



Zootaxa 3912 (1): 001–061
www.mapress.com/zootaxa/

Copyright © 2015 Magnolia Press

Monograph

ISSN 1175-5326 (print edition)

ZOOTAXA

ISSN 1175-5334 (online edition)

<http://dx.doi.org/10.11646/zootaxa.3912.1.1>

<http://zoobank.org/urn:lsid:zoobank.org:pub:2FB36894-6601-4665-A2B4-550149B5F7E9>

ZOOTAXA

3912

A survey of the weevils of Ukraine. Bark and ambrosia beetles (Coleoptera: Curculionidae: Platypodinae and Scolytinae)

TATYANA NIKULINA^{1,*}, MIKHAIL MANDELSHTAM^{2,3}, ALEXANDER PETROV⁴, VITALIJ NAZARENKO⁵
& NIKOLAI YUNAKOV⁶

¹*Donetsk National University, Biological Faculty, Department of Zoology and Ecology, Shchorsa, 46, Donetsk, 83050, Ukraine.
E-mail: nikulinatanya@mail.ru*

²*Saint-Petersburg State Forest Technical University, Centre for Bioinformatics and Genome Research, Institutsky per., 5, St.Petersburg, 194021, Russia*

³*Saint-Petersburg State University, Universitetskaya nab., 7/9, St.Petersburg, 199034, Russia.
E-mail: michail@MM13666.spb.edu*

⁴*Institute of Forest Science RAS, Sovetskaya st., 21, Uspenskoe, Moscow Region, 143030, Russia.
E-mail: hylesinus@list.ru*

⁵*Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, Bohdan Khmel'nitskiy, 15, 01601, Kyiv, Ukraine.
E-mail: nazarenko@izan.kiev.ua*

⁶*University of Oslo, Natural History Museum, Department of Zoology, P.O. Box 1172 Blindern, NO-0318 Oslo, Norway.
E-mail: n.yunakov@gmail.com*

**Corresponding author*



Magnolia Press
Auckland, New Zealand

TATYANA NIKULINA, MIKHAIL MANDELSHTAM, ALEXANDER PETROV, VITALIJ NAZARENKO
& NIKOLAI YUNAKOV

**A survey of the weevils of Ukraine. Bark and ambrosia beetles (Coleoptera: Curculionidae:
Platypodinae and Scolytinae)**

(*Zootaxa* 3912)

61 pp.; 30 cm.

22 Jan. 2015

ISBN 978-1-77557-625-9 (paperback)

ISBN 978-1-77557-626-6 (Online edition)

FIRST PUBLISHED IN 2015 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

<http://www.mapress.com/zootaxa/>

© 2015 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

Table of contents

Table of contents	3
Abstract	3
Introduction	3
Material and methods	4
Results	4
Review of species records	8
Acknowledgements	51
References	51

Abstract

Our knowledge of Ukrainian bark and ambrosia beetles (Coleoptera: Curculionidae: Scolytinae and Platypodinae) is summarized as a baseline for future studies of the fauna, with a checklist including information on distribution, host trees, biology and taxonomy. One hundred twenty-two species are recorded from Ukraine, of which seven are recorded for the first time. One species is recorded for the first time from Europe. Previous records of 24 species are considered dubious and requiring confirmation. In contrast to the Palaeartic Catalogue (Knížek 2011b), we consider *Anisandrus maiche* to be first described by Kurentsov (1941) rather than by Eggers (1942); *A. maiche* (Eggers, 1942) is a junior synonym of *A. maiche* (Kurentsov, 1941).

Key words: Coleoptera, Curculionidae, Scolytinae, Platypodinae, Ukraine, checklist, new records

Introduction

The taxonomic rank of bark and ambrosia beetles is a still matter of debate. Most papers dealing with faunistics and/or applied forest entomology traditionally considered these groups as well-defined beetle families – Scolytidae Latreille and Platypodidae Shuckard – distinct from weevils both morphologically and ecologically. However, new molecular genetic data along with morphological analyses of immatures and adults support treating bark and ambrosia beetles as subfamilies within Curculionidae (Thompson 1992; Lyal 1995; Marvaldi 1997; Marvaldi *et al.* 2002; Alonso-Zarazaga & Lyal 2009; Jordal *et al.* 2011).

The known world fauna includes ca. 6000 species of Scolytinae, from 230 genera and 28 tribes and ca. 1400 species of Platypodinae from 38 genera and 3 tribes (Wood & Bright 1992a,b; Alonso-Zarazaga 2009). The recently published Catalogue of Palaeartic Coleoptera (Knížek 2011b) includes 956 species of Scolytinae, in 107 genera and 21 tribes. These tribes are grouped into two supertribes: Hylesinitae and Scolytitae. Palaeartic Platypodinae count 96 species of from 11 genera and 2 tribes, that being grouped into two supertribes Platypoditae and Tesserocerinitae (Knížek 2011a).

Historical collections of Scolytinae and Platypodinae in Ukraine. Studies of bark and ambrosia beetles fauna in modern Ukraine territory proceed more than 130 years and is detailed in the recent review of Nikulina (2012). The first paper on Scolytinae that contains direct references to bark beetles for Ukraine is a fundamental work issued by Lindemann (1875–1879). In separate parts of the book there are present indications of several species of Scolytines for Ukraine (Lindemann 1875). As a second pioneering work on scolytines of Ukraine the monograph by Shevyrew “Bark beetles” (Shevyrew 1887) should be named. However, scattered references to bark beetle distribution in western provinces of Ukraine, former parts of adjacent countries, can be found in rather numerous papers by Łomnicki (1866, 1868, 1870, 1880, 1891, 1904), Miller (1868), Król (1877), Eggers (1914a,b). Some reports on bark beetles of Central and Eastern Ukraine were provided by Cherkunov (1889) and Shevyrew (1889). In the next decades the need for detailed study of wood pests has been tightly connected with the new branch of forest management appeared in the beginning of the XIX century – steppe afforestation. First results of steppe forestries bark beetles studies were reflected in Shevyrew monograph “Description of insect pests of steppe forestries and methods of struggle them” (Shevyrew 1893b). During the XXth century, most studies of bark and ambrosia beetles were applied research that dealt with rather few number of species bringing damage to forest economy. Due to this fact faunistic reviews for bark and ambrosia beetles for most of Ukraine regions were not

Scolytus jaroschewskii Shevyrew

Records. CRI [Eggers 1914a: 185–186; Korotnev 1926: 66; Stark 1952: 109; Sokanovsky 1954: 14; Stark 1955a: 660; Rudnev 1962: 72; Pfeffer 1995: 97; Knížek 2011b: 238.]

Distribution. Crimea, Caucasus (Stark 1952), Zentral Asia (Pfeffer 1995; Petrov 2005).

Material examined. No specimens from Ukraine were found.

Biology. On *Elaeagnus angustifolia*, *Ulmus laevis*, *U. minor* (Pfeffer 1995).

Notes. Besides the record by Eggers (1914) who described it as *S. tauricus*, a junior synonym of *S. jaroschewskii*, no further findings of this species in Ukraine were recorded. Apparently *S. jaroschewskii* can be also found in eastern provinces adjacent to Rostov Province of Russian Federation where it is known.

Acknowledgements

The authors deeply thank to Drs. A.V. Putehkov (SIZK), V.P. Fedorenko (IPP), A.A. Khaustov (State Nikitsky Botanical garden, Yalta), A.F. Bartenev and A.N. Drogvalenko (KUMN), V.B. Rizun (DMLU), V.A. Chumak (UZNU), P.N. Sheshurak (NSPU), S.A. Mosyakin (Simferopol), I.S. Turbanov (Sebastopol), A.N. Kravchenko (Pishcha, Volyn Prov.), D.V. Vlasov (Yaroslavl, Russia), A.V. Martynov (SIZK), V.V. Martynov jun. (DONNU), E.V. Martynova (DONNU) and N.B. Nikitsky (ZMUM) who helped in current project and lent valuable material. Our special thanks to V.V. Martynov for reviewing the manuscript.

References

- Alekseev, A.V. (1957) K nakhozhdeniju koroeda roda *Thamnurgus* Eichh. v Kurskoj oblasti [For the revealing of the bark beetle of genus *Thamnurgus* Eichh. in Kursk region]. Orekhovo-Zuevskij pedagogicheskij institut. Fakul'tet estestvoznaniya. Kafedry botaniki i zoologii. Moskva, pedagogicheskij institut. *Uchenye zapiski*, 5 (2), 159–163. [In Russian]
- Alonso-Zarazaga, M.A. & Lyal, C.H.C. (2009) A catalogue of family and genus group names in Scolytinae and Platypodinae with nomenclatural remarks (Coleoptera: Curculionidae). *Zootaxa*, 2258, 1–134.
- Andreeva, O.Yu. (2009) Sosnovyj lubojid (*Tomicus piniperda* L.) v oseredkakh sosnovykh pylshchykiv u Tsentral'nomu Polissi [Pine shoot beetle (*Tomicus piniperda* L.) in the foci of pine sawflies in Central Polissya]. *Lisivnytstvo i agrolisomelioratsija*, 116, 268–275. [In Ukrainian, with Russian and English summary]
- Arnoldi, K.V. (1953) O lesostepnykh istochnikakh i kharaktere proniknovenija v step' lesnykh nasekomykh pri stepnom lesorazvedenii [On the forest steppe sources and character of penetration of forest insects into steppe zone under steppe afforestation]. *Zoologicheskij zhurnal*, 32 (2), 175–194. [In Russian]
- Bartenev, A.F., Tupik, V.Yu. (1990) K izucheniju koroedov (Coleoptera, Scolytidae) Levoberezhnoj Ukrainy i Kryma [For the investigation of bark beetles (Coleoptera, Scolytidae) of the Left Bank Ukraine and Crimea]. *Uspekhi entomologii v SSSR: zhestkokrylye nasekomye: Materialy X s'ezda Vsesojuznogo entomologicheskogo obshchestva*. Leningrad, 15-16 sentjabrja 1989 g., Leningrad, pp. 11–15. [In Russian].
- Belgovsky, M.L. (1956) Vrednye nasekomye v lesnykh posadkakh Derkul'skoj stantsii po polezashchitnomu lesorazvedeniju [Pest insects in the forest plantations of Derkul station field intended for protective forest cultivation]. *Trudy instituta lesa*, 30, 343–363. [In Russian]
- Blinova, S.L. & Gurando, E.V. (1974) *Parasitorhabditis fuchsi* sp. n. (Nematoda, Rhabditidae) – parazit sosnovogo luboeda malogo (*Blastophagus minor* Hartig) [*Parasitorhabditis fuchsi* sp. n. (Nematoda, Rhabditidae) a parasite of *Blastophagus minor* Hartig]. *Vestnik zoologii*, 8 (2), 50–55. [In Russian, with English summary]
- Broun, I.V. (2009) Vrediteli i bolezni drevesnykh nasazhdenij dendroparka “Aleksandrija” NAN Ukrainy [Pests and diseases of the arboreal stands of “Alexandria” arboretum of NAS of Ukraine]. *Problemy sovremennoj dendrologii: Materialy mezhdunarodnoj nauchnoj konferentsii, posvjashchenoj 100-letiju so dnja rozhdenija chlen-korrespondenta AN SSSR P.I. Lapina*. Moskva, 30 ijunja – 2 ijulja 2009 g., Tovarishchestvo nauchnykh izdanij KMK, Moskva, pp. 740–743. [In Russian, with English summary]
- Bukowsky, W.J. (1930) Materialy po faune i biologii koroedov (Coleoptera, Ipidae) Kryma [Materials to fauna and biology of bark beetles (Coleoptera, Ipidae) of Crimea]. *Zapiski Krymskogo obshchestva estestvoispytatelej i ljubitelej prirody*, 12, 128–136. [In Russian, with German summary]
- Bukowski, W. (1940) Nekotorye dannye o vragakh i sozhiteljakh koroedov v Krymu [Some data on the enemies and the inquilines of bark beetles in Crimea]. *Trudy Krymskogo gosudarstvennogo zapovednika*, 2, 170–188. [In Russian, with English summary]

