. [Complexes of Diptera insects developing on *Maackia amurensis*] // Rol' nasekomykh v lesnykh biogeotsenozakh Primoriya. Vladivostok. P.121–128. [In Russian].
- Krivosheina N.P. 1972b. [Ecological relations of Diptera developing under the bark and in the wood of *Juglans mandshurica*] // Rol' nasekomykh v lesnykh biogeotsenozakh Primoriya. Vladivostok. P.87–97. [In Russian].
- Krivosheina N.P. 1974a. [Diptera — inhabitants of the bark and wood of *Populus maximowiczii* and related species] // Nasekomye razrushiteli drevesiny v lesnykh biotsenozakh Uzhnogo Primoriya. M.: Nauka. P.31–40. [In Russian].
- Krivosheina N.P. 1974b. [Xylophilous insects developing on *Alnus hirsuta* in Southern Primorye] // Nasekomye razrushiteli drevesiny v lesnykh biotsenozakh Uzhnogo Primoriya. M.: Nauka. P.56–64. [In Russian].
- Krivosheina N.P. 1974c. [Features of colonization by Diptera decomposing trunks of *Phellodendron amurense* and other endemic for the Far East wood species] // Nasekomye razrushiteli drevesiny v lesnykh biotsenozakh Uzhnogo Primoriya. M.: Nauka. P.96–104. [In Russian].
- Krivosheina N.P. 2002. Morphological and faunistic study of xylophilous flower-flies of the *bombylans* group of the genus *Temnostoma* (Diptera, Syrphidae) // Zoologicheskii Zhurnal. Vol.81. No.8. P.958–969. [In Russian].
- Krivosheina N.P. 2003. [Morphology of species of the genus *Temnostoma* from *apiforme* and *vespiforme* groups. Report 1 // Zoologicheskii Zhurnal. Vol.82. No.12. P.1475–1486. [In Russian].
- Krivosheina N.P. 2004. Morphology of species of the genus *Temnostoma* from *apiforme* and *vespiforme* groups Report 2 // Zoologicheskii Zhurnal. Vol.83. No.1. P.75–92. [In Russian].
- Krivosheina N.P. 2004. A review of species of the genus *Brachyopa* (Diptera, Syrphidae) from Russia, with description of new species from Tajikistan // Zoologicheskii Zhurnal. Vol.83. No.5. P.597–603. [In Russian].
- Krivosheina N.P. 2012. To the distribution of *Temnostoma vespiforme* (Diptera, Syrphidae) in North America // Zoologicheskii Zhurnal. Vol.91. No.4. P.446–452. [In Russian].
- Krivosheina N.P., Mamaev B.M., 1962. Larvae of European species of the genus *Temnostoma* (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vo.41. No.4. P.921–930. [In Russian].
- Kropacheva D.Yu., Barkalov A.V. 2013. [Hover flies (Diptera, Syrphidae) of the Republic Altai] // Bioraznoobrazie, problemy ekologii Gornogo Altaya i sopredel'nykh regionov: nastoyazhchee, proshloe, budushchee. Gorno-Altaysk. P.76–81. [In Russian].
- Krulikowsky L. 1897. Zur Kenntnis der Dipterenfauna des Gouvernements Wiatka (Nordostussland) // Entomologische Nachrichten. Berlin. Bd.23. No.4. S.59.
- Krulikowsky L. 1897. Weiterer Beitrag zur Kenntnis der Dipterenfauna des Gouvernements Wiatka (Nordostussland) // Entomologische Nachrichten. Berlin, 1897. Bd.23. No.8. S.117–119.
- Kustov S.Yu. Yaroshenko V. A. 1998. [Ecologo-faunistic review of hover flies of Tamanskij peninsular] // Aktual'nye voprosy ekologii i okhrany prirody ekosistem yuzhnukh regionov Rossii i sopredel'nykh territorij. Krasnodar. P.143–144. [In Russian].
- Kustov S.Yu. 2003. On the fauna and ecology of hover flies (Diptera, Syrphidae) of urban areas of the Northwestern Caucasus // Entomologicheskoe Obozrenie. Vol.82. No.3. P.779–788. [In Russian].
- Kustov S.Yu. 2005. The problem of protecting hover-flies (Diptera, Syrphidae) // Euroasian Entomological Journal. Vol.4. No.2. P.159–163. [In Russian].
- Kustov S.Yu. 2006. Zoogeographical analysis of the hover-fly fauna (Diptera, Syrphidae) of the Northwestern Caucasus // Entomologicheskoe Obozrenie. Vo.85. No.1. P.64–74. [In Russian].
- Kuznetsov S.Yu. 1985. Hover-flies of the genus *Scaeva* Fabricius (Diptera, Syrphidae) of the Palaearctic fauna // Entomologicheskoe Obozrenie. Vol.64. No.2. P.398–418. [In Russian].
- Kuznetsov S. Yu. 1987. New data on the systematics of the Palaearctic hover-flies (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.66. No.2. P.419–435. [In Russian].
- Kuznetsov S. Yu. 1990a. On the fauna of hover-flies of the genus *Pipizella* (Diptera, Syrphidae) of Mongolia and Transbaikalia // Insects of Mongolia. Vol.11. P.371–377. [In Russian].
- Kuznetsov S.Yu. 1990b. A new species of *Trichopsomyia* Williston and *Triglyphus* Loew (Diptera, Syrphidae) from Far East and Japan // Dipterological research. Vol.1. P.12–15.
- Kuznetsov S.Yu. 1990c. A new species of *Pipizella* Rd. (Diptera, Syrphidae) from the Central Caucasus // Dipterological research. Vol.1. P.16–18.
- Kuznetsov S.Yu. 1990d. A new European species of *Syrphus* F. (Diptera, Syrphidae) // Dipterological research. Vol.1. P.19–21.
- Kuznetsov S. Yu. 1992. A new Palaearctic species and new female of the genus *Eumerus* Meigen (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.3. P.33–40.
- Kuznetsov S.Yu. 1994. *Cryptoeristalis*, a new subgenus of *Eoseristalis* Latreille (Diptera: Syrphidae), with a description of a new species from Caucasus // An International Journal of Dipterological Research. Vol.5. P.231–238.
- Kuznetsov S.Yu. 1997. Five new Palaearctic Syrphidae // An International Journal of Dipterological Research. Vol.8. No.4. P.199–213.
- Kuznetsov S.Yu., Buhcalo S.P., Tikhmenev A.E. 1997. Records of hoverflies (Diptera, Syrphidae) from the Magadan Province // An International Journal of Dipterological Research. Vol.8. No.2. P.117–118.
- Kuznetsov S.Yu., Lyubvina I.V. 2001. To the hover-flies fauna of the Zhigulevsky Nature Reserve (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.12. No.4. P.253–267.
- Kuznetsov S.Yu., Kustov S.Yu. 2000. A contribution to the fauna of Krasnodar Territory (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.11. No.4. P.181–199.
- Kuznetsov S.Yu., Kuznetzova N.V. 2004a. On the genus *Lejogaster* (Diptera, Syrphidae) of the Palaearctic fauna // An International Journal of Dipterological Research. Vol.15. No.4. P.259–265.
- Kuznetsov S. Yu., Kuznetzova N.V. 2004b. A Checklist of the Hoverflies of the Russian Fauna (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.15. No.4. P.275–298.
- Kuznetsov S.Yu., Viklund B. 1999. Notes on the syrphid fauna of Russian Far East (Diptera: Syrphidae) // An International Journal of Dipterological Research. Vol.10. No.3. P.155–163.
- Lagunov A.V. 2001. [Preliminary data on the fauna of Diptera of Ilmen Reserve] // Issledovaniya etalonnykh prirodnykh kompleksov Urala. Ekaterinburg. P.127–130. [In Russian].
- Lukasz E.M. 2013. *Melangyna soszynskii* sp. n. (Diptera: Syrphidae) from the Sayan Mountains // Polish Journal of Entomology. Vol.82. P.339–342.
- Lyubvina I.V. 1998. [Syrphidae of Zhigulevskij Reserve] // Problemy entomologii Evropejskoj chasti Rossii i sopredel'nykh territorij. Samarskij University. P.76–77. [In Russian].

- Matsumura S. 1905. Thousand Insects of Japan // Tokyo. Additamenta 1. P.1–163. [In Japanese].
- Matsumura S. 1911. Erster Beitrag zur Insekten-Fauna von Sachalin // Journal of the College of Agriculture, Hokkaido Imperial University. Vol.4. No.1. P.1–145.
- Matsumura S. 1916. Thousand Insects of Japan // Tokyo. Additamenta 2 (Diptera). P.185–474. [In Japanese].
