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Research Article

Review of the Rove Beetles of the Tribe Lomechusini (Coleoptera: Staphylinidae: Aleocharinae) of Ukraine

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Abstract: An overview of the tribe Lomechusini (Coleoptera: Staphylinidae) from Ukraine is presented. It summarises all published data and new information on the group. Totally, six genera with 18 species are presented. The genera are: *Lomechusa* with three species (*L. emarginata*, *L. paradoxa* and *L. pubicollis*), *Lomechusoides* with one species (*L. strumosus strumosus*), *Drusilla* with one species (*D. canaliculata*), *Myrmoecia* with one species (*M. plicata*), *Pella* with nine species (*P. cognata, P. funesta, P. hampei, P. humeralis, P. laticollis, P. limbata, P. lugens, P. ruficollis* and *P. similis*) and *Zyras* with three species (*Z. collaris, Z. fulgidus* and *Z. haworthi*). The information on the distribution of the species recorded from the territory of Ukraine is clarified and supplemented.

Key words: rove beetles, subfamily Aleocharinae, tribe Lomechusini, fauna, Ukraine

Introduction

The tribe Lomechusini Fleming, 1821 belongs to Aleocharinae Fleming, 1821, which is the largest subfamily of the family Staphylinidae. The tribe comprises 2205 extant species and subspecies, which are placed in three subtribes and 207 genera. Members of the tribe are found in all regions of the world except oceanic islands, Antarctica and temperate South America. The group has long been of special interest to biologists because many of them are associated in some way with ants or termites, although the majority of species have been found outside the nests and those are probably free-living predators (Hlaváč et al. 2011).

Information on the findings of the representatives of the tribe is fragmentary for the fauna of Ukraine and is not often included in faunal summaries from certain regions of the country. No special studies on the taxonomy, distribution or biology of the Lomechusini in Ukraine have ever been carried out. The largest number of findings is known from the south-eastern regions of Ukraine (Luhansk and Donetsk Regions), as well as the western regions (Ivano-Frankivsk, Lviv, Transcarpathian Province) and the Ukrainian Carpathians. There are fragmentary data from Crimea and southern Ukraine. Thus, there is a need to summarise all known data on the findings of species of the tribe Lomechusini in Ukraine. This work is a continuation of the series of reviews of the genera and species of the subfamily Aleocharinae of the fauna of Ukraine started by Glotov et al. (2011) and Glotov (2012, 2021).

Materials and Methods

The study was based on the collections of the author, which have been sampled over many years and are currently deposited in the State Museum of Natural History, National Academy of Sciences of Ukraine (CGL, deposited in SMNH).

Specimens stored in the collections of other institutions have also been studied:

- Museum of Nature, V. N. Karazin Kharkiv National University (KUMN);
- National Science and Natural History Museum, National Academy of Sciences of Ukraine, Kyiv (NMNH);
- State Museum of Natural History, National Academy of Sciences of Ukraine, Lviv (SMNH);
- Zoological Museum, Taras Shevchenko National University, Kyiv (ZMTSNU);
- I. I. Schmalhausen Institute of Zoology, National Academy of Sciences of Ukraine, Kyiv (SIZK);
- Zoological Museum, Donetsk National University, Donetsk (ZMDONU);
- Zoological Museum, Gogol State University of Nizhyn (ZMNSU).

In addition, specimens from the personal collections of fellow entomologists were processed: Z. L. Berest (SIZK), V. O. Chumak (Uzhhorod, CCH), V. P. Foroshchuk (Luhansk, CFR), N. P. Koval (Velykyi Bereznyi, CKV), S. V. Konovalov (Severodonetsk, CKN), L. I. Faly (Dnipro, CFL), V. M. Yermolenko (SIZK), I. Severov (Rubizhne, CSV) and P. L. Voitko (Skole, CVT).

Current taxonomic status, nomenclature and general distribution of the species follow Schülke & Smetana (2015), taking into account taxonomic changes based on the molecular phylogenetic analysis by Elven et al. (2010).

Additional abbreviations used in the text (including province codes of Ukraine): CRI – Crimea, CER – Chernivtsi, CNG – Chernihiv, CRK – Cherkasy, DNI – Dnipro, DON – Donetsk, IFR – Ivano–Frankivsk, KHE – Kherson, KHM – Khmelnytskyi, KHR – Kharkiv, KRO – Kropyvnytskyi, KYI – Kyiv, LUG – Luhansk, LWI – Lviv, MYK – Mykolaiv, ODE – Odesa, POL – Poltava, RIV – Rivne, SUM – Sumy, TER – Ternopil, VIN – Vinnytsia, VOL – Volyn, ZAK – Zakarpattya, ZAP – Zaporizhzhia, ZIT – Zhytomyr; NNR – National Nature Reserve; RLP – Regional Landscape Park; SFHR – State Forest Hunting Range; c – city; d – district; ex or exs – exemplar or exemplars; l – lake; r – region; riv – river; v – village.

Results

Tribe Lomechusini Fleming, 1821

Subtribe Lomechusina Fleming, 1821

Genus *Lomechusa* **Gravenhorst, 1806**

Lomechusa emarginata **Paykull, 1789**

Material from Ukraine. KYI: Kyiv [K.], 1 ex., J. Hochhuth (NMNH); LWI: Turie [Staryi Sambor, m. Turze], 1908, 2 exs.; Lviv [Lwow], 15.5.1910, 1 ex. (SMNH).

Additional material. Austria. Graz [Umgeb, Graz St.], 2 exs., Dr. Penecke (ZMTSNU). Belarus. Gomel region: riv. Berezina, in river sediments, 8.08.1974, 2 exs., V. Nadvornyi (SMNH). Croatia. *Paklenica*, 1 ex., Dr. Penecke (ZMTSNU). Czech Republic. Prague [Praga Bochemia], date not specified, 1 ex., coll. J. Grolle; 1 ex., leg. Dr. Lokay (SMNH). France. Morhange [Mörchingen], 1 ex. (SIZK). Poland. Warszawa [Warzawa], 1 ex., Dr. Lygocky (SIZK). Locality not specified or illegible: [label missing], 5 exs. (SMNH).

Published records from Ukraine. Nowicki (1873), Król (1877), Łomnicki (1884, 1886, 1890), Rybiński (1903), Petrenko (1974), Bogdanov (1985) and Mateleshko (2007).

Bionomics. The beetles live in meadows and open steppe areas, as well as in the deciduous, mixed floodplain and foothill forests. They occur in summer together with ants of the genus *Formica,* while in winter they are associated with ants of the genus *Myrmica* (Hlaváč 2005).

Distribution. Europe; in Ukraine: KYI, LWI, VOL, TER, ZAK.

Lomechusa paradoxa Gravenhorst, 1806

Material from Ukraine. CRK: Cherkasy d., vicinity of Kamianka, 26.07.1971, 1 ex., A. Petrenko (SIZK); DON: Donetsk, 20–27.05.2003, 1 ex., V. Martynov (ZMDONU); IFR: Mykulychyn [Mikulizyn], 6.08.1906, 2 exs., Vorokhta [Worochta], 1 ex. (SMNH); LWI: Lviv [Leopolis], 1.5., 1 ex., leg. J. Mazurek, same locality but, [Halicia, Lwiv], 1 ex., leg. J. Lomnicki, same locality but Kryvchytsi [K], 19.4., 1 ex. (SMNH).

Additional material. Austria. *Innsbruck* [Tern her. Innsbrok], J. Park, 15.04.1945, 1 ex., V. Lazorko (SIZK). Russia. *Astrakhan region:* Kamyziak d., *Kirovskiy*, 20.08.1989, 1 ex., M. Nesterov (all – SIZK). Locality not specified or illegible: [S. Hlum], S. Merhurig, 2 exs., (SIZK).

Published record from Ukraine. Łomnicki (1884, 1890), Hormuzaki (1888), Cherkunov (1889), Rybiński (1903), Jakobson (1905–1915), Petrenko (1974) and Glotov (2021).

Bionomics. The beetles live in meadows and open steppe areas, as well as in deciduous, mixed, floodplain and foothill forests. They occur in summer together with ants of the genus *Formica,* while in winter they are associated with ants of the genus *Myrmica* (Hlaváč 2005).

Distribution. Europe, Caucasus and Asia Minor; in Ukraine: CER, CRK, DON, IFR, KYI, LWI, TER, ZIT.

Lomechusa pubicollis Brisout de Barneville, 1860

Material from Ukraine. LWI: Ivano-Frankove [Janów], 1 ex.; Lviv, Kryvchytsi [Krzywczyce], 6.5.1912, 1 ex. (all – SMNH). *Locality not specified or illegible:* [Hamm. v. 1907], *Formica rufa*, 1 ex., (SIZK); [*Bacher*], 1 ex., J. Rayer (ZMTSNU).

Published records from Ukraine. Kashcheev (1984) and Mateleshko (2007).

Bionomics. The beetles live in meadows and open steppe areas, as well as in deciduous, mixed floodplain and foothill forests. They occur in summer together with ants of the genus *Formica,* while in winter they are associated with ants of the genus *Myrmica* (Hlaváč 2005).

Distribution. Europe; in Ukraine: ZAK, POL.