- Cherkunov, N. (1889) Spisok zhukov, vodjashchikhsja v Kieve i ego okrestnostjakh [List of bugs living in Kyiv and its environs]. *Otdel'nyj ottisk iz Zapisok Kievskogo Obshchestva Estestvoispytatelej*, Kyiv, 1888 (1889), p. 58. [In Russian]
- Chernyavska, O.M. (2006) Vydovyj sklad i poselennja stovburovykh shkidnykiv u dibrovakh Kharkivs'koji oblasti [Species composition and settlement of trunk pests in oak groves in Kharkiv region]. *Ekologizatsija stalogo rozvytku agrosfery, kul'turnyj gruntogenez i noosferna perspektyva informatsijnogo suspil'stva: Mizhnarodna naukova konferentsija studentiv, aspirantiv i molodykh vchenykh; do 190-richcha KNAU imeni V. V. Dokuchaeva*. Kharkiv, 3–5 zhovtnja 2006 r., Kharkiv, p. 250 [In Ukrainian]
- Davidenko, E.V. (2010a) Osobennosti ekologii i raspredelenija po stvolu sosny obyknovenogo vershinnogo koroeda (*Ips acuminatus*) v uslovijakh Lesostepi Khar'kovskoj oblasti [Ecological features and distribution of the engraver beetle (*Ips acuminatus*) on the trunk of pine in the forest steppe zone within Kharkiv province]. *Suchasni problemy entomologiji: Tezy dopovidej entomologichnoji naukoivoji konferentsiji, prysvjachenoji 60-j richnytsi stvorennja Ukrajins'kogo entomologichnogo tovarystva*. Uman', 12–15 zhovtnja 2010 r., Kyiv, 119–120. [In Russian]
- Davidenko, E.V. (2010b) Rol' nasekomykh v usykhannii odno- i desjatiletnikh kul'tur sosny na gorel'nike v Izjumskom pristepnom boru [Role of insects in dieback of one- to ten years-old cultures of pine at burned areas of Izyumsky pine forest]. *Izvestija Sankt-Peterburgskoj lesotekhnicheskoi akademii*, 192, 73–78. [In Russian, with English summary]
- Davidenko, E.V. (2011) Kompleks gribov vyzyvajushchikh sinevu drevesiny, perenosimykh dvumja vidami kornezhilov v kul'turakh sosny obyknovennoj Levoberezhnoj Ukrainy [The complex of blue stain fungi transferred by two species of *Hylastes* in the cultures of *Pinus sylvestris* in the East Ukraine]. *Bolezni i vrediteli v lesakh Rossii: vek XXI: Materialy Vserossijskoj konferentsii s mezhdunarodnym uchastiem i V ezhegodnykh chtenij pamjati O.A. Kataeva*. Ekaterinburg, 20–25 sentjabrja 2011 g., Krasnojarsk, 42–44. [In Russian]
- Dmitriev, G.V. (1959) Vrednye nasekomye i kleshchi parkovykh nasazhdenij Ukrainy [Insect pests and mites of the park stands in Ukraine]. *Zoologicheskij zhurnal*, 38 (6), 846–859. [In Russian, with English summary]
- Eggers, H. (1914a) Bemerkungen zu Reitters Borkenkäferbestimmungstabellen, 2 Aufl. *Entomologische Blätter*, 7/8, 185–186. [In German]
- Eggers, H. (1914b) Bemerkungen zu Reitters Borkenkäferbestimmungstabellen, 2 Aufl. *Entomologische Blätter*, 9/12, 296–299. [In German]
- Eggers, H. (1942) Zur palaearktischen Borkenkäferfauna. (Coleoptera: Ipidae). VIII. Borkenkäfer aus dem asiatischen Russland. *Arbeiten über Morphologische und Taxonomische Entomologie*, 9, 27–36. [In German].
- Faccoli, M. (2006) Morphological separation of *Tomicus piniperda* and *T. destruens* (Coleoptera: Curculionidae: Scolytinae): new and old characters. *European Journal of Entomology*, 103, 433–442. <http://dx.doi.org/10.14411/eje.2006.057>
- Fedorov, S.M. (1930) Vrednye nasekomye lesov Kryma [Insects injurious of the forests in Crimea]. *Russkoe Entomologicheskoe Obozrenie*, 24(3–4), 225–227. [In Russian]
- Freude, H., Harde, K.W., Lohse, G.A. (1981) *Die Käfer Mitteleuropas, Bd 10: Rhynchophora I (Bruchidae – Curculionidae I)*, 310 pp.
- Gamayunova, S.G., Novak, L.V. & Chernyavska, O.M. (2005) Do vyvchennja vydovogo skladu ta osoblyvostej rozvytku stovburovykh shkidnykiv duba v nasazhennjah Kharkivs'koji oblasti [On the study of species composition and peculiarities of development for oak stem borers in the stands of Kharkiv region]. *Lisivnytstvo i agrolisomeliorsija*, 108, 264–268. [In Ukrainian, with Russian and English summary]
- Gamayunova, S.G., Novak, L.V. & Chernyavskaya, O.N. (2006) Osobennosti razvitija *Scolytus intricatus* Ratz. (Coleoptera: Scolytidae) v dubravakh Khar'kovskoj oblasti [Features of the development of *Scolytus intricatus* Ratz. (Coleoptera: Scolytidae) in the oak forests of the Kharkiv region]. *Sovremennye problemy populjatsionnoj ekologiji: Materialy IX Mezhdunarodnoj nauchno-prakticheskoi ekologicheskoi konferentsii*. Belgorod, 2–6 oktjabrja 2006 g., Belgorod, 43–44. [In Russian]
- Geiser, E. (2001) *Monographs on Coleoptera. Die Käfer des Landes Salzburg: Faunistische Bestandserfassung und tiergeographische Interpretation*. Wien, 706 pp. [In German]
- Giritz, A.A. (1959) Ochagi koroedov i ikh parazity v vetrovalakh Sovetskikh Karpat v 1958 godu [Foci of bark beetles and their parasites in windfalls of the East Carpathians in 1958]. *Nauchnye zapiski*, 40, 249–253. [In Russian]
- Giritz, A.A. (1975) *Osnovy biologicheskoi bor'by s koroedom-tipografom (Ips typographus L., Coleoptera, Ipidae)* [The basics of biological control on *Ips typographus* L. (Coleoptera, Ipidae)]. Vyshcha shkola, Lviv, 153 pp. [In Russian]
- Golovjanko, Z.S. (1926) K metodike ucheta zarazhennosti sosen koroedami [Towards the computation methods of infestation of the pine by bark beetles]. *Trudy po lesnomu opytному delu Ukrainy*, 4, 3–80. [In Russian]
- Greze, M. (1928) Jatruny brakonidy, vyvedeni z korojidiv na Ukraini [Braconids bred from the bark beetles in Ukraine]. *Trudy z lisovoji doslidnoji spravy na Ukraini*, 9, 137–139. [In Ukrainian]
- Gurando, E.V. (1973) Nekotorye voprosy ekologii sosnovogo luboeda malogo – *Blastophagus minor* Hartig (Coleoptera, Ipidae) – v uslovijakh Kievskogo poles'ja [Some ecological features of the *Blastophagus minor* Hartig (Coleoptera, Ipidae) in Kyiv Polissya]. *Vestnik zoologii*, 7 (2), 89–91. [In Russian]
- Gurando, E.V. (1979) Nematody malogo sosnovogo luboeda (*Blastophagus minor* Hartig) [Nematodes of *Blastophagus minor* Hartig]. *Vestnik zoologii*, 13 (3), 28–33. [In Russian, with English summary]
- Gurando, E.V., Isaeva, N.M. & Pavlenko, O.M. (1982) O zarazhennosti nematodami koroedov sosny v uslovijakh Kanevskogo zapovednika [On the infestation of pine tree bark beetles by nematodes in the Kanev Reserve]. *Patologija chlenistonogikh*

