

<https://doi.org/10.25221/fee.510.2>

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<https://zoobank.org/References/28A48D63-2409-46E7-8FDF-3371CB541D02>

NEW AND INTERESTING RECORDS OF FLIES (DIPTERA) IN THE REGIONS OF EUROPEAN RUSSIA

J. Oboňa¹⁾, M. N. Esin²⁾, M. Barták³⁾, L. Dvořák⁴⁾, J. Ježek⁵⁾, A. B. Ruchin^{2*)}

1) University of Presov in Presov, Prešov, Slovakia.

2) Joint Directorate of the Mordovia State Nature Reserve and National Park 'Smolny', Republic of Mordovia, Saransk, 430005, Russia. *Corresponding author, E-mail: ruchin.alexander@gmail.com

3) Faculty of Agrobiological, Food and Natural Resources, Czech University of Life Sciences Prague, Czech Republic.

4) Tři Sekery, Mariánské Lázně, Czech Republic.

5) Národní Muzeum, Prague, Prague, Czech Republic.

Summary. An annotated list of 84 species from 21 families of Diptera is given, of them 41 species are recorded from the Republic of Mordovia for the first time, 27 species – from the Ryazan Region, 14 species – from the Nizhny Novgorod Region, 3 species – from the Voronezh Region, and 3 species – from the Penza Region. Seven species are new for the fauna of Russia: *Dicranomyia (Dicranomyia) affinis* (Schummel, 1829) (Limoniidae), *Clytocerus (Boreoclytocerus) longicorniculatus* Krek, 1987, *C. (B.) ocellaris* (Meigen, 1804), *C. (B.) splendidus* Ježek et Hájek, 2007, *Seoda labeculosa* (Eaton, 1893), *Trichomyia kostovi* Ježek, 1990, and *Trichopsychoda hirtella* (Tonnoir, 1919) (Psychodidae).

Key words: Diptera, biodiversity, fauna, new records, Europe.

Й. Обоня, М. Н. Есин, М. Бартак, Л. Дворжак, Я. Ежек, А. Б. Ручин.
Новые и интересные находки двукрылых насекомых (Diptera) в регионах Европейской России // Дальневосточный энтомолог. 2024. N 510. С. 7-22.

Резюме. Приведен аннотированный список 84 видов из 21 семейств двукрылых насекомых (Diptera). Впервые для Республики Мордовия указаны 41 вид, для Рязанской области – 27 видов, для Нижегородской области – 14 видов, для Воронежской области – 3 вида и для Пензенской области – 3 вида. Семь видов впервые приведены из России: *Dicranomyia (Dicranomyia) affinis* (Schummel, 1829) (Limoniidae), *Clytocerus (Boreoclytocerus) longicorniculatus* Krek, 1987, *C. (B.) ocellaris* (Meigen, 1804), *C. (B.) splendidus* Ježek et Hájek, 2007, *Seoda labeculosa* (Eaton, 1893), *Trichomyia kostovi* Ježek, 1990 и *Trichopsychoda hirtella* (Tonnoir, 1919) (Psychodidae).

INTRODUCTION

In recent years, the Diptera fauna of various regions of the center of European Russia and the Volga region has been actively studied. The biodiversity of the Diptera of the Republic

of Mordovia is actively studied and not only new species for the region are noted (MacGowan *et al.*, 2021; Esin *et al.*, 2023; Gornostaev *et al.*, 2024), but also new species for science (MacGowan & Ruchin, 2022; Zeegers *et al.*, 2023). Using beer traps, new species finds have been noted for many regions (Dvořák *et al.*, 2022). Separate species of Diptera characteristic of the regions are also being studied (Orel & Zinchenko, 2023).

Recently, numerous data on the fauna of Chironomidae in reservoirs of various types within Tatarstan (Russia) have been summarized. The appearance of species new to the fauna of the region, which initially live in the northern and eastern regions of Russia, is noted, which indicates their settlement in more southern areas (Konratieva & Nazarova, 2023). A review of the biodiversity of Diptera from 9 families (Fanniidae, Keroplatidae, Limoniidae, Muscidae, Mycetophilidae, Pediciidae, Ptychopteridae, Sciomyzidae, Tipulidae) living on the territory of 14 regions located within the Volga upland and the Oka-Don lowland has been published. It is shown that many regions and families are poorly studied (Ruchin *et al.*, 2023). In this article, we present new species of Diptera for the fauna of five regions of the center of European Russia and the Volga region.

MATERIAL AND METHODS

The material for this article was collected in 2021–2023. Identification keys used are as follows: Anthomyiidae (Michelsen, 2006), Chloropidae (Stuke, 2017), Culicidae (Becker *et al.*, 2010), Fanniidae (Rozkošný, 1997), Lauxaniidae (Shtakelberg, 1970), Limoniidae (Oosterbroek, 2024), Lonchoceridae (Bährmann & Bellstedt, 1988), Muscidae (Gregor *et al.*, 2002), Psychodidae (Vaillant, 1971–1983; Withers, 1989), Sciomyzidae (Rozkošný, 1987), and Ulidiidae (Richter, 1970).

