

## NEW DISTRIBUTIONAL RECORDS FOR 11 WEEVIL SPECIES FROM UKRAINE (COLEOPTERA: CURCULIONIDAE)

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[**Volovnik, S. V. & Pavlyuk, V. N.** 2020. New distributional records for 11 weevil species from Ukraine (Coleoptera: Curculionidae). *Munis Entomology & Zoology*, 15 (2): 572-575]

**ABSTRACT:** The article presents data on new records of 11 weevil species (Coleoptera: Curculionoidea: Curculionidae, Rhynchitidae). *Lixus tibialis* Boheman, 1842 and *L. scabricollis* Boheman, 1842 are recorded for the first time from Ukraine. Six rare species are reported for the first time from Mykolaiv, Kherson and Zaporizhia Provinces. Three species also first noted for Kamiani Mohyly Nature Reserve. Specimens of *L. angustus* (Herbst, 1795), *L. bituberculatus* Smreczynski, 1968, and especially *L. cinerascens* Schönherr, 1832 deposited in entomological collections need in accurate reidentification because their similarity with *L. tibialis*. This likeness needs to be taken into account when using data from old literature. Apparently, *Otiorrhynchus ovalipennis* Boheman, 1843 have expanded northward from Crimea Peninsula to vicinities in mainland Ukraine.

**KEY WORDS:** Entomofauna, Coleoptera, Curculionidae, Rhynchitidae, Ukraine, species range

The weevils (Curculionoidea) is family of insects with ca. 60 000 described species. They occur in an extremely range of natural conditions. These insects feed on plants, from angiosperms until algae (and lichens and cyanobacteria as well). Besides herbivory, their ways of life include coprophagy, myrmecophily, and even predation and eusociality (Zwölfer, 1969; Kent & Simpson, 1992; Oberprieler et al., 2007). Due such taxonomical and ecological hyperdiversity, species composition, geographical distribution and natural history of Curculionidae of local faunas need further research.

The fauna of Ukraine is quite well-studied. A total of 1453 species of weevils are recorded in the fauna of Ukraine (Yunakov et al., 2018). After field researches and investigation of entomological collections some new and interesting findings were done.

### MATERIALS AND METHODS

This paper is essentially based on our data and specimens gathered from 2015 until 2019. Some entomological collections from prior years were also studied. To collect insects we used traditional entomological methods (handpicking, sweeping, beating, pitfall and light traps etc.), and photofixation as well. The study material is deposited in four depositories as listed below: SIZK – Schmalhausen Institute of Zoology, National Academy of Science, Kyiv; SSC – Private collection of Sergey Suchkov, Melitopol; SVC – Private collection of Semyon Volovnik, Melitopol; VPC – Private collection of Viktor Pavlyuk,

Nyzkivka. Data on common geographical distribution are given mainly by Alonso-Zarazaga et al. (2017).

## RESULTS AND DISCUSSION

### Curculionidae

#### *Apsis albolineata* (Fabricius, 1792)

**Material examined.** 3 spec. (SVC) Zaporizhia Province, Yakymivka District, Bohatyr, forest, 46.619644N, 35.258707E, on *Capsella bursa-pastoris*, S. Volovnik leg., 2.V.2019; 1 spec. (SVC) Zaporizhia Province, Melitopol, city park, 46.837787N, 35.366797E, shaking of *Ulmus minor*, S. Volovnik leg., 13.V.2019; 1 spec. (SIZK) Zaporizhia Province, Yakymivka District, Bohatyr, Molochny Liman shore, 46.635574N, 35.281218E, S. Volovnik leg., 16.V.2018.

**Distribution.** Central and South-East Europe, Balkans, Asia Minor, South of European Russia, and Kazakhstan.

**Biology.** Polyphagous on herbs.

**Notes.** The first records for Zaporizhia Province. Listed in Red List of Kharkiv Province (Pro zatverdzhenia..., 2018).

#### *Gasterocercus depressirostris depressirostris* (Fabricius, 1792)

**Material examined.** 9 spec. (SVC) Donetsk Province, Nikol'ske District, Kamiani Mohyly Nature Reserve, 47.305000N, 37.080000E, light trap, S. Volovnik leg., 1.VI.2019; 1 spec. (SSC) Mykolaiv Province, Pervomaj's'k, Southern Bug River bank, 48.007778N, 31.015833E, light trap, S. Suchkov leg., 15.VIII.2019.

