

ON THE DOLICHOPODIDAE (DIPTERA: EMPIDOIDEA) FROM SERBIA

IGOR YA. GRICHANOV

All-Russian Institute of Plant Protection, Podbelskogo 3, 196608 St. Petersburg-Pushkin, Russia
E-mail: grichanov@mail.ru

Abstract

The data on Dolichopodidae from Serbia are reviewed. New records resulting from short-term visits to Serbia in 2014 and 2015 are presented. Of the 24 species collected, 14 are recorded for the first time for Serbia. The other known species are listed, and the number of reliably reported species from the country has reached 37 species belonging to 19 genera. Almost all collected species are widespread across the Palaearctic Region or across Europe.

KEY WORDS: Diptera, Empidoidea, Dolichopodidae, fauna, Serbia, new records

Introduction

The Dolichopodidae is one of the largest groups among Diptera, comprising some 7,500 described species worldwide (Grichanov, 2014) and more than 500 species in the East Mediterranean region (Grichanov, 2007; Kechev & Ivanova 2015; Tonguç *et al.*, 2016). In the case of long-legged flies (Dolichopodidae), the territory of Serbia remains undercollected, with no checklists and practically no research articles for this country. Moreover, recent catalogs (e.g. Yang *et al.*, 2006; Grichanov, 2014) are based mainly on the Palaearctic Catalog (Negrobov, 1991) and use the name Yugoslavia in the distributional lists of countries for included species. According to these catalogs, about 115 species were recorded in the old literature for the territory of the former Yugoslavia, mainly from Bosnia and Herzegovina, Croatia and Slovenia, whereas the expected number of species there must exceed 250, as compared with some neighboring countries (Pärnu, 2002).

Only two new species were described originally from localities that are indisputably Serbian: *Cryptophleps kerteszi* Lichtwardt, 1898, and *Medetera longicauda* Becker, 1917. One of these published papers contains a list of 20 long-legged flies collected from Serbia in 1996 (Pärnu, 1997). Unfortunately, the author used largely outdated nomenclature. Grichanov (2009) reported *Asyndetus latifrons* (Loew, 1857) from the country. Here we list all these species, providing an updated synonymy and distribution.

This paper also presents new records for 12 newly collected species in detail. Specimens were collected by M. Krivosheina, A. Ozerov and N. Vikhrev (the Zoological Museum of Moscow State University, Moscow, Russia [MZUM]) in the course of several short visits to Serbia in 2014 and 2015. A hand net was used for collecting. Mainly wet localities (apart from the tree trunks *Medetera truncorum* was taken from) were explored. All specimens were dried and mounted on pins and placed in the museum drawers (MZUM). All species are widespread across the Palaearctic Region and common on the Balkan Peninsula, which as a whole may be considered to be comparatively well-studied. They are included in the keys to Dolichopodidae of the Caucasus and Eastern Mediterranean (Grichanov, 2007). General distribution of species is given after Negrobov *et al.* (2013) and Grichanov (2014). Type localities are provided, and country lists are arranged alphabetically.

Results

Material examined

Argyra diaphana (Fabricius, 1775)

Material. 1♂, Serbia: Babin Zub, 43.375° N, 22.625° E, 1550 m, 1-7.VII.2015, N. Vikhrev.

Distribution. Type locality: Germany: Lipsise [=Leipzig]. Palaearctic: Austria, Azerbaijan, Belarus, Belgium, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iran, Ireland, Latvia, Moldova, Netherlands, Norway, Poland, Romania, Russia (Krasnodar, Kursk, Krasnoyarsk, Leningrad, Lipetsk, Moscow, Pskov, Ryazan, Voronezh), Serbia, Slovakia, Sweden, Switzerland, Turkey (Sultaniçe), UK, Ukraine.

Argyra ilonae Gosseries, 1989

Material. 1♂, Serbia: Crni Vrh env., 43.407° N, 22.587° E, 800 m, 1-7.VII.2015, N. Vikhrev.

Distribution. Type locality: Denmark. Palaearctic: Abkhazia, Austria, Belgium, Czech, Denmark, Finland, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Romania, Russia (Adygea, Crimea, Kabardino-Balkaria, Karelia, Krasnodar, Leningrad, North Ossetia), Serbia, Slovakia, Sweden, Switzerland, UK, Ukraine (Kharkiv).