The majority of samples were determined by the J. Oboňa (Culicidae, Limoniidae, Lonchoceridae, Psychodidae), M. Esin (Anthomyiidae, Fanniidae, Lauxaniidae, Muscidae, Ulidiidae), L. Dvořák (Micropezidae), N. Vikhrev (Muscidae), M. Bartak (Anthomyiidae, Bibionidae, Chloropidae, Hybotidae, Lauxaniidae, Muscidae, Platystomatidae, Psilidae, Rhagionidae, Sciomyzidae, Stratiomyidae, Syrphidae, Tachinidae), M. Chursina (Conopidae), and M. Tschirnhaus (Chloropidae). Otherwise, several samples of Psychodidae were determined by J. Ježek. This material is deposited in the National Museum, Prague, Czech Republic (NMPC). In preparing permanent glass slides in Canadian balsam, the flies were cleared in chloralphenol and thereafter treated in xylol.

The material is deposited in the collection of the Laboratory and Museum of Evolutionary Ecology, Department of Ecology, University of Presov (LMEE PO), in the Mordovia State Nature Reserve (Republic of Mordovia, Russia), and in the private collection of L. Dvořák.

New for the regions records are asterisked (*). New for the fauna of Russia species is double asterisked (**). The following abbreviations are used: MSNR – Mordovia State Nature Reserve, NPS – National Park “Smolny”, distr. – distr., spec. – specimen. The following abbreviations are used for collectors: AR – A.B. Ruchin; ME – M.N. Esin; MR – M. Ryzhov, GS – G.B. Semishin; KT – K.P. Tomkovich.

LIST OF SPECIES

Family Anthomyiidae

Adia cinerella (Fallén, 1825)

MATERIAL. *Penza Region, Issa distr., Issa, 53.8815°N, 44.8333°E, 24–26.VII 2020, 1 spec., AR.

DISTRIBUTION. A Holarctic species (Roháček & Ševčík, 2009).

***Anthomyia procellaris* Rondani, 1866**

MATERIAL. ***Republic of Mordovia**, Krasnoslobodsk distr., Selishchi, 54.480°N, 43.523°E, 29.VI–12.VII 2021, 1 ♂, AR. ***Voronezh Region**, Novokhopersk distr., Koper State Nature Reserve, 51.257°N, 41.753°E, 21.VI–20.VII 2023, 1 spec., R. Fedyaev.

DISTRIBUTION. Holarctic and Ethiopian regions (Suwa, 1974).

***Delia platura* (Meigen, 1826)**

MATERIAL. ***Ryazan Region**: Shatsk distr. Kazachy Dyuk, 54.0362°N, 41.5838°E, 6–13.X 2020, 1 spec., AR; Sasovo distr., Shaftorka, 54.1243°N, 42.2449°E, 6–13.X 2020, 1 spec., AR; Spassk distr., Izhevskoe, 54.4918°N, 40.8154°E, 6–13.X 2020, 1 spec., AR. ***Nizhny Novgorod Region**: Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR; Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. A very common Holarctic species (Roháček & Ševčík, 2009).

***Delia radicum* (Linnaeus, 1758)**

MATERIAL. ***Penza Region**, Issa distr., Issa, 53.8815°N, 44.8333°E, 24–26.VII 2020, 1 spec., AR.

DISTRIBUTION. A frequent Holarctic species (Roháček & Ševčík, 2009).

***Hylemya vagans* (Panzer, 1797)**

MATERIAL. ***Penza Region**, Issa distr., Issa, 53.8815°N, 44.8333°E, 24–26.VII 2020, 1 spec., AR.

DISTRIBUTION. A frequent Palearctic species (Roháček & Ševčík, 2009).

***Pegomya testacea* (De Geer, 1776)**

MATERIAL. ***Voronezh Region**, Gribovskiy distr., Gribovskiy, 51.4333°N, 41.9339°E, 7–20.V 2022, 1 ♂, AR.

DISTRIBUTION. The species is widespread Western Palearctic (Michelsen, 2006).

Family Bibionidae

***Penthetria funebris* Meigen, 1804**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 12–31.V 2023, 1 spec., ME.

DISTRIBUTION. Palearctic (Fitzgerald, 2004).

Family Chloropidae

***Cetema cereris* (Fallén, 1820)**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 30.VII–24.VIII 2023, 1 spec., ME.

DISTRIBUTION. Transpalearctic (Nartshuk *et al.*, 2020).

***Oscinella frit* (Linnaeus, 1758)**

MATERIAL. ***Ryazan Region**, Spassk distr., Izhevskoe, 54.4918°N, 40.8154°E, 6–13.X 2020, 1 spec., AR.

DISTRIBUTION. Widely distributed species, recorded from all zoogeographical regions of the World.

***Rhodesiella plumiger* (Meigen, 1830)**

MATERIAL. ***Republic of Mordovia**, Temnikov distr., MSNR, Pushta, 54.7137°N, 43.2265°E, 11–15.VII 2022, 1 ♂, ME.

DISTRIBUTION. A widely distributed eurasian species, known from Europe to Far East Russia (Nartshuk, 2012).

Family Conopidae

Conops quadrifasciatus DeGeer, 1775

MATERIAL. *Republic of Mordovia: Krasnoslobodsk distr., Staraya Augura, 54.294°N, 44.221°E, 17.IX 2017, 1 spec., AR; Kovytkino distr., Tokmovo, 54.064°N, 44.114°E, 2.IX 2017, 1 spec., AR; Temnikov distr., MSNR, quarter 86, 54.894°N, 43.598°E, 24.VIII 2017, 1 spec., AR.

DISTRIBUTION. Palearctic (Stuke, 2017).

Myopa variegata (Linnaeus, 1767)

MATERIAL. *Republic of Mordovia, Elniki distr., Malye Mordovskie Poshaty, 54.688°N, 43.715°E, 23.VII.2016, 1 spec., AR.

DISTRIBUTION. Afrotropical, Palearctic (Stuke, 2017).