- Matsumura S. 1918. New species of the economic Syrphidae of Japan // Journal of the College of Agriculture, Hokkaido Imperial University. Vol.8. No.1. P.1–31. Pl.1.
- Matsumura S. 1931. 6000 Illustrated Insects of Japan–Empire. Tokyo. P.1–497.
- Matsumura S., Adachi J. 1916. Synopsis of the economic Syrphidae of Japan (Pt. I) // The Entomological Magazine. Kyoto. Vol.2. No.1. P.1–36.
- Matsumura S., Adachi J. 1917a. Synopsis of the economic Syrphidae of Japan (Pt. II) // The Entomological Magazine. Kyoto. Vol.2. No.4. P.133–156.
- Matsumura S., Adachi J. 1917b. Synopsis of the economic Syrphidae of Japan. (Pt. III) // The Entomological Magazine. Kyoto. Vol.3. No.1. P.14–46.
- Matsumura S., Adachi J. 1919. Synopsis of the economic Syrphidae of Japan (Pt. IV) // The Entomological Magazine. Kyoto. Vol.3. No.3–4. P.128–144.
- Mutin V.A. 1983a. [Species composition and ecology of hover flies (Diptera, Syrphidae) — pollinators of some flowering plants of the Lower Priamurye] // Sistematika i ekologo-faunisticheskij obzor otdelnykh otryadov nasekomykh Dal'nego Vostoka. Vladivostok. P.86–99. [In Russian].
- Mutin V.A. 1983b. [Hover flies (Diptera, Syrphidae) in anthophilic complexes of the Southern Primorie] // Sistematika i ekologo-faunisticheskij obzor otdelnykh otryadov nasekomykh Dal'nego Vostoka. Vladivostok. P.100–100. [In Russian].
- Mutin V.A. 1983c. A review of hover flies of the genus *Graptomyza* Wiedemann, 1820 (Diptera, Syrphidae) in fauna of the USSR // Entomologicheskoe Obozrenie. Vol.62. No.3. P.628–632. [In Russian].
- Mutin V.A. 1984a. Two new species of syrphids flies (Diptera, Syrphidae) from the South of the Soviet Far East // Zoologicheskii Zhurnal. Vol.63. No.5. P.783–785.
- Mutin V.A. 1984b. [Hover flies of the genus *Sphegina* Meigen, 1822 (Diptera, Syrphidae) of the mainland part of the Far East] // Fauna i ekologiya nasekomykh Yuga Dal'nego Vostoka. Vladivostok. P.117–127. [In Russian].
- Mutin V.A. 1984c. [Trophic links of the hover flies (Diptera, Syrphidae) with anemophilous plants] // Skarlato O.A. (Ed.). Diptera (Insecta) of the fauna of the USSR and their significance in ecosystems. Leningrad. P.79–80. [In Russian].
- Mutin V.A. 1984d. New and little known species of flower-flies (Diptera, Syrphidae) from the South of the Far-East // Tsherepanov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnye vidy fauny Sibiri). P.100–106. [In Russian].
- Mutin V.A. 1985. [New evidence on hover flies (Diptera, Syrphidae) of the Far East // Taksonomiya i ekologiya chlenistonogikh Dal'nego Vostoka. Vladivostok. P.85–89. [In Russian].
- Mutin V.A. 1986. New and little-known species of hover-flies (Diptera, Syrphidae) in the USSR fauna // Entomologicheskoe Obozrenie. Vol.65. No.4. P.826–832. [In Russian].
- Mutin V.A. 1987a. New species of the genus *Parasyrphus* Mats., 1917 (Diptera, Syrphidae) from the South of the Far East of USSR // Tsherepanov A.I. (Ed.). Nasekomye, klezhchi i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.54–56. [In Russian].
- Mutin V.A. 1987b. [Hover flies in an anthophilic complex of *Caltha membranacea*] // Tsherepanov A.I. (Ed.). Ekologiya i geografiya chlenistonogikh Sibiri. Novosibirsk: Nauka. P.80–82. [In Russian].
- Mutin V.A. 1987c. [New hover flies species of the genus *Xylota* Mg. (Diptera, Syrphidae) from the south of Far East] // Novye dannye po systematike nasekomykh Dal'nego Vostoka. Vladivostok. P.119–121. [In Russian].
- Mutin V.A. 1987d. Trophic relationships between imago of hover-flies (Diptera, Syrphidae) and Angiosperms // Nartshuk E.P. (Ed.). Two-winged insects: systematics, morphology and ecology. L. P.77–79. [In Russian].
- Mutin V.A. 1988. [Review of Far Eastern species of the genus *Neocnemodon* Goffe, 1944 (Diptera, Syrphidae)] // Zolotareno G.S. (Ed.). Taksonomiya zhivotnykh Sibiri. Novosibirsk: Nauka. P.126–131. [In Russian].
- Mutin V.A. 1990a. [Review of Palaearctic hoverfly species of the genus *Parasyrphus* Matsumura, 1917 (Diptera, Syrphidae)] // Zolotareno G.S. (Ed.). Taxonomiya nasekomykh i gelmintov. Novosibirsk: Nauka. P.129–153.
- Mutin V.A. 1990b. [New and little known species of hover flies (Diptera, Syrphidae) of Soviet Far East and Siberia // Novosti sistematiki nasekomykh Dal'nego Vostoka. Vladivostok. DVO AN SSSR. P.109–115. [In Russian].
- Mutin V.A. 1992. [Phenological aspects of the fauna of flowerflies (Diptera, Syrphidae) of southern Far East] // Nartshuk E.P. (Ed.). Systematics, zoogeography and karyology of two-winged insects (Insecta: Diptera). Sankt-Petersburg. P.119–121. [In Russian].
- Mutin V.A. 1997a. [Mating behaviour of the males of hover-flies (Diptera, Syrphidae)] // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 7. P.117–124. [In Russian].
- Mutin V.A. 1997b. [Hover-flies (Diptera, Syrphidae) collected in Kuril Islands in 1996] // Far Eastern entomologist. No.41. P.1–4. [In Russian].
- Mutin V.A. 1998a. New exotic species and new synonyms of hover-flies (Diptera, Syrphidae) from the Russian Far East // An International Journal of Dipterological Research. Vol.9. Part 1. P.9–12.
- Mutin V.A. 1998b. Four new species of the genus *Sphegina* Meigen, 1822 (Diptera: Syrphidae) from Russia and India // An International Journal of Dipterological Research. Vol.9. Part 3. P.237–241.
- Mutin V.A. 1998c. *Cryptopipiza* nom. n., new name for the genus *Pseudopipiza* Violovitsh (Diptera, Syrphidae) // An International Journal of Dipterological Research. Vol.9. Part 1. P.13.
- Mutin V.A. 1998d. Hover-flies (Diptera, Syrphidae) collected in Kuril Islands in 1997 // Far Eastern Entomologist. No.61. P.1–8.
- Mutin V.A. 1998e. New data on the genus *Brachyopa* Meigen, 1822 (Diptera, Syrphidae) from Russian Far East // Far Eastern Entomologist. No.65. P.1–9.
- Mutin V.A. 1999. Hover-flies (Diptera, Syrphidae) collected in Kuril Islands in 1998, with the description of a new species // Far Eastern Entomologist. No.80. P. 1–8.
- Mutin V.A. 2001a. [Fam. Syrphidae — hover flies. Addition] // Key to the insects of Russian Far East. Vladivostok: Dalnauka. Vol.6. Part 1. P.615–616. [In Russian].
- Mutin V.A. 2001b. New data on the taxonomy of the Palaearctic hover-flies (Diptera, Syrphidae) // Far Eastern Entomologist. No.99. P.19–20.
- Mutin V.A. 2001c. Review of *Sphegina claviventris* species-group (Diptera, Syrphidae) with description of a new species from Japan // Far Eastern Entomologist. No.107. P.1–8.
- Mutin V.A. 2002a. Review of the Far Eastern species of the genus *Pipiza* Fallén, 1810 (Diptera, Syrphidae) // Far Eastern Entomologist. No.121. P.1–16.
- Mutin V.A. 2002b. The melanism of hover-flies (Diptera, Syrphidae) // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 12. P.43–49. [In Russian].
- Mutin V.A. 2003a. Fauna and biogeography of hover-flies (Diptera, Syrphidae) of the Kuril Islands // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 13. P.103–120. [In Russian].
- Mutin V.A. 2003b. [Hover flies (Diptera, Syrphidae) of urban landscapes in Komsomolsk-na-Amure] // Voprosy ekologii i okhrany okruzhayushchej sredy Dalnego Vostoka: materialy

- regional'noj nauchno-metodicheskoy konferentsii. Komsomolsk-na-Amure. KnAGPU. P.72–75. [In Russian].