Campsicnemus curvipes (Fallén, 1823)

Material. 1♂, Serbia: Crni Vrh env., 43.408° N, 22.575° E, 708 m, 29.VI.2015, Ozerov & Krivosheina; 1♀, Serbia: Stara Planina, Mt. Babin Zub, 43.3617° N, 22.5791° E, 1459 m, 4.VII.2015, Ozerov & Krivosheina; 1♂, Serbia: Babin Zub, 43.375° N, 22.625° E, 1550 m, 1-7.VII.2015, N. Vikhrev.

Reference. Pârvu, 1997.

Distribution. Type locality: not given. Palaearctic: Abkhazia, Algeria, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Greece incl. Crete, Hungary, Ireland, Italy, Latvia, Luxembourg, Morocco, Netherlands, Norway, Poland, Portugal (Azores, Madeira), Romania, Russia (Adygea, Alania, Crimea, Dagestan, Kabardino-Balkaria, Kaluga, Karelia, Karachay-Cherkessia, Stavropol, Krasnodar, Krasnoyarsk, Leningrad, Moscow, Pskov, Ryazan), Serbia, Slovakia, Spain incl. Canary Is., Sweden, Switzerland, Turkey, Ukraine (Odessa), UK.

Campsicnemus umbripennis Loew, 1856

Material. 3♂, Serbia: Stara Planina, 43.37° N, 22.60° E, 1500 m, 16-18.IX.2014, N. Vihrev; 4♂, Serbia: Babin Zub, 43.375° N, 22.625° E, 1550 m, 1-7.VII.2015, N. Vihrev.

Reference. Pârvu, 1997.

Distribution. Type locality: Austria. Palaearctic: Abkhazia, Afghanistan, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Czech, France, Georgia, Germany, Greece incl. North Aegean, Hungary, Iraq, Italy, Israel, Poland, Portugal, Romania, Russia (Adygea, Alania, Kabardino-Balkaria, Karachay-Cherkessia, Krasnodar), Serbia, Slovakia, Spain, Switzerland, Tajikistan, Turkey (Erzurum, Hakkâri, Isparta, Kars, Muğla), Turkmenistan, UK.

Chrysotus laesus (Wiedemann, 1817)

Material. 1♂, Serbia: Babin Zub, 43.385° N, 22.63° E, 1700 m, 6-8.VII.2015, N. Vihrev.

Reference. Pârvu, 1997 (females only).

Distribution. Type locality: Germany: Kiel. Palaearctic: Armenia, Austria, Belgium, Belarus, Bulgaria, China, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Netherlands, Norway, Poland, Romania, Russia (Adygea, Altai, Bashkortostan, Blagoveshchensk, Buryatia, Dagestan, Irkutsk, Karelia, Krasnodar, Krasnoyarsk, Kursk, Leningrad, Lipetsk, Magadan, Moscow, Orenburg, Omsk, Pskov, Ryazan, Tatarstan, Tomsk, Vladivostok, Voronezh, Yakutia, Yaroslavl), Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey (Kars), UK, Ukraine.

Chrysotus suavis Loew, 1857

Material. 5♂, Serbia: Kalna env., river Timok, 43.4241° N, 22.4206° E, 30.VI and 5.VII.2015, Ozerov & Krivosheina; 1♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Reference. Pârvu, 1997 (females only).

Distribution. Type locality: Germany: "Coln; Austria: "Neusiedler See in Ungarn". Palaearctic: Afghanistan, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, N China, Croatia, Czech, Egypt, Estonia, Finland, France, Georgia, Germany, Greece (North Aegean), Hungary, Iraq, Iran, Israel, Italy, Kyrgyzstan, Latvia, Lithuania, Middle Asia, Mongolia, Morocco, Netherlands, Norway, Poland, Romania, Russia (Adygea, Alania, Altai, Astrakhan, Blagoveshchensk, Buryatia, Irkutsk, Kabardino-Balkaria, Kamchatka, Khabarovsk, Krasnodar, Krasnoyarsk, Kursk, Leningrad, Lipetsk, Magadan, Orel, Pskov, Rostov, Ryazan, Sakhalin, Tatarstan, Voronezh, Yakutia), Serbia, Slovakia, ?Slovenia, Spain (Canary Is), Sweden, Switzerland, Turkey (Adiyaman, Antalya, Antakya, Artvin, Gaziantep, Kizildere, Şanlıurfa), UK, Ukraine (Cherkasy, Kherson, Odessa); ?Afrotropical: ?DR Congo.