Genus ***Lomechusoides*** Tottenham, 1939

Lomechusoides strumosus strumosus Fabricius, 1792

Material from Ukraine. DON: Donetsk, 22–29.05.2004, 1 ex., V. Martynov (ZMDONU); Horlivka d., Olkhovatka, ravine

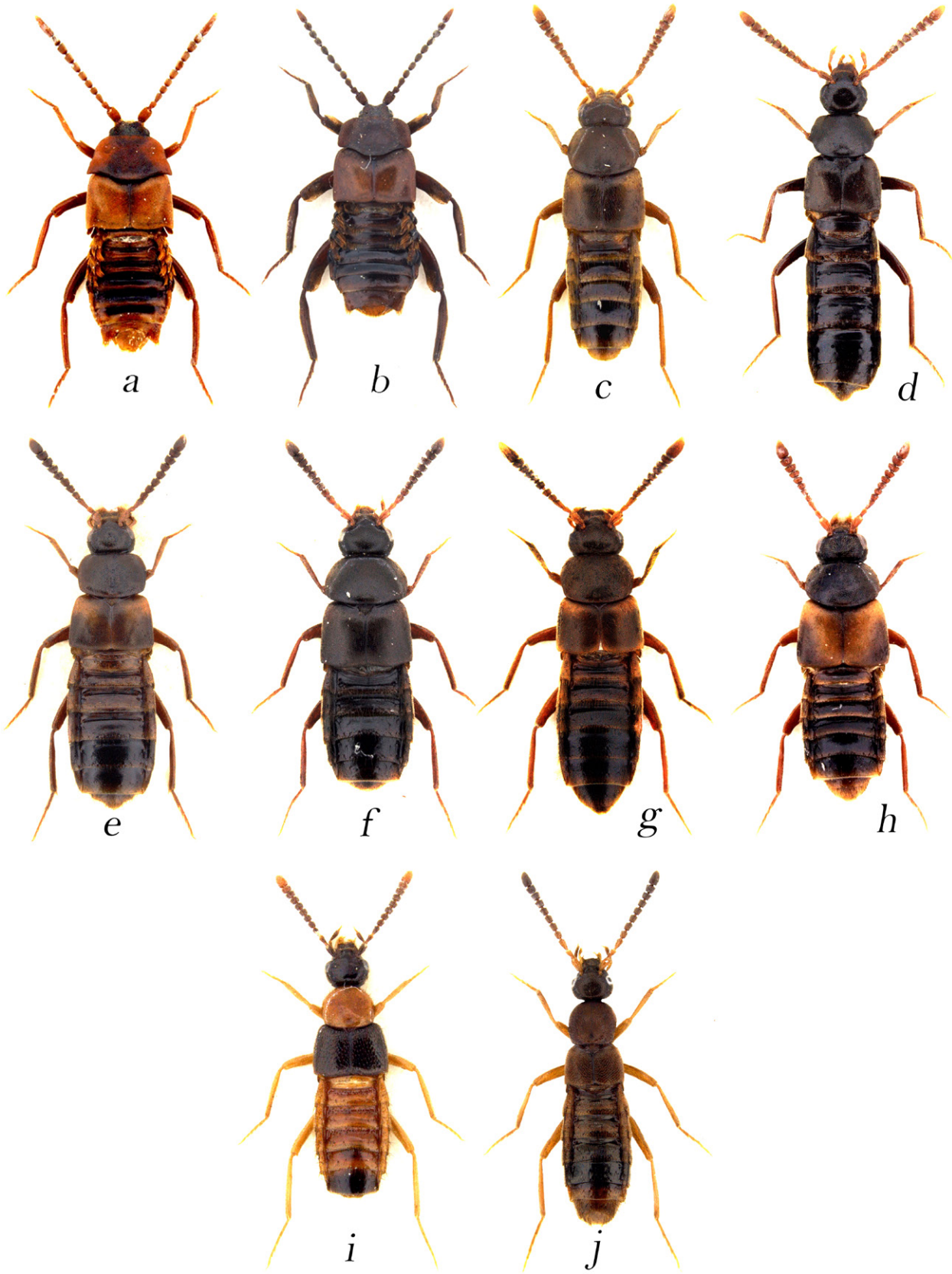

Fig. 1. Representatives of *Lomechusa emarginata* (a), *Lomechusoides strumosus strumosus* (b), *Pella cognata* (c), *Pella funesta* (d), *Pella humeralis* (e), *Pella laticollis* (f), *Pella limbata* (g), *Pella lugens* (h), *Zyras collaris* (i) and *Drusilla canaliculata* (j).

forest, 11.05.1974, 1 ex., V. M. Yermolenko (SIZK); KYI: Kyiv [K.], 1 ex., J. Hochhuth (NMNH); Tieriemki, together with ants of *Formica rufa*, 19.06.1980, 8 exs., A. Petrenko; LWI: Lviv [Lwiw], 10 exs.; same locality but 2 exs., leg. A. Stöeckel, same locality but Holosko [Holosko Mate], 4.07.1920, 7 exs., in *Formica sanguinea*, same locality but 1.07.1926, 4 exs., in *Formica sanguinea* (all – SMNH); ZAK: Velyka Uholka, 28.05.2018, 1 ex., V. Chumak (CCH).

Additional material. Austria. Graz [Umgeb, Graz St.], 7 exs., Dr. Penecke (ZMTSNU). Czech Republic. Prague [Praga Bochemia], 1 ex., coll. J. Grolle (SMNH). Germany. Thuringia [Thüringen], 1 ex. (SIZK). Georgia. 129 km far from Batumi, a forest opening, under stones and in cover, 9.06.1977, 1 ex., A. A. Petrenko. Russia. *Moscow* [Moskwa], Formica rufa, 1 ex. Locality not specified or illegible: [296], 1 ex., A. A. Petrenko; [Harr.], 1 ex.; [Hamm.], 1 ex. (all – SIZK).

Published records from Ukraine. Nowicki (1873), Łomnicki (1884), Cherkunov (1889) and Rybiński (1903).

Bionomics. The beetles live in deciduous and mixed forests in foothills. They occur together with ants of the genus *Formica* (Semenov 2008).

Distribution. Palaearctic (excluding North Africa); in Ukraine: DON, KYI, LWI, TER, ZAK.