- Mutin V.A. 2003c. The Pan-Japan Sea centre of the endemism of hover-flies (Diptera, Syrphidae) // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 14. P. 5–13. [In Russian].
- Mutin V.A. 2005. [Horologic analysis of hover flies (Diptera, Syrphidae) of the Russian Far East] // Estestvenno-geograficheskie issledovaniya. Komsomolsk-na-Amure. Issue 3. Part 1. P.30–42. [In Russian].
- Mutin V.A. 2006a. [Hover flies (Diptera, Syrphidae) of the Bolonskij State Natural Reserve] // Voronov B.A. (Ed.). Nauchnye issledovaniya prirodnykh kompleksov Sredneamurskoj nizmennosti. Khabarovsk. P.132–143. [In Russian].
- Mutin V.A. 2006b. [Hover flies (Diptera, Syrphidae) of the Moneron Island] // Rastitel'nyj i zhivotnyj mir ostrova Moneron: materialy mezhdunarodnogo sakhalinskogo proekta. Vladivostok: Dalnauka. P.275–282. [In Russian].
- Mutin V.A. 2006c. Landscape distribution of the hover-flies (Diptera, Syrphidae) on the Lower Amur Region // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 17. P.67–77. [In Russian].
- Mutin V.A. 2009a. [Hover-flies (Diptera, Syrphidae) of Pivan Village and its environs as typical local syrphid fauna of the Nizhnee Priamurie] // Remizov G.M. (Ed.). Estestvenno-geograficheskie issledovaniya. Komsomolsk-na-Amure. No.7. P.84–90. [In Russian].
- Mutin V.A. 2009b. [Family Syrphidae — hover flies] // Nasekomye Lazovskogo zapovednika. Vladivostok: Dalnauka. P.361–368. [In Russian].
- Mutin V.A. 2010a. Hover-flies (Diptera, Syrphidae) of the Bystrinskii Nature park, Kamchatka Peninsula // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 21. P.45–52. [In Russian].
- Mutin V.A. 2010b. [Landscape distribution of the hover flies (Diptera, Syrphidae) in Komsomolsk-na-Amure] // Sovremennye problemy biologii, khimii i metodiki prepodavaniya estestvenno-nauchnykh distsiplin: materialy Vserossijskoj nauchno-prakticheskoy konferentsii. Komsomolsk-na-Amure. P.60–65.
- Mutin, V.A. 2011a. Chorological structure of hover-flies (Diptera, Syrphidae) inhabited coniferous forests of the Lower Amur Region // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 22. P. 167–175. [In Russian].
- Mutin V.A. 2011b. [Features of hover flies distribution (Diptera, Syrphidae) on the Far East] // Lelej A.S. (Ed.). Opredelitel' nasekomykh Dal'nego Vostoka Rossii. Dopolnitel'nyj tom. Analiz fauny i obshchij ukazatel' nazvanij. Vladivostok: Dalnauka. P.184–196. [In Russian].
- Mutin V.A. 2012a. Hover-flies (Diptera: Syrphidae) of Sakhalin Island // Flora and fauna of North–West Pacific islands (Material of International Kuril Island and International Sachalin Island Projects). Vladivostok: Dalnauka. P.288–305. [In Russian].
- Mutin V.A. 2012b. [New data about hover-flies of nature monument «Thermal source Warm Key» with the Chope Stream] // Remizov G.M. (Ed.). Estestvenno-geograficheskie issledovaniya. Vypusk 9. Komsomolsk-na-Amure. P.26–34. [In Russian].
- Mutin V.A. 2012c. Biogeographic aspects of the hover-fly fauna (Diptera, Syrphidae) of the Sikhote-Alin Mountains // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 23. P.47–64. [In Russian].
- Mutin V.A. 2012d. [Order Diptera] // Zhivotnyj mir zapovednika «Bastak». Blagoveschensk. P.161–163. [In Russian].
- Mutin V.A. 2014. [Scandinavia and Kamchatka: keys to the knowledge of the Palaearctic fauna genesis] // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 25. P.13–24. [In Russian].
- Mutin V.A. 2015. The results of 30-year research of hover-flies (Diptera, Syrphidae) anthophilous complex of xerophytic willow (*Salix bebbiana*) in Silinskiy Park, Komsomolsk-na-Amure // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 26. P.325–337. [In Russian].
- Mutin V.A. 2016a. Eremal element of hover flies fauna (Diptera, Syrphidae) in Primorie // Vserossijskij dipterologicheskij simpozium. Krasnodar. Kubanskij gosudarstvennyj universitet. P.208–2012. [In Russian].
- Mutin V. 2016b. Species of the genus *Eumerus* Meigen, 1822 (Diptera: Syrphidae) from the Northern Minusinsk hollow, Republic of Khakassia // Euroasian Entomological Journal. Vol. 15. Appendix 1. P.103–107.
- Mutin V. 2016c. New records of the hover-flies (Diptera: Syrphidae) from Kunashir Island. // Far Eastern Entomologist. No.327. P.17–19.
- Mutin V.A., Barkalov A.V. 1990. [New data on synonymy of hover flies (Diptera, Syrphidae) of the Palaearctics] // Zolotareno G.S. (Ed.) Redkie gel'minty, klezhi i nasekomye. Novosibirsk: Nauka. P.117–120. [In Russian].
- Mutin V.A., Barkalov A.V., 1995. A new East Palaearctic genus of hover-flies // Entomologicheskoe Obozrenie. Vol.74. No.3. P.711–715. [In Russian].
- Mutin V.A., Barkalov A.V. 1997. A review of the hoverflies (Diptera, Syrphidae) of Sakhalin and the Kuril Islands, with Descriptions of Two New Species // Species Diversity. Vol.2. No.2. P.179–230.
- Mutin V.A., Barkalov A.V. 1999. [Fam. Syrphidae — hover-flies] // Lehr P.A. (Ed.). Key to the insects of Russian Far East. Vladivostok: Dalnauka. Vol.6. Pt.1. P.342–500. [In Russian].
- Mutin V. A., Barkalov A. V. 2018a. Hover-flies (Diptera: Syrphidae) of the Bolshoi Khekhtsir Ridge, Khabarovskii Krai, Russia // Far Eastern Entomologist, No.349. P.17–27.
- Mutin V.A., Barkalov A.V. 2018b. New data on the hover-flies of the genus *Eumerus* (Diptera: Syrphidae) from Russia // Far Eastern Entomologist. No.363. P.11–20.
- Mutin V.A., Bogunova A.A. 2010. [New data on the entomofauna of natural monument «Warm Key» (Tummin mineral spring)] // Remizov G.M. (Ed.). Estestvenno-geograficheskie issledovaniya. Komsomolsk-na-Amure. Vypusk 8. P.53–59. [In Russian].
- Mutin V., Gilbert F. 1999. Phylogeny of the genus *Xylota* Meigen, 1822 (Diptera, Syrphidae) with descriptions of new taxa // Dipteron. Vol.2. No.3. P.45–68.
- Mutin V., Gilbert F., Gritskevich D. 2009. The potential for using flower-visiting insects for assessing site quality: hoverfly visitors to the flowers of *Caltha* in the Far East region of Russia // Egyptian Journal of Biology. Vol.11. P.71–83.
- Mutin V.A., Gritskevich D.I. 1998. Ecology-faunistic outline of the hover-flies (Diptera, Syrphidae) of the Low Amur Territory // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. No.8. P.71–86. [In Russian].
- Mutin V., Ichige K. 2014. A new species of *Xylota* Meigen (Diptera: Syrphidae) from the Far East // Zootaxa. No.3878 (2). P.196–200.
- Mutin V.A., Lobkova L.E., 2018. Hover-flies (Diptera, Syrphidae) of the Kronotsky Nature Reserve // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok. Dalnauka. No.29. P.41–57. [In Russian].
- Mutin V.A., Syachina, A.A. 2007. [Peculiarities of the entomofauna of recreational zone of natural monument «Warm Key»] // Remizov G.M. (Ed.). Estestvenno-geograficheskie issledovaniya. Komsomolsk-na-Amure. No.5. P.42–49. [In Russian].
- Mutin V.A., Tridrih N.N. 2016. Syrphid fauna (Diptera, Syrphidae) of the North Okhotiya // A.I. Kurentsov's Annual Memorial Meetings. Vladivostok: Dalnauka. Issue 27. P.126–136. [In Russian].
- Mutin V. A., van Steenis J., van Steenis W., Palmer Ch., Bot S., Skevington J., Merkel-Wallner G., van Zuijen M. P., Zeegers Th., Ssymank A., Mengual X. 2016. Syrphid fauna (Diptera: Syrphidae) of Tummin River Basin, the Eastern macroslope of the Northern Sikhote-Alin, Russia // Far Eastern Entomologist. No.306. P.1–31.