Physocephala pusilla (Meigen, 1824)

MATERIAL. *Republic of Mordovia, Temnikov distr., Kushki, 54.490°N, 43.253°E, 2.VII.2016, 2 spec., AR; Temnikov distr., Tretyakovo, 54.527°N, 43.225°E, 2.VII 2016, 1 spec., AR.

DISTRIBUTION. Palearctic (Stuke, 2017).

Physocephala vitatta (Fabricius, 1794)

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, Kemlyanskoe forestry, quarter 66, 54.753°N, 45.234°E, 27.VII 2017, 1 spec., AR; Temnikov distr., Polyanki, 54.743°N, 43.490°E, 24.VII.2016, 1 spec., AR.

DISTRIBUTION. Afrotropical, Palearctic (Stuke, 2017).

Family Culicidae

Culiseta (Culicella) fumipennis (Stephens 1825)

MATERIAL. *Republic of Mordovia, Zubova Polyana distr., Molochnitsa, 54.2299°N, 42.8798°E, 3–15.VIII 2021, 1 ♂, ME.

DISTRIBUTION. Holarctic species, widely distributed throughout the whole of Europe, from southern Scandinavia to the east Baltic and southwards to the Ukraine and northern Caucasus (Becker *et al.*, 2010).

Ochlerotatus (Finlaya) geniculatus (Olivier 1791)

MATERIAL. *Republic of Mordovia: Temnikov distr., MSNR, cordon Inorskiy, 54.7277°N, 43.1510°E, 20–25.V, 31.V–3.VI 2021, 2 ♂, AR, ME; Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 10.V–15.VI 2022, 25 ♂, GS.

DISTRIBUTION. Species known in most European countries, and its northernmost limit follows that of deciduous or mixed forests (Becker *et al.*, 2010).

Ochlerotatus (Ochlerotatus) cantans (Meigen 1818)

MATERIAL. *Republic of Mordovia: Temnikov distr., MSNR, cordon Inorskiy, 54.7277°N, 43.1510°E, 17–20.V, 7–10.VI 2021, 9 ♂, AR, ME; Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 11–19.VI 2022, 6 ♂, GS;

DISTRIBUTION. The species has a western Palaearctic distribution and occurs from the taiga zone in the north to the Mediterranean region in the south (Becker *et al.*, 2010).

Ochlerotatus (Ochlerotatus) communis (De Geer 1776)

MATERIAL. *Republic of Mordovia: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 19–24.VI 2022, 1 ♂, GS; Ardatov distr., 1 km S of Ardatov, 54.8054°N, 46.2472°E, 12.VI–16.VII 2022, 1 ♂, S. Lukyanov; Ichalki distr., NPS, Barakhmanovskoe forestry, quarter 87, 54.7597°N, 45.6180°E, 24.V–23.VI 2022, 1 ♂, GS.

DISTRIBUTION. Common in Holarctic, North America, and Eurasia. The species is found from northern Europe to the Mediterranean area (Becker *et al.*, 2010).

***Ochlerotatus (Ochlerotatus) intrudens* (Dyar 1919)**

MATERIAL. ***Republic of Mordovia**: Temnikov distr., MSNR, cordon Inorskiy, 54.7277°N, 43.1510°E, 17–20.V, 5–8.VII 2021, 9 ♂, AR, ME; Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 10–17.V 2022, 1 ♂, GS.

DISTRIBUTION. It is a Holarctic species, recorded from central to northern, and eastern to southeastern Europe, it occurs from the steppe in southeastern Europe to the taiga in the north (Becker *et al.*, 2010).

***Ochlerotatus (Ochlerotatus) sticticus* (Meigen 1838)**

MATERIAL. ***Republic of Mordovia**: Temnikov distr., MSNR, cordon Inorskiy, 54.7277°N, 43.1510°E, 11.V–7.VI, 15–22.VI 2021, 63 ♂, AR, ME; Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 23.V–11.VI 2022, 29 ♂, GS.

DISTRIBUTION. The Holarctic species is widespread in Europe and occurs from northern Europe to the Mediterranean area and to Siberia in the East. It has also been reported from North America (Becker *et al.*, 2010).

Family Fanniidae

***Piezura graminicola* Zetterstedt, 1846**

MATERIAL. ***Ryazan Region**, Kadom distr., Roditelskoe, 54.5107°N, 42.4902°E, 6–11.IX 2023, 1 ♂, ME.

DISTRIBUTION. A Holarctic species that is absent from most of northern Europe (Rozkošný, 1997).

Family Hybotidae

***Bicellaria spuria* (Fallén, 1816)**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 30.VII–24.VIII 2023, 1 spec., ME.

DISTRIBUTION. Holarctic, Oriental (Shamshev, 2016).

***Hybos culiciformis* (Fabricius, 1775)**

MATERIAL. ***Nizhny Novgorod Region**: Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR; Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palaearctic (Shamshev, 2016).

***Oedalea tibialis* Macquart, 1828**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 31.V–27.VI 2023, 1 spec., ME.

DISTRIBUTION. Palaearctic (Shamshev, 2016).

***Platypalpus nigritarsis* (Fallen, 1816)**

MATERIAL. ***Nizhny Novgorod Region**, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palaearctic (Shamshev, 2016).

***Platypalpus pectoralis* (Fallén, 1815)**

MATERIAL. ***Nizhny Novgorod Region**, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palaearctic (Shamshev, 2016).

***Tachypeza nubila* (Meigen, 1804)**

MATERIAL. ***Nizhny Novgorod Region**, Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palaearctic (Shamshev, 2016).