Subtribe Myrmedoniina Thomson, 1867

Genus ***Drusilla*** Leach, 1819

Drusilla (***Drusilla***) ***canaliculata*** Fabricius, 1787

Material from Ukraine. CER: Chernivtsi [Bukowina, Cernowitz], date not specified, 4 exs., (ZMTSNU); CRI: Bilohirsk d., Bila Skelia, 18.05.1983, 1 ex., M. Nesterov; Crimea [Crimea], 1 ex.; Simferopol d., Simferopol [Vorontsov's Garden], 20.11.1957, 1 ex. (SIZK); Pionerske, 25.03.1957, 1 ex.; Mount Chatyrdah, 8.07.1979, 2 exs., A. Petrenko (all – SIZK); CNG: Snovsk (Schors) d., vicinity of Mistky, 30.08.2003, 1 ex., V. Pavlyuk (ZMNSU); CRK: *Zvenyhorodka d., Murzyntsi,* 2 exs., V. Karavaiev; Uman d., Uman, 27.03.1926*,* 2 exs., A. Ushynskyi; same locality but *8.04.1924,* 1 ex., A. Ushynskyi; same locality but *2.05.1924,* 1 ex., A. Ushynskyi; Cherkasy, 17.05.1970, 6 exs., A. Petrenko (all – SIZK); DON: Boikivske (Telmanove) d., Khomutovskyi Step Nature Reserve, 25.06.1979, 3 exs., A. Petrenko (SIZK); same locality but 6.07.1980, 2 exs., A. Petrenko (SIZK); same locality but 18.07.1980, 1 ex., A. Petrenko (SIZK); Kostiantynivka d., Kleban-Byk Regional Landscape Park, 6 exs., S. Glotov; Sloviansk d., Sloviansk, 4.07.2010, 2 exs., S. Glotov (all – CGL); Mariupol d., Staryi Krym, 5.07.1979, 1 ex., A. Petrenko (SIZK); Novoazovsk d., Sedove, 23.06.2010, 1 ex., S. Glotov (CGL); Pervomaisk d., Bilosaraiska Kosa, 3 exs., K. Savchenko; Donetsk, 20–27.05.2003, 1 ex., V. Martynov; 22–29.05.2004, 1 ex., V. Martynov; 19–26.07.2004, 5 exs., V. Martynov; 23.07.1999, 2 exs., V. Martynov; 28.07.2000, 4 exs., V. Martynov; 2.10.1999, 1 ex., V. Martynov; 27.07.–3.08.2001, 2 exs., V. Martynov; 29.07.–5.08.2001, 1 ex., V. Martynov; 19–26.08.2004, 44 exs., V. Martynov; Volodarsk d., Kamiani Mohyly Nature Reserve, 15–22.04.2006, 51 exs., K. Savchenko; same locality but 14–15.05.2006, 4 exs., K. Savchenko; same locality but 15–22.05.2006, 132 exs., K. Savchenko; 16–23.05.2007, 73 exs., K. Savchenko; same locality but 16–24.05.2008, 7 exs., K. Savchenko; same locality but 15–22.06.2006, 53 exs., K. Savchenko; same locality but 15–22.07.2006, 338 exs., K. Savchenko; same locality but 16–23.07.2007, 59 exs., K. Savchenko; same locality but 16–24.07.2008, 3 exs., K. Savchenko; same locality but 26.07–3.08.2007, 1 ex., K. Savchenko; same locality but 14–16.08.2006, 5 exs., K. Savchenko; same locality but 15–22.08.2006, 9 exs., K. Savchenko; same locality but 17.09.2006, 3 exs., K. Savchenko; same locality but 15–22.09.2006, 3 exs., K. Savchenko; same locality but 15–22.10.2006, 1 ex., K. Savchenko; same locality but 16–23.09.2007, 4 exs., K. Savchenko; same locality but 13–20.09.2008, 23 exs., K. Savchenko; Yasynuvata d., v. Pisky, 26.06.–3.07.2007, 2 exs., K. Savchenko; 26.06.–3.07.2007, 3 exs., K. Savchenko; Yasynuvata, 05.1999, 5 exs., V. Martynov; 25.07.1999, 1 ex., V. Martynov; 5.05.2004, 3 exs., V. Martynov; 30.05.2004, 2 exs., V. Martynov; 28.07.–5.08.2001, 2 exs., V. Martynov; 20–27.07.2004, 94 exs., V. Martynov; 2.10.2004, 1 ex., V. Martynov (all – ZMDONU); IFR: Zahvizdia [Z], 17.4., 1 ex., same locality but 17.7., 1 ex. (SMNH); KHE: Hola Prystan, Black Sea Biosphere Reserve, Solenoozerna area, 05.05.1980, 3 exs., A. Petrenko; same locality but 29.05.1980, 7 exs., A. Petrenko; same locality but 03.06.1980, 1 ex., A. Petrenko; same locality but 07.06.1980, 3 exs., A. Petrenko; same locality but Ivano-Rybalchanska area, 12.06.1980, 1 ex., A. Petrenko; same locality but 09.06.1980, 8 exs., A. Petrenko; same locality but 6.07.1978, 1 ex., A. Petrenko; same locality but 18.07.1978, 1 ex., A. Petrenko; same locality but 17.08.1978, 2 exs., A. Petrenko; Skadovsk d., Krasne, 30.04.1983, 1 ex., Yu. Ptashuk (SIZK); same locality but 8.05.1983, 1 ex., Yu. Ptashuk (all – SIZK); KHR: Velykyi Burluk d., Velykyi Burluk, 12.06.1972, 1 ex., V. Gramma; Kharkiv, 17.07.1933, 1 ex., S. Fedorov; 17.06.1995, 1 ex., O. Drogvalenko (all – KUMN); KYI: Kyiv [Kyiv], same locality but 12.04.1915, 6 exs.; 28.10.1919, 1 ex.; same locality but 3.06.1919, 1 ex.; same locality but 21.07.1958, 1 ex.; same locality but 7.10.1956, 6 exs.; same locality but 9.09.1956, 1 ex.; same locality but 30.09.1956, 5 exs.; same locality but 16 exs.; same locality but 10.07., 2 exs., A. Lebedev; same locality but slopes of riv. Dnipro, 16.04.1970, 1 ex., A. Petrenko; vicinity of Kyiv, 28.08.1919, 1 ex.; same locality but [Alluvio dnjeprensis prope Kiev] 3.05.1919, 3 exs.; same locality but 12.04.1915, 5 exs., U. Sovinskij; same locality but Holosievo, 29.04.1958, 10 exs.; same locality but Holosiivskyi Forest, 19.08.1956, 2 exs.; locality but 16.09.1956, 4 exs.; same locality but slopes of riv. Dnipro, 6.04.1972, 4 spec (all – SIZK); LUG: Alechevsk d., Alechevsk, 1 ex. I. Severov; Brianka, 1 ex., I. Severov (all – CSV); Antratsyt d., Diakove, 30.03.1999, 1 ex., S. Konovalov; 16.04.1999, 2 exs., S. Konovalov; 7.05.2003, 1 ex., S. Konovalov; 16.05.1999, 2 exs., S. Konovalov; 10.07.2000, 1 ex., S. Konovalov; 3.08.2001, 1 ex., S. Konovalov (all – CKON); Ivanivka, 17.04.–05.05.2011, 4 exs., V. Landyk; Rovenky, Dubova Balka, ravine forest, in forest cover, 15-20.06.2010, 11exs., S. Glotov (CGL); Bilokurakine d., Rozdolne, Rozdolanski Prudy Nature Reserve, 5.06.2005, 2 exs. S. Glotov; Bilovodsk d., Bilovodsk, bank of riv. Aidar, light trap, 16.07.2009, S. Glotov (all – CGL); Horodyshche, Kostiantyn Yunytskyi Botanical Reserve, 10–11.06.2009, 7 exs.; same locality but 13.06.2009, 1 ex. S. Glotov; Horodyshche, Natural Landmark Svynarska Balka, 7.06.2005, 1 ex. S. Glotov; Stepove, Yevsuh-Stepove Nature Reserve, 5.06.2005, 2 exs. S. Glotov; Kreminna d., Kudriashovka, 30.06.2009, 3 exs., S. Glotov (all – CGL); Lugansk, 29.03.2010, 1 ex., V. Landyk; same locality but 8–23.05.2012, 1 ex., V. Landyk; same locality but Balka Ploska Botanical Monument of Nature, 1–15.06.2003, 13 exs., S. Glotov; 1–20.05.2004, 3 exs., S. Glotov; Lutuhine d., Piatyhorivka, 17.06.2009, 4 exs., S. Glotov; Novoaidar d., Borovske, 1 ex., I. Severov; Muratovo, 1 ex., I. Severov; Spivakivka, 1 ex., I. Severov (all – CSV); Markivka d., Heraskivka, Heraskivka Nature Reserve, 3–4.06.2005, 2 exs. S. Glotov; Prosiane, in plant remains,

3-4.06.2005, 1 ex. S. Glotov; Lymarivka, 3–4.06.2005, 2 exs. S. Glotov; Lypove, 3–4.06.2005, 4 exs. S. Glotov; Milove d., Striltsivskyi Steppe Nature Reserve, 6.04.2009, 4 exs., S. Glotov (all – CGL); same locality but 17–25.05.2002, 4 exs., V. P. Foroshchuk (all – CFR); same locality but 7–30.05.2009, 1 ex., N. Polchaninova (CGL); same locality but 8.05.2009, 1 ex., S. Glotov; Novopskov d., Bilolutsk, Bilolutsk Nature Reserve, 21.05.2004, 1 ex., S. Glotov; Natural Landmark Novobila, 20.05.2004, 3 exs., S. Glotov; Zaaidarivka, 1 ex., S. Glotov; Ikove, 29.05.2004, 2 exs., S. Glotov; same locality but 29.05.2004, 1 ex., S. Glotov; Kuban, 22.05.2004, 4 exs., S. Glotov; Novobila, 20.05.2004, 3 exs., S. Glotov; Novopskov, 29.05.2004, 1 ex., S. Glotov; Osynove, Osynove Nature Reserve, bank of riv. Aidar, 21.05.2004, 2 exs., S. Glotov; Pysarivka, 29–30.05.2004, 7 exs., S. Glotov; Rohove, 27.05.2004, 2 exs., S. Glotov; Taniushchivka, 25.05.2004, 4 exs., S. Glotov; Teviasheve, 21.05.2004, 2 exs., S. Glotov; same locality but 21.05.2004, 2 exs., S. Glotov; Popasna d., Shypilivka, 7.07.2010, 5 exs., S. Glotov (all – CGL); Slovianoserbsk d., Trokhizbenka, 29.05.2010, 4 exs.; same locality but 9.06.2010, 4 exs. S. Konovalov; same locality but 22–25.08.2010, 3 exs. S. Konovalov; same locality but 28.08.–1.09.2010, 4 exs., S. Konovalov; same locality but 16–20.09.2010, 3 exs., S. Konovalov (all – CKN); Rubizhne, 3 exs., I. Severov (cSv); Svatove d., Svatove, 05–06.2002, 4 exs., I. Severov (cSv); Trokhizbensky Steppe Nature Reserve, 29.05.2009, 1 ex., S. Glotov; Stanytsia Luhanska d., Stanytsia Luhanska Nature Reserve, 19–26.05.2007, 1 ex., S. Glotov; 17–24.06.2007, same locality but 3 exs., S. Glotov; same locality but 28.05.2009, 4 exs., S. Glotov; Derkul Ichthyological Natur Reserve, bank of the riv. Derkul, light trap, 10.07.2010, 1 ex., S. Glotov; same locality but river bank, in animal remains, light trap, 11.07.2010, 1 ex., S. Glotov; Stanytsia-Luhanska, 2.05.2013, 2 exs., S. Glotov; Kindrashivka Nature Reserve, in animal remains, 2.06.2013, 9 exs., S. Glotov; Troitske d., Demyno-Oleksandrivske, 28.07.2009, 6 exs., S. Glotov (all – CGL); LWI: Ivano-Frankove [Janów], 1 ex.; Lviv [Lwiw], 8.3.[1]925, 1 ex.; same locality but [Lm], 6.4., 1 ex., same locality but 9.4., 1 ex., same locality but Bilohorshcha [Bit], 12.5., 1 ex., same locality but Zubra [Zubra], 1 ex., same locality but Sykhiv [Sichów], 1 ex.; Potorytsia [Pc], 15.5., 2 exs.; locality not specified [bo], 26.3., 1 ex., locality not specified [Hd], 4.8., 1 ex., date and locality not specified, 1 ex., leg. Dr. Lokay (all – SMNH); ODE: Odesa d., Dachne [state farm Dachne], 25.06.1977, 5 exs., Z. Berest; same locality but 27.06.1977, 2 exs., Z. Berest; same locality but 30.06.1977, exs. exs.1 ex., Z. Berest (all – SIZK); POL: Kremenchuk d., Kremenchuk, right bank of riv. Dnipro, 16.05.1970, 1 ex., A. A. Petrenko; same locality but 22.06.1984, 2 exs., A. Petrenko; Potoky, 15.05.1970, 6 exs., A. Petrenko; Chutove d., Novofedorivka, 13.10.1970, 4 exs., A. Petrenko; Nyzhni Rivni, 11.05.1970, 1 ex., A. Petrenko; Cherniakivka, 7.05.1970, 1 ex., A. Petrenko (all – SIZK); SUM: Seredyna-Buda d., vicinity Ulytsya, Desnyansko-Starogutsky NNP, 23.07.2005, 1 ex., P. Sheshurak (ZMNSU); VOL: Kovel d., Zelena, 12.08.1988, 2 exs., A. Petrenko (SIZK); Turiisk d., Turiisk, 13.07.2010, 1 ex., P. Voitko (CVT); ZAK: Velykyi Bereznyi d., Mochar, Yavirnyk Mountain range, 1010 m a.s.l., 05.06.2018, subalpine meadow, 19 exs., N. Koval; same locality but 27.06.2018, subalpine meadow, 10 exs., N. Koval; same locality but 20.07.2018, 9 exs., N. Koval; same locality but 12.08.2018, subalpine meadow, 21 exs., N. Koval; same locality but 29.08.2018, subalpine meadow, 1 ex., N. Koval; same locality but 27.05.2019, subalpine meadow, 1 ex., N. Koval; same locality but 19.06.2019, subalpine meadow, 11 exs., N. Koval; 08.07.2019, subalpine meadow, 2 exs., N. Koval; 01.08.2019, subalpine meadow, 5 exs. (all – CKV); Perechyn d., Lumshory, 11.07.1983, 1 ex., A. Petrenko (SIZK); ZAP: Berdiansk d., Andriivka, 2.10.1943, 1 ex. (SIZK); Vasylivka d., Skelky, Velykyi Luh National Nature Park, 6.07.2010, 2 exs., L. Faly (CFL); ZIT: Ovruch d., Selezivka, Polissia Nature Reserve, Selezivka Forestry, light trap, 3–9.06.2008, 1 ex., N. Nazarov (ZMNSU).