- i biologicheskie sredstva bor'by s vrednymi organizmami*: Tezisy dokladov Pervoj Respublikanskoj nauchnoj konferentsii. Kanev, 7–10 sentjabrja 1982 g., Kyiv, p. 63. [In Russian]
- Holzschuh, C. (1994) Zur Unterscheidung von *Xyleborinus saxesenii* (Ratzeburg) und *X. alni* (Niisima) (Coleoptera, Scolytidae). *Entomologica Basiliensia*, 17, 311–318. [In German, with English summary]
- Illinsky, A. (1928) Zakonomirnosti u rozmnozheni malogo osnovogo lubojida (*Blastophagus minor* Hartig.) i teoretychne obgruntuvannja zakhodiv borot'by z nym u lisakh [Regularities of breeding of *Blastophagus minor* Hartig. and theoretical justification of methods of its control in the woods]. *Trudy z lisovoji doslidnoji spravy na Ukrajinu*, 9, 1–57. [In Ukrainian, with German summary]
- Izhevsky, S.S., Nikitsky, N.B., Volkov, O.G. & Dolgin, M.M. (2005) Semejstvo Koroedy – Scolytidae [Family Bark beetles – Scolytidae]. In: *Illjustrirovannyj spravocchnik zhukov-ksilofagov – vreditelej lesa i lesomaterialov Rossijskoj Federatsii*. Grif i K, Tula, pp. 74–197. [In Russian, with English summary]
- Jordal, B.H. & Knížek, M. (2007) Resurrection of *Crypturgus subcribrosus* Eggers 1933 stat. n., and its close phylogenetic relationship to Nearctic *Crypturgus* (Coleoptera, Scolytinae). *Zootaxa*, 1606, 41–50.
- Jordal, B.H., Sequeira, A.S. & Cognato, A.I. (2011) The age and phylogeny of wood boring weevils and the origin of subsociality. *Molecular Phylogenetics and Evolution*, 59, 708–724.
<http://dx.doi.org/10.1016/j.ympev.2011.03.016>
- Khaustov, A.A. (1998) Kleshchi roda *Pyemotes* (Acariformes, Piemotidae), svjazannye s koroedami (Coleoptera, Scolytidae) Kryma [Mites of the genus *Pyemotes* (Acariformes, Pyemotidae) associated with bark beetles (Coleoptera, Scolytidae) in the Crimea]. *Zoologicheskij zhurnal*, 77 (12), 1419–1424. [In Russian, with English summary]
- Khaustov, A.A. (2001) *Kleshchi (Acarina), svjazannye s koroedami (Coleoptera: Scolytidae) juzhnogo berega Kryma* [Mites (Acarina), associated with bark beetles (Coleoptera: Scolytidae) in the southern coast of Crimea]. Avtoreferat dissertatsii na soiskanie uchenoj stepeni kandidata biologicheskikh nauk, Kyiv. Kyiv, 20 pp. [In Ukrainian, with Russian, Ukrainian and English summary]
- Khaustov, A.A. & Nikulina, T.V. (2008) Pervaja nakhodka *Tomicus destruens* (Coleoptera, Scolytidae) v Ukraine [The first record of *Tomicus destruens* (Coleoptera, Scolytidae) in Ukraine]. *Vestnik zoologii*, 42 (1), 84. [In Russian]
- Khvatova, L.P. (1964) Vrediteli jasenja v Velikom Anadole i mery bor'by s nimi [Pests of ash tree in the Velikiy Anadol and methods of their control]. *Lesnoe khozjajstvo*, 1, 52–53. [In Russian]
- Kirkendall, L.R., Faccoli, M. & Ye, H. (2008) Description of the Yunnan shoot borer, *Tomicus yunnanensis* Kirkendall & Faccoli sp. n. (Curculionidae, Scolytinae), an unusually aggressive pine shoot beetle from southern China, with a key to the species of *Tomicus*. *Zootaxa* 1819, 25–39.
- Kirkendall, L.R. & Faccoli, M. (2010) Bark beetles and pinhole borers (Curculionidae, Scolytinae, Platypodinae) alien to Europe. *Zookeys*, 56, 227–251.
<http://dx.doi.org/10.3897/zookeys.56.529>
- Klimesch, J. (1915) Beiträge zur Kenntnis der Gattung *Trypophloeus* Fairm. (*Glyptoderes* Eichh.). *Entomologische Blätter*, 1/3, 6–13. [In German]
- Knížek, M. (2011a) Platypodinae. In: Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera. Vol. 7*. Apollo Books, Stenstrup, pp. 1–201.
- Knížek, M. (2011b) Scolytinae. In: Löbl, I. & Smetana, A. (Eds.), *Catalogue of Palaearctic Coleoptera. Vol. 7*. Apollo Books, Stenstrup, pp. 204–251.
<http://dx.doi.org/10.1603/008.104.0301>
- Kohlmayr, B., Reigler, M., Wegensteiner, R. & Stauffer, Ch. (2002) Morphological and genetic identification of the three pine pests of the genus *Tomicus* (Coleoptera, Scolytidae) in Europe. *Agricultural and Forest Entomology*, 4, 151–157.
<http://dx.doi.org/10.1046/j.1461-9563.2002.00139.x>
- Kolomoets, T.P. (1995) *Vrediteli zeljonykh nasazhdenij promyshlennogo Donbassa* [Pests of green space of industrial Donbass]. Naukova dumka, Kyiv, 215 pp. [In Russian]
- Kostyba, M.V., Kramarets, V.O., Grynyk, G.G., Bunij, V.Ja. & Novorynsky, P.S. (2008) Vsykhannja jalynovykh lisostaniv na Bukovyni [Decline of spruce stands in Bukovyna region]. *Lisivnytstvo i agrolisomelioratsija*, 114, 152–158. [In Ukrainian, with Russian and English summary]
- Kozak, V.T. (1980) Nekotorye zakonomernosti razvitija bol'shogo osnovogo luboeda [Some features of the development of *Blastophagus minor* Hart.]. *Issledovanija po entomologii i akarologii na Ukraine: Tezisy dokladov II S'ezda UEO*. Uzhgorod, 1–3 oktjabrja 1980 g., Kyiv, pp. 161–162. [In Russian]
- Kozak, V.T. (1983) Sroki zashchity zagotovlennoj drevesiny khvojnykh porod ot koroedov v uslovijakh Volynskogo Poles'ja [Terms of protection timber from coniferous bark beetles in Volyn Polissya]. *Lesovodstvo i agrolisomelioratsija*, 66, 58–61. [In Russian]
- Korotnev, N.N. (1926) *Koroedy, ikh lesovodcheskoe znachenie i mery bor'by* [Bark beetles, their forestry importance and control measures]. Novaja derevnja, Moskva, 188 pp. [In Russian]
- Kostenko, N.K. (1929) Fauna koroedov Svjatogorskogo lesnichestva Izjumskogo okruga [The bark beetle fauna of Svjatogorsk forestry of Izyum district]. *Zashchita rastenij*, 6, 206–210. [In Russian]
- Kravchenko, O.M. (2010) Materialy do fauny nadrodny kurkulionoidnykh (Coleoptera, Curculionidae) Shats'kogo natsional'nogo pryrodnogo parku [Materials to fauna Superfamily Curculionoidea (Coleoptera, Curculionoidea) Shats'k National Nature Park]. *Naukovyj visnyk Volyns'kogo natsionalnogo universytetu imeni Lesi Ukrajinky. Biologichni nauky*,

- 18, 58–63. [In Ukrainian, with English summary]
- Krivolutskaya, G.O. (1965) Sem. Ipidae – Koroedy [Fam. Ipidae – Bark beetles]. In: Bej-Bienko, G.Ya. (Ed.), *Opredelitel' nasekomykh evropejskoj chasti SSSR. Vol. 2: Zhestkokrylye i Veerokrylye*. Nauka, Moskva, Leningrad, pp. 622–639.
- Krivolutskaya, G.O. (1996) Sem. Scolytidae – Koroedy [Fam. Scolytidae – Bark beetles]. In: Lehr, P.A. (Ed.), *Opredelitel' nasekomykh Dal'nego Vostoka Rossii v shesti tomakh. Vol. 3: Zhestkokrylye, ili zhuki, Ch. 3*. Dal'nauka, Vladivostok, pp. 312–373. [In Russian]
- Król, Ż. (1877) Fauna koleopterologiczna Janowa pode Lwowem. *Sprawozdania Komisji Fizjograficznej*, 10, 33–63. [In Polish]
- Kryshchal', O.P. (1959) *Komakhy-shkidnyky sil's'kogospodars'kykh roslyn v umovakh Lisostepu ta Polissja Ukrainy* [Insect pests of agricultural crops in forest steppe zone and Polissya of Ukraine]. Vydavnytstvo Kyivs'kogo universytetu, Kyiv, 360 pp. [In Ukrainian]
- Kubisz, D., Mazur, M. & Pawłowski, J. (1998) Chrząszcze Miodoborów (Zachodnia Ukraina). Czesc II. Aktualny stan poznania (Insecta: Coleoptera). *Studia Ośrodka Dokumentacji Fizjograficznej*, 25, 217–293. [In Polish, with English summary]
- Kukina, O.M. (2009) Vyvchennja zdatnosti *Scolytus intricatus* Ratz. zaseljaty substrat riznoji jakosti [The investigation of the ability of *Scolytus intricatus* Ratz. to colonize the substrate of different quality]. *Zoologichna nauka u suchasnomu suspil'stvi: Vseukrajins'ka naukova konferentsija, prysvjachena 175-richchju zasnuvannja kafedry zoologiji*. Kyiv, pp. 241–244. [In Ukrainian]
- Kurentsov, A.I. (1941) *Koroedy Dalnego Vostoka SSSR* [Bark beetles of the Far East, USSR]. Moskva, Leningrad: Izdatelstvo Akademii Nauk SSSR, 234 pp. [In Russian, with English Summary].
- Kucheryavenko, O.V. (2003) Poshkodzhennja pagoniv sosny malym sosnovym lubojdom *Blastophagus minor* Hart. v oseredku korenevoji gubky [Damage of *Pinus sylvestris* L. shoot by *Blastophagus minor* Hart. in the root rot focus]. *Lisivnytstvo i agrolisomelioratsija*, 104, 178–181. [In Ukrainian, with Russian and English summary]
- Kuznetsov, N.N. & Vasil'eva, E.A. (1987) Fauna koroedov arboretuma Nikitskogo botanicheskogo sada i mery bor'by s nimi [Bark beetle fauna of Arboretum of Nikita Botanical garden and methods of control]. *Bulleten' Gosudarstvennogo Nikitskogo botanicheskogo sada*, 64, 67–71. [In Russian]
- Lyal, C.H.C. (1995) The ventral structures of the weevil head (Coleoptera: Curculionidea). *Memoirs of the Entomological Society of Washington*, 14, 35–51.
- Lazorko, V. (1938) Prychynky do favny khrushchiv ukrajins'kykh zemel' [Notes on the fauna of beetles of the Ukrainian lands]. *Zbirnyk fiziografichnoji komisiji*, 7, 33–44. [In Ukrainian]
- Lazorko, V. (1963) *Materijaly do sistematyky i favny zhukiv Ukrainy* [Materials for the systematics and fauna of beetles of Ukraine]. Vancouver, B. K., Canada, pp. 85. [In Ukrainian]
- Lebedev, A.G. (1935) Materialy do vyvchannja biotsenozu lystjanogo lisu (ch. II). [Materials for the study of biocenosis of the deciduous forest (ch. II)]. *Trudy instytutu zoologiji ta biologiji: Zbirnyk prats' viddilu ekologiji nazemnykh tvaryn*, 2, 19–55. [1934] [In Ukrainian, with Russian and English summary]
- Lindeman, K.E. (1875) Monografija koroedov Rossii (Fam. Scolytidae Lacord) Ch.1 [Monograph on bark beetles of Russia (Fam. Scolytidae Lacord) Ch.1]. *Izvestija imperatorskogo obshchestva ljubitelej estestvoznanija, antropologii i etnografii*, 18, 3–116. [In Russian]
- Lindemann, K. (1876) Monografie der Borkenkäfer Russland. Die Cryphaloiden Tomiciden. *Bulletin de la Société des Naturalistes de Moscou*, 51 (3), 148–162. [In German]
- Lindemann, K. (1876) Monografie der Borkenkäfer Russland. Die Cryphaloiden Tomiciden. *Bulletin de la Société des Naturalistes de Moscou*, 51 (4), 320–380. [In German]
- Lindemann, K. (1877) Monografie der Borkenkäfer Russland. Die Cryphaloiden Tomiciden. *Bulletin de la Société des Naturalistes de Moscou*, 52 (2), 159–187. [In German]
- Lindemann, K. (1879) Monografie der Borkenkäfer Russland. Die Gattung Dendroctonus. *Bulletin de la Société des Naturalistes de Moscou*, 54 (3), 53–87. [In German]
- Łomnicki, M. (1866) *Przyczynek do fauny chrząszczów galicyjskich*. Kraków, 9 pp. [In Polish]
- Łomnicki, M. (1868) Wycieczka na Czarnogórze. *Sprawozdanie Komisji Fizyograficznej*, 2, 132–152. [In Polish]
- Łomnicki, M. (1870) Zapiski z wycieczki podolskiej odbytej w roku 1869 pomiędzy Seretem, Zbruczem a Dniestrem. *Sprawozdanie Komisji Fizyograficznej*, 4, 41–85. [In Polish]
- Łomnicki, M. (1880) Chrząszcze zebrane w górach Sołotwińskich. *Sprawozdanie Komisji Fizyograficznej*, 14, 3–12. [In Polish]
- Łomnicki, M. (1891) Wykaz chrząszczów nowych dla fauny Galicyi. *Sprawozdanie Komisji Fizyograficznej*, 26, 16–25. [In Polish]
- Łomnicki, M. (1904) Chrząszcze nowe dla fauny galicyjskiej. *Kosmos czasopismo Polskiego tow. przyrodników imienia Kopernika*, 29, 367–373. [In Polish]
- Maksimova, Yu.P. (1967) K poznaniu zhestkokrylykh (Coleoptera), vredjashchikh drevesno-kustarnikovym nasazhdenijam goroda Khar'kova [To the knowledge of Coleoptera injuring trees in the city of Kharkiv]. *Entomologicheskoe obozrenie*, 46 (4), 799–804. [In Russian, with English summary]
- Mandelstam, M.Ju. (1999) Notes on the current status of *Ips amitinus* Eichh. (Coleoptera, Scolytidae) in North West Russia. *Entomologica Fennica*, 10 (1), 29–34.