***Trichinomyia flavipes* (Meigen, 1830)**

MATERIAL. *Nizhny Novgorod Region, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palaearctic (Shamshev, 2016).

Family Lauxaniidae

***Peplomyza discoidea* (Meigen, 1830)**

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 12–31.V 2023, 1 spec., ME.

DISTRIBUTION. Palaearctic species (Krupauerová *et al.*, 2010).

***Peplomyza litura* (Meigen, 1826)**

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 31.V–27.VI 2023, 1 spec., ME.

DISTRIBUTION. A common European forest species (Roháček & Ševčík, 2009).

***Sapromyosoma quadripunctata* (Linnaeus, 1758)**

MATERIAL. *Republic of Mordovia, Temnikov distr., Ityakovo, 54.6397°N, 43.2582°E, 5.VI 2023, 1 ♂, ME.

DISTRIBUTION. A common West Palaearctic thermophilous species (Roháček & Ševčík, 2009).

***Tricholauxania praeusta* (Fallén, 1820)**

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 30.VII–24.VIII 2023, 1 spec., ME.

DISTRIBUTION. A West Palaearctic forest species, one of the most common species of the family (Roháček & Ševčík, 2009).

Family Limoniidae

***Dicranomyia (Dicranomyia) affinis* (Schummel, 1829)**

MATERIAL. **Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 23.V–7.VI 2022, 4 ♀, GS.

DISTRIBUTION. Species known from Europe (France (incl. Corsica), Great Britain, Italy (Sardinia), Ireland, Netherlands, Norway, Poland, Portugal, Spain, Sweden) and Morocco (Oosterbroek, 2024).

NOTES. First record for Russia.

***Dicranomyia (Dicranomyia) mitis* (Meigen, 1830)**

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 11–15.VI 2022, 1 ♂, GS.

DISTRIBUTION. Species known from whole Europe, Russia (North European, Northwest European, Central European, and East European), North Caucasus; Morocco, Algeria; Georgia, Azerbaijan, Turkey, Israel and Turkmenistan. (Oosterbroek, 2024).

***Molophilus (Molophilus) medius* de Meijere, 1918**

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, cordon Rizovatovskiy, 54.740°N, 45.475°E, 21–22.VI 2022, 1 ♂, 2 ♀, GS.

DISTRIBUTION. Species known from whole Europe and Russia (North European, Northwest European, Central European, and East European) (Oosterbroek, 2024).

Family Lonchopteridae

***Lonchoptera scutellata* Stein, 1890**

MATERIAL. *Republic of Mordovia, Temnikov distr., MSNR, cordon Inorskiy, 54.7277°N, 43.1510°E, 12–15.VII 2021, 1 ♂, AR, ME.

DISTRIBUTION. A species of temperate and North Europe (Barták & Roháček, 2009).

Family Micropezidae

Calobata petronella (Linnaeus, 1761)

MATERIAL. *Republic of Mordovia: Temnikov distr., MSNR, cordon Novenkiy 54.709°N, 43.213°E, 4.VII 2020, 1 ♀, GS; Temnikov distr., MSNR, cordon Srednyaya Melnitsa, 12.VII 2018, 1 ♀, GS; Temnikov distr., MSNR, Pushta, 54.713°N, 43.225°E, 8–14.VI 2020, 1 ♀, ME; Ichalki distr., NPS, Obrezki, 54.836°N, 43.374°E, 18.VII 2017, 1 ♀, GS.

DISTRIBUTION. European species except for South Europe (Soós, 1984).

Neria cibaria (Linnaeus, 1761)

MATERIAL. *Republic of Mordovia: Temnikov distr., MSNR, cordon Inorskiy 54.7277°N, 43.1510°E, 25–31.V, 3–7.VI, 10–18.VI, 8–12.VII, 15–19.VII, 30.VII–2.VIII 2021, 2 ♂, 5 ♀, AR, ME; Temnikov distr., MSNR, Pushta settlement, 54.713°N, 43.225°E, 7–9.VII, 10–13.VII 2020, 1 ♂, 1 ♀, ME; Ichalki distr., NPS, Barakhmanovskoe forestry, quarter 3, 54.833°N, 45.533°E, 1.VI 2021, 1 ♀, GS; Ichalki distr., NPS, cordon Mitryashki, 54.745°N, 45.505°E, 26–29.VII 2022, 6 ♀, KT; Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 23.V–15.VI, 24.VI–12.VII, 12–20.VII, 28.VII–1.VIII 2022, 12 ♂, 15 ♀, GS; Ichalki distr., NPS, Kemlyanskoe forestry, quarter 87, 54.742°N, 45.274°E, 3.VI 2020, 1 ♂, GS; Temnikov distr., 2 km north of Babevo, 54.5871°N, 43.2279°E, 6–9.VII 2021, 2 ♀, ME; Temnikov distr., Alkaevo, 54.6052°N, 43.3651°E, 6–9.VII 2021, 1 ♀, ME; Tengushevo distr., 2 km NW of Ivanovka, 54.6726°N, 42.8282°E, 9–13.VII 2021, 1 ♂, 11 ♀, ME; Tengushevo distr., 3 km N of Klemeshchey, 54.6067°N, 42.8412°E, 9–13.VII 2021, 1 ♀, ME; Tengushevo distr., 3 km NE of Standrovo, 54.6708°N, 42.7181°E, 13–16.VII 2021, 2 ♂, ME; Tengushevo distr., Aleksandrovka, 54.7068°N, 42.8136°E, 13–16.VII 2021, 3 ♀, ME; Tengushevo distr., Klemeshchey, 54.5715°N, 42.8671°E, 9–13.VII 2021, 2 ♂, 16 ♀, ME; Zubova Polyana distr., 2 km N of Ozerny, 54.4247°N, 42.6985°E, 26–29.VII 2021, 2 ♀, ME; Zubova Polyana distr., 22 km NW of Yavas, 54.4713°N, 42.6614°E, 23–26.VII 2021, 1 ♀, ME; Zubova Polyana distr., 5 km N of Potma, 54.1521°N, 42.9070°E, 3–15.VIII 2021, 17 ♀, ME; Zubova Polyana distr., 8 km S of Dachny, 54.5052°N, 42.6468°E, 23–26.VII 2021, 4 ♀, ME; Zubova Polyana distr., Molochnitsa, 54.2299°N, 42.8798°E, 3–15.VIII 2021, 1 ♀, ME; Zubova Polyana distr., Yavas, 54.4067°N, 42.8618°E, 17–19.VI 2021, 3 ♀, ME.

