

## NEW DATA ON SYRPHIDAE (DIPTERA) IN LITHUANIA

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**Introduction**

The latest list of Lithuanian Diptera included 3311 species (Pakalniškis *et al.*, 2006) and later publications during the past nine years added about 220 more.

Fauna of only the few Diptera families in Lithuania (out of 90 families recorded) is studied comparatively better (e.g. Nematocera: Tipulidae, Limoniidae, Simuliidae; Brachycera: Agromyzidae, Syrphidae, Tachinidae), with majority of the families getting weaker or only sporadic attention, if at all. New species are being recorded every time more effort is devoted, proving that there is still much to do in Diptera research in Lithuania. Syrphidae is one of the families that has been getting comparatively more attention in recent years (Lutovinovas, 2007; 2012; Petrašiūnas, 2011; Lutovinovas & Kinduris, 2013, 2015; Lutovinovas, Venckus, 2015). The following publication provides new data on howerflies (Syrphidae) in Lithuania, with three species newly recorded for the country.

**Material and Methods**

Specimens were caught by sweeping the vegetation. The majority of material was collected by the author of this report (A.P.), other collectors are referred in the text accordingly.

Specimens were identified by the author using the keys of Bartsch (2009a, 2009b) Haarto & Stahls (2014), Hippa *et al.* (2001, 2009) and van Veen (2010).

The material is deposited at the Museum of Zoology of Vilnius University (MZVU), Vilnius and most of the specimens with museum labels have those indicated in the text. Species new to the Lithuanian fauna are marked with an asterisk (\*).

## List of localities

Anykščiai	Anykščiai distr.	55.526111, 25.103333
Aukštasis Pavilnys	Vilnius city	54.678527, 25.366972
Avilčiai env.	Molėtai distr.	55.285277, 25.332638
Ažuolyno miškas f.	Vilnius distr.	54.829000, 24.949777
Bagdyšiai	Širvintos distr.	55.089027, 24.751888
Bėčionys mound	Šalčininkai distr.	54.220611, 25.599166
Belmontas	Vilnius city	54.677777, 25.335555
Čepkeliai	Varėna distr.	54.021388, 24.427500
Dubingiai env.	Molėtai distr.	55.058611, 25.453333
Ežeraitis lake	Varėna distr.	54.088707, 24.330097
Geivitoniai	Pasvalys distr.	56.026444, 24.437638

Ginučiai	Ignalina distr.	55.383611, 25.994166
Girdžiūnai env. [1]	Šalčininkai distr.	54.170777, 25.756916
Girdžiūnai env. [2]	Šalčininkai distr.	54.172472, 25.732194
Ignalina	Ignalina distr.	55.343333, 26.172222
Jiesia landscape Pres.	Kaunas city	54.849111, 23.934500
Kairėnai, Botanical garden	Vilnius city	54.733751, 25.403101
Kamanos Nat. R.	Akmenė district	56.313416, 22.652527
Lazdėnai	Elektrėnai distr.	54.742222, 24.930277
Marcinkonys env.	Varėna distr.	54.058055, 24.396388
Medsožiai, Tytuvėnai Reg. P.	Kelmė distr.	55.575111, 23.302194
Menčiai env.	Akmenė district	56.274111, 22.923055
Mikališkės	Šalčininkai distr.	54.288222, 25.553305
Pavilnys	Vilnius city	54.671388, 25.361388
Puvočiai [2], Dzūkija Nat. P.	Varėna distr.	54.115002, 24.294581
Puvočiai, Dzūkija Nat. P.	Varėna distr.	54.115000, 24.303055
Ribiškiai landscape Pres., Pavilniai Reg. P.	Vilnius city	54.661861, 25.319750
Šaltiškiai	Akmenė district	56.169527, 22.849805
Slišiškiiai	Molėtai distr.	55.289750, 25.462388
Tolučiai env., Tytuvėnai Reg. P.	Kelmė distr.	55.635194, 23.194722
Vanaginė	Vilnius city	54.776666, 25.271388
Viešvilė Nat. R.	Tauragė distr.	55.177222, 22.469444
Vingis park	Vilnius city	54.684722, 25.241388
Žalgiris env., Neris Reg. P.	Elektrėnai distr.	54.803444, 24.970138
Žalieji ežerai lakes [1]	Vilnius city	54.792416, 25.320222
Žalieji ežerai lakes [2]	Vilnius city	54.782333, 25.335250
Zujai	Ukmergė distr.	55.287222, 24.845000

## List of species

### *Anasimyia lineata* (Fabricius, 1787)

Bėčionys mound, 15 06 2014, 1 ♀ (MZVUE0009) (A.P.); Girdžiūnai env. [1], Gauja river valley, 14 06 2014, 1 ♀ (MZVUE0018) (A.P.).