- Nielsen T.R. 1981. *Platycheirus groenlandicus* Curran and *Pl. fjellbergi* Nielsen (Dipt., Syrphidae) in the Soviet Union // Fauna norvegica. Ser.B. Vol.28. P.48.
- Nielsen T.R., Barkalov A.V. 2017. A review of and key to the Holarctic and Oriental *Platycheirus manicatus* group species (Diptera, Syrphidae) // Norwegian Journal of Entomology. Vol.64. P.28–52.
- Olshvang V.N. 1980. [Insects of Polar Ural and Priobskoi forest-tundra] // Danilov N.N. (Ed.). Fauna i ekologiya nasekomykh Priobskogo Severa. P.3–37. [In Russian].
- Osten Sacken C.R. 1858. Sketche of the current state of knowledge of the entomological fauna of the environs of St. Petersburg // Zhurnal Ministerstva narodnogo prosvyashcheniya. No.12. P.1–166.
- Pape T., Thompson F.C. 2018. Systema Dipteroorum (version 2.0, Jan 2011) // Roskov Y., Abucay L., Orrell T., Nicolson D., Bailly N., Kirk P.M., Bourgoin T., DeWalt R.E., Decock W., De Wever A., Nieukerken E., Zarucchi J., Penev L. (Eds.). Species 2000, ITIS Catalogue of Life, 20th December 2017. Digital resource at [www.catalogueoflife.org/col](http://www.catalogueoflife.org/col). Species 2000: Naturalis, Leiden, the Netherlands. ISSN 2405–8858.
- Peck L.V., 1988. Catalogue of Palaearctic Diptera. Syrphidae. B. Soys (Ed.) Budapest. Vol.8. P.11–230.
- Pestov S.V. 2004a. [Hover flies (Diptera, Syrphidae) some OOPT of Kojgorodskij District of the Republic Komi] // Problemy osobo okhranyaemykh prirodnykh territorij Evropejskogo Severa: Materialy nauchno-prakticheskoj konferentsii. Syktyvkar. P.220. [In Russian].
- Pestov S.V. 2004b. [Study of hover flies (Syrphidae, Diptera) of the European North of Russia] // Severgeokotek–2004: Materialy V mezhdunarodnoj konferentsii. Ukhta. P.245–247. [In Russian].
- Pestov S.V. 2005a. [New data on the hover flies fauna (Diptera, Syrphidae) of the Republic Komi] // Aktual'nye problemy biologii i ekologii: Materialy XII molodezhnoi nauchnoj konferentsii of the Institute of biology Komi SC UrO RAS. Syktyvkar. P.121–123. [In Russian].
- Pestov S.V. 2005b. [Amphibiotic hover flies (Diptera, Syrphidae) of the Republic Komi] // Biologicheskie resursy Belogo morya i vnutrennikh vodoemov Evropejskogo Severa: Materialy IV (XXVII) mezhdunarodnoj konferentsii. Chast' 2. Vologda. P.61–64.
- Pestov S.V. 2005c. [Population structure of *Myathropa florea* (Linnaeus, 1758) (Diptera, Syrphidae)] // Populyatsii v prostranstve i vremeni: Materialy VIII Vserossijskogo populyatsionnogo seminar. Nizhnij Novgorod. P. 313–314. [In Russian].
- Pestov S.V. 2006. [Rare species of hover flies (Diptera, Syrphidae) of the European North-East of Russia] // Aktual'nye problemy regional'nogo ekologicheskogo monitoringa: nauchnyj i obrazovatel'nyj aspekty: Materialy nauchnoj shkoly. Kirov. P.66–67. [In Russian].
- Pestov S.V. 2007. [Mukhi-zhurchalki (Diptera, Syrphidae) taezhnoi zony severo-vostoka Russkoj ravniny] // Avtoreferat dissertastii kandidata biologicheskikh nauk. St.-Petersburg. P.1–20. [In Russian].
- Pestov S.V., Dolgin M.M. 2006. [Analysis of landscape-geographical distribution of hover flies (Diptera, Syrphidae) of the North-East of European part of Russia] // Byulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.111. No.4. P.15–22. [In Russian].
- Pestov S.V., Yuferev G.I. 2009. [To knowledge of the hover flies fauna (Diptera, Syrphidae) of the «Nurgush» Reserve] // Nauchnye issledovaniya kak osnova okhrany prirodnykh kompleksov zapovednikov i zakaznikov: Materialy V serossijskoj nauchno-prakticheskoj konferentsii. Kirov. P.112–116. [In Russian].
- Pestov S.V., Yuferev G.I., Tselishcheva L.G. 2010. [Hover flies (Diptera, Syrphidae) of Kirov region] // Vestnik Udmurtskogo Universiteta. Biologiya. Nauki o Zemle. Vol.4. P.86–96. [In Russian].
- Popov G.V. 1997. [State of knowledge of hover flies (Diptera, Syrphidae) of Crimea] // Izvestiya Kharkovskogo entomologicheskogo obshchestva. Vol.5. No.2. P.29–38. [In Russian].
- Popov G.V. 1998. [New data on the hover-flies (Diptera, Syrphidae) fauna of the Crimea] // Izvestiya Kharkovskogo entomologicheskogo obshchestva. Vol.6. No.2. P.57–69. [In Russian].
- Popov G.V. 2009. *Merodon alexandri* spec. nov. — a new species of hoverfly (Diptera: Syrphidae) from the northern Black Sea Region // Studia dipterologica. Vol.16. No.1/2. P.133–151.
- Portschinski I.A. 1874. [Entomological notes during my stay in Gdovskij Uezd, Petersburg Province in 1871 year] // Trudy Russkogo Entomologicheskogo obshchestva. Vol.7. P.44–54. [In Russian].
- Portschinski I.A. 1877. [Materials for history of fauna of Russia and Caucasus. Bumblebee Diptera] // Trudy Russkogo Entomologicheskogo obshchestva. Vol.10. P.102–198. [In Russian].
- Prokhorov A. V., Popov G. V. 2016. The first record of *Leucozona inopinata* (Diptera: Syrphidae) from European Russia // Ukrainska Entomofaunistyka. Vol.7. No.4. P.43–44.
- Shernin A.A. 1974. [Order Diptera] // Zhivotnyj mir Kirovskoj oblasti. Kirov. P.297–344. [In Russian].
- Shipova A.A. 1937. [Materials for study Diptera in Siberia] // Trudy Biologicheskogo Nauchno-Issledovatel'skogo Instituta. Vol.4. P.219–250. [In Russian].
- Shiraki T. 1930. Die Syrphiden des Japanischen Kaiserreichs // Memoirs Faculty of Science Agriculture Taihoku Imperial University. Vol.I. No.1. P.1–446.
- Skufjin K.V. 1964. [To study of pollinators from family sirphids (Diptera, Syrphidae) of the reserved sites of Galichya Gora (Lipetskaya Area) // Okhrana prirody Tsentralno-Chernosemnoi polosy. Voronezh. No.5. P.165–172.
- Skufjin K.V. 1967. [Materials on the hover flies fauna (Diptera, Syrphidae) of the Caucasian State Reserve] // Trudy Voronezhskogo gosudarstvennogo zapovednika. Vol.15. P.50–66. [In Russian].
- Skufjin K.V. 1976. New species of hover flies (Diptera, Syrphidae) from the Northern Caucasus // Entomologicheskoe obozrenie. Vol.55. No.4. P.931–934. [In Russian].
- Skufjin K.V. 1977a. [New species and subspecies of the genus *Cheilisia* Mg. (Diptera, Syrphidae) from the Galichya Gora (Lipetsk region)] // Skorlato O.A. (Ed.). New and little known species of insects of the European part of the USSR. Zoological Institute RAS. P.57–60. [In Russian].
- Skufjin K.V. 1977b. [To the faunistic review of hover flies (Diptera, Syrphidae) of Usman' Pinery] // Okhrana prirody Tsentral'no-Chernozemnoj polosy. Voronezh. No.8. P.76–77. [In Russian].
- Skufjin K.V. 1979a. [New species of hover flies of the genus *Cheilisia* Meig. (Diptera, Syrphidae) from the Northern Caucasus] // Trudy Vsesoyuznogo Entomologicheskogo Obshchestva. Vol.61. P.194–196. [In Russian].
- Skufjin K.V. 1979b. [Hover flies (Diptera, Syrphidae) of the Galichya Gora in Lipetsk Area] // Materials of the VII International Symposium on Entomofauna of Central Europe. Leningrad. P.336–338.