DISTRIBUTION. European species except for South Europe (Soós, 1984).

Neria ephippium (Fabricius, 1794)

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 5–12.VII 2022, 1 ♀, GS.

DISTRIBUTION. Species known from all parts of Europe and Algeria (Soós, 1984).

Neria femoralis (Meigen, 1826)

MATERIAL. *Republic of Mordovia: Temnikov distr., MSNR, cordon Inorskiy 54.7277°N, 43.1510°E, 18–22.VI 2021, 1 ♀, AR, ME; Ichalki distr., NPS, Obrezki, 54.836°N, 43.374°E, 17.VI 2018, 1 ♂, 1 ♀, GS; Ichalki distr., NPS, Lvovskoe forestry, quarter 53, 25.V 2018, 1 ♀, GS; Tengushevo distr., Aleksandrovka, 54.7060°N, 42.8130°E, 13–16.VII 2021, 2 ♀, ME; Tengushevo distr., 3 km N of Klemeshchey, 54.6067°N, 42.8412°E, 9–13.VII 2021, 1 ♀, ME; Zubova Polyana distr., Yavas, 54.4067°N, 42.8618°E, 17–19.VI 2021, 1 ♀, ME.

DISTRIBUTION. Known from northern and central parts of Europe (Soós, 1984).

Rainieria latifrons (Loew, 1870)

MATERIAL. *Republic of Mordovia: Chamzinka distr., 2.3 km SW of Kalinovka, 54.3952°N, 45.8813°E, 22.VII–26.VIII 2022, 1 ♂, MR; Ichalki distr., NPS, Barakhmanovskoe

forestry, quarter 3, 54.833°N, 45.533°E, 11.VI 2021, 1 ♂, GS; Tengushevo distr., 2 km NW of Ivanovka, 54.6726°N, 42.8282°E, 9–13.VII 2021, 1 ♂, ME.

DISTRIBUTION. Known from Europe, Russian Far East, and Japan (Soós, 1984).

Family Muscidae

Coenosia agromyzina (Fallén, 1825)

MATERIAL. *Nizhny Novgorod Region, Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palearctic.

Coenosia means Meigen, 1826

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 27.VI–24.VIII 2023, 2 spec., ME.

DISTRIBUTION. Palearctic.

NOTES. The record from Ryazan Region moves natural habitat of *C. means* almost 700 km to the south-east-south.

Coenosia pumila (Fallén, 1825)

MATERIAL. *Ryazan Region, Shatsk distr. Kazachy Dyuk, 54.0362°N, 41.5838°E, 6–13.X 2020, 1 spec., AR.

DISTRIBUTION. Holarctic.

Helina evecta (Harris, 1780)

MATERIAL. *Ryazan Region, Kadom distr., 1 km NW of Chermnye, 54.4443°N, 42.4707°E, 6–11.IX 2023, 1 ♂, ME.

DISTRIBUTION. Holarctic, Neotropical, Oriental, Afrotropical.

Helina reversio (Harris, 1780)

MATERIAL. *Nizhny Novgorod Region, Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Holarctic, Oriental.

Lispocephala alma (Meigen, 1826)

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 27.VI–30.VII 2023, 1 spec., ME. *Nizhny Novgorod Region, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Holarctic, Afrotropical, Oriental, Austrotropical.

Muscina levida Harris, 1780

MATERIAL. *Ryazan Region: Shatsk distr. Kazachy Dyuk, 54.0362°N, 41.5838°E, 6–13.X 2020, 1 spec., AR; Kadom distr., Roditelskoe, 54.5107°N, 42.4902°E, 6–11.IX 2023, 1 ♂, 2 ♀, ME.

DISTRIBUTION. Holarctic, Neotropical, Austrotropical.

Muscina pascuorum Meigen, 1826

MATERIAL. *Ryazan Region: Shatsk distr. Kazachy Dyuk, 54.0362°N, 41.5838°E, 6–13.X 2020, 1 spec., AR; Kadom distr., Roditelskoe, 54.5107°N, 42.4902°E, 6–11.IX 2023, 2 ♂, ME. *Nizhny Novgorod Region, Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Holarctic, Oriental.

Phaonia cincta Zetterstedt, 1846

MATERIAL. *Ryazan Region, Kadom distr., 1 km NW of Chermnye, 54.4443°N, 42.4707°E, 6–11.IX 2023, 1 ♂, ME.

DISTRIBUTION. Palearctic.