- Mandel'shtam, M.Yu. (2008) Fauna zhukov koroedov (Coleoptera, Scolytidae) Kaliningradskoj oblasti: istorija izuchenija i sovremennoe sostojanie znaniy [Fauna of bark beetles (Coleoptera, Scolytidae) in the Kaliningrad region: the history of studying and the modern state of knowledge]. *Izvestija Sankt-Peterburgskoj Lesotekhnicheskoy akademii*, 182, 200–209. [In Russian, with English summary]
- Mandel'shtam, M.Yu., Nikitsky, N.B. & Bibin, A.R. (2005a) Zhuki-koroedy (Coleoptera: Scolytidae) iz podsemejstv Hylesininae i Scolytinae (krome trib Xyleborini, Cryphalini i Corthylini) Zapadnogo Kavkaza [The bark beetles (Coleoptera, Scolytidae) from the subfamilies Hylesininae and Scolytinae (except tribus Xyleborini, Cryphalini, Corthylini) of the Western Caucasus]. *Bulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij*, 110 (2), 20–30. [In Russian, with English summary]
- Mandel'shtam, M.Yu., Nikitsky, N.B. & Bibin, A.R. (2005b) Zhuki-koroedy trib Xyleborini, Cryphalini i Corthylini (Coleoptera: Scolytidae, Scolytinae) Zapadnogo Kavkaza (s zamehanijami o nekotorykh vidakh iz drugikh trib semejstva) [The bark beetles from the tribus Xyleborini, Cryphalini and Corthylini (Coleoptera: Scolytidae, Scolytinae) of Western Caucasus (with notes on some species from other tribus of the family)]. *Bulleten' Moskovskogo obshchestva ispytatelej prirody. Otdel biologicheskij*, 110 (3), 21–28. [In Russian, with English summary]
- Mandel'shtam, M.Yu. & Petrov, A.V. (2009) Koroedy (Coleoptera: Scolytidae) ostrova Kunashir: 40 let spustja posle pervykh sistemicheskikh issledovanij dendrofil'noj entomofauny Kuril'skikh ostrovov [Scolytidae (Coleoptera) of the Kunashir Island: 40 years after first systematic investigation of the Kuril Isles dendrophylic entomofauna]. *Izvestija Sankt-Peterburgskoj Lesotekhnicheskoy akademii*, 187, 182–190. [In Russian, with English summary]
- Mandel'shtam, M.Yu., Petrov, A.V. & Korotyaev, B.A. (2011) K poznaniyu travjanykh koroedov roda *Thammurgus* Eichhoff (Coleoptera, Scolytidae) [To the knowledge of the herbivorous Scolytid genus *Thammurgus* Eichhoff (Coleoptera, Scolytidae)]. *Entomologicheskoe obozrenie*, 90 (3), 595–621. [In Russian, with English summary] (English translation available: Mandel'shtam, M.Yu., Petrov, A.V. & Korotyaev, B.A. (2012) To the knowledge of the herbivorous Scolytid genus *Thammurgus* Eichhoff (Coleoptera, Scolytidae). *Entomological Review*, 92 (3), 329–349.) <http://dx.doi.org/10.1134/s0013873812030098>
- Marvaldi, A.E. (1997) Higher level phylogeny of Curculionidae (Coleoptera: Curculionoidea) based mainly on larval characters, with special reference to broad nosed weevils. *Cladistics*, 13, 285–312. <http://dx.doi.org/10.1111/j.1096-0031.1997.tb00321.x>
- Marvaldi, A.E., Sequeira, A.S., O'Brien, C.W. & Brian, D.F. (2002) Molecular and morphological phylogenetics of weevils (Coleoptera, Curculionoidea); do niche shifts accompany diversification? *Systematic Biology*, 51, 761–85.
- Mateleshko, O.Yu., Rizun, V.B., Chumak, V.O., Timochko, V.B., Martynov, V.V., Petrenko, A.A., Odnosum, V.K. & Nazarenko, V.Yu. (2009) Tverdokryli (Insecta, Coleoptera) Karpats'kogo natsional'nogo pryodnogo parku [Beetles (Insecta, Coleoptera) of the Carpathian National Nature Park]. *Zberezhenja ta vidtvorenja bioriznomanittja pryrodno-zapovidnykh terytorij: Materialy mizhnarodnoji nauko- i praktichnoji konferentsiji, prysvjachenoji 10-rychchju Rivnens'kogo pryrodnogo zapovidnyka. Sarny, 11–13 chervnja 2009 r., Rivne*, pp. 479–491. [In Ukrainian]
- Medvedev, S.I. (1950) K voprosu o proiskhozhdenii entomofauny parkov Askanii–Nova [To the origin of the insect fauna of Askania–Nova parks]. *Trudy nauchno-issledovatel'skogo instituta biologii Kharkovskogo gosudarstvennogo universiteta im. A.M. Gor'kogo*, pp. 14–15, 67–88. [In Russian]
- Medvedev, S.I., Bozhko, M.P. & Shapiro, D.S. (1951) O proiskhozhdenii i formirovanii entomofauny polezashchitnykh polos v stepnoj zone USSR [On the origin and development of the insect fauna of windbreaks in the steppe zone of the Ukrainian SSR]. *Zoologicheskij zhurnal*, 30 (4), 309–318. [In Russian]
- Medvedev, S.I., Bozhko, M.P. & Shapiro, D.S. (1952) Istochniki formirovanija fauny vrednykh nasekomykh polezashchitnykh lesnykh polos [Sources of the development of fauna of insect pests of shelter belts]. *Zashchita lesonasazhdenij ot vreditelej i boleznej: Trudy respublikanskoj konferentsii po voprosam razvitija stepnogo lesorazvedenija v Ukrainskoj SSR, Kyiv*, pp. 39–46. [In Russian]
- Melnikova, N.I. (1965) Bol'shoy elovyj luboed (*Dendroctonus micans* Kug.) v Karpatakh [*Dendroctonus micans* Kug. in the Carpathians]. *Zoologicheskij zhurnal*, 44 (12), 1866–1869. [In Russian, with English summary]
- Meshkova, V.L. & Kukina, O.M. (2007) Biologija ta shkodochynnist' dubovogo zabolonnyka *Scolytus intricatus* (Ratzeburg) [Biology and hazard of European oak bark beetle *Scolytus intricatus* (Ratzeburg)]. *Lisivnytstvo i agrolisomeliorsacija*, 111, 272–280. [In Ukrainian, with Russian and English summary]
- Meshkova, V.L. & Kukina, O.M. (2009) Shchil'nist' matochnykh i lychynkovykh hodiv dubovogo zabolonnyka (*Scolytus intricatus* Ratzeburg, 1837 (Coleoptera: Scolytidae) u lisosichnykh zalyshkakh na zrubi [The density of maternal and larval mines of *Scolytus intricatus* Ratzeburg, 1837 (Coleoptera: Scolytidae) in logging residues at cuttings]. *Visnyk Kharkivs'kogo natsional'nogo agrarnogo universitetu. Serija Entomologija ta fitopatologija*, 8, 99–104. [In Ukrainian]
- Meshkova, V.L. & Kukina, O.N. (2010) Populjatsionnye pokazateli dubovogo zabolonnyka *Scolytus intricatus* (Ratzeburg, 1837) (Coleoptera: Scolytidae) pri zaselenii porubochnykh ostatkov [Population characteristics of oak bark beetle *Scolytus intricatus* (Ratzeburg, 1837) (Coleoptera: Scolytidae) during colonization of logging remains]. *Izvestija Sankt-Peterburgskoj lesotekhnicheskoy akademii*, 192, 167–174. [In Russian, with English summary]
- Meshkova, V.L. & Kukina, O.N. (2011) Vredonosnost' ksilobiontov na dubovykh vyrubkakh v Levoberezhnoj Ukraine [Injuriousness of xylobionts in the oak clear cuts in the Left Bank Ukraine]. *Izvestija Sankt-Peterburgskoj lesotekhnicheskoy akademii*, 196, 236–246. [In Russian, with English summary]
- Meshkova, V.L., Sokolova, I.M. & Stovbunenka, D.V. (2006) Metodyka obliku korenezhyliv i velykogo sosnovogo