Additional material. Azerbaijan. *Lenkoran d.*, Hirkan [Аврора], forest, 4.06.1976, 1 ex., A. Petrenko; *Lenkoran,* 2.06.1976, 2 exs., A. Petrenko; riv. Araks, 20.08.1990, 1 ex., A. Belov (SIZK); Nakhchivan Autonomous Republic: Bilav, in sediments, 16.05.1976, 1 ex., A. Petrenko; same locality but 19.06.1977, 1 ex., A. Petrenko; Lerik d., *Gosmalian*, 28.06.1976, 1 ex., A. Petrenko (all – SIZK). Belarus. Vitebsk region: Braslaw [Pameleyki ja Braslaw], 10.8.1924, 1 ex. (SMNH). Poland. Lesser Poland Voivodeship: Krakow [Kr], 4.12., 1 ex., same locality but 19.1., 1 ex., Wadowice [Wd], 26.4., 1 ex., same locality but 26.4., 1 ex. (all – SMNH). Russia. *Volgograd region: Batrak,* 5.06.1976, 5 exs.; same locality but 24.06.1976, 5 exs.; Krasnodar region: Pshada [Caucasus, Pshada], 8 exs., A. Vasilyev; Kemerovo region: riv. Kasma, 1 ex., V. Karavaiev; Nothern Ossetia: Vladikavkaz, 7.1912, 1 ex., J. Roubal; Rostov region: Taganrog, 3 exs.; Murmansk region: Kandalaksha, river bank, under stones, 21.05.1972, 6 exs., A. Petrenko; Chelyabinsk region: Ilmen Nature Reserve [Ilmen Nature Reserve, Demidovy Sopki], 22.06.1985, 2 exs., A. Petrenko; Sakhalin region: Yuzhno-Sakhalinsk, 4.07.1976, exs.exs.1 ex., A. Petrenko; Susunaiskiy mountain range, peak Chekhova, valley of riv. Burei, 21.07.1986, 10 exs., M. Nesterov; same locality but 5.06.1988, 4 exs., M. Nesterov; same locality but 8.06.1988, 2 exs., M. Nesterov; same locality but 12.06.1988, 4 exs., M. Nesterov (all – SIZK). *Locality not specified or illegible:* Caucasus, 1 ex., V. Lutshnik (SIZK).

Published records from Ukraine. Krynicki (1832), Miller (1868), Nowicki (1873), Łomnicki (1875, 1884, 1886, 1890), Frivaldszky (1875), Hormuzaki (1888), Cherkunov (1889), Rybiński (1903), Yatsentkovskyi (1912), Miedvediev & Vysotska (1969), Miedvediev & Skliar (1974), Kashcheev (1984), Bogdanov (1985), Semenov & Blynshtein (1989), Kubisz (1998), Petrenko et al. (2003), Petrenko (2005, 2009), Nazarenko & Petrenko (2008), Petrenko & Glotov (2008), Faly et al. (2009), Faly & Glotov (2012), Glotov & Savchenko (2009, 2011, 2013), Petrenko & Zhuravchak (2009), Petrenko & Sheshurak (2013), Boychuk & Zamoroka (2017), Sumarokov & Zamoroka (2020), Glotov (2021), Glotov & Zamoroka (2021), Glotov et al. (2009, 2020, 2021) and Puchkov et al. (2020).

Bionomics. The species is eurytopic, occurring in a wide variety of habitats.

Distribution. Europe, Asia Minor, Siberia, Far East; in Ukraine: CRI, CER, CNG, CRK, DNI, DON, IFR, KHE, KHR, KYI, LUG, LWI, MYK, ODE, POL, RIV, SUM, TER VOL, ZAK, ZAP.

Genus ***Myrmoecia*** Mulsant & Rey, 1873

Myrmoecia plicata Erichson, 1837

Material from Ukraine. CRK: Cherkasy d., Horodyshche [Kyiv province, Cherkasy county, v. Horodyshche], 1918, 2 exs., V. Lukin; KYI: Kyiv, Teremky, deciduous forest, 1.07.1982, 1 ex., A. Petrenko; same locality but Hydropark, l. Berezka, 8–11.05.2004, 1 ex., A. Petrenko; same locality but Pushcha Vodytsia, 16.04.1971, 2 exs., A. Petrenko; same locality but 18.04.1971, 8 exs., A. Petrenko; same locality but l.

Malynove, 25.06.2005, 6 exs., A. Petrenko (all – SIZK); LWI: Lviv, Pohulanka, 25.09.1935, 2 exs., Petrovsky; POL: Kremenchuk d., Shcherbaky, 23.06.1970, 1 ex., A. Petrenko; Chutove d., Cherniakivka, 4.05.1973, 2 exs., A. Petrenko; Poltava, left bank of the riv. Vorskla, in plant remains, 14.05.1970, 1 ex., A. Petrenko (all – SIZK). *Locality not specified or illegible:* 12.04.1915, 1 ex. (SIZK); Ukraine, Podil, 17.19.1937, 1 ex., V. Lazorko (all – SIZK).

Published records from Ukraine. Cherkunov (1889) and Nazarenko & Petrenko (2008).

Bionomics. The beetles live in forests and artificial forest plantations, at banks of rivers and reservoirs, collected in wet soil, in the litter layer, as well as under stones.

Distribution. Central and South-East Europe, Asia Minor, Middle Asia; in Ukraine: CRK, KYI, LWI, POL.

Genus *Pella* Stephens, 1835

Pella cognata (Märkel, 1842)

Material from Ukraine. CRI: Simferopol, 05.04.1957, 1 ex.; same locality but 20.03.1957, 1 ex., same locality but 20.03.1957; KYI: vicinity of Kyiv, 22.04.1919, 2 exs.; KHE: Black Sea Biosphere Reserve, 27.05.1978, 1 ex., A. Petrenko (all – SIZK); LWI: Lviv [Lp.], 22.3., 2 exs.; same locality but 26.3., 1 ex. (all – SMNH).

Additional material. Austria. Graz [Umgeb, Graz St.], 4 exs., Dr. Penecke (ZMTSNU). Hungary. [*Hu.*], 1 ex. (SIZK). Russia. Krasnodar region: Pshada, Mountain Pshada, 09.07.1978, 3 exs., L. Vasylieva (SIZK). Locality not specified or illegible: [label missing], 1 ex. (SMNH).

Published records from Ukraine. Miller (1868), Hochhut (1872), Łomnicki (1875, 1884, 1886, 1890), Frivaldszky (1875), Król (1877), Weise (1876), Cherkunov (1889), Rybiński (1903), Jakobson (1905-1913), Roubal (1930), Petrenko (1974), Bogdanov (1985, 2015) and Glotov et al. (2021).

Bionomics. The beetles live in deciduous and mixed forests at the foothills, where they occur in rotten wood in the litter layer, together with *Lasius fuliginosus* (Sharp 1888, Franc 1992, Maruyama 2006).

Distribution. Europe, Caucasus, Asia Minor and West Siberia; in Ukraine: CRI, IFR, KYI, KHE, LWI, TER, VOL, ZAK.