***Phaonia latipalpis* Schnabl & Dziedzicki, 1911**

MATERIAL. *Republic of Mordovia, Temnikov distr., MSNR, quarter 424, 54.7335°N, 43.1714°E, 3–20.VIII 2019, 1 ♀, AR.

DISTRIBUTION. Palaearctic.

***Phaonia rufiventris* Scopoli, 1763**

MATERIAL. *Ryazan Region, Kadom distr., 1 km NW of Chermnye, 54.4443°N, 42.4707°E, 6–11.IX 2023, 2 ♀, ME.

DISTRIBUTION. Palaearctic.

***Phaonia valida* (Harris, 1780)**

MATERIAL. *Ryazan Region, Kadom distr., 1 km NW of Chermnye, 54.4443°N, 42.4707°E, 6–11.IX 2023, 1 ♀, ME.

DISTRIBUTION. Palaearctic.

***Polietes lardarius* Fabricius, 1781**

MATERIAL. *Ryazan Region, Kadom distr., 1 km NW of Chermnye, 54.4443°N, 42.4707°E, 6–11.IX 2023, 2 ♀, ME.

DISTRIBUTION. Holarctic, Afrotropical, Oriental.

***Thricops semicinereus* Wiedemann, 1817**

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 12.V–30.VII 2023, 3 spec., ME; Sasovo distr., Novye Vyselki, 54.3527°N, 42.1550°E, 6–11.IX 2023, 1 ♀, ME.

DISTRIBUTION. Palaearctic.

***Thricops simplex* (Wiedemann, 1817)**

MATERIAL. *Ryazan Region, Shatsk distr., Kazachy Dyuk, 54.0362°N, 41.5838°E, 6–13.X 2020, 1 spec., AR; Sasovo distr., Novye Vyselki, 54.3527°N, 42.1550°E, 6–11.IX 2023, 1 ♂, 1 ♀, ME.

DISTRIBUTION. Palaearctic.

Family Platystomatidae

***Platystoma seminationis* (Fabricius, 1775)**

MATERIAL. *Voronezh Region, Novokhopersk distr., Khoper State Nature Reserve, 51.257°N, 41.753°E, 21.VI–20.VII 2023, 1 spec., R. Fedyayev.

DISTRIBUTION. A West Palaearctic species. It is the most common member of the family in Central Europe (Roháček & Ševčík, 2009).

Family Psilidae

***Psila fimetaria* (Linnaeus, 1761)**

MATERIAL. *Ryazan Region, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 31.V–27.VI 2023, 1 spec., ME.

DISTRIBUTION. A very common European species (Roháček & Ševčík, 2009).

Family Psychodidae

***Chodopsycha lobata* (Tonnoir, 1940)**

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 24–29.VIII 2022, 1 ♂, GS.

DISTRIBUTION. Species known from Russia (Ježek, 2020).

***Clytocyclus (Boreoclytocyclus) longicorniculatus* Krek, 1987**

MATERIAL. **Republic of Mordovia: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 28.VII–1.VIII, 5–8.VIII 2022, 2 ♂, GS; Temnikov distr., Alkaevo, 54.6052°N, 43.3651°E, 6–9.VII 2021, 1 ♂, ME; Zubova Polyana distr., 12 km N of Potma, 54.1903°N, 42.8966°E, 3–15.VIII 2021, 2 ♂, ME; Zubova Polyana distr., 5 km N of Potma, 54.1521°N, 42.9070°E, 3–15.VIII 2021, 3 ♂, ME; Tengushevo distr., 2 km NW of Ivanovka, 54.6726°N, 42.8282°E, 9–13.VII 2021, ME.

DISTRIBUTION. A species known only from Europe (Ježek *et al.*, 2020).

NOTES. First record for Russia.

***Clytocyclus (Boreoclytocyclus) ocellaris* (Meigen, 1804)**

MATERIAL. **Republic of Mordovia: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 1–5.VIII, 17–24.VIII, 24–29.VIII 2022, 12 ♂, GS; Temnikov distr., MSNR, Pushta, 54.7200°N, 43.2266°E, 12.IX, 15.IX 2020, 3 ♂, AR; Temnikov distr., MSNR, cordon Novenkiy, 16–19.VIII 2022, 1 ♂, KT.

DISTRIBUTION. Central and western European species (Morelli & Biscaccianti, 2021).

NOTES. First record for Russia.

***Clytocyclus (Boreoclytocyclus) splendidus* Ježek & Hájek, 2007**

MATERIAL. **Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 19–24.VI 2022, 1 ♂, GS.

DISTRIBUTION. Not common European species, known from Belgium, Estonia, Czech Republic, Slovakia and Poland (Ježek *et al.*, 2018; Kroča & Ježek, 2019).

NOTES. First record for Russia.

***Logima albipennis* (Zetterstedt, 1850)**

MATERIAL. *Republic of Mordovia: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 15–20.VII 2022, 1 ♂, GS; Tengushevo distr., 2 km NW of Ivanovka, 54.6726°N, 42.8282°E, 9–13.VII 2021, 1 ♀, ME.

DISTRIBUTION. Cosmopolitan species (Ježek *et al.*, 2021a, 2023a).

***Logima satchelli* (Quate, 1955)**

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 28.VII–1.VIII 2022, 1 ♂, GS.

DISTRIBUTION. Holarctic species (Ježek *et al.*, 2020, 2023a).

***Philosepedon (Philosepedon) humerale* (Meigen, 1818)**

MATERIAL. *Republic of Mordovia: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 17–23.V, 17–24.VIII 2022, 4 ♂, GS; Zubova Polyana distr., 5 km N of Potma, 54.1521°N, 42.9070°E, 3–15.VIII 2021, 1 ♂, ME.

