

New records of beetles (Insecta, Coleoptera) from Voronezhskaya Oblast of Russia

Новые находки жесткокрылых (Insecta, Coleoptera) для Воронежской области России

A.N. Volodchenko
А.Н. Володченко

Balashov Institute of Saratov State University, Carl Marx Str. 29, Balashov 412300 Russia. E-mail: kimixla@mail.ru.

Балашовский институт (филиал) Саратовского государственного университета им. Н.Г. Чернышевского, ул. Карла Маркса 29, Балашов 412300 Россия.

Key words: Coleoptera, European part of Russia, new records, Voronezhskaya Oblast.

Ключевые слова: Coleoptera, европейская часть России, дополнения к фауне, Воронежская область.

Abstract. 37 beetle species from the 19 families are firstly registered for eastern regions of Voronezhskaya Oblast, Russia based on material collected during 2018–2021.

Резюме. В статье по сборам 2018–2021 г. приведены данные о 37 видах жуков из 19 семейств, впервые обнаруженных в восточной части Воронежской области.

Introduction

Coleoptera is the largest order of insects. Beetle fauna of Voronezhskaya Oblast has been studied by many researchers throughout the 20th century. First checklist of beetles of the region was presented in the Cadastre of invertebrates of Voronezhskaya Oblast [Negrobov et al., 2005]. Since then, 18 works have been published containing additional faunistic information on the findings of new species of beetles in Voronezhskaya Oblast [Prokin, 2006; Negrobov, Novoselova, 2007; Negrobov, 2007, 2010a, b, c; Negrobov, Negrobova, 2010; Nikitsky et al., 2009, 2010; Aksenenko et al., 2012; Berezhnova, Tsurikov, 2013; Orlova-Bienkowskaja, 2013; Emets, 2015, 2018; Shchapova, Petrov, 2018; Ryaskin, 2018, 2019; Sazhnev, Prokin, 2021]. In this article some new records of beetles from Voronezhskaya Oblast are reported.

Material and methods

Material presented in the present paper, was collected by the author from eastern regions of Voronezhskaya Oblast during 2018–2021, mostly in forest habitats using flight interception traps. The studied material is kept in the author's private collection. Taxonomy used in the article is given according to the Catalogue of Palaearctic Coleoptera [Catalogue..., 2007, 2008, 2010, 2011, 2013, 2015, 2016; Alonso-Zarazaga et al., 2017].

Annotated list of species from the eastern part of the Voronezh region. The details are given in the Appendix (Appendix 2, p. 8–9).

Discussion

The new records enlarge our knowledge about the regional distribution of beetle species in Russia. 37 species from 19 families are given. Most of the species recorded are widespread in the European part of Russia, and more widely in Europe and the Palaearctic. *Dirrhagofarsus attenuatus*, *Nematodes filum*, *Lacon lepidopterus* have been described as primeval forest relict species from Europe [Eckelt et al., 2018]. These species can be included in the Red List of Voronezhskaya Oblast as indicators of forest stands with high conservation value. The findings show that the fauna of beetles in the Voronezhskaya Oblast has not yet been sufficiently studied.

References

- Aksenenko E.V., Gaponov S.P., Melkumov G.M. 2012. [To the study of checked beetles (Coleoptera, Cleridae) of the Voronezhskaya Oblast] // *Sovremennye zoologicheskie issledovaniya v Rossii i soprodel'nyh stranah materialy II Mezhdunarodnoj nauchno-prakticheskoy konferencii pamyati d.b.n., professora M.A. Kozlova*. Cheboksary: *Novoe vremya*. P.4–5. [In Russian].
- Alonso-Zarazaga M.A., Barrios H., Borovec R., Bouchard P., Caldara R., Colonnelli E., Gültekin L., Hlavá P., Korotyaev B., Lyal C.H.C., Machado A., Meregalli M., Pierotti H., Ren L., Sánchez-Ruiz M., Sforzi A., Silfverberg H., Skuhrovec J., Trizna M., Velázquez de Castro A.J., Yunakov N.N. 2017. Cooperative catalogue of palaearctic Coleoptera Curculionoidea // *Monografias electrónicas*. Vol.8. P.1–729.
- Berezhnova O.N., Tsurikov M.N. 2013. [Ecological-faunistic characteristics of the hortobiont beetles (Coleoptera) on cretaceous exposures of the southeast Voronezhskaya Oblast] // *Fundamental research*. Vol.11. No.5. P.933–938. [In Russian].