Diaphorus hoffmannseggii Meigen, 1830

Material. 1♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: not given. Palaearctic: Austria, Belgium, Czech, Denmark, Finland, France, Germany, Hungary, Israel, Italy, Latvia, Netherlands, Poland, Romania, Russia (Leningrad, Moscow, North Caucasus, Ural, Voronezh), Serbia, Slovakia, Sweden, Switzerland, Turkey (Zonguldak), UK.

Dolichopus lepidus Staeger, 1842

Material. 2♂, Serbia: Babin Zub, 43.375° N, 22.625° E, 1550 m, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: Denmark: Slutningen, ved Leersøen. Palaearctic: Austria, Belarus, Belgium, China, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Kazakhstan, Latvia, Mongolia, Netherlands, Norway, Poland, Romania, Russia (Adygea, Karelia, Khabarovsk, Khantia-Mansia, Krasnodar, Krasnoyarsk, Leningrad, Magadan, Moscow, Murmansk, Novgorod, Pskov, Ryazan, Sayan Mountains, Vladivostok, Vologda, Voronezh), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Kars), UK.

Dolichopus ungulatus (Linnaeus, 1758)

Material. 1 ♂, Serbia: Stara Planina, Mt. Babin Zub, 43.374° N, 22.621° E, 1547 m, 2.VII.2015, Ozerov & Krivosheina; 1 ♂, Serbia: Crni Vrh env., 43.3956° N, 22.605° E, 988 m, 4.VII.2015, Ozerov & Krivosheina.

Distribution. Type locality: Europe. Palaearctic: Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, China (Xinjiang), Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Iran, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Romania; Russia (Adygea, Alania, Altai, Irkutsk, Kabardino-Balkaria, Karachay-Cherkessia, Karelia, Khabarovsk, Khantia-Mansia, Krasnodar, Krasnoyarsk, Kursk, Leningrad, Lipetsk, Mordovia, Moscow, Novgorod, Orel, Orenburg, Perm, Pskov, Ryazan, Tatarstan, Vologda, Voronezh), Serbia, Slovakia, Spain, Sweden, Switzerland, UK, Ukraine (Kharkiv, Kiev, Odessa, Ternopil, Carpathians).

Gymnopternus brevicornis (Staeger, 1842)

Material. 1 ♂, Serbia: Crni Vrh env., 43.3956° N, 22.605° E, 988 m, 4.VII.2015, Ozerov & Krivosheina.

Distribution. Type locality: not given [Denmark]. Palaearctic: Austria, Belgium, Czech, Denmark, Finland, France, Germany, Hungary, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Romania, Russia (Karelia, Leningrad, Murmansk, Voronezh, "Ural", Altai, Khantia-Mansia, Primorskii Terr.), Sweden, Switzerland, UK, Ukraine (Carpathians, Odessa).

Gymnopternus celer (Meigen, 1824)

Material. 1 ♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vikhrev.

Reference. Pârvu, 1997 (as *Hercostomus celer*).

Distribution. Type locality: not given. Palaearctic: Austria, Belgium, Bulgaria, Czech, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Kazakhstan, Luxembourg, Kazakhstan, Netherlands, Norway, Poland, Romania, Russia (Altai, Buryatia, Krasnodar, Krasnoyarsk, Mordovia, Moscow, Novgorod, Ryazan, Ural, Voronezh, "North Caucasus"), Serbia, Slovakia, Sweden, Switzerland, Turkey (Çanakkale), UK, Ukraine.

Hercostomus nanus (Macquart, 1827)

Material. 1 ♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vikhrev.

Reference. Pârvu, 1997 (females only).

Distribution. Type locality: Turkey: "Kleinasien". Palaearctic: Belgium, Bulgaria, Czech, Denmark, France, Germany, Hungary, Ireland, Italy, Moldova, Netherlands, Poland, Romania, Russia (Crimea, Pskov), Serbia, Slovakia, Sweden, Switzerland, Turkey (Muğla), UK, Ukraine.

Hercostomus rusticus (Meigen, 1824)

Material. 2 ♂, Serbia: Babin Zub, 43.385° N, 22.63° E, 1700 m, 6-8.VII.2015, N. Vikhrev.

Distribution. Type locality: not given. Palaearctic: Abkhazia, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Czech, Estonia, France, Georgia, Germany, Greece, Hungary, Iran, Italy, Kazakhstan, Macedonia, Mongolia, Netherlands, Poland, Romania, Russia (Adygea, Altai, Blagoveshchensk, Buryatia, Dagestan, Irkutsk, Kabardino-Balkaria, Karachai-Cherkessia, Krasnodar, Krasnoyarsk, Kursk, Leningrad, Omsk, Samara, Ural, Vladivostok, Voronezh, Yakutia), Serbia, Slovakia, Spain, Switzerland, Turkey (Rize), Ukraine.