- dovgonosyka [Method of root borers and large pine weevil registration]. *Lisivnytstvo i agrolisomelioratsija*, 110, 1–284. [In Ukrainian, with Russian and English summary]
- Mezintsev, A.I. (1965) Glavnejshie vrediteli stvolov i vetvej duba v ochagakh ego usykhaniya v vostochnoj chasti lesostepi USSR [Main pests of trunks and branches of oak in the centers of its drying in the eastern part of the forest steppe zone of USSR]. *Issledovaniya po entomologii i akarologii na Ukraine: Tezisy dokladov II S'ezda UEO. Uzhgorod 1–3 oktjabrja 1980 g.*, Kyiv, pp. 165–166. [In Russian]
- Michalski, J. (1973) *Revision of the palaeartic species of the genus Scolytus Geoffroy (Coleoptera, Scolytidae)*. Warszawa, Krakow, 214 pp. [In English, Polish and Russian, with English, Polish and Russian summary]
- Mikhalski, Ja. (1964) Novye palearkticheskie vidy koroedov roda *Scolytus* Geoffr. (Coleoptera, Scolytidae) [New Palaeartic species of the bark beetles of the genus *Scolytus* Geoffr. (Coleoptera, Scolytidae)]. *Entomologicheskoe obozrenie*, 43 (3), 662–668. [In Russian]
- Mikhalski, Ja. (1968) Tipy palearkticheskikh vidov roda *Scolytus* Geoffr. (Coleoptera, Scolytidae) kolleksii Zoologicheskogo instituta AN SSSR v Leningrade [Types of the Palaeartic species of the genus *Scolytus* Geoffr. (Coleoptera, Scolytidae) from the collection of the Zoological Institute, Academy of Sciences of the USSR (Leningrad)]. *Entomologicheskoe obozrenie*, 47 (1), 184–199. [In Russian, with English summary]
- Mikhalski, Ja. (1969) Tipy koroedov (Coleoptera, Scolytidae), khranjashchiesja v kolleksii zoologicheskogo instituta AN SSSR v Leningrade [Types of bark beetles (Coleoptera, Scolytidae) preserved in the collection Zoological Institute of the Academy of Sciences, USSR (Leningrad)]. *Entomologicheskoe obozrenie*, 48 (4), 888–898. [In Russian, with English summary]
- Miller, L. (1868) Eine entomologische Reise in die ostgalizischen Karpathen. *Verhandlungen zoologisch-botanischen Gesellschaft*, 18, 3–34. [In German]
- Nazarenko, V.Yu. (2008) Dolgonosiki-ksilobionty (Coleoptera: Curculionoidea) rekreatsionnykh zon g. Kieva [Weevils xylobionts (Coleoptera: Curculionoidea) of recreational areas of Kyiv]. *Zhivye ob'ekty v uslovijakh antropogennogo pressa: Materialy X Mezhdunarodnoj nauchno-prakticheskoy ekologicheskoy konferentsii*. Belgorod, 15–18 sentjabrja 2008 g., Belgorod, pp. 143–144. [In Russian]
- Nazarenko, V.Yu. (2009a) Dovgonosykopodibni zhuky (Coleoptera, Curculionoidea) Rivnens'kogo pryrodnogo zapovidnyka ta pryleglykh terytorij [Weevils beetles (Coleoptera, Curculionoidea) of Rivne Nature Reserve and adjacent areas]. *Zberezhennja ta vidtvorennja bioriznomaniitja pryrodno-zapovidnykh terytorij: Materialy mizhnarodnoji naukovo-praktychnoji konferentsiji, prysvjachenoji 10-richchju Rivnens'kogo pryrodnogo zapovidnyka*. Sarny, 11–13 chervnja 2009 r., Rivne, pp. 497–505. [In Ukrainian]
- Nazarenko, V.Yu. (2009b) Zhuky-dovgonosyky viddilennja Ukrajins'kogo stepovogo pryrodnogo zapovidnyka “Mykhajlivs'ka tsilyna” ta pryleglykh terytorij [Weevils of the branch of the Ukrainian Steppe Natural Reserve “Mykhajlivska tsilyna” and adjacent territories]. *Vestnik zoologii. Otdel'nyj vypusk*, 22, 36–50. [In Ukrainian, with Russian and English summary]
- Nazarenko, S.V. (2008) Materialy k faune i bioekologii zhukov-koroedov osnovnykh nasazhdenij zony Nizhnedneprovskikh peskov [Fauna and bioecology of bark beetles in artificial pine stands of the Low Dnieper sands region]. *Lisivnytstvo i agrolisomelioratsija*, 112, 270–275. [In Russian, with Ukrainian and English summary]
- Nikitsky, N.B., Semenov, V.B. & Dolgin, M.M. (1998) Zhestkokrylye-ksilobionty, missetobionty i plastinchatousye Prioksko-Terrasnogo biosfernogo zapovednika (s obzorom fauny etikh grupp Moskovskoj oblasti). Dopolnenie 1 (s zamechanijami po nomenklature i sistematike nekotorykh zhukov Melandryidae mirovoj fauny). [The beetles of the Prioksko-Terrasny Biosphere Reserve – xylobiontes, mycetobiontes, and Scarabaeidae (with the review of the Moscow Region fauna of these groups). Supplement 1 (with remarks on nomenclature and systematics of some Melandryidae of the world fauna). In: Sviridov A.V. (Ed.), *Sbornik trudov Zoologicheskogo muzeja MGU*, 36, Izdatel'stvo Moskovskogo universiteta, pp. 1–55. [In Russian, with English summary]
- Nikitsky, N.B. (2009) Novye i interesnye nakhodki ksilofil'nykh i nekotorykh drugikh zhestkokrylykh nasekomykh (Coleoptera) v Moskovskoj oblasti i Moskve [New and interesting finds of xylophilous and some other beetles (Coleoptera) in the Moscow region and in Moscow]. *Bulleten' Moskovskogo obshchestva ispytatelej prirody. Otdelenie Biologicheskoe*, 114 (5), 50–58. [In Russian, with English summary]
- Nikulina, T.V. (2005) Faunisticheskij obzor zhukov-koroedov (Coleoptera, Scolytidae) zapovednika “Medobory” [Faunistic review on bark beetles (Coleoptera, Scolytidae) of the reserve “Medobory”]. *Fal'šfejnivs'ki chytannja: Zbirnyk naukovykh prats'*, 2, 57–58. [In Russian]
- Nikulina, T.V. (2007) Novye i interesnye nakhodki zhukov-koroedov (Coleoptera, Scolytidae) na territorii Ukrainy [New and interesting finds of the bark beetles (Coleoptera, Scolytidae) from the territory of Ukraine]. *Problemy i perspektivy obshchej entomologii: Tezisy dokladov XIII s'ezda Russkogo entomologicheskogo obshchestva*. Krasnodar, 9–15 sentjabrja 2007 g., Krasnodar, pp. 257–258. [In Russian]
- Nikulina, T.V. (2008a) Izmenenie arealov zhukov-koroedov (Coleoptera: Scolytidae) pod vlijaniem khozjajstvennoj dejatel'nosti cheloveka [Anthropogenic pressure induced variability in bark beetles (Coleoptera: Scolytidae)]. *Zhivye ob'ekty v uslovijakh antropogennogo pressa: Materialy X Mezhdunarodnoj nauchno-prakticheskoy ekologicheskoy konferentsii*, Belgorod, 15–18 sentjabrja 2008 g., Belgorod, pp. 150–151. [In Russian]
- Nikulina, T.V. (2008b) Zoogeograficheskaja i troficheskaja kharakteristika zhukov-koroedov (Coleoptera: Scolytidae) Ukrainy [Zoogeographical and trophic characteristics of the bark beetles (Coleoptera: Scolytidae) of Ukraine]. *Izvestiya Khar'kovskogo entomologicheskogo obshchestva*, 15 (1–2), 72–76. [In Russian, with English summary]