Distributed from Scandinavia south to the northern edge of the Pyrenees and Ireland east through central Europe into European parts of Russia, through Siberia to the Pacific coast. Larvae aquatic, microphagous, in rotting plant debris just below the water surface (Speight, 2014).

### *Baccha elongata* (Fabricius, 1775)

Kairėnai, 21 05 2016, 1 ♀ (MZVUE0389) (A.P.).

Known from Scandinavia to the Mediterranean, central Spain eastwards to Greece and Ireland eastwards into European parts of Russia. Prefer forest, both coniferous and deciduous, both young and old; also scrub woodland, hedgerows and suburban gardens. (Speight, 2014)

### *Brachypalpus laphriformis* (Fallén, 1816)

Ažuolyno miškas f., 17 05 2014, 1 ♂ (MZVUE0034) (A.P.).

Known from Southern Fennoscandia south to the Pyrenees, Ireland east through much of central Europe to the former Yugoslavia and European parts of Russia. Prefers over-mature *Fagus* and *Quercus* forest with senescent trees and fallen, rotting timber

(Speight, 2014).

***Cheilisia illustrata* (Harris, 1780)**

Zujai, 20 07 1985, 1♀ (MZVUE0318) (leg. G. Švitra); Puvočiai, 27 07 1987, 1♂ (MZVUE0319) (R. Rekevičius); Marcinkonys, 18 07 1985, 1♂ (A. Stiebytė); Sližiškiai, 27 07 2015, 1♀ (MZVUE0259) (I. Olechnavičiūtė).

Known from Fennoscandia to Spain and Ireland, to western parts of Siberia. Preferred environments are deciduous forest and hedgerows, pasture and meadows, including montane pasture within sheltering woodland (Speight, 2014).

***Cheilisia morio* (Zetterstedt, 1838)**

Ribiškiai landscape preserve, 01 05 2015, 1♀ (MZVUE0286) (A.P.).

Known from northern Scandinavia south to northern Germany and Poland, from the Baltic states and northern Germany eastwards through central Europe to Bulgaria and Romania and on into the Ukraine, the Balkans, western Siberia and Mongolia. The larva inhabits resin outflows on the trunk of *Picea*, caused by damage or the activities of scolytid beetles (Speight, 2014).

***Chrysotoxum bicinctum* (Linnaeus, 1758),**

Puvočiai, Grūda river shore, 09 07 1991, 3♂ (MZVUE0132, MZVUE0133, MZVUE0135) 1♀ (MZVUE0134) (leg. unknown); Bagdyšiai, 27 07 2014, 1♀ (MZVUE0088) (A.P.).

Known from Fennoscandia south to Iberia and the Mediterranean, including N. Africa, through central and southern Europe into Turkey and European parts of Russia, in Asiatic parts of Russia as far as central Siberia. Are mainly found beside streams in open areas in coniferous and deciduous forest, also in fen meadow /unimproved, lowland humid grassland (Speight, 2014).

***Chrysotoxum cautum* (Harris, 1776)**

Puvočiai, Grūda river shore, 01 07 1990, 1♀ (leg. unknown); Sližiškiai, 23 05 2014, 2♂ (MZVUE0328-329) (A.P.); 30 05 2015, 1♂ (MZVUE0253) (A.P.); Puvočiai (2), N54.115002, E24.294581, 29 05 2016, 2♂ (MZVUE0362-363) (A.P.).

Known from Finland south to the Pyrenees and Spain, Britain eastwards through central and southern Europe into Turkey and Russia as far as the Altai mountains. Prefers deciduous forest and scrub, unimproved grassland and lightly grazed grassland which has not been subject to ploughing or tillage (Speight, 2014).

***Chrysotoxum fasciolatum* (De Geer, 1776)**

Ignalina, 16 07 1979, 1♀ (MZVUE0325) (Geštautaitė, Getkinytė).

Known from Fennoscandia, mountain ranges in Poland and Germany south to France and eastwards through northern Europe into Siberia and on to the Pacific and Japan. Prefers herb-rich open areas within humid *Fagus/Picea* forest (Speight, 2014).