Hydrophorus balticus (Meigen, 1824)

Material. 1♂, Serbia: Stara Planina, 43.37° N, 22.60° E, 1500 m, 16-18.IX.2014, N. Vihrev.

Distribution. Type locality: Germany: Hamburg. Palaearctic: Afghanistan, Algeria, Austria, Azerbaijan, Belgium, Bulgaria, Cyprus, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Golan Heights, Greece, Hungary, Iran, Ireland, Israel, Italy, Mongolia, Morocco, Netherlands, Norway, Poland, Romania, Russia (Adygea, Alania, Baikal, Crimea, Kabardino-Balkaria, Karachay-Cherkessia, Krasnodar, Leningrad, Moscow, Voronezh, Yakutia), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Antalya, Aydin, Denizli, Isparta, Kars, Muğla, Rize), UK, Ukraine (Odessa); Afrotropical: South Africa, St. Helena.

Liancalus virens (Scopoli, 1763)

Material. 2♂, 1♀, Serbia: Stara Planina, 43.3681° N, 22.5943° E, 1496 m, 3.VII.2015, Ozerov & Krivosheina; Serbia: Stara Planina, Mt. Babin Zub, 43.374° N, 22.621° E, 1547 m, 7.VII.2015, Ozerov & Krivosheina. 1♂, Serbia: Stara Planina, 43.37° N, 22.60° E, 1500 m, 16-18.IX.2014, N. Vihrev.

Distribution. Type locality: not given ["Carnioliae indigena", Slovenia]. Palaearctic: Abkhazia; Algeria, Austria, Azerbaijan, Belgium, Bulgaria, Cyprus; Czech, Denmark, Finland, France, Georgia; Germany, Greece incl. Crete; Hungary, Ireland, Israel; Italy, S Kazakhstan, Kyrgyzstan, Luxembourg, Morocco, Netherlands, Norway, Poland, Portugal incl. Madeira, Romania; Russia (Crimea, Krasnodar, Leningrad, "Siberia"), Serbia, Slovakia; Slovenia, Spain, Sweden, Switzerland, Tajikistan, Tunisia, Turkey (Hakkâri, Muğla), UK.

Medetera jacula (Fallén, 1823)

Material. 1♂, Serbia: Babin Zub, 43.375° N, 22.625° E, 1550 m, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: Sweden: Scania. Palaearctic: Armenia, Austria, Azerbaijan, Belarus, Belgium, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Kazakhstan, Netherlands, Norway, Poland, Romania, Russia (Alania, Altai, Buryatia, Irkutsk, Kabardino-Balkaria, Kaluga, Krasnodar, Kursk, Leningrad, Mordovia, Moscow, Novgorod, Orel, Rostov, Ryazan, Sayan Mountains, Stavropol, Urals, Vologda, Voronezh, Yakutia), Slovakia, Sweden, Switzerland, Tunisia, Turkey (Antalya), UK, Ukraine.

Medetera truncorum Meigen, 1824

Material. 1♂, Serbia: Crni Vrh env., 43.408° N, 22.575° E, 708 m, 29.VI.2015, Ozerov & Krivosheina; 3♂, Serbia: Crni Vrh env., 43.407° N, 22.587° E, 800 m, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: Germany: Hamburg. Palaearctic: Algeria, Austria, Azerbaijan, Belgium, Czech, Croatia, Denmark, Egypt, Estonia, Finland, France, Germany, Golan Heights, Greece, Hungary, Ireland, Israel, Luxembourg, Netherlands, Norway, Poland, Portugal incl. Azores, Russia (Crimea, Krasnodar, Yakutia), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Adiyaman, Gaziantep, Hatay, Isparta, Mersin, Muğla, Şanlıurfa), UK, Ukraine (Kharkiv); Nearctic: British Columbia, Wyoming, Oregon.

Poecilobothrus chrysozygos (Wiedemann, 1817)

Material. 2♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Reference. Pârvu, 1997 (as *Hercostomus chrysozygos*).

Distribution. Type locality: Germany: "probably Aachen". Palaearctic: Armenia, Austria, Belarus, Belgium, Bulgaria, Czech, Denmark, France, Germany, Hungary, Iran, Kazakhstan, Latvia, Moldova, Netherlands, Poland, Romania, Russia (Adygea, Karachay-Cherkessia, Krasnodar, Lipetsk, Mordovia, Moscow, Voronezh, Ural, Khabarovsk), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Kirkclareli), UK, Ukraine (Kharkiv, Kherson, Odessa).