Pella funesta (Gravenhorst**,** 1806)

Material from Ukraine. DON: Donetsk, 19–26.07.2004, 6 exs., V. Martynov (ZMDONU); CNG: Korop d., vicinity of Obolonnya, valley of riv. Desna, Mezinskyi NNP, 24.05.2002, 1 ex., P. Sheshurak (ZMNSU); CRK: Kaniv, slopes of the riv. Dnipro, 29.07.1971, 1 ex., A. Petrenko (SIZK); KYI: Kyiv, 06.07.1905, 1 ex., same locality but 19.07.1905, 4 exs.; same locality, 15.07.1903, 1 ex.; Teremky, 18.07.1982, 1 ex., A. Petrenko, same locality, 18.07.1982, 2 exs., A. Petrenko, same locality but near an anthill of *L. fuliginosus*, 19.06.1980, 3 exs., A. Petrenko; Holosiiv, 29.07.1958, 3 exs.; Obolon d., in soil, 26.05–16.06.2011, 5 exs., A. Petrenko (all – SIZK); LUG: Lugansk, 8–23.05.2012, 1 ex., V. Landyk; same locality but Balka Ploska Botanical Monument of Nature, 1–15.06.2003, 1 ex., S. Glotov; 1–20.05.2004, 1 ex., S. Glotov; Stanytsia Luhanska d., Stanytsia Luhanska, 22–29.04.2007, 3 exs., S. Glotov (all – CGL); LWI: Lviv, Pohulanka, 25.09.1935, 1 ex., Petrov; same locality but, [Lwow], 1 ex., same locality but Pohulanka [Pohulanka], 6.4.1917, 3 exs., same locality but 11.4.1917, 2 exs., [Lp.], 22.5., 1 ex. (all – SMNH); POL: Chutove d., Cherniakivka, 04.05.1973, 2 exs., A. Petrenko (SIZK); ZIT: Ovruch d., vicinity Selezivka, Polissia Nature Reserve, Selezivka Forestry, pine forest, tract overgrown with blueberry, Barber trap, 12–19.05.2008, 1 ex., N. Nazarov; same locality but pine forest, path overgrown with blueberry, Barber trap, 3–9.06.2008, 2 exs., N. Nazarov; same locality but pine forest, tract overgrown with green moss, Barber trap, 3–9.06.2008, 2 exs., N. Nazarov; same locality but pine forest, tract overgrown with blueberry, Barber trap, 10–17.06.2008, 1 ex., N. Nazarov; same locality but pine forest, tract overgrown with green moss, Barber trap, 10–17.06.2008, 1 ex., N. Nazarov (all – ZMNSU).

Additional material. Austria. Graz [Umgeb, Graz St.], 4 exs., Dr. Penecke (ZMTSNU). Czech Republic. Moravia [Moravia], 1 ex. (SIZK); Prague [Ocolica Pragy], 1 ex., leg. Dr. Lokay (SMNH). *Hungary*. [*Smöd Hu.*], 1 ex. (SIZK). Russia. Sakhalin region: Yuzhno-Sakhalinsk, 11.08.1978, 1 ex., V. Kromolenko (all – SIZK).

Published records from Ukraine. Łomnicki (1875, 1884, 1886), Cherkunov (1889), Hormuzaki (1888), Rybiński (1903), Jakobson (1905-1913), Petrenko (1974, 2005), Nazarenko & Petrenko (2008), Petrenko & Glotov (2008), Petrenko & Zhuravchak (2009), Glotov (2008, 2011в, 2021), Glotov et al. (2021) and Puchkov et al. (2020).

Bionomics. The beetles live in deciduous and mixed forests in mountain foothills, in floodplain and ravine forests, as well as in artificial forest plantations, sometimes also outside forests, as long as there are trees with *L. fuliginosus* (Franc 1992, Maruyama 2006, Glotov 2021).

Distribution. Europe, Caucasus, Asia Minor and North Africa; in Ukraine: CRK, CER, DON, IFR, KHR, KYI, LUG, POL, RIV, TER, VOL.

Pella hampei (Kraatz, 1862)

Material from Ukraine. IFR: Vorokhta [Worochta], 1 ex. LWI: Potorytsia [Pc], 7.5., 1 ex. (all – SMNH).

Published records from Ukraine. Reitter (1878), Łomnicki (1913) and Mateleshko (2007).

Bionomics. This species is collected from nests of *Liometopum microcephalum*, usually together with *Pella ruficollis*. This species occurs very locally. It has rarely been collected, probably due to the rarity of its ant host (Franc 1992, Maruyama 2006).

Distribution. Central Europe, Asia Minor; in Ukraine: IFR, LWI, ZAK.

Pella humeralis (Gravenhorst, 1802)

Material from Ukraine. KYI: Kyiv, Teremky, 18.07.1982, 4 exs., same locality, 24.06.1980, 4 exs., same locality but 24.04.1977, 1 ex., A. A. Petrenko, Pushcha-Vodytsia, 18.04.1971, 1 ex., Holosiiv Forest, 29.04.1950, 1 ex., A. Bohachev, same locality but in an anthill *Formica rufa*, 16.09.1982, 5 exs., A. Bohachev, same locality but 19.06.1980, 2 exs. A. Bohachev, same locality but 08.07.1982, 5 exs., A. Bohachev (all – SIZK); LUG: Stanytsia Luhanska d., Stanytsia Luhanska 15–22.04.2007, 1 ex., S. Glotov (CGL); Milove d., Striltsivskyi Steppe Nature Reserve, 17-25.05.2002, 1 ex., V. Foroshchuk (CFR); LWI: Ivano-Frankove [Janów], 3 exs., same locality but 14.08.1913, 5 exs., leg. Stocle; Lviv [Lwow], 14.8. same locality but 3 exs., Pohulanka, 18.4.1917, 1 ex., same locality but 6.4.1917, 4 exs.; same locality but Briukhovychi, [Brzuchowice], 9 exs.; same locality but Zubra [Z], 3.5., 1 ex. (all – SMNH); TER: Berezhany [Berezhany, oak tree, cover], 24.07.1980, 1 ex., leg. Vozniak (SIZK); ZAK: Tiachiv d., vicinity Mala Uholka, Carpathian Biosphere Reserve, 16.10.1984, 1 ex., V. Chumak; same locality but 13.08.1990, 1 ex., V. Chumak (all – SIZK).

Additional material. Austria. *Aflenz,* 3 exs., Dr. Penecke (ZMTSNU). Poland. Subcarpathian Voivodeship: Zarichchia

[Zarzecze pod Jaroslavom], 1.04.1917, 5 exs. (SMNH). Locality not specified or illegible: [label missing], 2 exs. (SMNH).

Published records from Ukraine. Nowicki (1965, 1873), Łomnicki (1866, 1884, 1886, 1890), Cherkunov (1889), Rybiński (1903), Petrenko (1974, 2005), Kashcheev (1984), Bogdanov (1985), Glotov (2007), Petrenko & Glotov (2008), Sumarokov & Zamoroka (2020), Glotov (2021) and Glotov et al. (2021).

Bionomics. The beetles live in open steppe areas, in deciduous, mixed floodplain and foothill forests, in the litter layer, usually found outside ant nests.

Distribution. Europe, Caucasus, Kazakhstan, Middle Asia and Siberia; in Ukraine: IFR, KYI, LUG, LWI, POL, TER, ZAK.

Pella laticollis (Märkel, 1844)

Material from Ukraine. LWI: Lviv [Lwow], 11.4.1917, 1 ex., same locality but Bogdanivka [Bg], 18.10., 1 ex.; same locality but Holosko [H], 25.5., 1 ex.; same locality but Pohulanka, 6.4.1917, 2 exs., same locality but 4.5.1917, 3 exs., same locality but 11.4.1917, 2 exs. (all – SMNH).

Additional material. Austria. Graz [Umgeb, Graz St.], 7 exs., Dr. Penecke (ZMTSNU). Czech Republic. Prague [Ocolica Pragy], data not specified, 1 ex., leg. Dr. Lokay (SMNH).

Published records from Ukraine. Łomnicki (1868, 1884), Nowicki (1873), Cherkunov (1889); Petrenko & Kapelyukh (2010) and Glotov et al. (2021).

Bionomics. The beetles are common in open steppe areas, in deciduous and mixed foothill and floodplain forests, where they occur together with *Lasius fuliginosus* (Franc 1992, Maruyama 2006).

Distribution. Europe, Asia Minor; in Ukraine: IFR, KYI, LWI, TER.

Pella limbata (Paykull, 1789)