***Chrysotoxum festivum* (Linnaeus, 1758)**

Tolučiai env., swampy meadow, 17 06 2012, 1♂, (MZVUE0323) (A.P.); Mikališkės, border of sand pit, 15 06 2014, 1♀ (MZVUE0004) (A.P.); Puvočiai (2), N54.115002, E24.294581, 29 05 2016, 1♀ (MZVUE0356) (A.P.).

Known from Fennoscandia south to Iberia and the Mediterranean, including N. Africa, from Ireland eastwards through much of Europe into Turkey and European parts of Russia; through Siberia to the Pacific coast, Japan, northern India. Prefers open areas in scrub woodland and deciduous forest, unimproved grassland with scrub (Speight, 2014).

***Chrysotoxum vernale* Loew, 1841**

Puvočiai, 10 06 1984, 1♀ (MZVUE0331) (Vencevičiūtė); Sližiškiai, 23 05 2014, 1♂ (MZVUE0330) (A.P.).

Distributed from Fennoscandia south to the Pyrenees, from Britain eastwards through most of Europe into Asia almost to the Pacific, Iran. Larva not described, but females have been observed ovipositing around the entrance holes of ants of the *Lasius flavus* group in unimproved grassland. Prefers open woodland and scrub, also in well-drained, unimproved grassland (Speight, 2014).

***Eristalinus sepulchralis* (Linnaeus, 1758)**

Bagdyšiai 127 07 2014, 1♀ (MZVUE0089) (A.P.).

Distributed from Fennoscandia south to Iberia and the Mediterranean, including N. Africa, from Ireland through most of Europe into Turkey and European parts of Russia, through Siberia to the Japan, China, India. Prefers fen, river and pond margins; significantly anthropophilic, occurring also where domestic stock is pastured, along polluted ditches and in the vicinity of slurry pits (Speight, 2014).

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

Geivitoniai, 10 07 2015, 1♂ (MZVUE0262) (I. Olechnavičiūtė).

Known from Iceland, Fennoscandia and the Faroes south to central Spain, absent from much of southern Europe; from Ireland eastwards through much of northern and central Europe into Russia as far as eastern Siberia. Larva occurs in semi-liquid mud and fen peat beside water, in field drains, slurry and cow dung on water-logged ground (Speight, 2014).

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

Ginučiai, 18 07 1975, 1♀ (MZVUE0248) (V. Klausas, A. Knystautas); Ignalina, 15 07 1979, 1♀ (MZVUE0249) (Januška).

Distributed from Fennoscandia south to N. Africa, from Ireland eastwards through much of Europe into Russia and on through Siberia to the Pacific coast, India. Preferred environment: fen, cut-over valley bog, margins of pools, brooks and rivers, especially brooks in forest, both deciduous and coniferous (Speight, 2014).

***Eristalis oestracea* (Linnaeus, 1758)**

Sližiškiai, 28 07 2015, 1♂ (MZVUE0263) (I. Olechnavičiūtė); 03 08 2015, 1♂ (MZVUE0264) (D. Petrusėvičiūtė).

Distributed from Fennoscandia south to Denmark and northern Germany and eastwards through Poland into European parts of Russia, through Siberia into central Asia. Prefers oligotrophic/mesotrophic water bodies in bog, moor and coastal dune systems (Speight, 2014).

***Eristalis obscura* Loew, 1866**

Puvočiai (2), N54.115002, E24.294581, 29 05 2016, 1♂ (MZVUE0359) (A.P.)

Distributed from northern Norway, Sweden and Finland south to the Netherlands, central Germany, European parts of Russia and eastwards through most of Siberia as well as Nearctic region. Prefers wetland, reed beds, fen, fen carr on alluvial floodplains and fringing lakes (Speight, 2014).

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

Geivitoniai, 10 07 2015, 1♂ (MZVUE0261) (I. Olechnavičiūtė); Sližiškiai, 04 08 2015, 1♂ (MZVUE0260) (G. Gerikaitė).

Known from Fennoscandia south to Iberia and the Mediterranean, from Ireland through much of Europe into European parts of Russia and Turkey, not known beyond

the Urals. Larva were found in farm drains, wet manure, manure heap and decaying vegetable matter in a pond (Speight, 2014).

***Eristalis rupium* Fabricius, 1805**

Viešvilė Res., 08 06 2003, 1 ♀ (MZVUE0121) (A.P.).