- Skufjin K.V. 1980. A review of the genus *Sphaerophoria* Lepeletier et Serville (Diptera, Syrphidae) in the USSR // Entomologicheskoe Obozrenie. Vol.59. No.4. P.886–894. [In Russian].
- Skufjin K.V. 1987. [Two new species of the genus *Platycheirus* Lepeletier et Serville (Diptera, Syrphidae) from mountain regions of Asia] // Biologicheskie Nauki. Vol.12. P.35–38. [In Russian].
- Skufjin K.V. 1988. [Fauna of pollinators from the family hover flies (Diptera, Syrphidae) of the Botanical Garden of Voronezh University] // Introduktsiya rastenij v Tsentral'nom Chernozem'e. P.155–158. [In Russian].
- Skufjin K.V., Bulli A.F. 1987. [Fauna of hover flies of average flow of the Severnyj Donets River] // Priroda malykh okhranyaemykh territorij. Voronezh. P.118–127.
- Skufjin K.V., Kuznetsova V.T. 1974. [To fauna of pollinators from families hover flies and vesp flies (Diptera, Syrphidae,

- Conopidae) of reserved sides of the Lipetsk Area] // Problemy izucheniya i okhrany landshaftov. Voronezh. P.34–36.
- Skuffin K.V., Kuznetsova V.T. 1979. [New data on species composition of hover flies (Diptera, Syrphidae) of the Reserve «Galichya Gora»] // Izucheniye zapovednykh landshaftov Galichej Gory. Voronezh. P.22–26.
- Skuffin K.V., Kuznetsova V.T. 1982. [Hover flies fauna of the Reserve «Galichya Gora»] // Skuffin K.V. (Ed.). Issledovaniye rastitelnogo i zhivotnogo mira zapovednika «Galichya Gora». Voronezh University. P.81–89 [In Russian].
- Skuffin K.V., Lysenko Yu.N. 1972. [New data on hover flies fauna of the Caucasian State Reserve] // Problemy izucheniya i okhrany landshaftov. Voronezh. P.55–59. [In Russian].
- Skuffin K.V., Zimina L.V., Pereyaslavtseva A.B. 1962. [Materials on fauna of sirphids (Diptera, Syrphidae) of Voronezh Area in connection with their meaning as landscape insects] // Okhrana prirody Tsentralno–Chernosemnoi polosy. Voronezh. No.4. P.179–190.
- Smirnov E.S. 1923. Ein Beitrag zur Kenntnis der Gattung *Helophilus* Meig. (= *Tubifera* Mg.) // Zoologische Anzeiger. Vol.56. No.3–4. P. 81–87.
- Sorokina V.S. 2002. Beschreibung von drei neuen Arten der Gattung *Paragus* Latreille, 1804 (Diptera, Syrphidae) aus Asien, mit einem Bestimmungsschlüssel der bisher bekannten russischen *Paragus*-Arten // *Volucella*. Vol.6. P.1–22.
- Sorokina V.S. 2003. [Trophic preferences of hover-flies adults (Diptera, Syrphidae) in Southern Trans–Urals] // Euroasian Entomological Journal. Vol.2. No.3. P.197–214. [In Russian].
- Sorokina V.S. 2005. [Spatiotemporal Structure and Organization of Syrphidocomplexes of the South Transural Region] // Sibirskij ekologicheskij zhurnal. Vol.3. P.401–415. [In Russian].
- Sorokina V.S. 2006. [Latitudinal distribution of hover-flies (Diptera, Syrphidae) in Southern Trans–Urals] // Euroasian Entomological Journal. Vol.5. No.1. P.69–76. [In Russian].
- Sorokina V.S. 2009. [Hover flies of the genus *Paragus* Latr. (Diptera, Syrphidae) of Russia and adjacent countries] // Entomologicheskoe Obozrenie. Vol.88. No.2. P.466–487. [In Russian].
- Sorokina V.S., Chashchina O.E. 2003. Data on the fauna of flower flies (Diptera: Syrphidae) of the South Urals // Russian Entomological Journal. Vol.12. No.1. P.93–101.
- Soszyński B., Mielczarek L.E., Tofilski A. 2013. *Dasyrphus neovenustus* sp.n. (Diptera, Syrphidae) a new species in the *venustus* species group // Polish Journal of Entomology. Vol.82. P.353–363.
- Speight, M.C.D. 2016. Species accounts of European Syrphidae 2016. In: Speight, M.C.D., Castella, E., Sarthou, J.–P., Vanappelghem, C. (Eds.). *Syrph the Net, the database of European Syrphidae* (Diptera), Vol.93. Syrph the Net publications, Dublin. 288 p. ISSN 1393–4546.
- Stackelberg A.A. 1914. [To systematics and geographical distribution of some Russian *Xylota* Meig.] // Russkoe Entomologicheskoe Obozrenie. Vol.14. P.324–325.
- Stackelberg A.A. 1915. [List of species of the Petrograd Region] // Russkoe Entomologicheskoe Obozrenie. Vol.15. P.197–217. [In Russian].
- Stackelberg A.A. 1916. [To the fauna of Diptera of Nizhnej Bronnoj of the Peterhof County] // Russkoe Entomologicheskoe Obozrenie. Vol.16. P.299–307.
- Stackelberg A.A. 1918. [To dipterofauna of Novgorodskoj province] // Bulletin of the Russian Academy of Sciences (Ser. 6). P.2149–2160. [In Russian].
- Stackelberg A.A. 1921. Contribution à la faune des Syrphides (Diptera) du gouvernement de Jakutsk // Russkoe Entomologicheskoe Obozrenie. Vol.17 (1917–1921). P.139–143. [In Russian].
- Stackelberg A.A. 1922. De Syrphidarum (Diptera) speciebus duabus novis e Rossia europea // Annuaire du Musée Zoologique de l'Académie des Sciences Russia. Vol.18. No.3/4. P.362–364.
- Stackelberg A.A. 1923. *Cynorrhina nitens* sp.nov. (Syrphidae: Diptera) // Supplementa entomologica. Vol.9. P.22–23.
- Stackelberg A.A. 1924. Syrphidarum novorum palaearticarum diagnoses // Wiener entomologische Zeitung. Vol.41. S.25–29.
- Stackelberg A.A. 1925a. Kurze Übersicht der paläarktischen *Zelima* (= *Xylota*) Arten (Dipt., Syrph.) // Deutsche Entomologische Zeitschrift. Bd.4. S.279–288.
- Stackelberg A.A. 1925b. Matériaux pour servir à la faune des Diptères du gouvernement de Yaroslavl fam. Syrphidae // Trudy Yaroslavl'skogo Estestveno–Istoricheskogo Obshchestva. Vol.4. No.1. P. 5–11. [In Russian].
- Stackelberg A.A. 1926. Syphidarum novorum palaearticorum diagnoses (Diptera) // Annuaire du Musée Zoologique de l'Académie des Sciences Russia. No.1/2. P.87–92.
- Stackelberg A.A. 1927. Übersicht der paläarktischen Arten der Unterfamilie Cinxiiinae (Diptera, Syrphidae), im Zusammenhang mit der Auffindung eiunen Art der Gattung *Cinxia* in Jakutien // Materialy Komissii po izucheniyu Yakutskoi ASSR [= Matériaux de la Commission pour l'étude de la République Autonome Soviétique Socialiste Iakoute]. Vol.20. P.1–27.
- Stackelberg A.A. 1928a. Descriptio species novae generis *Ceroides* Pd. (Dipt.) // Izvestiya Stavropolskogo entomologicheskogo obshchestva. Vol.5. No.1. P.1–2.
- Stackelberg A.A. 1928b. Species palaearticae generis *Cynorrhina* (Dipt., Syrphidae) // Konowia. Vol.7. No.3. P.252–258.
- Stackelberg A.A. 1929. Beiträge zur Kenntnis der paläarktischen Syrphiden (Diptera). I // Russkoe entomologicheskoe Obozrenie. Vol.23. No.3–4. P.244–250.
- Stackelberg A.A. 1930a. Beiträge zur Kenntnis der paläarktischen Syrphiden. II // Zoologische Anzeiger. Bd.90. No.3/4. S.113–120.
- Stackelberg A.A. 1930b. Beiträge zur Kenntnis der paläarktischen Syrphiden. III // Konowia. Vol.9. No.3. P.223–234.
- Stackelberg A.A. 1933. [Key to flies of the European Part of the USSR] // Key to the fauna of the USSR. Zoological Institute AS USSR. P.1–373. [In Russian].
- Stackelberg A.A. 1949. [New data on the genus *Eumerus* Mg. (Diptera, Syrphidae) of the Palaeartic fauna] // Entomologicheskoe Obozrenie. Vol.30. No.3–4. P.426–439. [In Russian].