- Nikulina, T.V. (2009a) Izmenenie arealov zhukov-koroedov (Coleoptera: Scolytidae) pod vlijaniem khozjajstvennoj dejatel'nosti cheloveka [Anthropogenic pressure induced variability in bark beetles (Coleoptera: Scolytidae)]. *Izvestiya Khar'kovskogo entomologicheskogo obshchestva*, 16 (1–2), 52–56. [In Russian, with English summary]
- Nikulina, T.V. (2009b) Zhuky-korojidy (Coleoptera: Scolytidae) Natsional'nogo pryrodnogo parku "Gutsul'shchina" [Bark beetles (Coleoptera: Scolytidae) of National Nature Reserve "Huzulschina"]. *Naukovi osnovy zberezhenja biotychnoi riznomanitnosii: Materialy IX naukovoi konferentsiji molodykh uchenykh*. Lviv, 1–2 zhovtnja 2009 r., Lviv, pp. 125–127. [In Ukrainian, with English summary]
- Nikulina, T.V. (2010a) Zhuki-koroedy (Coleoptera: Scolytidae) iskusstvennykh lesnykh nasazhdenij Jugo-Vostochnoj Ukrainy [Bark beetles (Coleoptera: Scolytidae) of the artificial forest plantations in the South Eastern Ukraine]. *Vidovye populjatsii i soobshchestva v antropogenno transformirovannykh landshaftakh: sostojanie i metody ego diagnostiki: Materialy XI Mezhdunarodnoj nauchno-prakticheskoi ekologicheskoi konferentsii*. Belgorod, 20–25 sentjabrja 2010 g., Belgorod, pp. 174–175. [In Russian]
- Nikulina, T.V. (2010b) Semejstvo Scolytidae – Koroedy [The family Scolytidae – Bark beetles]. In: *Landshafty, rastitel'nyj pokrov i zhivotnyj mir regional'nogo landshaftnogo parka "Meotida"*. Noulidzh, Donetsk, pp. 141–142. [In Russian]
- Nikulina, T.V. (2011a) K biologii koroedov (Coleoptera: Curculionidae: Scolytinae), razvivajushchiksja na il'movykh porodakh v uslovijakh Jugo-Vostochnoj Ukrainy [On the biology of bark beetles (Coleoptera: Curculionidae: Scolytinae) developing on elm rocks in the South Eastern Ukraine]. In: Jegorov, P.V. & Bespalova, S.V. (Eds.), *Materialy naukovoi konferentsiji profesors'ko-vykladats'kogo skladu, naukovykh spivrobitykiv i aspirantiv Donets'kogo natsional'nogo universytetu za pidsumkamy naukovykh doslidnoji roboty za period 2009–2010 rr.*, pp. 268–269. [In Russian]
- Nikulina, T.V. (2011b) Zhuki-koroedy (Coleoptera: Curculionidae: Scolytinae) Natsional'nogo prirodnogo parka "Svyatye gory" [Bark beetles (Coleoptera: Curculionidae: Scolytinae) of the National Natural Park "Svyatye Gory"]. *Fundamental'ni ta prykladni doslidzhennja v biologiji: Materialy II Mizhnarodnoi naukovoi konferentsiji studentiv, aspirantiv ta molodykh uchenykh*. Donets'k, 19–22 veresnja 2011 r., Noulidzh, Donets'k, pp. 58–59. [In Russian]
- Nikulina, T.V. (2012) Istorija izuchenja zhukov-koroedov (Coleoptera: Curculionidae: Scolytinae) Ukrainy [History of studying of bark beetles (Coleoptera: Curculionidae: Scolytinae) of Ukraine]. *Izvestiya Khar'kovskogo entomologicheskogo obshchestva*, 18 (2), 42–47. [In Russian, with English summary]
- Nikulina, T. (2012a) Osobennosti biologii *Phloeosinus aubei* (Perris, 1855), novogo invazivnogo vida koroedov na jugo-vostoke Ukrainy [Features of biology of *Phloeosinus aubei* (Perris, 1855), a new invasive species of bark beetle in the south east of Ukraine]. *Dynamika bioriznomanitija 2012: Zbirnyk naukovykh prats'*. LNU imeni Tarasa Shevchenka, Lugans'k, pp. 104–107. [In Russian]
- Nikulina, T.V. (2012b) Zhuki-koroedy (Coleoptera: Curculionidae: Scolytinae) iskusstvennykh nasazhdenij Priazov'ja [Bark beetles (Coleoptera: Curculionidae: Scolytinae) of the artificial plantings of Priazovye]. *Kam'jani Mogyly – mynule ta suchasnist'*: Materialy naukovo-praktychnoi konferentsiji, prysvjachenoji 85-ricnomu juvileju viddilennja Ukrajins'kogo stepovogo pryrodnogo zapovidnyka NAN Ukraini "Kam'jani Mogyly". *Noulidzh, Donetsk*, 2 (1), 250–255. [In Russian, with Russian, Ukrainian and English summary]
- Nikulina, T.V. (2012c) Zhuki-koroedy (Coleoptera: Curculionidae: Scolytinae) Donetskoi promyshlenno-gorodskoj aglomeratsii [Bark beetles (Coleoptera: Curculionidae: Scolytinae) of Donetsk industrial agglomeration]. *Strukturno-funktsional'nye izmenenija v populjatsijakh i soobshchestvakh na territorijakh s raznym urovnem antropogennoj nagruzki: Materialy XII Mezhdunarodnoj nauchno-prakticheskoi ekologicheskoi konferentsii*. Belgorod, 9–12 oktjabrja 2012 g., Belgorod, pp. 154–155. [In Russian]
- Nikulina, T.V. (2013a) Taksonomicheskaja struktura fauny zhukov-koroedov (Coleoptera, Curculionidae: Scolytinae) jugo-vostoka Ukrainy [Taxonomic structure of the fauna of bark beetles (Coleoptera, Curculionidae: Scolytinae) of the South Eastern Ukraine]. *VIII z'jzd GO "Ukrajins'kogo entomologichnogo tovarystva"*: Tezy dopovidej. Kyiv, 26–30 serpnja 2013 r., pp. 112–113. [In Russian]
- Nikulina, T.V. (2013b) Itogi izuchenija zhukov-koroedov (Coleoptera: Curculionidae: Scolytinae) Kryma [The results of investigations of bark beetles (Coleoptera: Curculionidae: Scolytinae) of the Crimea]. *Jubilejnye zoologicheskie chtenija: Materialy mezhdunarodnoj nauchnoj konferentsii, posvjashchenoj 100-letnemu jubileju so dnja rozhdenija S.L. Deljamure i 90-letiju so dnja rozhdenija A.S. Skrjabina*. Simferopol, 5 dekabrja 2013 g., Simferopol, pp. 33. [In Russian]
- Nikulina, T.V. (2014) Kljuchi k opredeleniju zhukov-koroedov (Coleoptera: Curculionidae: Scolytinae) Ukrainy [The keys for identification of bark beetles (Coleoptera: Curculionidae: Scolytinae) of Ukraine]. *Kavkazskij entomologicheskij bulletin*, 10 (1), 89–106. [In Russian, with English summary]
- Nikulina, T.V. & Filyk, R.A. (2010) Rodyna zhuky-korojidy – Scolytidae [The family bark beetles – Scolytidae]. In: *Chlenystonogi pryrodnogo zapovidnyka "Roztochcha"*. Lviv, pp. 252–264. [In Ukrainian]
- Nikulina, T.V. & Martynov, V.V. (2007) Annotirovannyj spisok vidov koroedov (Coleoptera: Scolytidae) Jugo-Vostochnoj Ukrainy [Annotated list of bark beetles (Coleoptera: Scolytidae) of the South Eastern Ukraine]. *Izvestiya Khar'kovskogo entomologicheskogo obshchestva*, 14 (1–2), 81–98. [In Russian, with English summary]
- Nikulina, T.V., Martynov, V.V. & Mandelshtam, M.Yu. (2007a) *Xyleborinus alni* – novyj vid zhukov-koroedov (Coleoptera, Scolytidae) v faune Ukrainy i evropejskoj chasti Rossii [The first record of the bark beetle *Xyleborinus alni* (Coleoptera, Scolytidae) in faunas of Ukraine and European Russia]. *Vestnik zoologii*, 41 (6), 542. [In Russian]
- Nikulina, T.V., Martynov, V.V. & Mandelshtam, M.Yu. (2007b) *Anisandrus maiche* – novyj vid zhukov-koroedov (Coleoptera, Scolytidae) v faune Evropy [The first record of the bark beetle *Anisandrus maiche* (Coleoptera, Scolytidae) in the

- European fauna]. *Vestnik zoologii*, 41 (6), 542. [In Russian]
- Nikulina, T.V., Mandelshtam, M.Yu. & Martynov, V.V. (2010) Materialy k faune zhukov-koroedov (Coleoptera, Scolytidae) Ukrainy [Materials on the fauna of bark beetles (Coleoptera, Scolytidae) of Ukraine]. *Suchasni problemy entomologiji: Tezy dopovidnoji entomologichnoji naukoivoji konferentsiji prisyvjachenoji 60-j richnytsi stvorennja Ukrajins'kogo entomologichnogo tovarystva. Uman'*, 12–15 zhovtnja 2010 r., Kolobig, Kyiv, 68–69. [In Russian]
- Nikulina, T.V., Rizun, V.B., Chumak, V.A. & Mandelshtam, M.Yu. (2012) Pervaja nakhodka zhuka-koroeda *Crypturgus subcribrosus* (Coleoptera, Curculionidae, Scolytinae) v faune Ukrainy [The first finding of bark beetle *Crypturgus subcribrosus* (Coleoptera, Curculionidae, Scolytinae) in the fauna of Ukraine]. *Vestnik zoologii*, 46(5), 414. [In Russian]
- Novak, L.V., Gamayunova, S.G. (2008) Biologicheskie osobennosti massovykh vidov vjazovykh koroedov (Coleoptera, Scolytidae) v dubravakh Khar'kovskoj oblasti [Biological peculiarities of dominant species of elm bark beetles (Coleoptera, Scolytidae) in Kharkiv region]. *Lisivnytstvo i agrolisomelioratsija*, 114, 187–193. [In Russian, with Ukrainian and English summary]
- Novak, L.V., Meshkova, V.L. & Gamayunova, S.G. (2008) Biologichni osoblyvosti strokatogo jasenovogo lubojida *Hylesinus varius* (F.) (*H. fraxini* Panz.) u Khar'kivs'kij oblasti [Biological peculiarities of common ash bark beetle *Hylesinus varius* (F.) (*H. fraxini* Panz.) in Kharkiv region]. *Lisivnytstvo i agrolisomelioratsija*, 112, 255–260. [In Ukrainian, with Russian and English summary]
- Parkhomenko, V.I. (1928) Sostojanie sosnovykh nasazhdenij Dymerskogo (Kievskoj gubernii) i Janpol'skogo (Chernigovskoj gubernii) lesnichestv v svjazi s razmnozheniem v nikh vreditel' [The state of pine plantations of Dymerskiy (Kyiv province) and Yanpolskiy (Chernigiv province) forestries due to the reproduction of pests in them]. *Izvestija Leningradskogo lesnogo instituta*, 36, 122–132. [In Russian, with German summary]
- Pavlenko, O.M., Gurando, E.V. & Isaeva, N.M. (1982) Glavnejshie skrytostvol'nye vrediteli Kanevskogo zapovednika [The main hidden stem living pests of the Kanev Reserve]. *Patologija chlenistonogikh i biologicheskie sredstva bor'by s vrednymi organizmami: Tezisy dokladov Pervoj Respublikanskoj nauchnoj konferentsii. Kanev, 7–10 sentjabrja, 1982 g.*, Kyiv, pp. 189–190. [In Russian]
- Petrov, A.V. (2002) Novyj vid i novyj sinonim v rode *Hylesinus* Fabricius (Coleoptera, Scolytidae) [A new species and a new synonym in the genus *Hylesinus* Fabricius (Coleoptera, Scolytidae)]. *Entomologicheskoe obozrenie*, 81 (1), 121–125. [In Russian, with English summary]
- Petrov, A.V. (2005) Fauna koroedov (Coleoptera: Scolytidae) respubliki Dagestan [Fauna of the bark beetles (Coleoptera: Scolytidae) of Daghestan]. *Russian Entomological Journal*, 14 (3), 217–222. [In Russian, with Russian and English summary]
- Petrov, A.V. (2011) Novye dannye o jasenevykh luboedakh (*Hylesinus* Fabricius, 1801) Rossii i sopredel'nykh stran (Coleoptera: Curculionidae) [New data on bark beetles of the genus *Hylesinus* Fabricius, 1801 from Russia and adjacent countries]. *Lesnoj vestnik, Vestnik Moskovskogo gosudarstvennogo Universiteta lesa*, 4 (80), 21–24. [In Russian]
- Petrov, A.V. (2013) Novye dannye o sinonimii i faune koroedov roda *Scolytus* Geoffroy, 1762 (Coleoptera: Curculionidae: Scolytinae) na territorii Rossii i sopredel'nykh stran [New data on synonymy and fauna of the bark beetles of the genus *Scolytus* Geoffroy, 1762 (Coleoptera: Curculionidae: Scolytinae) in the territory of Russia and adjacent countries]. *Lesnoj vestnik, Vestnik Moskovskogo gosudarstvennogo Universiteta lesa*, 6 (82), 39–47. [In Russian]
- Pfeffer, A. (1955) *Fauna ČSR. Kůrovci – Scolytoidea (Řád: Brouci – Coleoptera). Svazek 6. Nakladatelství Československé Akademie Věd, Praha*, 324 pp. [In Czech, with Russian and German summary]
- Pfeffer, A. (1995) Zentral- und Westpaläarktische Borken- und Kernkäfer (Coleoptera: Scolytidae, Platypodidae). *Entomologica Basiliensia*, 17, 5–310. [In German]
- Pliginsky, V.G. (1916) Materialy po faune zhestkokrylykh Tavricheskoi gubernii [Materials on the fauna of beetles of Taurian province]. *Russkoe Entomologicheskoe obozrenie*, 16 (1–2), 347–352. [In Russian]
- Pogorilyak, I.M. (1968) *Koroedy (Ipidae) Ukrainskikh Karpat* [Bark beetles (Ipidae) of Ukrainian Carpathians]. Avtoreferat dissertatsii na soiskanie uchenoj stepeni kandidata biologicheskikh nauk, Uzhgorod. Moskva, 19 pp. [In Russian]
- Pogorilyak, J.M. (1973) *Korobjdy ta biologichni osnovy borot'by z nymy* [Bark beetles and biological bases of control of them]. Karpaty, Uzhgorod, 87 pp. [In Ukrainian]
- Pomerantsev, D. (1902) Iz entomologicheskago dnevnika. I. O rastjanutosti leta u koroedov [From entomological diary. I. On the lengthening of the flight period of bark beetles]. *Lesopromyshlennyj vestnik*, 26, 449–450. [In Russian]
- Pomerantsev, D.V. (1949) *Vrednye nasekomye i bor'ba s nimi v lesakh i lesnykh polosakh jugo-vostoka evropejskoj chasti SSSR* [Pest insects and control of them in forests and forest belts of the south east of the European part of the USSR]. Goslesbumizdat, Moskva, Leningrad, 209 pp. [In Russian]
- Popov, G.V. (2009a) Osnovnye vrediteli dekorativnykh nasazhdenij Donetskoj oblasti (2000–2009 gg.) i bor'ba s nimi [The principal pests of decorative plantations in Donetsk region (2000–2009) and control of them]. *Promyshlennaja botanika*, 9, 213–219. [In Russian, with Russian and English summary]
- Popov, G.V. (2009b) Objom fauny vreditel' dekorativnykh nasazhdenij Donbassa [The volume of pests fauna of decorative plantings of Donbass]. *Introduktsija, selektsija ta zakhyst roslyn: Materialy Drugoji Mizhnarodnoji naukoivoji konferentsiji, 2. Donets'k, 6–8 zhovtnja 2009 r., Tsifrova typografija, Donets'k*, pp. 195–197. [In Russian]
- Popov, G.V. & Kovalenko, V.M. (2004a) K faune vreditel' zeljonykh nasazhdenij Donetskogo botanicheskogo sada NAN Ukrainy [On the pests fauna of green space of Donetsk Botanical garden of NAS of Ukraine]. *Zbereshennja bioriznomanitnosti na pivdennomu skhodi Ukrajinii: Materialy naukoivo-praktichnoji konferentsiji. Donets'k, 14 veresnja*