From Fennoscandia south to the Pyrenees and northern Spain, from Britain eastwards through central Europe into Turkey and Russia and on throughout Siberia. Larvae aquatic. Are mostly found beside streams in humid deciduous and coniferous forest and montane grassland (Speight, 2014).

***Eumerus ovatus* Loew, 1848**

Bėčionys mound, 15 06 2014, 1 ♂ (MZVUE0005) (A.P.).

From Lithuania and Poland, southern Germany and the Czech Republic through central Europe (Switzerland, Austria) to Romania, the Ukraine and the Caucasus mountains, in southern Europe from Spain through southern France and Italy to the former Yugoslavia. Preferred environment: open ground, thermophilous forest fringes and herb-rich, dry/semi-arid, open, unimproved, calcareous grassland and scrub (Speight, 2014).

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

Sližiškiai, 01 08 2015, 1 ♂ (MZVUE0256) (S. Paliulis).

Distributed from Fennoscandia south to the Mediterranean and from Ireland eastwards through Eurasia to the Pacific, including Iran and Afghanistan. This species is regarded as highly migratory and can frequently be found in habitats which cannot support its larvae. Preferred river margins, seasonally flooded humid grassland and salt-marsh, becomes to a significant extent anthropophilic in southern Europe, where it frequents irrigation ditches in farmland (Speight, 2014).

***Leucozona lucorum* (Linnaeus, 1758)**

Sližiškiai, 23 05 2015, 1 ♀ (MZVUE0258) (A. Kovalkova).

Known from Fennoscandia south to the Pyrenees and northern Spain, from Ireland eastwards through Eurasia to the Pacific coast, Japan. Larva aphidophagous. Preferred environment: deciduous forest, including scrub woodland and hedgerows, normally in relatively humid regions and up to the upper altitudinal limit of *Fagus* (Speight, 2014).

***Mallota megilliformis* (Fallen, 1817)**

Sližiškiai, 24 05 2014, 1 ♂ (MZVUE0322) (A.P.).

Known from Southern parts of Fennoscandia south to Germany, from Poland eastwards into European parts of Russia and the Ukraine and on into Siberia to Khabarovsk. European records of this species are extremely few from the 20th century and it must be regarded as threatened at European level. Adults largely arboreal, descending to visit the upper flowering branches of small trees like *Crataegus* and *Salix* (Speight, 2014).

***Melangyna lasiophthalma* (Zetterstedt, 1843)**

Žalgiris env., 11 04 2015, 1 ♂ (MZVUE0241) (A.P.).

Known from Iceland and Fennoscandia south to the Pyrenees and mountainous parts of Spain, from Ireland eastwards through northern Europe and mountainous parts of central Europe into European parts of Russia, through much of Siberia. Larvae aphid-feeding, on yellow gentian (Speight, 2014).

***Melanogaster nuda* (Macquart, 1829)**

Puvočiai, 11 07 2003, 3 ♂ (MZVUE0127-129) (A.P.).

Distributed from Sweden and Finland south to central Spain, from northern France

and Belgium eastwards through central Europe into European Russia, south-east into southern Turkey and Syria. The larvae are to be found among plant roots, usually at the edge of running water, where the bank begins to rise above the water level (Speight, 2014).

***Melanostoma mellinum* (Linnaeus, 1758)**

Avilčiai env., 10 05 2015, 1♂ (MZVUE0287) (A.P.).

Distributed from Iceland and Fennoscandia south to Iberia, the Mediterranean and N. Africa, from Ireland eastwards through most of Europe into European parts of Russia, Siberia. Larva aphid-feeding, on a wide range of low-growing plants. Preferred environment: open country, grassland and heathland, grassy clearings and tracksides in woodland, predominantly anthropophilic, occurring also in most types of farmland, including arable crops and "improved" pasture, in suburban gardens and parks and along firebreaks and tracks in conifer plantations (Speight, 2014).

***Melanostoma scalare* (Fabricius, 1794)**

Bagdyšiai, 27 07 2014, 1♀ (MZVUE0085) (A.P.).

Known from Iceland and Fennoscandia south to Iberia, the Mediterranean and N. Africa, eastwards through most of Europe into European parts of Russia; in Siberia from the Urals to the Pacific coast. Larvae seem to occur mostly in the litter layer or tussocks of grasses. Preferred environment is most types of humid/mesophilous forest. A largely anthropophilic species, occurring along hedges in various sorts of farmland and in gardens, parks and along tracksides in conifer plantations (Speight, 2014).