- Catalogue of Palaearctic Coleoptera. 2015. Revised and updated version. Hydrophiloidea — Staphylinoidea // Löbl I., Löbl D. (Eds): Vol.2. Leiden-Boston: Brill. 1702 p.
- Catalogue of Palaearctic Coleoptera. 2016. Revised and updated version. Scarabaeoidea – Scirtoidea – Dascilloidea – Buprestoidea – Byrrhoidea // Löbl I., Löbl D. (Eds): Vol.3. Leiden-Boston: Brill. 983 p.
- Catalogue of Palaearctic Coleoptera. 2007. Elateroidea – Derodontoidea – Bostrichoidea – Lymexyloidea – Cleroidea – Cucujoidea // Löbl I., Smetana A. (Eds): Vol.4. Stenstrup: Apollo Books. 935 p.
- Catalogue of Palaearctic Coleoptera. 2008. Tenebrionoidea // Löbl I., Smetana A. (Eds): Vol.5. Stenstrup: Apollo Books. 670 p.
- Catalogue of Palaearctic Coleoptera. 2010. Chrysomeloidea // Löbl I., Smetana A. (Eds): Vol.6. Stenstrup: Apollo Books. 924 p.
- Emets V.I. 2015. [Species richness and macrosociological composition of the beetles of the weevils (Coleoptera, Curculionidae) of the Voronezh Biosphere Reserve] // Proshloe, nastoyashchee i budushchee oboohranyaemyh prirodnyh territorij: sbornik nauchnyh materialov, posvyashchennyj 80-letiyu Hoperskogo gosudarstvennogo zapovednika. Voronezh. P.50–54. [In Russian].
- Emets V.M. 2018. [Finds of ladybird *Harmonia axyridis* (Coleoptera, Coccinellidae) in Voronezhsky reserve (Voronezhskaya oblast of Russia)] // Russian Journal of Biological Invasions. No.1. P.33–37. [In Russian].
- Eckelt A., Müller J., Bense U., Brustel H., Bußler H., Chittaro Y., Cizek L., Frei A., Holzer E., Kadej M., Kahlen M., Köhler F., Möller G., Mühle H., Sanchez A., Schaffrath U., Schmid J., Smolis A., Szallies A., Németh T., Wurst C., Thorn S., Christensen R.H.B., Seibold S. 2018. «Primeval forest relict beetles» of Central Europe: a set of 168 umbrella species for the protection of primeval forest remnants // Journal of Insect Conservation. Vol.22. P.15–28.
- Negrobov S.O. 2007. [To the study of the fauna of minute brown scavenger beetles and shining flower beetles (Lathridiidae, Phalacridae, Coleoptera) of the Voronezhskaya Oblast] // Proceedings of the Voronezh State University. Series: Chemistry. Biology. Pharmacy. Vol.8. No.1. P.94–95. [In Russian].
- Negrobov S.O. 2010a. [To the knowledge of new beetles in Voronezhskaya Oblast] // Proceedings of the Voronezh State University. Series: Chemistry. Biology. Pharmacy. Vol.11. No.2. P.101–102. [In Russian].
- Negrobov S.O. 2010b. [To the knowledge of new for the Voronezhskaya Oblast Chrysomeloidea beetles (Coleoptera, Chrysomeloidea, Chrysomelidae, Orsodacnidae, Cerambycidae, Bruchidae)] // Aktual'nye voprosy sovremennoj entomologii i ekologii nasekomyh: Materialy mezhdunarodnoj nauchnoj konferencii, posvyashchennoj pamyati A.I. Fomicheva. Borisoglebsk. P.63–68. [In Russian].
- Negrobov S.O. 2010c. [To the knowledge of rove beetles, new to the Voronezhskaya Oblast (Coleoptera, Staphilinoidea, Staphilinidea, Scaphilidae, Leiodidae)] // Problemy monitoringa prirodnyh processov na osobo ohranyaemyh prirodnyh territoriyah: materialy mezhdunarodnoj nauchno-prakticheskoy konferencii, posvyashchennoj 75-letiyu Hoperskogo gosudarstvennogo prirodnogo zapovednika. Voronezh: VGPU. P.481–484. [In Russian].
- Negrobov S.O., Negrobova E.V. 2010. [To knowledge new to the Voronezhskaya Oblast Cucujiformia coleopterans (Cucujiformia, Coleoptera)] // Scientific statements of the Belgorod State University. Series: natural sciences. Vol.15 (86). No.12. P.82–85. [In Russian].
- Negrobov S.O., Novoselova E.V. 2007. [New ground beetles (Coleoptera, Caraboidea) in the fauna Voronezhskaya Oblast] // Proceedings of the Voronezh State University. Series: Chemistry. Biology. Pharmacy. Vol.8. No.1. P.91–93. [In Russian].
- Negrobov S.O., Tsurikov M.N., Logvinovsky V.D., Fomichev A.I., Prokin A.A., Gilmutdinov K.S. 2005. Order Coleoptera // Kadastr bespozvonochnyh zhivotnyh Voronezhskoj oblasti. Voronezh: Voronezhskij gosudarstvennyj universitet. P.534–673. [In Russian].
- Nikitsky N.B., Negrobov S.O., Negrobova E.V. 2009. [To the knowledge of mycetobionthes Coleoptera: superfamilies: Scirtoidea, Bostrichoidea, Lymexyloidea, Cleroidea, Cucujoidea (except Latridiidae and Corylophidae) of the Voronezhskaya Oblast] // Bulletin of Moscow Society of Naturalists. Biological series. Vol.114. No.3. P.17–25. [In Russian].
- Nikitsky N.B., Negrobov S.O., Negrobova E.V. 2010. [To the knowledge of mycetobiontic beetles (Coleoptera) from superfamilies Cucujoidea (Latridiidae and Corylophidae) and Tenebrionoidea of the Voronezh area] // Bulletin of Moscow Society of Naturalists. Biological series. Vol.115. No.2. P.17–24. [In Russian].
- Orlova-Bienkowskaja M.J. 2013. Ashes in Europe are in danger: the invasive range of *Agrilus planipennis* in European Russia is expanding // Biological Invasions. Vol.16. No.7. P.1345–1349.
- Prokin A. 2006. New Records of Water Beetles (Coleoptera: Haliplidae, Gyrinidae, Dytiscidae, Hydrochidae, Hydrophilidae) from the Middle Russian Forest-Steppe // Latvijas entomologs. Vol.43. P.138–142. [In Russian].
- Ryaskin D.I. 2018. [New records of weevils (Coleoptera: Curculionidae) from Voronezhskaya Oblast, Russia] // Euroasian Entomological Journal. Vol.17. No.6. P.433–439. [In Russian].
- Ryaskin D.I. 2019. [New records of weevils (Coleoptera, Curculionidae: Anthribidae, Rhynchitidae, Brentidae, Curculionidae) for the Voronezhskaya Oblast, Russia] // Euroasian Entomological Journal. Vol.18. No.2. P.106–112. [In Russian].
- Sazhnev A.S., Prokin A.A. 2021. [New data to the fauna of beetles (Coleoptera) of the Voronezh Province] // Eversmannia. Vols 67–68. P.69. [In Russian].
- Shtapova N.N., Petrov A.V. 2018. [Fauna of bark beetles (Coleoptera: Curculionidae: Scolytinae) Tellermanovsky forest field station of the Voronezhskaya Oblast] // Forestry Bulletin. Vol.22. No.5. P.34–41. [In Russian].