Rhaphium caliginosum Meigen, 1824

Rhaphium zetterstedti (Parent, 1925) (unnecessary new name for *Rhaphium caliginosum* Zetterstedt, 1843, nec Meigen, 1824; misidentification)

Material. 1♂, Serbia: Stara Planina, Mt. Babin Zub, 43.3617° N, 22.5791° E, 1459 m, 4.VII.2015, Ozerov & Krivosheina; 1♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Reference. Pârvu, 1997 (as *Rhaphium zetterstedti*).

Distribution. Type locality: not given. Palaearctic: Algeria, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Croatia, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Latvia, Morocco, Netherlands, Norway, Poland, ?Romania, Russia (Adygea, Kabardino-Balkaria, Kaliningrad, Karachay-Cherkessia, Krasnodar, Krasnoyarsk, Kursk, Leningrad, Moscow, Murmansk, Orel, Pskov, Rostov, Stavropol, Voronezh), Serbia, Slovakia, Sweden, Switzerland, Syria, Turkey (Burdur, İzmir), UK, Ukraine (Kherson, Odessa).

Rhaphium micans (Meigen, 1824)

Material. 2♂, Serbia: Crni Vrh env., 43.407° N, 22.587° E, 800 m, 1-7.VII.2015, N. Vihrev.

Reference. Pârvu, 1997.

Distribution. Type locality: Germany "Hamburg". Palaearctic: Abkhazia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, China, Czech, Finland, France, Germany, Hungary, Italy, Latvia, Netherlands, Norway, Poland, Romania, Russia (Adygea, Astrakhan, Kabardino-Balkaria, Karachay-Cherkessia, Karelia, Khabarovsk, Krasnodar, Krasnoyarsk, Leningrad, Pskov, Rostov, Ryazan, Voronezh, Vladivostok), Serbia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Turkey (Muğla, Rize), UK.

Rhaphium riparium (Meigen, 1824)

Material. 1♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: not given. Palaearctic: Austria, Belarus, Belgium, China, Czech, Denmark, Estonia, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Kyrgyzstan, Latvia, Mongolia, Netherlands, Norway, Poland, Romania, Russia (Kamchatka, Karachay-Cherkessia, Krasnodar, Leningrad), Serbia, Slovakia, Sweden, Switzerland, UK.

Syntormon denticulatus (Zetterstedt, 1843)

Material. 1♂, Serbia: Crni Vrh env., 43.407° N, 22.587° E, 800 m, 16-22.IX.2014, N. Vihrev; 1♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: Sweden: Scania. Palaearctic: Abkhazia, Afghanistan, Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Finland, France, Germany, Greece, Iran, Israel, Italy, Kyrgyzstan, Norway, Poland, Romania, Russia (Adygea, Alania, Kabardino-Balkaria, Karelia, Krasnodar, Leningrad, Moscow, Murmansk, Stavropol), Sweden, Switzerland, Tajikistan, Turkey (Erzurum, Muğla, Van), UK, Ukraine, "North Africa".

Syntormon pallipes (Fabricius, 1794)

Material. 2♂, Serbia: Crni Vrh env., 43.407° N, 22.587° E, 800 m, 16-22.IX.2014, N. Vihrev; 2♂, Serbia: Babin Zub, 43.385° N, 22.63° E, 1700 m, 6-8.VII.2015, N. Vihrev.

Reference. Pârvu, 1997.

Distribution. Type locality: Germany. Palaearctic: Abkhazia, Afghanistan, Algeria, Armenia, Austria, Azerbaijan, Belgium, Bulgaria, China, Croatia, Czech, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Iran, Iraq, Ireland, Israel, Italy, Jordan, Kyrgyzstan, Latvia, Morocco, Netherlands, Norway, Poland, Portugal incl. Madeira, Azores, Romania, Russia (Adygea, Alania, Crimea, Kabardino-Balkaria, Karachay-Cherkessia, Krasnodar, Leningrad, Murmansk, Orel, Rostov, Voronezh), Serbia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Tunisia, Turkey (Adiyaman, Ankara, Antalya, Burdur, Denizli, Hakkâri, Isparta, Korusuk, Muğla, Van), UK, Ukraine (Kherson, Odessa), Uzbekistan; Oriental: China; Afrotropics: Madagascar, Tanzania, Yemen, St. Helena (?introduced).