***Merodon equestris* (Fabricius, 1794)**

Vanaginė, collective gardens, 16 06 2012, 1♀ (MZVUE0123) (D. Padribonytė).

Distributed from Fennoscandia south to Iberia and the Mediterranean, including N. Africa, from Ireland eastwards through much of Europe into European parts of Russia, also in Japan. Within Europe its range has almost certainly been expanded due to human activity - it is doubtful, for instance, that this species reached either Britain or Ireland unaided by man. Larvae are internal feeder in tissues of bulbs of Liliaceae, that's why they are regarded as a minor pest of horticulture (Speight, 2014).

***Microdon devius* (Linnaeus, 1761)**

Sližiškiai, 24 05 2014, 1♂ (MZVUE0026) 1♀ (MZVUE0025) (A.P.); Aukštasis Pavilnys, meadow, 05 06 2014, 2♂ (MZVUE0027, MZVUE0028) (A.P.); Pavilnys, 15 06 2015, 1♂ (MZVUE0247) (A. Lisavičiūtė).

Distributed from Fennoscandia south to Spain, from Britain eastwards through central and southern Europe into European parts of Russia and as far as central Siberia. Larvae collected from nests of the ant *Lasius flavus* (Speight, 2014).

***Myathropa florea* (Linnaeus, 1758)**

Sližiškiai, 20 05 2011, 1♀ (MZVUE0245) (N. Paršonytė); Lazdėnai, 27 06 2014, (MZVUE0246) (K. Gimbutis); Bagdyšiai, 27 07 2014, 1♀ (MZVUE0087) (A.P.).

Distributed from Fennoscandia south to Iberia and the Mediterranean, the Canary Isles and N. Africa, from Ireland eastwards through Eurasia to the Pacific coast. Larva aquatic, frequent in standing-water rot-holes and in water-filled hollows among tree-roots, on tree stumps or at the junction between major branches and trunk, from ground level to high in the tree. Prefers most types of deciduous forest, to some extent anthropophilic, occurring in humid pasturage and suburban gardens (Speight, 2014).

***Neoascia tenur* (Harris, 1780)**

Ežeraitis lake shore, 2016 05 28, 5♂ 5♀ (MZVUE0367-376) (A.P.)

Distributed from Iceland, Fennoscandia and the Faroes south to Iberia and the Mediterranean; from Ireland eastwards through most of Europe into Turkey and European parts of Russia and on through most of Siberia. Preferred environment is wetland, flushes and streams in blanket bog, around the periphery of raised bogs, acid and rich fen, pond and lake margins and along brooks (Speight, 2014).

\* ***Neoascia obliqua* Coe, 1940**

Belmontas, Vilnelė river bank, 16 05 2011, 1♀ (MZVUE0333) 3♂ (MZVUE0334-0336) (A.P.).

Distributed from southern Sweden south to the Pyrenees; from Ireland eastwards through central Europe to European parts of Russia, the former Yugoslavia, the Caucasus. Preferred environment is streamsides within forest, lake-side fen, stream-sides with tall herb communities, at sheltered locations (Speight, 2014).

***Orthonevra stackelbergi* Thompson & Torp, 1982**

Girdžiūnai env. [2], Gauja river valley, 14 06 2014, 1♂ (MZVUE0188) (A.P.).

Known from Fennoscandia, the Baltic States and Poland, European parts of Russia and on through Siberia to the Pacific. Prefers wetland/forest, wet clearings/open areas in deciduous forest and mixed boreal forest, areas subject to seasonal flooding (Speight, 2014).

\* ***Paragus pecchiolii* Rondani, 1857**

Ežeraitis lake shore, 2016 05 28, 1♂ (MZVUE0366) (A.P.).

The species is known from southern Norway and Denmark south to Spain, from northern France (Brittany) eastwards through central Europe to Roumania and European parts of Russia and southeast to Turkey. Occurs in a wide range of biotopes, most frequently in deciduous woodland, also at the edges of marshes (Speight, 2014).

***Parhelophilus frutetorum* (Fabricius, 1775)**

Sližiškiai, 30 05 2015, 1♂ (MZVUE0254) (A.P.); Žalieji Ežerai lakes [2], 27 06 2015, 1♀ (MZVUE0255) (S. Rudokaitė).