DISTRIBUTION. Very common European species, also recorded in North Africa (Ježek *et al.*, 2018, 2020).

***Pneumia nubila* (Meigen, 1818)**

MATERIAL. *Republic of Mordovia, Zubova Polyana distr., 12 km N of Potma, 54.1903°N, 42.8966°E, 3–15.VIII 2021, 1 ♂, ME.

DISTRIBUTION. Common European species (Ježek *et al.*, 2019, 2021b), known also from Transcaucasia (Ježek *et al.*, 2023a).

***Psycha grisescens* (Tonnoir, 1922)**

MATERIAL. *Republic of Mordovia, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 28.VII–1.VIII, 12–17.VIII 2022, 2 ♂, GS.

DISTRIBUTION. European and North African species (Ježek *et al.*, 2018).

***Psychodocha cinerea* (Banks, 1894)**

MATERIAL. ***Republic of Mordovia**: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 17.V–7.VI, 24.VI–12.VII, 5–12.VIII, 17–24.VIII 2022, 8 ♂, GS; Zubova Polyana distr., Yavas, 54.4067°N, 42.8618°E, 17–19.VI 2021, 2 ♂, 2 ♀, ME; Zubova Polyana distr., 5 km N of Potma, 54.1521°N, 42.9070°E, 3–15.VIII 2021, 3 ♂, ME; Tengushevo distr., 2 km NW of Ivanovka, 54.6726°N, 42.8282°E, 9–13.VII 2021, 4 ♂, ME; Tengushevo distr., Klemeshchey, 54.5715°N, 42.8671°E, 9–13.VII 2021, 1 ♂, 1 ♀, ME; Tengushevo distr., 3 km NE of Standrovo, 54.6708°N, 42.7181°E, 13–16.VII 2021, 1 ♂, ME.

DISTRIBUTION. Cosmopolitan species (Ježek & Yağci, 2005; Afzan & Belquat, 2016).

***Psychodocha gemina* (Eaton, 1904)**

MATERIAL. ***Republic of Mordovia**: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 12–17.VIII, 24–29.VIII 2022, 3 ♂, GS; Ichalki distr., NPS, sanatorium 'Alatyr', 54.739°N, 45.383°E, 24–25.VII 2022, 1 ♂, GS.

DISTRIBUTION. European and Transcaucasian species (Ježek *et al.*, 2021a).

***Psychodula minuta* (Banks, 1894)**

MATERIAL. ***Republic of Mordovia**: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 24–29.VIII 2022, 1 ♂, GS; Tengushevo distr., 2 km NW of Ivanovka, 54.6726°N, 42.8282°E, 9–13.VII 2021, 1 ♂, ME.

DISTRIBUTION. Holarctic species (Ježek *et al.*, 2023b).

***Psychomora trinodulosa* (Tonnoir, 1922)**

MATERIAL. ***Republic of Mordovia**: Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 1–5.VIII 2022, 2 ♂, GS; Ichalki distr., NPS, sanatorium 'Alatyr', 54.739°N, 45.383°E, 24–25.VII 2022, 1 ♂, GS; Temnikov distr., MSNR, cordon Inorskiy, 54.7277°N, 43.1510°E, 11–19.X 2021, 1 ♂, AR, ME.

DISTRIBUTION. Holarctic species, penetrating into Anatolia, Transcaucasia, distributed in North Africa, inhabiting Mediterranean islands, many records are from the USA (Ježek & Yağci, 2005; Ježek *et al.*, 2021b).

***Seoda labeculosa* (Eaton, 1893)**

MATERIAL. ****Republic of Mordovia**, Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 15–20.VII 2022, 2 ♂, GS.

DISTRIBUTION. Species known only from Czech Republic, Denmark, Estonia, France, Great Britain, Lithuania, Luxemburg, and Ireland (Kvifte, 2014).

NOTES. First record for Russia.

***Tinearia alternata* (Say, 1824)**

MATERIAL. ***Republic of Mordovia**: Temnikov distr., MSNR, Pushta, 54.7135°N, 43.2255°E, 31.I 2023, 1 ♀, KT; Ichalki distr., NPS, sanatorium 'Alatyr', 54.739°N, 45.383°E, 16–19.VI 2022, 34 ♀, GS; Zubova Polyana distr., Yavas, 54.4067°N, 42.8618°E, 17–19.VI 2021, 1 ♀, ME; Zubova Polyana distr., 12 km N of Potma, 54.1903°N, 42.8966°E, 3–15.VIII 2021, 1 ♀, ME; Tengushevo distr., 3 km NE of Standrovo, 54.6708°N, 42.7181°E, 13–16.VII 2021, 7 ♂, 2 ♀, ME; Tengushevo distr., Telimerki, 54.7362°N, 42.7882°E, 16–20.VII 2021, 12 ♀, ME.

DISTRIBUTION. Cosmopolitan species (Ježek *et al.*, 2023b).

***Trichomyia kostovi* Ježek, 1990**

MATERIAL. ****Republic of Mordovia**, Temnikov distr., Alkaevo, 54.6052°N, 43.3651°E, 6–9.VII 2021, 15 ♂, ME.

DISTRIBUTION. Species known only from original description from Bulgaria (Ježek, 1990).

NOTES. First record for Russia.