Tachytrechus genualis Loew, 1857

Material. 1♂, Serbia: Kalna, river Timok, 43.42° N, 22.42° E, 1-7.VII.2015, N. Vihrev.

Distribution. Type locality: not given [Germany]. Palaearctic: Armenia, Austria, Bulgaria, Czech, Germany, Hungary, Japan, Poland, Romania, Russia (Adygea, Kabardino-Balkaria, Krasnodar, Leningrad, Sayan Mountains), Slovakia, Spain, Switzerland, Turkey (Sakarya, Zonguldak); Oriental: China (Taiwan).

Other species known from Serbia

Asyndetus latifrons (Loew, 1857)

Reference. Grichanov, 2009.

Distribution. Type locality: Poland: "Schleisen". Palaearctic: Austria, Belgium, Bulgaria, Cyprus, Czech, Estonia, France, Germany, Hungary, Italy, N Kazakhstan, Netherlands, Poland, Romania, Russia (Adygea, Krasnodar, Leningrad, N Ossetia-Alania, Voronezh, S Ural), Serbia, Slovakia, Spain, Switzerland, Syria, Turkey (Efas, Buharkent; Korusuk, Ortaca – Dalaman Çayi, Adapazari, Zonguldak); Afrotropical: DR Congo, Gabon, Kenya; Oriental: Bangladesh, China, India, Pakistan, Philippines, Thailand.

Chrysotus viridifemoratus von Roser, 1840

Chrysotus monochaetus Kowarz, 1874

Reference. Pârvu, 1997 (as *Chrysotus monochaetus*).

Remarks. Synonymy of *C. monochaetus* and *C. viridifemoratus* needs confirmation. See additional references in Grichanov (2014).

Distribution. Type locality: not given [Germany: Wurttemberg]. Palaearctic: Austria, Belgium, Czech, France, Germany, Hungary, Italy, Netherlands, Poland, Romania, Russia (Krasnoyarsk, Novosibirsk, Yakutia), Serbia, Slovakia, Switzerland, UK, Ukraine (Chernovtsy).

Cryptophleps kerteszi Lichtwardt, 1898

Reference. Lichtwardt, 1898.

Distribution. Type locality. Serbia: "Deliblat, Hungaria". Palaearctic: China (Liaoning), Hungary, Romania, Russia (Saratov), Serbia, Spain, Sweden.

Diaphorus unguiculatus Parent, 1925

Reference. Pârvu, 1997.

Distribution. Type locality: Italy: Rovereto. Palaearctic: Italy, Romania, Serbia.

Dolichopus griseipennis Stannius, 1831

Reference. Pârvu, 1997 (females only).

Distribution. Type locality: France: Lyon. Palaearctic: Algeria, ?Armenia, Azerbaijan, Austria, Belgium, Bulgaria, Cyprus, Czech, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Greece incl. Crete, Hungary, Iran, Ireland, Israel, Italy, N Kazakhstan, Lithuania, Luxembourg, Morocco, Netherlands, Norway, Poland, Romania, Russia (Adygea, Krasnodar, Moscow, "Siberia"), Serbia, Slovakia, Spain incl. Balearic Is., Sweden, Switzerland, Tunisia, Turkey (Sinop), UK, "Middle Asia".

Dolichopus longicornis Stannius, 1831

Reference. Pârvu, 1997.

Distribution. Type locality: not given. Palaearctic: Austria, Belarus, Belgium, China, Czech, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Mongolia, Netherlands, Norway, Poland, Romania, Russia (Altai, Amur Reg., Arkhangelsk, Irkutsk, Kamchatka, Karelia, Komi, Krasnodar, Krasnoyarsk, Leningrad, Lipetsk, Magadan, Moscow, Murmansk, Novgorod, Perm, Primorskii Terr., Pskov, Sakhalin, Sayany, Ural, Vologda, Voronezh, Yakutia, Yaroslavl), Serbia, Slovakia, Sweden, Switzerland, UK, Ukraine (Kherson, Carpathians); Nearctic: Canada (Yukon), USA (Alaska).

Gymnopternus angustifrons (Staeger, 1842)

Reference. Pârvu, 1997 (as *Hercostomus angustifrons*).

Distribution. Type locality: Denmark: "Flere Hanner paa Valdplanter". Palaearctic: Belgium, Czech, Denmark, Estonia, Finland, France, Germany, Hungary, ?Ireland, Kazakhstan, Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Russia (Adygea, Karelia, Karachay-Cherkessia, Krasnodar, Leningrad, Lipetsk, Moscow, Pskov, Ryazan, Voronezh, "Ural", "Siberia"), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Kars), UK, Ukraine.