Distributed from southern Sweden south to the Mediterranean and eastwards through central Europe and parts of southern Europe into Russia, the Caucasus and on as far as eastern Siberia. The larva and puparium are known from organic mud in a woodland pond (Speight, 2014).

***Platycheirus rosarum* (Fabricius, 1787)**

Dubingiai env., 28 06 2015, 1♀ (MZVUE0250) (leg. unknown); Puvočiai (2), N54.115002, E24.294581, 29 05 2016, 1♂ (MZVUE0357) (A.P.).

Known from Fennoscandia south to Iberia and the Mediterranean, from Ireland eastwards through most of Europe into European parts of Russia. Preferred environment is pond, stream and river margins with tall herb vegetation and fen, around the periphery of raised bogs, *Salix* swamp, also humid, seasonally-flooded, unimproved grassland (Speight, 2014).

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

Sližiškiai, 01 08 2015, 1♂ (MZVUE0257) (J. Jakaitė).

This is an extremely migratory species, distributed from Fennoscandia south to Iberia, the Mediterranean, Canary Isles and N. Africa, from Ireland east through much of Europe and Asia Minor into European Russia. The larva is aphid feeding on a wide range of aphids on low-growing plants, bushes and shrubs, including many crops. It is to a significant extent anthropophilic, occurring in arable crops, hedgerows, orchards, gardens and conifer plantations (Speight, 2014).

**\* *Sericomyia superbiens* (Muller, 1776)**

Puvočiai, 11 07 1990, 1♂ (MZVUE0321) (J. Burbulytė).

Known from Scandinavia south to the Pyrenees; Ireland east through central and southern Europe into European parts of Russia. Larva undescribed, but almost certainly aquatic or subaquatic among organic debris in semi-liquid mud close to streams and springs (Speight, 2014).

***Sericomyia silentis* (Harris, 1776)**

Čepkeliai, 05 08 2013, 1♂ (MZVUE0122) (E. Žigis); Puvočiai, 29 06 1995, 1♂ (MZVUE0324) (S. Podėnas); Puvočiai, 18 07 1979, 1♂ (leg. unknown).

Known from Fennoscandia south through mountainous regions to the Pyrenees; from Ireland eastwards through northern Europe and mountainous parts of central Europe into Russia and on to the Pacific coast and Japan. Prefers wet moorland, valley bog, streams in humid coniferous and deciduous forest (Speight, 2014).

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

Bagdyšiai, 27 07 2014, 1♀ (MZVUE0091), 5♂ (MZVUE0092-0096) (A.P.); Geivitoniai, 20 07 2015, 1♀ (MZVUE0251) (I. Olechnavičiūtė).

A highly migratory species, known from southwest Greenland, Iceland and Fennoscandia south to the Mediterranean, the Canary Isles and N. Africa. Larva aphid-feeding on herbaceous plants, including various crop plants. Prefers open ground, grassland, suburban gardens, predominantly coastal at the northern edge of its range, further south distinctly anthropophilic, occurring with various crops and along hedges and roadside verges (Speight, 2014).

***Sphecomomyia vespiformis* (Gorski, 1852)**

Vingis park, 03 07 2013, 1♂ (MZVUE0352) (M. Linkevičiūtė).

Distributed in Scandinavia, Baltic States, Poland and on into Siberia. Preferred environment: along rivers or streams in *Betula/Pinus* forest (Speight, 2014).

***Spilomyia diophthalma* (Linnaeus, 1758)**

Ankščiūnai, 10 07 2015, 1♀ (MZVUE0337) (K. Milaševičiūtė).

Found from Scandinavia to northern Italy, European parts of Russia, Turkey and the Caucasus and on through Siberia to Sakhalin. The European range of this species is now apparently discontinuous. It is probably endangered at the European level. Preferred environment: conifer and deciduous forest; *Tilia/Quercus/Fraxinus* forest and *Abies/Picea* forest, with over-mature trees (Speight, 2014).

***Temnostoma bombylans* (Fabricius, 1805)**

Sližiškiai, 23 05 2015, 1♀ (MZVUE0265) (T. Zapasnikas); Puvočiai (2), N54.115002, E24.294581, 29 05 2016, 1♂ (MZVUE0360) (A.P.).

Palaearctic species, in Europe, probably the most frequently met with *Temnostoma* species, but nonetheless very local. Larva wood-boring, in solid wood within part-rotted stumps and logs; reared from stumps and logs of *Acer*, *Fagus*, *Quercus*, *Salix* and *Tilia* (Speight, 2014).