- Stackelberg A.A. 1950. [Brief review of Palaeartic species of the genus *Mallota* Mg. (Diptera, Syrphidae)] // Entomologicheskoe Obozrenie. Vol.31. No.1–2. P.285–296. [In Russian].
- Stackelberg A.A. 1952a. [New Syrphidae (Diptera) of the Palaeartic fauna] // Trudy Zoologicheskogo Instituta. Leningrad. Vol.12. P.350–404. [In Russian].
- Stackelberg A.A. 1952b. [Brief review of Palaeartic species of the genus *Zelima* Mg. (Diptera, Syrphidae)] // Entomologicheskoe Obozrenie. Vol.32. P.316–328. [In Russian].
- Stackelberg A.A. 1953a. [Palaeartic species of the genus *Orthoneura* Macq. (Diptera, Syrphidae)] // Entomologicheskoe Obozrenie. Vol.33. P.342–357. [In Russian].
- Stackelberg A.A. 1953b. [Breif review of Palaeartic species of the genus *Sphegina* Mg. (Diptera, Syrphidae)] // Trudy Zoologicheskogo Instituta. Leningrad. Vol.13. P.373–386. [In Russian].
- Stackelberg A.A. 1955a. [Palaeartic species of the genus *Neoascia* Will. (Diptera, Syrphidae)] // Trudy Zoologicheskogo Instituta. Leningrad. Vol. 21. P.342–352. [In Russian].
- Stackelberg A.A. 1955b. [Palaeartic species of the genus *Penthesilea* Mg. (Diptera, Syrphidae)] // Entomologicheskoe Obozrenie. Vol.34. P.340–349. [In Russian].
- Stackelberg A.A. 1956. Neue Angaben über die Systematik der paläarktischen *Sphegina*-Arten (Diptera, Syrphidae), II // Entomologicheskoe Obozrenie. Vol.35. No.4. P.935–946.
- Stackelberg A.A. 1958a. The Palearctic species of the genus *Spilomyia* Mg. (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol. 37. No.3. P. 759–768. [In Russian].
- Stackelberg A.A. 1958b. List of Diptera of the Leningrad Region. IV. Syrphidae // Trudy Zoologicheskogo Instituta. Leningrad. Vol.21. P.192–246. [In Russian].

- Stackelberg A.A. 1959. Palearctic species of the genus *Chrysogaster* Mg. (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.38. No.4. P.898–904. [In Russian].
- Stackelberg A.A. 1961. Palearctic species of the genus *Eumerus* Mg. (Diptera, Syrphidae) // Trudy Vsesoyuznogo Entomologicheskogo Obshchestva. Vol. 48. P.181–229. [In Russian].
- Stackelberg A.A. 1963a. Neue paläarktische *Cheilosia*-Arten (Diptera: Syrphidae) // Beiträge zur Entomologie. Bd.13. Nr.3/4. S.513–522.
- Stackelberg A.A. 1963b. Neue paläarktische Syrphiden-Arten (Diptera) // Stuttgarter Beiträge zur Naturkunde. Nr.113. S.1–6 + plt.113/7.
- Stackelberg A.A. 1964. Notes on Palearctic Syrphidae // Zoologicheskii Zhurnal. Vol.18. No.3. P.467–473. [In Russian].
- Stackelberg A.A. 1965a. [New data on fauna of Diptera of the Leningrad Region] // Latvijas Entomologs. No.10. P.61–70. [In Russian].
- Stackelberg A.A. 1965b. New data on the taxonomy of Palearctic hover-flies (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol. 44. No.4. P.907–926.
- Stackelberg A.A. 1970. [Syrphidae — zhurchalki] // Opredelitel' nasekomykh Evropeiskoj chasti SSSR. Vol.5. Part 2. Leningrad: Nauka. P.11–98. [In Russian].
- Stackelberg A.A. 1974. New species of hover flies (Diptera, Syrphidae) of Siberia and Mongolian People's Republic // Entomologicheskoe Obozrenie. Vol.53. No.2. P.443–446.
- Stackelberg A.A., Richter V.A. 1968. Materials on hover flies fauna (Diptera, Syrphidae) of the Caucasus // Trudy Vsesoyuznogo entomologicheskogo obzhestva. Vol.52. P.224–274.
- Ståhls G., Barkalov A.V. 2017. Taxonomic review of the Palearctic species of the *Cheilosia caerulescens*-group (Diptera, Syrphidae) // ZooKeys. No.662. P.137–171.
- Stubbs A.E., Falk S.J. 1983. British hoverflies. An Illustrated identification guide // The British Entomological, Natural History Society. Headland Printers Ltd. P.1–253. 12 Pl.
- Suk S.-W., Han H.-Y. 2013. Clarification of previously confused *Chrysotoxum sapporensis* and *Chrysotoxum graciosum* (Insecta: Diptera: Syrphidae) in East Asia based on morphological and molecular data // Animal Cells and Systems. Vol.17. No.4. P.277–289.
- Tschernov Yu.I. 1958. [To fauna, ecological and landscape distribution of hover flies (Diptera, Syrphidae) of Moscow Area] // Sbornik studencheskikh nauchnykh rabot po estestvenno-matematicheskomu tsiklu. Moscow. MOIP. P.33–43. [In Russian].
- Tschernov Yu.I. 1963. [Materials on hover flies fauna (Diptera, Syrphidae) of tundra zone // Uchenye zapiski Moskovskogo oblastnogo pedagogicheskogo instituta im. N.K. Krupskoj. Vol.126. No.6. P.101–107. [In Russian].
- van Veen M.P. 2004. Hoverflies of Northwest Europe. Identification keys to the Syrphidae // KNNV Publishing. The Netherlands. Utrecht. P.1–253.
- Violovitsh N.A. 1935. To the fauna of Diptera of Moscow Region // Zapiski Bolzhevskoj biologicheskoy stancii. P.7–8. [In Russian].
- Violovitsh N.A. 1952. [Two new species of syrphid-flies from Southern Sakhalin (Diptera, Syrphidae)] // Soobshcheniya Dalnevostochnogo filiala Akademii Nauk SSSR. No.4. P.56–57. [In Russian].
- Violovitsh N.A. 1955. [New and little known hover flies (Diptera, Syrphidae) from Kunashir Island] // Entomologicheskoe Obozrenie. Vol.34. P.350–359. [In Russian].
- Violovitsh N.A. 1956a. New Syrphiden (Diptera, Syrphidae) aus Sachalin-Gebiet // Entomologicheskoe Obozrenie. Vol.35. No.2. P.462–472. [In Russian with German title].
- Violovitsh N.A. 1956b. [New species of the genus *Syrphus* Fabr. (Diptera, Syrphidae) from the Far East] // Zoologitscheskij Journal. Vol.35. No.5. P.741–745. [In Russian].
- Violovitsh N.A., 1956c. [Fauna of Syrphidae (Diptera) Sakhalin Island and Kuril Islands and its origin] // Ph.D. theses. Leningrad. P.1–20. [In Russian].
- Violovitsh N.A. 1957. New Palearctic Syrphidae (Diptera) from the Far Eastern territory of the USSR // Entomologicheskoe Obozrenie. Vol.36. No.3. P. 748–755. [In Russian].
- Violovitsh N.A. 1960a. New Palearctic species of Syrphidae (Diptera) from Far East // Entomologicheskoe Obozrenie. Vol.39. No.1. P. 205–209. [In Russian].
- Violovitsh N.A. 1960b. [A contribution to the knowledge of the hover flies fauna (Diptera, Syrphidae) of Sachalin and the Kuril Islands] // Trudy Vsesoyuznogo Entomologicheskogo Obshchestva. Vol.47. P.217–272. [In Russian].
- Violovitsh N.A. 1964. [A New Palearctic species of the genus *Chrysotoxum* Mg. (Diptera, Syrphidae) from Tuva A.S.S.R.] // Entomologicheskoe Obozrenie. Vol.458. No.2. P. 458–460. [In Russian].
- Violovitsh N.A. 1965a. [New Palearctic species of the genus *Syrphus* Fabr. (Diptera, Syrphidae) from Tuva] // Tsherepanov A.I. (Ed.). Novye i maloizvestnye vidy fauny Sibiri, 1. Novosibirsk: Nauka. P.7–13. [In Russian].
- Violovitsh N.A. 1966a. A new species of the family Syrphidae (Diptera) from Tuva // Tsherepanov A.I. (Ed.). New species of fauna of Siberia and adjoining region. Novosibirsk: Nauka. P.49–53. [In Russian].