Material from Ukraine. CER: Chernivtsi [Bukowina, Cernowitz], 1 ex. (ZMTSNU); DON: Volodarsk d., Kamiani Mohyly Nature Reserve, 15–22.04.2006, 2 exs., K. Savchenko; same locality but 15–24.05.2007, 40 exs., K. Savchenko; same locality but 16–24.05.2008, 3 exs., K. Savchenko; same locality but 15–22.06.2006; 2 exs., K. Savchenko; same locality but 16–23.07.2007, 32 exs., K. Savchenko; Donetsk, 20–27.05.2003, 1 ex., V. Martynov; same locality but 22–29.05.2004, 1 ex., V. Martynov; same locality but 24.07.1999, 1 ex., V. Martynov; same locality but 19–26.07.2004, 3 exs., V. Martynov; Yasynuvata d., Yasynuvata, 27.05.2001, 1 ex., V. Martynov; same locality but 28.05.2003, 1 ex., V. Martynov; Mariupol, 04.04.2010, 1 ex., V. Martynov (all – ZMDONU); LUG: Antratsyt d., Ivanivka, 17.04. –25.05.2011, 2 exs., S. Glotov; Luhansk, 25.04.2010, 1 ex., V. Landyk (CGL); Slovianoserbsk d., Trokhizbenka, 6.04.2010, 1 ex., S. Konovalov (CKN); Stanytsia Luhanska d., Stanytsia Luhanska Nature Reserve, 23.04.2012, 1 ex., S. Glotov (CGL); Slovianoserbsk d., Trokhizbenka, 29.05.2010, 1 ex.; same locality but 9.06.2010, 1 ex. S. Konovalov; same locality but 22–25.08.2010, 2 exs., S. Konovalov (all – CKN); Trokhizbensky Steppe Nature Reserve, 29.05.2009, 1 ex., S. Glotov (CGL); LWI: Ivano-Frankove [Janów], 10.5., 1 ex., Lviv [Lwiw], 1 ex.; same locality but 15.5., 1 ex., same locality but 18.4., 1 ex., same locality but Briukhovychi, [Brzuchowice], 1 ex., same locality but Kryvchytsi [Kr], 18.4., 1 ex., same locality but 3.7., 1 ex., same locality but Pohulanka [Pohulanka], 18.4.1917, 3 exs.; same locality but 17.5., 1 ex.; same locality but 1.4.1917, 1 ex., same locality but Snopkiv [Sp.], 27.4., 1 ex., same locality but Zubra [Zubra], 1 ex. (SMNH); KHR: Izium d., Topalske, 17.09.1999, 1 ex., A. Drohvalenko (KUMN); KYI: Kyiv, slopes of the riv. Dnipro, 06.04.1972, 1 ex., A. Petrenko (SIZK); ZAK: Kniahynia, Stinka Mountain range, 961 m a.s.l., 21.06.2018, subalpine meadow, 1 ex., N. Koval; same locality but deciduous forest, 18.05.2019, 1 ex., N. Koval; same locality but deciduous forest, 04.06.2019, 2 exs., N. Koval; same locality but deciduous forest, 04.06.2019, 2 exs., N. Koval; same locality but border of deciduous forest and subalpine meadow, 1 ex., N. Koval; 30.06.2019, 5 exs., N. Koval (all – CKV); Tiachiv d., vicinity Mala Uholka, Carpathian Biosphere Reserve, 02.06.2017, 4 exs., V. Chumak; same locality but 20.06.2017, 13 exs., V. Chumak; same locality but 15.07.2017, 23 exs., V. Chumak; same locality but 15.08.2017, 3 exs., V. Chumak; same locality but 05.09.2017, 1 ex., V. Chumak; same locality but 01.07.2021, 4 exs., V. Chumak; same locality but 01.08.2021, 11 ex., V. Chumak; same locality but 01.09.2021, 1 ex., V. Chumak; vicinity Velyka Uholka, Carpathian Biosphere Reserve, same locality but 19.05.2017, 1 ex., V. Chumak; same locality but 30.06.2017, 2 exs., V. Chumak; same locality but 07.07.2017, 1 ex., V. Chumak; same locality but 28.07.2017 1 ex., V. Chumak; same locality but 18.08.2017, 6 exs., V. Chumak; same locality but 01.06.2021, 4 exs., V. Chumak; same locality but 15.06.2021, 1 ex., V. Chumak; same locality but 01.07.2021, 1 ex., V. Chumak; same locality but 15.07.2021, 2 exs., V. Chumak (all – CCH).

Additional material. Austria. Vienna [Wien], 3 exs. (SIZK). Locality not specified or illegible: [label missing], 1 ex. (SMNH).

Published records from Ukraine. Nowicki (1873), Kotuła (1873), Łomnicki (1875, 1884, 1886, 1890), Hormuzaki (1888), Rybiński (1903), Kryshtal (1956), Petrenko (1974), Glotov & Savchenko (2009, 2011, 2013), Petrenko & Kapelyukh (2010), Glotov (2011b, 2021), Sumarokov & Zamoroka (2020), Glotov et al. (2021), Glotov & Zamoroka (2021) and Koval et al. (2020).

Bionomics. The beetles live in open steppe and meadow areas, as well as in various forest habitats with *Lasius brunneus*, *L. flavus*, *L. fuliginosus* (Maruyama 2006).

Distribution. Europe, Kazakhstan and East Siberia; in Ukraine: CRK, DON, IFR, KHR, KYI, LWI, POL, TER, ZAK.

Pella lugens (Gravenhorst**,** 1802)

Material from Ukraine. LWI: Lviv, Pohulanka [Pohulanka], 6.4.1917, 3 exs., same locality but 11.4.1917, 2 exs., same locality but 8 exs., same locality but Briukhovychi, [Brzuchowice], 10.5., 3 exs. (all – SMNH); ZAK: Mochar, Yavirnyk Mountain range, 1010 m a.s.l., 21.06.2018, deciduous forest, 1 ex., N. Koval; same locality but 20.07.2018, deciduous forest, 3 exs., N. Koval (all – CKV); Tiachiv d., Mala Uholka, Carpathian Biosphere Reserve, 14.05.2018, 21 exs., V. Chumak; same locality but 08.06.2018, 32 exs., V. Chumak; same locality but 01.07.2018, 35 exs., V. Chumak; same locality but 15.07.2018, 5 exs., V. Chumak; Velyka Uholka, Carpathian Biosphere Reserve, 14.05.2018, 37 exs., V. Chumak; same locality but 21.05.2018 1 ex., V. Chumak; same locality but 28.05.2018, 5 exs., V. Chumak; same locality but 18.06.2018, 2 exs., V. Chumak; same locality but 09.07.2018, 11 exs., V. Chumak; same locality but 23.07.2018, 7 exs., V. Chumak; same locality but 06.08.2018, 1 ex., V. Chumak; same locality but 03.09.2018, 1 ex., V. Chumak (all – CCH).

Additional material. Austria. Graz [Umgeb, Graz St.], 1 ex., Dr. Penecke (ZMTSNU). Czech Republic. Prague [Ocolica Pragy], 1 ex., data not specified, leg. Dr. Lokay (SMNH). Lithuania. [Litwa], locality and date not specified, 1 ex. (all – SMNH).

Published records from Ukraine. Hochhuth (1872), Reitter (1878), Cherkunov (1889), Łomnicki (1890, 1891), Rybiński (1903), Gusarov (1991), Koval et al. (2020), Puchkov et al. (2020) and Glotov et al. (2021).

Bionomics. The beetles occur in deciduous forests of mountain areas. This is probably the most active flyer in the genus, regularly found in window traps.

Distribution. Europe, Caucasus, Asia Minor, Iran, Kazakhstan and Middle Asia; in Ukraine: CRI, KHR, KYI, LWI, TER, ZAK.

Pella ruficollis (Grimm, 1845)

Material from Ukraine. Unavailable, literature data only.

Additional material. Croatia. Zagreb [Zagreb, Weingurten], data not specified, 1 ex., leg. Weingärtner, same locality but 1 ex., leg. Hochentlinger (SMNH); Split [Dalmatia. Spalato], 5 exs. (ZMTSNU).

Published records from Ukraine. Reitter (1878) and Łomnicki (1913).

Bionomics. Pella ruficollis is collected from nests of *Liometopum microcephalum* sometimes together with *P. hampei*. This species occurs very locally. It has rarely been collected, probably due to the rarity of its host ants (Maruyama 2006).

Distribution. Central and South-Eastern Europe, Asia Minor; in Ukraine: Carpathians.

Pella similis (Markel, 1844)

Material from Ukraine. CER: Chernivtsi [Bukowina, Cernowitz], 1 ex. (ZMTSNU); DON**:** Yasynuvata, 05.2000, 1 ex., V. Martynov; 30.05.2004, 1 ex., V. Martynov; 25.07.1999, 2 exs., V. Martynov; 20–27.07.2004, 7 exs., V. Martynov (all – ZMDONU); IFR: Pistyn [Pistyń], 1 ex.; LWI: Hrebeniv [Hrebenów], 2 exs. (SMNH); LWI: Lviv, 1 ex. (SIZK); LUG**:** Antratsyt d., Ivanivka, 29–30.04.2012, 1 ex., S. Glotov; Luhansk, 9–20.04.2012, 1 ex., B. Landyk; Milove d., Striltsivskyi Steppe Nature Reserve, 16–17.04.2009, 5 exs., S. Glotov; Stanytsia Luhanska d., Stanytsia Luhanska, 3–10.06.2007, 2 exs., S. Glotov (all – CGL).

Additional material. Austria. Styria, Selzthal [Styria, Selzthal], 3 exs., leg. E. Reitter (SMNH); Graz [Umgeb, Graz St.], 3 exs., Dr. Penecke (ZMTSNU).

Published records from Ukraine. Pliginsky (1928), Marcu (1936), Schülke & Smetana (2015), Glotov (2011a, 2011b, 2021), Glotov & Hushtan (2020a, 2020b) and Glotov et al. (2021).

Bionomics. The beetles live in natural and artificial forests, in open steppe and meadow areas, in the litter layer, together with *Lasius fuliginosus* and *Liometopum microcephalum* (Sharp 1888, Franc 1992, Maruyama 2006).

Distribution. Europe, Turkey. In Ukraine: CRI, CER, DON, IFR, LWI, LUG.

Genus ***Zyras*** Stephens, 1835

Zyras (***Zyras***) ***collaris*** (Paykull, 1800)

Material from Ukraine. KYI: Kyiv, Holosiiv Forest, 13.10.19571, 1 ex.; same locality but 12–25.03. 1920, V. Luchnyk [V. Lutshnik]; same locality but 05.08.1932, 2 exs. (all – SIZK); LWI: Chornushovychi [Chornushovychi], 26.6.18981 ex., Lviv, Zubra [Zubra], 1.5., 1 ex., same locality but 19.5, 1 ex.; same locality but 1 ex.; 1 ex., leg. Dr. Lokay (all – SMNH); TER: Skalat [Skalatskiy], 1 ex. (SMNH); ZAK: Tiachiv d., Mala Uholka, Carpathian Biosphere Reserve, 21.06.2012, 2 exs., V. Chumak; Velyka Uholka, Carpathian Biosphere Reserve, 16.06.2017, 1 ex., V. Chumak (all – CCH).

Additional material. Austria. Graz [Umgeb. Graz St.], 5 exs., Dr. Penecke (ZMTSNU). *Hungary*. [*Hu.*], 1 ex. (SIZK). Russia. Chelyabinsk region: Ilmen Nature Reserve, in muddy soil, 26.06.1985, A. Petrenko; Primorsky Krai: Kedrovaya Pad, 17.08.1985, 1 ex., Z. Berest (all – SIZK). Locality not specified or illegible: [label missing], 2 exs. (all – SMNH).