***Temnostoma sericomomyiaeforme* (Portschinsky, 1887)**

Dubingiai env., 28 06 2015, 1♂ (MZVUE0252) (A. Lekavičius).

Distribution range uncertain, due to confusion with *T. vespiforme* until recently, but confirmed from Norway, Sweden, Finland, Denmark and the Ukraine. Preferred environment: deciduous forest, *Alnus* swamp forest with *Salix*, *Populus tremula* and *Betula* and with overmature and fallen trees (Speight, 2014).

***Temnostoma vespiforme* (Linnaeus, 1758)**

Kamanos Strict N. Res., 15 06 2013, 1♂ (MZVUE0317) (A.P.).

Known from central Sweden south to northern Spain; from northern France eastwards through most of Europe and on through Asiatic parts of Russia to the Pacific coast and Japan. Now rather localised over much of its European range. Larva wood-boring, in solid wood within part-rotted stumps and logs (Speight, 2014).

***Volucella bombylans* (Linnaeus, 1758)**

Medsodžiai, small bog, 16 06 2012, 1♂ (MZVUE0042); Puvočiai, 03 07 2003, 1♂ (MZVUE0348) (A.P.).

Found from northern Fennoscandia south to Iberia, from Ireland eastwards through central and southern Europe into Russia and the Caucasus and on to the Pacific coast and Japan. The larvae are known to be detritivores/larval predators in nests of bumble bees (*Bombus* species), where they occur in the floor of the nest cavity (Speight, 2014).

***Volucella pellucens* (Linnaeus, 1758)**

Jiesia landscape Pres., 22 06 2003, 1♂ (MZVUE0347) (A.P.).

Known from Fennoscandia south to Iberia; from Ireland eastwards through Eurasia to Japan, India and Malaya. The larvae are scavengers/larval predators in nests of wasps (*Vespula*), where they occur in the floor of the nest cavity (Speight, 2014).

***Xanthogramma pedissequum* (Harris, 1776)**

Belmontas, 18 07 2012, 1♂ (MZVUE0131) (G. Caikinaitė); Žalieji ežerai lakes [1], 19 07 2012, 1♂ (MZVUE0130) (N. Aukštuolytė); Šaltiškiai, open clay pit, 16 06 2013, 1♂ (MZVUE0332) (A.P.); Ažuolyno miškas f., 17 05 2014, 1♀ (MZVUE0029) (A.P.).

Known from Britain and Atlantic seaboard countries south to southern France and into central Europe to the Alps (France, Switzerland). The larvae are predators of the "herds" of root aphids tended by ants of the genus *Lasius*. Preferred environment: open ground; occasionally along grassy road verges or canal banks, or in suburban parks and gardens (Speight, 2014).

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

Girdžiūnai env. [1], Gauja river valley, 14 06 2014, 1♂ (MZVUE0013) (A.P.).

Distributed throughout Europe except for the extreme north. Larvae may be found under bark of rotten stumps, trunks and logs of both deciduous trees and conifers and in various rotting plant debris. Preferred environment: most types of coniferous and deciduous forest; an anthropophilic species, also found away from woodland in hedgerows and suburban gardens (Speight, 2014).

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

Lazdėnai, 27 06 2014, 1♂ (MZVUE0229) (A. Klimavičius).

Distributed from Fennoscandia south to Iberia; from Ireland eastwards through much of northern and central Eurasia to the Pacific coast. Larvae have been found in damp, fungus-ridden decaying wood of *Abies*, *Fagus* and *Quercus* trunks and stumps, usually beneath the bark. Preferred environment: most types of humid deciduous and coniferous forest with mature and over-mature trees (Speight, 2014).

**Discussion**

Most of the species mentioned in the list are probably distributed throughout Lithuania as they are found in many countries in Europe, but because of the lack of

research the data is scarce. Most of the species were earlier found in our country for at least several times and that data were published, but 17 species are mentioned here only for the second time. Namely those species are: *Cheilosia morio*, *Chrysotoxum cautum*, *Ch. fasciolatum*, *Ch. festivum*, *Ch. vernale*, *Eristalinus sepulchralis*, *Eristalis pertinax*, *Eumerus ovatus*, *Mallota megilliformis*, *Melangyna lasiophthalma*, *Melanostoma scalare*, *Orthonevra stackelbergi*, *Parhelophilus frutetorum*, *Sphecomyia vespiformis*, *Temnostoma sericomylaeforme*, *T. vespiforme*, *Xanthogramma pedissequum* (Syrphidae).