***Trichopsychoda hirtella* (Tonnoir, 1919)**

MATERIAL. ****Republic of Mordovia:** Ichalki distr., NPS, cordon Mokrov, 54.7591°N, 45.6124°E, 24.VI–05.VII 2022, 1 ♂, GS; Temnikov distr., MSNR, Pushta, 54.7200°N, 43.2266°E, 12.IX, 15.IX 2020, 1 ♂, AR.

DISTRIBUTION. European and Transcaucasian species (Ježek *et al.*, 2020; Morelli & Biscaccianti, 2021).

NOTES. First record for Russia.

Family Rhagionidae

***Rhagio maculatus* (De Geer, 1776)**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 31.V–27.VI 2023, 1 spec., ME.

DISTRIBUTION. A species of temperate and North Europe, moderately common especially in deciduous forests (Roháček & Ševčík, 2009).

Family Sciomyzidae

***Pherbellia schoenherri* (Fallen, 1826)**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 27.VI–30.VII 2023, 1 spec., ME.

DISTRIBUTION. Holarctic: the Palaearctic nominate subspecies (Rozkošný, 1987).

Family Stratiomyidae

***Microchrysa polita* (Linnaeus, 1758)**

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 31.V–27.VI 2023, 1 spec., ME.

DISTRIBUTION. The most common species of the genus widespread throughout the Palaearctic Region and introduced to North America (Roháček & Ševčík, 2009).

Family Syrphidae

***Didea alneti* (Fallén, 1817)**

MATERIAL. ***Nizhny Novgorod Region**, Ardatov distr., Mukhtolovo, 55.4462°N, 43.2762°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. A Holarctic arboreal species (Roháček & Ševčík, 2009).

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

MATERIAL. ***Nizhny Novgorod Region**, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. A very common and ubiquitous Palaearctic species (Roháček & Ševčík, 2009).

***Eristalis arbustorum* (Linnaeus, 1758)**

MATERIAL. ***Nizhny Novgorod Region**, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. Palearctic. The species was incorrectly recorded from Jamaica (Thompson, 1997).

***Eristalis tenax* (Linnaeus, 1758)**

MATERIAL. ***Nizhny Novgorod Region**, Sosnovskoe distr., Lesunovo, 55.6506°N, 43.1076°E, 29.IX–2.X 2020, 1 spec., AR.

DISTRIBUTION. A cosmopolitan species, very common and ubiquitous in Central Europe (Roháček & Ševčík, 2009).

Family Tachinidae

Eriothrix rufomaculatus (De Geer, 1776)

MATERIAL. ***Ryazan Region**, Ermish distr., Vysokoye, 54.761°N, 42.356°E, 30.VII–24.VIII 2023, 1 spec., ME.

DISTRIBUTION. A common Palearctic species (Roháček & Ševčík, 2009).

Family Ulidiidae

Ceroxys munda Loew, 1869

MATERIAL. ***Republic of Mordovia**, Krasnoslobodsk distr., Selishchi, 54.480°N, 43.523°E, 8–29.VI 2021, 2 ♀, AR.

DISTRIBUTION. Palearctic. European Russia (Rostov and Volgograd Regions); Ukraine; Kazakhstan; China (Xingjian) (Kameneva, 2008).

DISCUSSION

A total of 84 Diptera species from 21 families (Anthomyiidae, Bibionidae, Chloropidae, Conopidae, Culicidae, Fanniidae, Hybotidae, Lauxaniidae, Limoniidae, Lonchopteridae, Micropezidae, Muscidae, Platystomatidae, Psilidae, Psychodidae, Rhagionidae, Sciomyzidae, Stratiomyidae, Syrphidae, Tachinidae, and Ulidiidae) collected in the Republic of Mordovia (41 species), in the Ryazan Region (27), in the Nizhny Novgorod Region (14), in the Voronezh Region (3), in the Penza Region (3), are listed. New to the fauna of Russia are *Dicranomyia* (*Dicranomyia*) *affinis* (Limoniidae) *Clytocerus* (*Boreoclytocerus*) *longicorniculatus*, *C. (B.) ocellaris*, *C. (B.) splendidus*, *Seoda labeculosa*, *Trichomyia kostovi*, *Trichopsychoda hirtella*. Fauna of the family Psychodidae on the territory of Russia (with the exception of epidemiological representatives of the family Phlebotominae) was only sporadically investigated. According to the authors' knowledge, approximately 23 species of non-biting moth flies are known so far. Seventeen records of common Palearctic species are mentioned in Ježek (1992), Wagner (1994), and Ježek et al. (2020, 2023c). Subsequently, Ježek (1994, 1995, 2001) described four species from Russia namely: *Krivosheinoscopus ussuricus* Ježek, 2001, *Psycmera kolomietsi* Ježek, 1994, *Psycmera kolomietsi* Ježek, 1994, *Lepimormia sibirica* Ježek, 1995. Two additional records *Parajungiella ellisi* (Withers, 1987) from Siberia and (*Chodopsycha lobata* (Tonnoir, 1940) from Moscow are added by Ježek (1997, 2004).

ACKNOWLEDGEMENTS

We are obliged to the editor and anonymous reviewers, who helped by providing constructive comments, as well as improving the manuscript. We also want to thank our colleagues for kindly helping them in determining the samples: M. Chursina for Conopidae, M. Tschirnhaus for Chloropidae, and N. Vikhrev for Muscidae. We are grateful for the advice on Conopidae from J.-H. Stuke (Germany). The manuscript was prepared partly due to the financing of the Russian Science Foundation (grant number 22-14-00026), and by the Ministry of Culture of the Czech Republic (DKRVO 2024–2028/5.I.a, National Museum, 00023272).

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