- Violovitsh N.A. 1966b. [A new Palearctic species of the genus *Cheilosia* Meig. (Diptera, Syrphidae) from the Altai] // Tsherepanov A.I. (Ed.). New species of fauna of Siberia and adjoining region. Novosibirsk: Nauka. P.54–56. [In Russian].
- Violovitsh N.A. 1966c. [To fauna of Syrphidae (Diptera) of Tuva] // Tsherepanov A.I. (Ed.). Fauna i ecologia nasekomykh. Novosibirsk: Nauka. P.165–173. [In Russian].
- Violovitsh N.A. 1971a. [A new species of the genus *Microdon* Mg. (Diptera, Syrphidae) from the Altai] // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 4. P.62–63
- Violovitsh N.A. 1971b. A new species of the genus *Cheilosia* Meig. (Diptera, Syrphidae) from Moneron Island, Sakhalin Region // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 5. P.109–111. [In Russian].
- Violovitsh N.A. 1971c. A new species of *Chrysotoxum* Meig. (Diptera, Syrphidae) from Tuva // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 5. P.112–114. [In Russian].
- Violovitsh N.A. 1973a. A new Palearctic species of the genus *Helophilus* Mg. (Diptera, Syrphidae) from Altai // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 6. P.96–98. [In Russian].
- Violovitsh N.A. 1973b. The new Palearctic species of the genus *Chrysotoxum* Mg. (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 6. P.99–102. [In Russian].
- Violovitsh N.A. 1973c. New species of hover flies of the genus *Chrysotoxum* Mg. (Diptera, Syrphidae) from Palearctic // Entomologicheskoe Obozrenie. Vol.52. No.4. P.924–934. [In Russian].
- Violovitsh N.A. 1973d. [New Palearctic hover flies species (Diptera, Syrphidae) from Altai] // Yudin B.S. (Ed.). Fauna Sibiri. Part II. Novosibirsk: Nauka. P.145–149. [In Russian].
- Violovitsh N.A. 1973e. [New species of the genus *Cheilosia* Mg. (Diptera, Syrphidae) from Moneron Island of Sakhalin Region] // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 7. P.109–111. [In Russian].
- Violovitsh N.A. 1973f. [New Palearctic species of the genus *Criorrhina* Mg. (Diptera, Syrphidae)] // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 7. P.112–116. [In Russian].
- Violovitsh N.A. 1974a. A review of the Palearctic species of the genus *Chrysotoxum* Mg. (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.53. No.1. P.196–217. [In Russian].
- Violovitsh N.A. 1974b. [Brief survey of Palearctic species of genus *Ceriana* Rafinesque, 1815 (Diptera, Syrphidae)] // Ivestiya Sibirskogo Otdeleniya Akademii Nauk SSSR. Seria

- biologicheskikh nauk. Novosibirsk: Nauka. Issue 1. P.81–88. [In Russian].
- Violovitsh N.A. 1974c. [Brief review of species of the genus *Criorrhina* Mg. (Diptera, Syrphidae) of Palaearctic fauna] // Kolomiets N.G. (Ed.). Fauna i ekologiya nasekomykh Sibiri. Novosibirsk: Nauka. P.124–128. [In Russian].
- Violovitsh N.A. 1974d. [New Palaearctic species of the genus *Criorrhina* Mg. (Dipt. Syrphidae)] // Tsherepanov A.I. (Ed.). New and little-known species of Siberian fauna. Novosibirsk: Nauka. Issue 8. P.112–116. [In Russian].
- Violovitsh N.A. 1975a. Some new Palaearctic species of hoverflies (Diptera, Syrphidae) from the fauna of the USSR // Tsherepanov A.I. (Ed.). Taksonomiya i ekologiya zhivotnykh Sibiri (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.73–89. [In Russian].
- Violovitsh N.A. 1975b. Brief survey of Palaearctic species from the genus *Xanthogramma* Schiner (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). Taksonomiya i ekologiya zhivotnykh Sibiri (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.90–106. [In Russian].
- Violovitsh N.A. 1975c. A Revision of the Palaearctic species of the genus *Scaeva* Fabricius, 1805 (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.54.No.1. P.176–179. [In Russian].
- Violovitsh N.A. 1976a. Some new Palaearctic species of hover flies (Diptera, Syrphidae) from the fauna of Siberia and adjoining regions // Tsherepanov A.I. (Ed.). Novosti fauny Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.118–129. [In Russian].
- Violovitsh N.A. 1976b. Survey on species of genus *Baccha* Fabricius, 1805 (Diptera, Syrphidae) from the Palaearctic fauna // Tsherepanov A.I. (Ed.). Novosti fauny Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.130–154. [In Russian].
- Violovitsh N.A. 1976c. A short review the species of the genus *Microdon* Meigen, 1803 (Diptera, Syrphidae) from the fauna of the USSR // Tsherepanov A.I. (Ed.). Novosti fauny Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.155–161. [In Russian].
- Violovitsh N.A. 1976d. [Materials on the of hover flies fauna (Diptera, Syrphidae) of Siberia] // Zolotareno G.S. (Ed.). Fauna gelmintov i chlenistonogikh Sibiri. Trudy Biologicheskogo instituta. Issue 18. P.326–346. [In Russian].
- Violovitsh N.A. 1977a. Some new Palaearctic species of hover flies (Diptera, Syrphidae). 28-th Contribution // Tsherepanov A.I. (Ed.). Taksony fauny Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.68–84. [In Russian].
- Violovitsh N.A. 1977b. Two new species from the genus *Helophilus* Meigen (Diptera, Syrphidae). 29-th Contribution // Tsherepanov A.I. (Ed.). Taksony fauny Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.85–88. [In Russian].
- Violovitsh N.F. 1978a. Redescription of the Genus *Mallota* Meigen, 1822 (Diptera, Syrphidae) Siberian fauna // Tsherepanov A.I. (Ed.). Taksonomiya i ecologia chlenistonogikh Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.163–171. [In Russian].
- Violovitsh N.A. 1978b. Some new Palaearctic species of hoverflies (Diptera, Syrphidae). 33-nd Contribution // Tsherepanov A.I. (Ed.). Taksonomiya i ecologia chlenistonogikh Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.172–181. [In Russian].
- Violovitsh N.A. 1978c. [A new Palaearctic species of the genus *Chrysosyrphus* Sedman, 1965 (Diptera, Syrphidae) 34-th Contribution] // Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR. Seriya biologicheskikh nauk. Novosibirsk: Nauka. Issue 1. P.111–114. [In Russian].
- Violovitsh N.A. 1979a. [Review of Siberian species of the genus *Orthoneura* Macquart, 1829 (Diptera, Syrphidae)] // Tsherepanov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.48–63. [In Russian].
- Violovitsh N.A. 1979b. [Review of the Palaearctic species of the genus *Helophilus* Meigen, 1822 (Diptera, Syrphidae)] // Tsherepanov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.64–86. [In Russian].
- Violovitsh N.A. 1979c. New genus and species of the hover flies (Diptera, Syrphidae) of the Palaearctic fauna // Trudy Vsesoyuznogo Entomologicheskogo Obzhestva. Vol.61. P.190–191. [In Russian].
- Violovitsh N.A. 1980a. Review of Siberian species of the genus *Sphegina* Mg., 1822 (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). Sistematica i ekologiya zhivotnykh. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.105–123. [In Russian].
- Violovitsh N.A. 1980b. New species of the flower flies (Diptera, Syrphidae) of the Palaearctic fauna. Contribution 35 // Tsherepanov A.I. (Ed.). Sistematica i ekologiya zhivotnykh. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.124–131. [In Russian].
- Violovitsh N.A. 1980c. [Survey of Palaearctic species of the genus *Triglyphus* Loew, 1840 (Diptera, Syrphidae)] // Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR. Seriya biologicheskikh nauk. Novosibirsk: Nauka. Issue 1. P.40–44. [In Russian].
- Violovitsh N.A. 1980d. [Survey of Palaearctic species of the genus *Lejota* Rondani, 1857 (Dipt., Syrphidae)] // Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR. Seriya biologicheskikh nauk. Novosibirsk: Nauka. Issue 1. P.44–47. [In Russian].
- Violovitsh N.A. 1980e. [New Palaearctic species of the genus *Psilota* Meigen, 1822 (Dipt., Syrphidae) from the Siberian fauna. 36-th Contribution] // Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR. Seriya biologicheskikh nauk. Novosibirsk: Nauka. Issue 1. P.47–51. [In Russian].
- Violovitsh N.A. 1980f. [Additions to the hover flies list of species (Diptera, Syrphidae) of Siberian Fauna] // Zolotareno G.S. (Ed.). Fauna i ekologiya rastitelnoyadnykh i khizhchnykh nasekomykh Sibiri. Novosibirsk: Nauka. P.266–270. [In Russian].