**Distribution.** Europe (excluding north) – from France to South of European Russia and Transcaucasia. The species is known for Ukraine only on few localized records in Lviv (Mazur, 2002), Odessa, Zaporizhia, Luhansk, and Kharkiv Provinces (Yunakov et al., 2018).

**Biology.** In dead or decaying wood (*Quercus* spp., *Fagus sylvatica*) (Smreczyński, 1972; Pavłowski et al., 2002).

**Notes.** The first record for Kamiani Mohyly Nature Reserve and Mykolaiv Province. A relict endangered species (Pavłowski et al., 2002).

#### *Lepidonotaris petax* (Sahlberg, 1823)

**Material examined.** 1 spec. (SSC) Mykolaiv Province, Pervomaj's'k, Southern Bug River bank, 48.007778N, 31.015833E, light trap, S. Suchkov leg., 15.VIII.2019.

**Distribution.** Palearctic – from Czechia, Slovakia (Benedikt et al., 2016), Romania (Proches, 1999), Bulgaria, and Hungary to Far East and Mongolia (Alonso-Zarazaga et al., 2017).

**Biology.** On *Phragmites* (Poaceae) (Isaev, 1984).

**Notes.** The first record of this species in Mykolaiv Province and the 5<sup>th</sup> record in Ukraine.

#### *Lixus (Ortholixus) tibialis* Boheman, 1842

**Material examined.** 3 spec. (SVC) Chernihiv Province, Kozelets District, Bondarivskii forest, 50.940086N, 30.721571E, V. Pavlyuk, 6.VI.2004; 4 spec. (VPC) ibidem, V. Pavlyuk, 12.VIII. 2004; 8 spec. (VPC) ibidem, V. Pavlyuk, 19.VIII.2017; 1 spec. (SVC) Volyn Province, Turiisk, 51.083330N, 24.533330E, P. Vojtko, 22.VI.2011; 1 spec. (ZIN) Kharkiv Prov., Dergachy Distr., Solonysivka, 49.99111N, 36.054722E, 20.VIII.2000, floodplain of Uda River, flood-meadow (K. Nadein) (B. A. Korotyaev, personal communication).

**Distribution.** West Palearctic – from Algeria and Italy to Iran.

**Biology.** On *Hieracium umbellatum* (Asteraceae). Adults feed on leaves and stems, preimaginal development occurs in the base part of the stems (Wanat, 2004, and original data).

**Notes.** The first records in Ukraine. Listed on Red List as «least concern» in Poland (Pavłowski et al., 2002). By its morphological characters *L. tibialis* is rather similar to some other *Ortholixus*, namely *L. angustus* (Herbst, 1795), *L. bituberculatus* Smreczynski, 1968, and especially to *L. cinerascens* Schönherr, 1832. So, accurate redefinition of their specimens in the museum collections is necessary.

#### *Lixus (Phillixus) scabricollis* Boheman, 1842

**Material examined:** 3 spec. (VPC) Crimea, Sevastopol, coast of Kozacha Bay, 44.570224N, 33.406227E, V. Pavlyuk leg., 14.V.2010.

**Distribution.** West Palearctic – from Portugal and Great Britain to Iran.

**Biology.** Adults were found on *Beta maritime* L. Oligophagous on Amaranthaceae (Dieckmann, 1983). A host of 7 (?) spp. of hymenopteran parasitoids (Noyes, 2003).

**Notes.** The first record in Ukraine.

***Otiorhynchus (Pseudocryphiphorus) chrysostictus* Gyllenhal, 1834**

**Material examined.** 1 spec. (SSC) Mykolaiv Province, Pervomajsk, Southern Bug River bank, 48.007778N, 31.015833E, light trap, S. Suchkov leg., 15.VIII.2019; 1 spec. (SVC) Zaporizhia Province, Yakymivka District, Bohatyr, Molochny Liman shore, 46.635574N, 35.281218E, S. Volovnik leg., 3.V.2019.