- 2004 r., Lebid', Donets'k, pp. 133. [In Russian]
- Popov, G.V. & Kovalenko, V.M. (2004b) Dopolnenija k faune vreditel'ej zeljonykh nasazhdenij Donetskogo botanicheskogo sada NAN Ukrainy [Additions to pests fauna of green plantations of the Donetsk Botanical gardens of NAS of Ukraine]. *Promyshlennaja botanika*, 4, 189–194. [In Russian, with Russian and English summary]
- Roubal, J. (1936) *Katalog coleopter (brouků) Slovenska a Podkarpatska Rusi*. Bratislava, pp. 252–277. [In Czech]
- Rudnev, D.F. (1953a) Glavnejšie vrednye nasekomye lesov Zakarpatskoj oblasti [The principal insect pests of forests of Transcarpathian region]. *Zoologicheskij zhurnal*, 32 (6), 1141–1155. [In Russian]
- Rudnev, D.F. (1953b) O prognoze vreditel'ej lesa i planirovanii meroprijatij po bor'be s nimi [On the prediction of forest pests and planning measures to combat them]. *Zoologicheskij zhurnal*, 32 (1), 3–13. [In Russian]
- Rudnev, D.F. (1959) Rol' poroslevogo vozobnovlenija i nekotorykh drugikh antropogennykh faktorov v razmnozhenii vreditel'ej lesa na Ukraine [The role of regeneration and some other anthropogenous factors in the reproduction of forest pests in Ukraine]. *Zoologicheskij zhurnal*, 38 (2), 196–207. [In Russian, with Russian and English summary]
- Rudnev, D.F. (1962) Korojidy Krymu [Bark beetles of the Crimea]. *Shkidnyky lisu ta borot'ba z nymy. Naukovi pratsi*, 11, 67–90. [In Ukrainian, with Russian summary]
- Rudnev, D.F., Grymalsky, V.I. & Vasechko, G.I. (1962) Vplyv sposobu rubky na masove rozmnozhenja korojidiv u jalynovykh lisakh Karpat [The influence of logging method for the mass reproduction of bark beetles in the spruce forests of the Carpathians]. *Visnyk sil'skogospodars'koji nauky*. UASGN, Kyiv, 5 (3), 53. [In Ukrainian, with Russian summary]
- Rudnev, D.F. & Stepanova, E.N. (1960) K biologii koroeda *Scolytus zaitzevi* But. (Ipidae) [On the biology of the bark beetle *Scolytus zaitzevi* But. (Ipidae)]. *Zoologicheskij zhurnal*, 39 (5), 773–777. [In Russian, with English summary]
- Rudnev, D.F. & Vasechko, G.I. (1988a) Sem. Ploskohody – Platypodidae [Fam. Platypodidae – Pin hole borers]. In: Vasil'ev, V.P. (Ed.), *Vrediteli sel'skokhozjajstvennykh kul'tur i lesnykh nasazhdenij: V 3 tomakh. Vol. 2. Vrednye chlenistonogie, pozvonochnye*. Urozhaj, Kyiv, pp. 182. [In Russian]
- Rudnev, D.F. & Vasechko, G.I. (1988b) Sem. Ipidae – Koroedy [Fam. Scolytidae – Bark beetles]. In: Vasil'ev, V.P. (Ed.), *Vrediteli sel'skokhozjajstvennykh kul'tur i lesnykh nasazhdenij: V 3 tomakh. Vol. 2. Vrednye chlenistonogie, pozvonochnye*. Urozhaj, Kyiv, pp. 146–182. [In Russian]
- Saranča, L.V. & Bilyakov, V.V. (2006) Predstavnyky rodyny korojidiv – Scolytidae, jaki najchastishe zustrichalys' pry dogljadi importnykh lisomaterialiv ta derevyny v Kharkivs'kij oblasti [Representatives of the family of bark beetles that are most frequently encountered during the inspection of imported timber and wood in the Kharkiv region]. *Karantyn i zakhyst roslyn*, 6 (120), 2–5. [In Ukrainian]
- Shevyrew, I. (1887) *Koroedy* [Bark beetles]. Tipografija Kantseljarii Sankt-Peterburgskogo Gradonachal'nika, Sankt-Peterburg, 67 pp. [In Russian]
- Shevyrew, I. (1889a) O nekotorykh vrednykh v sadovodstve nasekomykh Khar'kovskoj gubernii [On some insect pests in horticulture of Kharkiv province]. *Sel'skoe khozjajstvo i lesovodstvo*, 160, 431–453. [In Russian]
- Shevyrew, I. (1889b) O nekotorykh vrednykh v sadovodstve nasekomykh Khar'kovskoj gubernii [On some insect pests in horticulture of Kharkiv province]. *Sel'skoe khozjajstvo i lesovodstvo*, 161, 35–58. [In Russian]
- Shevyrew, I. (1892a) Koroedy stepnykh lesov [Bark beetles of the steppe forests]. *Sel'skoe khozjajstvo i lesovodstvo*, 171 (9), 15–44. [In Russian]
- Shevyrew, I. (1892b) Koroedy stepnykh lesov [Bark beetles of the steppe forests]. *Sel'skoe khozjajstvo i lesovodstvo*, 171 (10), 83–97. [In Russian]
- Shevyrew, I. (1892c) Koroedy stepnykh lesov [Bark beetles of the steppe forests]. *Sel'skoe khozjajstvo i lesovodstvo*, 171 (11), 165–194. [In Russian]
- Shevyrew, I. (1893a) Koroedy stepnykh lesov. Vtoroj otchet Lesnomu Departamentu [Bark beetles of the steppe forests. The second report for Forestry Department]. *Sel'skoe khozjajstvo i lesovodstvo*, 172 (1), 15–46. [In Russian]
- Shevyrew, I. (1893b) *Opisanie vrednykh nasekomykh stepnykh lesnichestv i sposobov bor'by s nimi* [Description of the steppe forestry pests and measures to combat them]. Tipografija I.N. Skorokhodova, Sankt-Peterburg, 124 pp. [In Russian]
- Sheshurak, P.N. & Nazarenko, V.Yu. (2002) K izucheniju zhukov nadsemejstva Curculionoidea Latreille, 1802 (Coleoptera) Biostatsionara NGPU “Lesnoe ozero” i ego okrestnostej (okr. s. Jaduty Borznychanskogo r-na Chernigovskoj oblasti) [The investigation of beetles of the superfamily Curculionoidea Latreille, 1802 (Coleoptera) of the Biological state NGPU “Lesnoe ozero” and the surrounding area (vic. vil. Yaduty Borznychansky district Chernigiv region)]. *Ekologichni problemy dovyklykha ta shljakhy jikh vyrishennja: Zbirnyk naukovykh prats' Mizhnarodnoji naukovo-praktychnoji konferentsiji*, Poltava, pp. 121–123. [In Russian]
- Shyshkin, I. (1913) Nasekomye, sobrannye v kanavkakh Kievskogo lesnichestva [Insects collected in the grooves of the Kyiv forestry]. *Entomologicheskij vestnik*, 2 (1), 44–51. [In Russian]
- Sklyarova, Z.A. & Tarasenko, I.M. (1973) K kharakteristike ochagov stvolovykh vreditel'ej v sosnovykh kul'turakh na Nizhnedneprovskikh peskakh [For the characteristic of outbreaks of stem pests in pine plantations at the Low Dnieper sands]. *Lesovodstvo i agrolesomelioratsija*, 34, 70–74. [In Russian]
- Sklyarova, Z.A. & Tarasenko, I.M. (1975) Osobennosti razvitija bol'shogo sosnovogo luboeda i ego entomofagov v sosnovykh kul'turakh na Nizhnedneprovskikh peskakh [Features of the development of the *Tomicus piniperda* and its entomophages in pine plantations at the Low Dnieper sands]. *Lisivnytstvo i agrolisomelioratsija*, 44, 75–83. [In Russian]
- Skrylnyk, Y., Kukina, O., Meshkova, V., Menkis, A., Stenlid, J. & Vasaitis, R. (2011) Insect-fungi associations in pine stands of Kharkiv region of Ukraine. *IUFRO WP 7.03.05: Novel risks with bark and wood boring insects in broadleaved and conifer*