- Violovitsh N.A. 1981a. Review of Siberian species of the genus *Pipizella* Rondani, 1856 (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). Nasekomye i klezhchi Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.57–78. [In Russian].
- Violovitsh N.A. 1981b. New syrphids (Diptera, Syrphidae) from the Palaearctic fauna // Tsherepanov A.I. (Ed.). Nasekomye i klezhchi Sibiri. (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.85–95. [In Russian].
- Violovitsh N.A. 1981c. [Some new Palaearctic species of hoverflies (Dipt., Syrphidae). 39-th Contribution] // Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR. Seriya biologicheskikh nauk. Novosibirsk: Nauka. Issue 1. P.93–96. [In Russian].
- Violovitsh N.A. 1982a. [Hover-flies fauna (Diptera, Syrphidae) of Northern Asia] // Zolotareno G.S. (Ed.). Poleznye i vrednye nasekomye Sibiri. Fauna Sibiri. Novosibirsk: Nauka. P.184–222. [In Russian].
- Violovitsh N.A. 1982b. New species syrphids from the Palaearctic fauna (Diptera, Syrphidae). Contribution 41 // Tsherepanov A.I. (Ed.). Gelminty, klezhchi i nasekomye (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.54–64. [In Russian].
- Violovitsh N.A. 1983. [Hover flies of Siberia (Diptera, Syrphidae). Key to] // Novosibirsk: Nauka. 241 pp. [In Russian].
- Violovitsh N.A. 1984. The review of the Palaearctic species genus *Rohdendorfia* Smirnov, 1924 (Diptera, Syrphidae) // Tsherepanov A.I. (Ed.). Chlenistonogie i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.88–93. [In Russian].
- Violovitsh N.A. 1985a. New flower flies (Diptera, Syrphidae) of the Palaearctic fauna // Tsherepanov A.I. (Ed.). Sistematika i biologiya chlenistonogikh i gelmintov (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.80–96. [In Russian].

- Violovitsh N.A. 1985b. [New species of *Pipiza* Fall. (Diptera, Syrphidae) of Palaearctic fauna] // Zolotareno G.S. (Ed.). Chlenistonogie Sibiri i Dal'nego Vostoka. Novosibirsk: Nauka. P.199–207. [In Russian].
- Violovitsh N.A. 1987. New species of flower-flies (Dipt., Syrphidae) of Palearctic fauna (Communication 45) // Tsherepanov A.I. (Ed.). Nasekomye, klezhchi i gelminty (Novye i maloizvestnye vidy fauny Sibiri). Novosibirsk: Nauka. P.47–54. [In Russian].
- Violovitsh N.A. 1988. [Brief review of Palaearctic species of the genus *Pipiza* Fallen (Diptera, Syrphidae)] // Zolotareno G.S. (Ed.). Taksonomiya zhivotnykh Sibiri. Novosibirsk: Nauka. P.108–126. [In Russian].
- Violovitsh N.A., Barkalov A.V. 1980. [To the hover flies fauna (Diptera, Syrphidae) of lower reaches of the river Enisei] // Zolotareno G.S. (Ed.). Fauna i ekologiya rastitelnoyadnykh i khizhchnykh nasekomykh Sibiri. Novosibirsk: Nauka. P.270–273. [In Russian].
- Vnukovskij V.V. 1928. [To knowledge of fauna (Diptera) of the Kamensk Distric (West Siberia)] // Izvestiya zapadno-sibirskogo muzeya. P.1–2. [In Russian].
- Volkova M.I. 1934. [Diptera of Chyuvash Republic of base of zoological expedition in 1926–1929 years] // Uchenye zapiski Kazanskogo gosudarstvennogo universiteta. Vol.94. Book 4. Issue 2.
- Vujić A., Ståhls G., Ačanski J., Bartsch H., Bygebjerg R., Stefanović A. 2013. Systematics of Pipizini and taxonomy of European *Pipiza* Fallén: molecular and morphological evidence (Diptera, Syrphidae) // Zoologica Scripta. Vol.42. No.3. P. 288–305.
- Zimina L.V. 1952. [New species *Spilomyia* (Diptera, Syrphidae) from the Far East] // Entomologicheskoe Obozrenie. Vol.32. P.329–331. [In Russian].
- Zimina L.V. 1954. Hover flies (Diptera, Syrphidae) of the district of state forest stripe Kamyshin–Stalingrad // Zoologicheskij Zhurnal. Vol.33. No.6. P.1282–1288. [In Russian].
- Zimina L.V. 1957. [New data on ecology and faunistics of hover flies (Diptera, Syrphidae) of the Moscow Area] // Byulleten' Moskovskogo Obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.62. No.4. P.51–62. [In Russian].
- Zimina L.V. 1961. [Brief review of Palaearctic species of the genus *Volucella* Geoffr. (Diptera, Syrphidae)] // Sbornik trudov Zoologicheskogo Museya Moskovskogo Universiteta. Vol.8. P.139–149. [In Russian].
- Zimina L.V. 1964. [Some interesting Diptera from families Conopidae and Syrphidae (Diptera) from Far East] // Entomologicheskoe Obozrenie. Vol.43. No.2. P.461–465. [In Russian].
- Zimina L.V. 1968a. [To diptero fauna of East Siberia. Syrphidae and Conopidae] // Sbornik trudov Zoologicheskogo Museya Moskovskogo Universiteta. Vol.11. P.57–77. [In Russian].
- Zimina L.V. 1968b. [Additional data about distribution of hover flies (Diptera, Syrphidae) of the Russian fauna] // Sbornik trudov Zoologicheskogo Museya Moskovskogo Universiteta. Vol.11. P.79–96. [In Russian].
- Zimina L.V. 1972a. [First communication on the Syrphidae (Diptera) of the Magadan Oblast] // Byulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.77. No.1. P.37–45. [In Russian].
- Zimina L.V. 1972b. [To the hover flies fauna (Diptera: Syrphidae) of «Kedrovaya Pad'» Reserve] // Rol' nasekomykh v lesnykh biogeotsenozakh Primor'ya. Vladivostok. P.172–175. [In Russian].
- Zimina L.V. 1975. [Rare and interesting Syrphidae (Diptera) in collection of the Zoological Muzeum of the Moscow University, 1] // Sbornik trudov Zoologicheskogo Museya Moskovskogo Universiteta. Issue 15. P.136–148. [In Russian].
- Zimina L.V. 1976. [Rare and interesting Syrphidae (Diptera) in collection of the Zoological Museum of the MGU] // Sbornik trudov Zoologicheskogo Museya Moskovskogo Universiteta. Vol.15. P. 136–148. [In Russian].
- Zimina L.V. 1979. [To the fauna of Syrphidae of Yakutia] // Byulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.84. No.1. P.46–49. [In Russian].
- Zimina L.V. 1981a. [Rare and interesting Syrphidae (Diptera) in the collection of the Zoological Museum of the MGU] // Sbornik trudov Zoologicheskogo Museya Moskovskogo Universiteta. Vol.19. P.150–170. [In Russian].
- Zimina L.V. 1981b. [The Syrphidae of north Amur district] // Sokolov L.I. and Shatalkin A.I. (Eds.) Ekologo-faunisticheskie issledovaniya. Biologicheskie resursy territorii v zone stroitel'stva BAM. Izdatel'stvo Moskovskogo Universiteta. P.27–38. [In Russian].
- Zimina, L.V. 1982. [Two new species of *Callicera* Panzer, 1809 (Diptera, Syrphidae) in the fauna of the USSR] // Byulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.87. No.3. P.37–39. [In Russian].
- Zimina L.V. 1986a. [Additional data on syrphid fauna (Diptera, Syrphidae) in Moscow Region] // Byulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.91. No.2. P.55–58. [In Russian].
- Zimina L.V. 1986b. Review of Palaearctic Hover flies of the genus *Callicera* Panzer (Diptera, Syrphidae) // Entomologicheskoe Obozrenie. Vol.65. No.3. P.633–638. [In Russian].
- Zimina L.V. 1989. New hover flies of the genus *Merodon* (Diptera, Syrphidae) from East Crimea // Vestnik Zoologii. Kiev. No.1. P.24–29. [In Russian].
- Zimina L.V., Olshvang V.N. 1976. [To hover flies fauna of Priobskij North (Diptera, Syrphidae)] // Byulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij. Vol.71. No.6. P.144–148. [In Russian].
- Yuferev G.I. 2004. [Entomofauna of Kirov Area. New materials] // Kirov: Triada plyus. P.1–30. [In Russian].

Поступила в редакцию 21.10.2018