**Distribution.** Palearctic – from Italy, Germany and Turkey to West Siberia and Kazakhstan.

**Biology.** Polyphagous mostly on Rosaceae.

**Notes.** The first records for Mykolaiv and Zaporizhia Provinces.

***Otiorhynchus (Melasemnus) ovalipennis* Boheman, 1843**

**Material examined.** 1 spec. (SVC) Zaporizhia Province, Melitopol, city park, 46.837778N, 35.366797E, shaking of *Ulmus minor*, S. Volovnik leg., 13.V.2019.

**Distribution.** East mediterranean region (excluding North Africa), South of European Russia, and Transcaucasia.

**Biology.** Polyphagous on the leaves of trees and shrubs (Halperin, 1986). Adults show nocturnal activity (Özbek, 2016).

**Notes.** The first record for Zaporizhia Province. Long ago *O. ovalipennis* was known in Ukraine in Crimea only (Arnoldi et al., 1965). Now it occurs in Lviv and Kyiv Provinces as introduced species (Yunakov et al., 2018). In Russia weevil has expanded its distribution from the Black Sea coast northwards (Korotyaev, 2015). It's not unlikely that range of this species is expanded from Crimean Peninsula to mainland Ukraine as well.

***Pachycerus segnis* (Germar, 1823)**

**Material examined.** 1 spec. (SVC) Kherson Province, Black Sea Biosphere Reserve, Ivano-Rybalchansky Division, plain sandy steppe, 46.472204N, 32.201165E, L. Zelinskaia leg., 11.V.1987.

**Distribution.** West Palearctic (excluding north).

**Biology.** Oligophagous on Boraginaceae (Hubert & Vayssieres, 1990).

**Notes.** The first record for Kherson Province.

***Tournotaris bimaculata* (Fabricius, 1787)**

**Material examined.** 1 spec. (SVC) Donetsk Province, Nikol'ske District, Kamiani Mohyl Nature Reserve, 47.305000N, 37.080000E, S. Volovnik leg., 2.VI.2019.

**Distribution.** Holarctic.

**Biology.** On Typhaceae and Poaceae: *Typha latifolia* L., *Phalaris arundinacea* L. (Hoffmann, 1958), *Bromopsis inermis* (Leyss.) Golub., *Dactylis glomerata* Ehrh., *Carex* spp., *Sparganium* sp., and *Glyceria* sp. (Dediukhin, 2012). Preimaginal development occurs in the stems of host-plants (Dieckman, 1986).

**Notes.** The first record for Kamiani Mohyl Nature Reserve.

***Tychius quinquepunctatus* (Linnaeus, 1758)**

**Material examined.** 3 spec. (SVC) Donetsk Province, Nikol'ske District, Kamiani Mohyl Nature Reserve, 47.305000N, 37.080000E, on *Lathyrus tuberosus*, S. Volovnik leg., 5.VI.2019.

**Distribution.** Palearctic.

**Biology.** On herbaceous Fabaceae. Preimaginal development occurs in the pods (Dieckmann, 1988).

**Notes.** The first record for Kamiani Mohyl Nature Reserve.

**Rhynchitidae**

***Tatianaerhynchites aequatus* (Linnaeus, 1767)**

**Material examined.** 3 spec. (SVC) Donetsk Province, Nikol'ske District, Kamiani Mohyl Nature Reserve, 47.305000N, 37.080000E, on *Crataegus*, S. Volovnik leg., 5.VI.2019.

**Distribution.** West Palearctic (excluding North Africa, Middle Asia, and West Siberia).

**Biology.** On trees and shrubs of Rosaceae (Dieckmann, 1974).

**Notes.** The first record for Kamiani Mohyl Nature Reserve.

## ACKNOWLEDGEMENTS

We greatly appreciate information provided by B. A. Korotyaev (Zoological Institute of the RAS, Sankt-Petersburg, Russia), I. Turbanov (Papanin Institute for Biology of Inland Waters RAS, Borok, Russia) and Y. A. Moskalenko (Black Sea Biosphere Reserve, Ukraine). We are thankful to N. Yunakov (Natural History Museum, University of Oslo, Norway) for the identifications of some species.

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