All three newly recorded species – *Neoascia obliqua*, *Paragus pecchiolii* and *Sericomyia superbiens* are rather widely found throughout Europe so it was just a matter of time and effort they appeared in Lithuanian Diptera list, expanding the number of Syrphidae species known in the country to 282.

## References

- Bartsch H., Binkiewicz E., Klintbjer A., Rådén A. & Nasibov E. 2009a. Tvåvingar, Blomflugor: Diptera: Syrphidae: Eristalinae & Microdontinae. In *The Encyclopedia of the Swedish Flora and Fauna, DH53b*. Artdatabanken, SLU, Uppsala, p. 478.
- Bartsch H., Binkiewicz E., Rådén A. & Nasibov E. 2009b. Tvåvingar, Blomflugor: Diptera: Syrphidae: Syrphinae. In *The Encyclopedia of the Swedish Flora and Fauna, DH53a*. Artdatabanken, SLU, Uppsala, p. 405.
- Haarto A. & Ståhls G. 2014. When mtDNA COI is misleading: congruent signal of ITS2 molecular marker and morphology for North European *Melanostoma* Schiner, 1860 (Diptera, Syrphidae). *ZooKeys* 431: 93–134.
- Hippa H., Nielsen T. R., van Steenis J. 2001. The west Palaearctic species of the genus *Eristalis* Latreille (Diptera, Syrphidae). *Norwegian Journal of Entomology* 48: 289–327.
- Hippa H., Nielsen T.R. & Thompson F.C. 2009. *Eristalis obscura* (Loew) (Diptera, Syrphidae): synonyms and morphological variation in the Holarctic region. *Norwegian Journal of Entomology* 56: 32–36.
- Lutovinovas, E. 2007. Brachycerous fly (Diptera) species new for the Lithuanian fauna. *New and Rare for Lithuania Insect Species*, 19, 56–62.
- Lutovinovas E. 2012. New additions to the hoverfly fauna of Lithuania (Diptera: Syrphidae). *New and Rare for Lithuania Insect Species*, 24, 39–42.
- Lutovinovas E., Kinduris R. 2013. *Temnostoma sericomylaeforme* (Portschinsky, 1887) – new to the fauna of Lithuania (Diptera: Syrphidae). *New and Rare for Lithuania Insect Species* 25: 66–68.
- Lutovinovas E., Kinduris R., 2015. *Temnostoma carens* Gaunitz, 1936 – new to the fauna of Lithuania (Diptera: Syrphidae). *New and Rare for Lithuania Insect Species* 27: 96–99
- Lutovinovas E., Venckus O., 2015. *Volucella zonaria* (Poda, 1761) – new to the fauna of Lithuania (Diptera: Syrphidae). *New and Rare for Lithuania Insect Species* 27: 100–104.
- Pakalniškis S., Bernotienė R., Lutovinovas E., Petrašiūnas A., Podėnas S., Rimšaitė J., Sæther O. A., Spungis V. 2006. Checklist of Lithuanian Diptera. *New and Rare for Lithuania Insect Species* 18: 16–154.

- Petrašiūnas A. 2011. New data on the Diptera fauna of Lithuania. *New and Rare for Lithuania Insect Species* 23: 106–111.
- Speight M.C.D. 2014. Species accounts of European Syrphidae (Diptera), 2014. In *Syrph the Net: the database of European Syrphidae (Diptera)*. Syrph the Net publications, Dublin, p. 321.
- Veen M.P. van. 2010. *Hoverflies of the Northwest Europe*. KNNV publishing, Zeist.

## Nauji duomenys apie žiedmuses (Diptera: Syrphidae) Lietuvoje

A.PETRAŠIŪNAS

### Santrauka

Pateikiami duomenys apie tris naujas Lietuvos faunos žiedmusių rūšis: *Neoascia obliqua* Coe, 1940, *Paragus pecchiolii* Rondani, 1857 ir *Sericomyia superbiens* (Muller, 1776), bei apie 45 mažiau tirtas rūšis. Daugelio rūšių radimo faktai publikuojami pirmą kartą, praėjus bent keliolikai metų nuo paskutinio paminėjimo mokslinėje spaudoje, nors tai daugiausiai dažnos rūšys, net jeigu to neatspindi radviečių skaičius šiame pranešime.

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