Published records from Ukraine. Hochhut (1872), Nowicki (1873), Łomnicki (1884, 1886, 1890), Hormuzaki (1888), Cherkunov (1889), Rybiński (1903), Jakobson (1905-1913), Roubal (1930), Lebedjev (1934), Petrenko (1974), Kashcheev (1984), Bogdanov (1985), Petrenko (2005) and Glotov et al. (2021).

Bionomics. The beetles live in the litter layer, in mosses, in wet places, at banks of rivers and reservoirs.

Distribution. Europe, North Africa, Iran; in Ukraine: CER, KYI, LWI, POL, TER, ZAK.

Zyras (***Zyras***) ***fulgidus*** (Gravenhorst, 1806)

Material from Ukraine. DON: Boikivske (Telmanove) d., Khomutovskyi Step Nature Reserve, 16.10.1974, 1 ex., V. Yermolenko; same locality but 7.11.1976, 1 ex., A. Kotenko (all – SIZK); IFR: Vorokhta [Worochta], 0.5.[1]925, 2 exs. (SMNH); KHE: Askaniia Nova Nature Reserve, virgin steppe, 28.05.1974, 1 ex., V. Yermolenko (SIZK); LWI: Lviv, Pohulanka [Pohulanka], 8.11.1917, 1 ex., Kryvchytsi [K], 4.6., 1 ex. (all – SMNH).

Additional material. Azerbaijan. Nakhchivan Autonomous Republic: v. Bilav, in sediments, 16.05.1976, 2 exs., A. Petrenko; same locality but 21.09.1977, 2 exs., A. Petrenko (all – SIZK).

Published records from Ukraine. Nowicki (1858, 1964, 1965, 1873), Łomnicki (1870, 1884, 1886), Cherkunov (1889) and Bogdanov (1985).

Bionomics. The beetles live in natural and artificial forests in the litter layer and in steppe areas, in wet places, at banks of rivers and reservoirs.

Distribution. Europe, Caucasus, Azerbaijan (first record for the country) and Iran; in Ukraine: DON, IFR, KHE, KYI, LWI, TER, ZAK.

Zyras (***Zyras***) ***haworthi*** (Stephens, 1832)

*Material from Ukraine***.** CRI: Angarskyi Pass, forest, onto white cloth, 02.07.1979, 1 ex., A. Lelei; CER: Kaniv d., Kaniv Nature Reserve, 2 exs., O. Pavlenko; same locality, 05.06.1984, 2 exs., A. Petrenko (all – SIZK); DON**:** Donetsk, 14–21.06.2001, 1 ex., V. Martynov; Yasynuvata, 30.05.2004, 2 exs., V. Martynov (all – ZMDONU); KYI: Kyiv, Holosiiv Forest, in cover, 21.05.1958, 1 ex.; LWI: Lviv, 1 ex., Dr. Ligocky (all – SIZK); ZAK: Tiachiv d., Mala Uholka, Carpathian Biosphere Reserve, 15.09.2011, 2 exs., V. Chumak (CCH), Velyka Uholka, Carpathian Biosphere Reserve, 15.06.2011, 2 exs., V. Chumak (SIZK).

Additional material. Armenia. Ararat region, Khosrov Forest State Reserve, 05.08.1984, 2 exs., O. Pavlenko; Caucasus, 04.07.1978, 1 ex., P. Vasyliev (SIZK). Czech Republic: Prague [Praga. Bochemia], 1 ex., leg. Dr. Lokay (SMNH). Germany. *Marburg,* 1 ex., Dr. Penecke (ZMTSNU). Poland: Subcarpathian Voivodeship: Przemysl [Pikulice. Przemysl] V. Luchnyk [V. Lutshnik] (SIZK). Locality not specified or illegible: [label missing], 3 exs. (SMNH).

Published records from Ukraine. Petrenko (1974, 2005), Mateleshko (2007) and Glotov (2021).

Bionomics. The beetles live in natural and artificial forests in the litter layer and together with ants of the genus *Formica* and *Lasius.*

Distribution. Europe, North Africa, Asia Minor, Iran; in Ukraine: CRI, CER, DON, KYI, ZAK.

Discussion

Based on the critical analysis of literature data, study of the collection material including the author's own collections, it was established that the tribe Lomechusini is represented in the fauna of Ukraine by six genera and 18 species (*Lomechusa* – 3 species, *Lomechusoides* – 1 species, *Drusilla* – 1 species, *Myrmoecia* – 1 species, *Pella* – 9 species, *Zyras* – 3 species).

Among the identified species, the presence of 17 species is confirmed by the presence of collection materials. One species, *Pella ruficollis*, was not confirmed by collection materials and remain known only from literature (Reitter 1878, Łomnicki 1913). We consider it quite possible that this species will be found in the Ukrainian Carpathians as a result of further research, taking into account that it is rare throughout its range and occurs locally in neighbouring countries (Hungary, Romania and Slovakia), mainly in mountainous areas together with *Liometopum microcephalum*. Thus, among all representatives of the tribe only *Pella hampei* and *P. ruficollis* remain known for the fauna of Ukraine only from the Ukrainian Carpathians. The vast majority of representatives of the tribe Lomechusini found in Ukraine are quite widespread within the Palaearctic and are typical for forest and forest-steppe natural zones of Ukraine as well as in the mountains and foothills of the Ukrainian Carpathians. Such species are *Lomechusa emarginata*, *L. paradoxa, L. pubicollis*, *Lomechusoides strumosus strumosus, Myrmoecia plicata*, *Pella cognata, P. funesta, P. humeralis, P. laticollis, P. limbata, P. lugens, P. similis, Zyras collaris, Z. fulgidus* and *Z. haworthi*. They are much less common in the steppe zone and in the mountains of Crimea. The composition of the Ukrainian fauna of the Lomechusini is more similar to the humid, forest and meadow associated fauna of the neighbouring countries of Europe (Czech Republic, Hungary, Poland, Romania, Slovakia and the European part of Russia) than to the fauna of the steppe zone.

The fauna of the steppe zone of Ukraine is represented by two eurytopic species *Drusilla canaliculata* and *Pella limbata*, which are found both in areas of virgin steppe and in natural and artificial forests. In addition, a number of species characteristic of the forest and forest-steppe zones are able to penetrate into the steppe zone using an extensive network of floodplain forests in the valleys of large rivers as well as a network of gully groves and an artificially created network of forest plantations and forest belts. Such species are *Lomechusa paradoxa, Lomechusoides strumosus strumosus, Pella cognata, P. funesta, P. humeralis, P. similis, Z. fulgidus* and *Z. haworthi*.

The fauna of the mountainous and steppe Crimea, currently represented by four species (*Drusilla canaliculata*, *Pella cognata, P. lugens, Zyras haworthi*), requires an additional study.

Conclusions

The present analysis represents a detailed faunistic and taxonomic study of the tribe Lomechusini covering 25 administrative regions of Ukraine and the Autonomous Republic of Crimea. It includes 18 species of six genera as follows: *Lomechusa emarginata*, *L. paradoxa, L. pubicollis*, *Lomechusoides strumosus strumosus, Drusilla canaliculata*, *Myrmoecia plicata*, *Pella cognata, P. funesta, P. hampei, P. humeralis, P. laticollis, P. limbata, P. lugens, P.* ruficollis, *P. similis, Zyras collaris, Z. fulgidus* and *Z. haworthi*. The present results can be used in compiling a catalogue of the fauna of Ukraine as well as in comparative faunal studies, analyses of the distribution of species, biogeographical modelling, ecological monitoring and forecasting effects of anthropogenic factors on natural ecosystems.

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References

Bogdanov Yu. A. 1985. Fauna and ecology of rove beetles Staphilinids of the Transcarpathia Region. Synopsis of thesis of Ph. D (Biology). Kiev, 23 p. (In Russian).

Boychuk L. & Zamoroka A. 2017. Distribution of the epigeous Coleoptera among habitats in "Kasova Hora" steppe locality (Halych National Park). XIII International Scientific Conference "Youth and Progress of Biology", Lviv, 13, p. 163.

Cherkunov N. 1889. List of beetles in Kyiv and its vicinity. Notes of the Kyiv Society of Naturalists 10: 147–204 (In Russian).

Elven H., Bachmann L. & Gusarov V. I. 2012. Molecular phylogeny of the Athetini-Lomechusini-Ecitocharini clade of Aleocharine rove beetles (Insecta). Zoologica Scripta 41: 617–636.

Faly L. I. & Glotov S. V. 2012. Rove beetles (Coleoptera, Staphylinidae) of ravine and gully ecosystems of Dnipropetrovsk. Collection of Scientific Papers Biodiversity Dynamics 2012, Luhansk, State Institution Luhansk National University named after Taras Shevchenko, pp. 177–178 (In Ukrainian).

Faly L. I., Petrenko A. A., Krainik Y. M. & Glotov S. V. 2011. On studying of rove beetles (Coleoptera, Staphylinidae) of the Velyki Luky National Nature Park. Biodiversity and the role of animals in ecosystems. Materials of the VI International Scientific Conference. Dnipro, Publishing House of the Dnipro National University, pp. 223–224 (In Ukrainian).

Frivaldszky J. 1875. Adatok Maramaros varmegye faunajahoz. Jelentes az 1871. ev julius havaban e megyebe tett allattani kirandulasrol. Mathematikai es Termeszettudomdnyi Kozlemenyek 9: 183–232.

Glotov S. V. 2007. Materials on the fauna of rove beetles (Coleoptera, Staphylinidae) of the department of the Luhansk Nature Reserve "Provalska Steppe". Materials of the scientific conference "Zoocenosis-2007" Biodiversity and the role of animals in ecosystems, Dnipro, Dnipro National University, pp. 245–246 (In Russian).