Medetera longicauda Becker, 1917

Reference. Becker, 1917.

Distribution. Type locality: "Deliblat, Dubovacs, Sud-Ungarns" [Serbia]. Palaearctic: France, Germany, Hungary, Serbia, Slovakia, Russia (Voronezh).

Rhaphium appendiculatum Zetterstedt, 1849

Rhaphium macrocerum (Parent, 1925) (nec Meigen, 1824, nec Zetterstedt, 1843; misidentification)

Reference. Pârnu, 1997 (as *Rhaphium macrocerum*).

Distribution. Type locality: Sweden: Scania ad Esperod. Palaearctic: Abkhazia, Afghanistan, Algeria, Austria, Bulgaria, Czech, Denmark, Finland, France, Georgia, Germany, Greece, Hungary, Iran, Ireland, Italy, Morocco, Netherlands, Poland, Romania, Russia (Adygea, Alania, Crimea, Krasnodar, Leningrad, Moscow, Pskov, Ural), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Adiyaman, Kuruçuk), UK, "Middle Asia"; Afrotropical: St. Helena (?introduced).

Sybistroma nodicornis Meigen, 1824

Reference. Pârnu, 1997.

Distribution. Type locality: "not given". Palaearctic: Austria, Belgium, Bulgaria, Czech, Egypt, France, Germany, Greece, Hungary, Iran, Iraq, ?Israel, Italy, Netherlands, Romania, "South Russia", Serbia, Slovakia, Switzerland, Turkey (Afyonkarahisar, Uşak).

Sympycnus pulicarius (Fallén, 1823)

Reference. Pârnu, 1997.

Distribution. Type locality: not given [Sweden]. Palaearctic: Austria, Azerbaijan, Belgium, Bulgaria, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iran, Ireland, Italy, Kazakhstan, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Romania, Russia (Alania, Altai, Kabardino-Balkaria, Kaliningrad, Karachay-Cherkessia, Karelia, Leningrad, Murmansk, Novgorod, Pskov, Stavropol), Serbia, Slovakia, Spain, Sweden, Switzerland, Turkey (Aydın, Muğla, Van), UK, Ukraine. Nearctic: California.

Syntormon fuscipes (von Roser, 1840)

Reference. Pârnu, 1997.

Distribution. Type locality: "not given" (Germany: Württemberg). Palaearctic: Abkhazia, Andorra, Austria, Belgium, Bulgaria, Czech, Denmark, France, Germany, Greece, Hungary, Netherlands, Poland, Romania, Russia (Krasnodar), Serbia, Slovakia, Spain, Sweden, Turkey (Adiyaman), UK, Ukraine. Afrotropics: Burundi, Kenya.

Syntormon silvianus Pârnu, 1989

Reference. Pârnu, 1997.

Remarks. Grichanov (2007, 2013) considered the species doubtful, being a possible synonym of widely distributed *Syntormon monilis* (Haliday, 1851). Key characters of the two species must be redescribed and accurately figured in order to define their true relations.

Distribution. Type locality: Romania: Pietra Craiului Mountains, Southern Carpathians. Palaearctic: Romania, Serbia.

Discussion

Twenty four dolichopodid species were collected during several short-term visits to Serbia in 2014 and 2015. *Argyra diaphana*, *Argyra ilonae*, *Diaphorus hoffmannseggi*, *Dolichopus lepidus*, *Dolichopus unguulatus*, *Gymnopternus brevicornis*, *Hercostomus rusticus*, *Hydrophorus balticus*, *Liancalus virens*, *Medetera jacula*, *Medetera truncorum*, *Rhaphium riparium*, *Syntormon denticulatus* and *Tachytrechus genualis* are recorded from Serbia for the first time. As a result, the number of reliably reported species from this country is now 37 species, belonging to 19 genera. Almost all collected species are widespread across the Palaearctic Region or across Europe; nevertheless, *Cryptophleps kerteszi*, *Diaphorus unguiculatus* and *Medetera longicauda* are rare species in Europe. We suggest that many more species will be revealed in Serbia if new districts and localities are investigated with the use of mass trapping methods.

Acknowledgments

This paper was partly supported by the grant of the Russian Foundation for Basic Research N 14-04-00264-a to Oleg P. Negrobov. Prof. O.P. Negrobov (Voronezh, Russia), Dr. Stefan Naglis (Zurich, Switzerland) and an anonymous reviewer kindly commented on earlier drafts of the manuscript.