Поступила в редакцию 12.1.2021

Приложение к статье: А.Н. Володченко. Новые находки жесткокрылых (Insecta, Coleoptera) для Воронежской области России (Евразийский энтомологический журнал. 2023. Т.22. Вып.2. С. 117–118)

Appendix to the article: A.N. Volodchenko. New records of beetles (Insecta, Coleoptera) from Voronezhskaya Oblast of Russia (Euroasian Entomological Journal. 2023. Vol.22. No.2. P. 117–118)

Список видов жесткокрылых из восточной части Воронежской области

Histeridae

Teretrius fabricii Mazur, 1972

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Quercus robur*, 1.VII.2019 — 1 ex.

Ptiliidae

Ptilium exaratum (Allibert, 1844)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 2 ex.

Buprestidae

Anthaxia senicula (Schrank, 1789)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Quercus robur*, 1.VII.2019 — 1 ex.; 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Quercus robur*, 7.VII.2021 — 1 ex.

Trachys troglodytes Gyllenhal, 1817

Material. 2 km NE of Povorino, 51°12'37" N, 42°16'51" E, steppe, sweeping, 10.VI.2021 — 2 ex.

Eurythyrea aurata (Pallas, 1776)

Material. 7.2 km NW of Borisoglebsk, 51°25'35" N, 42°0'49" E, birch forest, interception trap on *Betula pendula*, 7.VII.2021 — 1 ex.

Eucnemidae

Microrhagus emyi (Rouget, 1856)

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Quercus robur*, 20.VI.2021 — 1 ex.

Microrhagus lepidus (Rosenhauer, 1874)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 2 ex.; Griбановский district, 1.5 km E of Listopadovka, 51°26'15" N, 41°26'04" E, maple forest, interception trap on *Populus tremula*, 07.VII.2021 — 1 ex.

Dirrhagofarsus attenuatus (Maklin, 1845)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 2 ex.

Melasis buprestoides (Linnaeus, 1761)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Quercus robur*, 1.VII.2019 — 1 ex.

Eucnemis capucina Ahrens, 1812

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Ulmus laevis*, 14.VI.2021 — 1 ex.

Nematodes filum (Fabricius, 1801)

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Populus tremula*, 7.VII.2021 — 15 ex.; interception trap on *Ulmus laevis*, 7.VII.2021 — 4 ex.