- forests, 7–9 September 2011. Sopron, Hungary, p. 32.
- Sokanovsky, B. (1930) Zametki po sistematike i geograficheskomu rasprostranjeniju palearkticheskikh koroedov (Soobshchenie vtoroe) [Taxonomic and geographical notes on Ipidae (Second communication)]. *Zashchita rastenij*, 6 (5–6), 803–804. [In Russian]
- Sokanovsky, B.V. (1954) Zametki o zhukakh koroedakh fauny SSSR (Coleoptera, Ipidae) [Notes on bark beetles of the fauna of the USSR]. *Bulleten' Moskovskogo Obshchestva Ispytatelej Prirody. Otdel Biologii*, 59 (5), 13–22. [In Russian]
- Sokolova, I.M. (2008) Poshkodzhennja odno-tryrichnykh sosnovykh kul'tur velykym sosnovym dovgonosykom i korenezhylamy [Damage of one – three year-old pine plantations by *Hylobius abietis* L. and *Hylastes* ssp.]. *Lisivnytstvo i agrolisomelioratsija*, 114, 169–176. [In Ukrainian, with Russian and English summary]
- Stark, V.N. (1952) *Fauna SSSR. Nasekomye zhestkokrylye. Vol. 31. Koroedy* [Fauna of the USSR. Beetles. Bark beetles]. AN SSSR, Moskva, Leningrad, 461 pp. [In Russian]
- Stark, V.N. (1955a) Sem. Ipidae – Koroedy [Fam. Ipidae – Bark beetles]. In: Pavlovsky, E.N. (Ed.), *Vrediteli lesa: Spravochnik. Vol. II*. AN SSSR, Moskva, Leningrad, pp. 649–734. [In Russian]
- Stark, V.N. (1955b) Sem. Platypodidae [Fam. Platypodidae]. In: Pavlovsky, E.N. (Ed.), *Vrediteli lesa: Spravochnik. Vol. II*. AN SSSR, Moskva, Leningrad, pp. 735–737. [In Russian]
- Sumarokov, A.M. (2009) *Vosstanovlenie bioticheskogo potentsiala pri umen'shenii pestitsidnykh nagruzok* [Recovery of biotic potential under decrease of pesticide loads]. Veber, Donetsk, 193 pp. [In Russian, with Ukrainian and English summary]
- Tarasenko, I.M. (1969) Glavnejshie vrediteli sosnovykh nasazhdenij na juche Ukrainy [The principal pests of pine plantations in the south of Ukraine]. *Lesovodstvo i agrolisomelioratsija*, 19, 127–131. [In Russian]
- Terekhova, V.V. (2006) K voprosu o formirovanii kompleksa koroedov (Coleoptera, Scolytidae) – ksilofagov il' movykh porod. [On the formation of the complex of bark beetles (Coleoptera, Scolytidae) – xylophages of elm species]. *Biologija: vid molekuly do biosfery: Zbirnyk materialiv Pershoji mizhnarodnoji naukovoji konferentsiji studentiv, aspirantiv ta molodykh uchenykh. Kharkiv, 21–23 lystopada 2006 r., Kharkiv*, pp. 81. [In Russian]
- Terekhova, V.V. (2007) Osobennosti biologii koroedov tribu Xyleborini (Coleoptera, Scolytidae) NPP “Gomol'shanskie lesa” [Features of biology of bark beetles in the tribe Xyleborini (Coleoptera, Scolytidae) of the NNP “Gomolshansky Forests”]. *Biologichne riznomanittja biologichnykh ekosystem i suchasna strategija zakhystu roslyn: Materialy Mizhnarodnoji naukovoji konferentsiji studentiv, aspirantiv i molodykh uchenykh do 75-richchja fakul'tetu zakhystu roslyn KNAU imeni V.V. Dokuchaeva. Kharkiv, 5–6 chervnja 2007 r., Kharkiv*, pp. 93–94. [In Russian]
- Terekhova, V.V. (2009a) Ksilobiontnye zhestkokrylye (Coleoptera), razvivajushchiesja na bereste, *Ulmus carpinifolia* Rupp. ex Suckow v uslovijakh Natsional'nogo Prirodnogo Parka “Gomol'shanskie lesa” [Xylobiont beetles (Coleoptera) which develop in the bark of elm, *Ulmus carpinifolia* Rupp. ex Suckow in the national Natural park “Gomolshansky Forests”]. *Izvestija khar'kovskogo entomologicheskogo obshchestva*, 16 (1–2), 44–51. [In Russian, with English summary]
- Terekhova, V.V. (2009b) Vydovyj sklad ta dejaki osoblyvosti ekologiji korojdiv-zabolonnykh (Coleoptera, Scolytidae) Skhidnogo Lisostepu Ukrainy [Species composition and ecological peculiarities of some engravers (Coleoptera, Scolytidae) in eastern forest steppe of Ukraine]. *Ekologija – shljakhy harmonizatsiji vidnosyn pryrody ta suspil'stva: Zbirnyk tez mizhvuziv's'koji konferenciji. Uman', 23–24 kvitnja 2009 r., Uman'*, pp. 47–48. [In Ukrainian]
- Terekhova, V.V. & Skrylnik, Yu.Ye. (2010) Pervaja nakhodka i svedenija o biologii zhuka-koroeda *Anisandrus maiche* Stark (Coleoptera: Curculionidae: Scolytinae) v lesostepnoj zone Ukrainy [The first revealing and information on the biology of bark beetle *Anisandrus maiche* Stark (Coleoptera: Curculionidae: Scolytinae) in the forest steppe zone of Ukraine]. *Vidovye populjatsii i soobshchestva v antropogenno transformirovannykh landshaftakh: sostojanie i metody ego diagnostiki: Materialy XI Mezhdunarodnoj nauchno-prakticheskoi ekologicheskoi konferentsii. Belgorod, 20–25 sentjabrja 2010 g., Belgorod*, pp. 129–130. [In Russian]
- Terekhova, V.V. & Skrylnik, Yu.Ye. (2012) Osobennosti biologii chuzherodnogo dlja Evropy zhuka-koroeda *Anisandrus maiche* Stark (Coleoptera: Curculionidae: Scolytinae) na territorii Ukrainy [Peculiarities of biology of adventive for Europe ambrosia beetle *Anisandrus maiche* Stark (Coleoptera: Curculionidae: Scolytinae) in the territory of Ukraine]. *Rossijskij zhurnal biologicheskikh invazij*, 1, 88–98. [In Russian, with English summary] <http://dx.doi.org/10.1134/s2075111712020105>
- Thompson, R.T. (1992) Observations on the morphology and classification of weevils (Coleoptera, Curculionoidea) with a key to major groups. *Journal of Natural History*, 26, 835–891. <http://dx.doi.org/10.1080/00222939200770511>
- Tregub, V.Yu., Gavrilenko, I.V. & Sheshurak, P.N. (2000) Koroedy (Coleoptera, Scolytidae) Sumshchiny [Bark beetles (Coleoptera, Scolytidae) of Sumy region]. *Izvestija Khar'kovskogo entomologicheskogo obshchestva*, 8 (2), p. 51. [In Russian]
- Tupik, V.Yu. & Bartenev, A.F. (1993) Nekotorye dannje po biologii koroedov (Coleoptera, Scolytidae) severo-vostoka levoberezhnoj Ukrainy [Some facts of bark beetles (Coleoptera, Scolytidae) biology on the north west of the Left Bank Ukraine]. *Izvestija Khar'kovskogo entomologicheskogo obshchestva*, 1 (2), 131–132. [In Russian, with English summary]
- Vasechko, G.I. (1971) Biologija koroedov (Coleoptera, Ipidae) – vreditel' eli i pikhty v Karpatakh [The biology of bark beetles (Coleoptera, Ipidae), pests of spruce and fir in the Carpathians]. *Entomologicheskoe obozrenie*, 50 (4), 750–761. [In Russian]
- Vega, F.E., Infante, F., Castillo, A. & Jaramillo, J. (2009) The coffee berry borer, *Hypothenemus hampei* (Ferrari) (Coleoptera: Curculionidae): a short review, with recent findings and future research directions. *Terrestrial Arthropod Reviews*, 2,

129–147.

<http://dx.doi.org/10.1163/187498209x12525675906031>

- Wood, S.L. & Bright, D.E. (1992a) *Catalogue of Scolytidae and Platypodidae (Coleoptera), Part 2: Taxonomic Index*. Great Basin Naturalist Memoirs, 13 (A), 1–833.
- Wood, S.L. & Bright, D.E. (1992b) *Catalogue of Scolytidae and Platypodidae (Coleoptera), Part 2: Taxonomic Index*. Great Basin Naturalist Memoirs, 13 (B), 835–1553.
- Zagajkevich, I.K. (1958) *Komakhy-shkidnyky derevnykh i chagarnykovykh porid zakhidnykh oblastej Ukrainy* [Insect pests of trees and shrubs of the western regions of Ukraine]. AN URSS, Kyiv, 132 pp. [In Ukrainian]
- Zagajkevich, I.K. (1959) *Korojid-drukar v lisakh zakhidnykh oblastej Ukrainy* [*Ips typographus* in forests of the western regions of Ukraine]. AN URSS, Kyiv, 28 pp. [In Ukrainian]