References

- Becker, T. (1917). Dipterologische Studien. Dolichopodidae. A. Paläarktische Region. *Nova Acta Academiae Caesareae Leopoldinisch-Carolinae Germanicae Naturae Curiosorum*, 102(2), 113-361.
- Grichanov, I. Ya. (2007). *A checklist and keys to Dolichopodidae (Diptera) of the Caucasus and East Mediterranean*. St. Petersburg: VIZR (Plant Protection News Suppl., N6).
- Grichanov, I. Ya. 2009. New records for Mediterranean Dolichopodidae (Diptera). *International Journal of Dipterological Research*, 20(4), 207-215.
- Grichanov, I. Ya. (2013). Systematic notes on West-Palaearctic species of the genus *Syntormon* Loew (Diptera: Dolichopodidae). In I. Ya. Grichanov & O. P. Negrobov (Eds.), *Fauna and taxonomy of Dolichopodidae (Diptera)*. *Collection of papers* (pp. 3-26), St. Petersburg: VIZR (Plant Protection News Suppl., N9).
- Grichanov, I. Ya. (2014). *Alphabetic list of generic and specific names of predatory flies of the epifamily Dolichopodoidea (Diptera)*. St. Petersburg: VIZR (Plant Protection News, Suppl., N14).
- Kechev, M. & Ivanova, M. (2015). New records and list of known species of the family Dolichopodidae (Diptera, Empidoidea) from Croatia. *Natura Croatica*, 24(2), 323-330.
- Lichtwardt, B. (1898). *Cryptophleps novum* genus Dolichopodidarum. *Természetrzajzi Füzetek*, 21, 491-493.
- Negrobov, O. P. (1991). Family Dolichopodidae. In: Á. Sóos & L. Papp (Eds.), *Catalogue of Palaearctic Diptera*. Vol. 7. *Dolichopodidae-Platypezidae* (pp. 11-139). Budapest: Akadémiai Kiadó, dx.doi.org/10.1016/B978-0-444-98731-0.50008-9.
- Negrobov, O. P., Selivanova O. V., Maslova, O. O. & Chursina M. A. (2013). Check-list of predatory flies of the family Dolichopodidae (Diptera) in the fauna of Russia. In I. Ya. Grichanov & O. P. Negrobov (Eds.), *Fauna and taxonomy of Dolichopodidae (Diptera)*. *Collection of papers* (pp. 47-93). (Plant Protection News, Supplements, N9). St. Petersburg: VIZR.
- Pârvu, C. (1997). Some species of Dolichopodidae (Diptera) recorded from Serbia (Yugoslavia). *Travaux du Museum National d'Histoire Naturelle "Grigore Antipa"*, 39, 175-178.

- Pârvu, C. (2002). Checklist of Dolichopodidae (Diptera) of Romania (XX). *Travaux du Museum National d'Histoire Naturelle "Grigore-Antipa"*, 44, 267-276.
- Tonguç, A., Grichanov, I. & Naglis, S. (2016). Checklist of the Dolichopodidae (Diptera, Brachycera) of Turkey. *Turkish Journal of Zoology*, 40(1), 14-26.
- Yang, D., Zhu, Y., Wang, M. & Zhang, L. (2006). *World Catalog of Dolichopodidae (Insecta: Diptera)*. Beijing: China Agricultural University Press.

DOLICHOPODIDAE ИЗ СРБИЈЕ (DIPTERA: EMPIDOIDEA)

ИГОР ГРИЧАНОВ

Извод

У раду су обрађене врсте фамилије *Dolichopodidae* које су у Србији уловили сарадници Зоолошког музеја из Москве. Примерци су уловљени за време више кратких посета Србији током 2014. и 2015. године и то углавном на влажним стаништима. У сакупљеном материјалу идентификоване су 24 врсте, од којих је 14 нових за фауну Србије. То су: *Argyra diaphana*, *Argyra ilonae*, *Diaphorus hoffmannseggi*, *Dolichopus lepidus*, *Dolichopus unguatus*, *Gymnopternus brevicornis*, *Hercostomus rusticus*, *Hydrophorus balticus*, *Liancalus virens*, *Medetera jacula*, *Medetera truncorum*, *Rhaphium riparium*, *Syntormon denticulatus* и *Tachytrechus genualis*.

До сада је за Србију забележено 37 врста фамилије *Dolichopodidae* које су систематисане у 19 родова.

Received December 12th, 2015
Accepted March 21st, 2016