Elateridae

Lacon lepidopterus (Panzer, 1800)

Material. 5 km SE of Griбановка, 51°25'05" N, 42°00'38" E, birch forest, interception trap on *Betula pendula*, 7.VII.2021 — 2 ex.

Dermestidae

Orphilus niger (P. Rossi, 1790)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Quercus robur*, 1.VII.2019 — 2 ex.

Ptinidae

Ptinus rufipes A.Olivier, 1790

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Quercus robur*, 1.VII.2019 — 8 ex.

Cleridae

Tillus elongatus (Linnaeus, 1758)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 8 ex.; 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Quercus robur*, 14.VI.2021 — 3 ex.; 5 km SE of Griбановка, 51°25'05" N, 42°00'38" E, aspen forest, interception trap on *Populus tremula*, 10.VIII.2021 — 4 ex.

Nitidulidae

Glischrochilus grandis (Tournier, 1872)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 8 ex.

Melandryidae

Hallomenus axillaris (Illiger, 1807)

Material. 5 km SE of Griбановка, 51°25'05" N, 42°00'38" E, aspen forest, interception trap on *Populus tremula*, 7.VII.2021 — 1 ex.

Hypulus quercinus (Quensel, 1790)

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Quercus robur*, 14.VI.2021 — 2 ex.; 5 km SE of Griбановка, 51°25'05" N, 42°00'38" E, aspen forest, interception trap on *Populus tremula*, 14.VI.2021 — 1 ex.

Orchesia fasciata (Illiger, 1798)

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Populus tremula*, 14.VI.2021 — 1 ex.; 5 km SE of Griбановка, 51°25'05" N, 42°00'38" E, aspen forest, interception trap on *Populus tremula*, 7.VII.2021 — 1 ex.

Ripiphoridae

Pelecotoma fennica (Paykull, 1799)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 2 ex.; 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, sweeping, 7.VII.2021 — 7 ex.

Mordellidae

Mordellaria aurofasciata (Comolli, 1837)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 4 ex.; 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, sweeping, 14.VI.2021 — 7 ex.

Tenebrionidae

Hymenophorus doublieri Mulsant, 1851

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Quercus robur*, 7.VII.2021 — 1 ex.

Upis ceramboides (Linnaeus, 1758)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 8 ex.

Oedemeridae

Oedemera croceicollis (Gyllenhal, 1827)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 8 ex.; 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Fraxinus excelsior*, 20.VI.2021 — 1 ex.

Mycteridae

Mycterus curculioides (Fabricius, 1781)

Material. 2 km NE of Povorino, 51°12'37" N, 42°16'51" E, forest edge, sweeping, 10.VI.2021 — 2 ex.

Cerambycidae

Phytoecia cylindrica (Linnaeus, 1758)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 2 ex.

Exocentrus punctipennis

Melsant et Guillebeau, 1856

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 9 ex.

Chrysomelidae

Longitarsus exsoletus (Linnæus 1758)

Material. Borisoglebsk urban district, 2 km W of Gorelka, 51°24'55" N, 42°38'43" E, steppe, sweeping, 10.VI.2018 — 3 ex.

Anthribidae

Choragus scheppardi Kirby, 1819

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 14.VI.2019 — 1 ex.

Curculionidae

Tapinotus sellatus (Fabricius, 1794)

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Ulmus laevis*, 14.VI.2021 — 1 ex.

Cossonus parallelepipedus (Herbst, 1795)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 8 ex.; 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Ulmus laevis*, 14.VI.2021 — 1 ex.

Dorytomus longimanus (Forster, 1771)

Material. 5.5 km W of Borisoglebsk, 51°24'01" N, 42°00'45" E, oak forest, interception trap on *Ulmus laevis*, 14.VI.2021 — 2 ex.

Mecinus pascuorum (Gyllenhal, 1813)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 29.VI.2019 — 3 ex.

Orchestes rusci (Herbst, 1795)

Material. 2 km N of Povorino, 51°13'18" N, 42°15'28" E, floodplain forest, interception trap on *Populus tremula*, 1.VII.2019 — 8 ex.

Magdalis phlegmatica (Herbst, 1797)

Material. Borisoglebsk urban district, 3 km S of Makashevka, 51°28'19" N, 42°37'45" E, pine forest, under the pine, 15.VI.2020 — 1 ex.

Carphoborus minimus (Fabricius, 1798)

Material. Borisoglebsk urban district, 3 km S of Makashevka, 51°28'19" N, 42°37'45" E, pine forest, under the pine bark, 20.VII.2020 — 13 ex.

Hylurgus ligniperda (Fabricius, 1787)

Material. Borisoglebsk urban district, 3 km S of Makashevka, 51°28'19" N, 42°37'45" E, pine forest, under the pine bark, 20.VII.2020 — 6 ex.