Glotov S. V. 2008. New findings of rove beetles (Coleoptera, Staphylinidae) in the department Stanytsia Luhanska of the Luhansk Nature Reserve. Scientific works of the Luhansk Nature Reserve. Plant and animal world and its protection. Dedicated to the 40th Anniversary of the Luhansk Nature Reserve, Luhansk 1: 121–130 (In Russian).

Glotov S. V. 2011a. Rove beetles (Coleoptera, Staphylinidae) of the department "Streltsivska Steppe". Collection of Scientific Works of the Luhansk Nature Reserve 1: 175–190 (In Russian).

Glotov S. V. 2011b. Materials on the fauna of rove beetles of the subfamily Aleocharinae of the Luhansk region. Message 2. Natural Almanac. Biological Sciences Series 16: 5–12 (In Russian).

Glotov S. V. 2012. Rove Beetles of the Genera *Agaricochara*, *Brachida* and *Encephalus* (Coleoptera, Staphylinidae, Aleocharinae) of Ukraine. Vestnik Zoologii 46 (5): 387–393.

Glotov S. V. 2021. The rove beetles of the tribe Aleocharinae (Coleoptera, Staphylinidae, Aleocharinae) in the South East of Ukraine (fauna, morphology, taxonomy). Synopsis of thesis of Ph. D (Biology), Kyiv, 21 p. (In Ukrainian).

Glotov S. V., Petrenko A. A. & Mateleshko A. Yu. 2011. Rove Beetles of the Genus *Gyrophaena* (Coleoptera, Staphylinidae, Aleocharinae) of Ukraine. Vestnik Zoologii 45 (2): 127–143.

Glotov S. V. & Hushtan K. V. 2020a. Rove beetles of the subfamily Aleocharinae (Coleoptera: Staphylinidae) from the Hutsulshchyna National Nature Park. Biosystems Diversity 28 (4): 364–369.

Glotov S. V. & Hushtan K. V. 2020b. Materials on fauna of rove beetles of the Subfamily Aleocharinae (Coleoptera, Staphylinidae) from the Hutsulshchyna National Nature Park. Problems of avoiding loss of biodiversity of the Ukrainian Carpathians. Materials of the International scientific conference dedicated to the 100th anniversary of the birth of Professor Kostyantyn Malynovskyi (Lviv, May 14–15, 2020), Lviv, pp. 125–126.

Glotov S. & Savchenko K., 2009. The materials about fauna of Staphylinidae beetles (Coleoptera, Staphylinidae) in Kamennye Mogily Reserve. Biodiversity and Role of Animals in Ecosystems: Extended Abstracts of The V International Conference, Dnipropetrovsk, Lira, pp. 197–198.

Glotov S. V. & Savchenko K. Yu. 2011. Rove beetles (Coleoptera, Staphylinidae) of the Kamiani Mohyly Nature Reserve. Materials of the Kharkiv Entomological Society, 19 (2): 5–12 (In Russian).

Glotov S. V. & Savchenko K. Yu. 2013. Landscape and biotope distribution of rove beetles (Coleoptera: Staphylinidae) of the Kamiani Mohyly Nature Reserve (Ukraine). Caucasian Entomological Bulletin 9 (1): 50–57 (In Russian).

Glotov S., Hushtan K., Hushtan H. & Rizun V. 2020. The Rove beetles of subfamily Aleocharinae (Coleoptera, Staphylinidae) from Skole Beskids National Nature Park in collection of the State Museum of Natural History (Lviv). In: Nature of Podillya: study, problems of preservation, Grimails, pp. 97–99.

Glotov S., Hushtan K. & Hushtan H. 2021. Rove beetles (Coleoptera: Staphylinidae: Aleocharinae) of the genus Zyras in the collection of the I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine. Materials of the International scientific and practical conference "Ideas and innovations in natural sciences" (March 12–13, 2021), Lublin, Izdevnieciba Baltija Publishing, pp. 37–40 (In Ukrainian).

Glotov S. V., Koval N. P. & Chumak V. O. 2021. Studying of rove beetles (Coleoptera, Staphylinidae) of the upper forest border of the Polonynskyi Mountain range. In: Biological research – 2021. Collection of scientific works. Zhytomyr, PP Euro-Volyn, pp. 70–73 (In Ukrainian).

Glotov S. V. & Zamoroka A. M. 2021. Studying of rove beetles (Coleoptera: Staphylinidae) of the Galician National Nature Park. Biological research – 2021. In: Collection of scientific works. Zhytomyr, PP Euro-Volyn, pp. 67–70 (In Ukrainian).

Gusarov V. I. 1991. Novye i maloizvestnye Palearkticheskie stafilinidy (Coleoptera, Staphylinidae). Soobshchenie 2 [New and little known Palaearctic rove beetles (Coleoptera, Staphylinidae). Communication 2]. Vestnik Leningradskogo Universiteta, Seria 3: Biologia 3 (17): 3–12 (In Russian).

Hlaváč P. 2005. Revision of the myrmecophilous genus *Lomechusa* (Coleoptera: Staphylinidae: Aleocharinae). Sociobiology 46 (2): 203–225.

Hlaváč P., Newton A. F. & Maruyama M. 2011. World catalogue of the species of the tribe Lomechusini (Staphylinidae: Aleocharinae). Zootaxa 3075: 1–151.

Hochhuth J. H. 1872. Enumeration der in den russischen Gouvernements Kiew und Volhynien bisher aufgefundenen Käfer. II. Bulletin de la Société Impériale des Naturalistes de Moscou 44 (3–4): 85–177.

Hormuzaki C. 1888. Beiträge zur Käferfauna der Bukovina und Nordrumaliens. Entomologische Nachrichten und Berichte 14: 21–31, 34–41, 67–77, 93–96, 105–110, 148–156, 161–169.

Jakobson G. G. 1905–1913. Beetles of Russia and Western Europe. A guide to identifying beetles. Sankt-Peterburg, A. F. Devrien, 1024 p.

Jatzentkovsky E. V. 1910. Notes on rove beetles of Russian fauna (Coleoptera, Staphylinidae) II. Russian Entomological Review 12 (3): 452–467 (In Russian).

Kashcheev V. A. 1984. Rove beetles (Coleoptera, Staphylinidae) from forest cover of deciduous forests of Poltava region. Publication of the All-Russian Institute of Scientific and Technical Information of the Russian Academy of Sciences 770: 1–14. (In Russian).

Kotuła B. 1873. Przyczynek do fauny chrząszczów Galicyi. Sprawozdanie Komisyi Fizyograficznéj 7: 53–90.

Koval N. P., Glotov S. V. & Chumak V. O. 2020. Rove beetles (Coleoptera: Staphylinidae) of the upper forest border of the Polonynskyi mountain range (within the Uzhanskyi National Nature Park). Notes of the State Natural History Museum, Lviv 37: 223–242. (In Ukrainian).

Komaromi N. A., Nikolenko N. Yu. & Putchkov A. V. 2018. Faunistic composition of Coleoptera (Insecta: Coleoptera) of the herpetocenosis of Kharkiv's urbocenoses. Ukrainian Entomological Journal 2 (15): 3–21. (In Russian).

Kryshtal O. P. 1956. Entomofauna of the soil and cover in the valley of the middle course of the Dnipro River. Kyiv, Publishing House of Kyiv University, 423 p.

Krynicki I. 1832. Enumeratio Coleopterorum Rossiae meridionalis et praecipe in Universitatis Caesareae Charkoviensis circulo ovbenientium, quae annorum 1827–1831 spatio observavit. Bulletin se la Société Imperiale des Naturalistes de Moscou, 5: 65–179.

Król Ż. 1877. Fauna koleopterologiczna Janowa pod Lwowem. Sprawozdanie Komisyi Fizyograficznej 11 (2): 33–63.

Kubisz D., Mazur M., Pawłowski J. 1998. Chrząszcze Miodoborów (Zachodnia Ukraina). Część II. Aktualny stan poznania (Insecta, Coleoptera). Studia Ośrodka Dokumentacji Fizjograficznej 25: 217–293.

Landyk V. A., Glotov S. V. & Fomin S. V. 2012. Rove beetles (Coleoptera, Staphylinidae) of the artificial forest plantations of Luhansk. Collection of Scientific Papers "Biodiversity Dynamics 2012", Luhansk, State Institution Luhansk National University named after Taras Shevchenko, pp. 162–163 (In Ukrainian).

Lebedjev A. G. 1934. Materials on studying the biocenosis of a deciduous forest. Collection of Works of the Department of Terrestrial Animal Ecology 2: 19–55. (In Ukrainian).

Łomnicki M. A. 1866. Przyczynek do fauny chrząszczów galicyjskich. Uniwersytet Jagielloński, Kraków, pp. 1–9.

Łomnicki M. A. 1868. Wycieczka na Czarnogórę. Sprawawozdanie Komisyi fizyograficznej 2: 132–152.

Łomnicki M. A. 1870. Zapiski z wycieczki podolskiéj odbytéj w roku 1869 pomiędzy Seretem, Zbruczem a Dniestrem. Sprawozdanie Komisyi Fizyjograficznéj 4: 41–85.

Łomnicki M. A. 1875. Chrząszcze zebrane w okolicy Stanisławowa. Sprawozdanie Komisyi Fizyjograficznéj 9: 154–182.

Łomnicki M. A. 1884. Catalogus Coleopterorum Haliciae. Sumptibus L. Zontaki, Custodis Musaci Dzieduszyckiani, Leopoli, pp. 1–43.

Łomnicki M. A. 1886. Chrząszcze czyli Tęgoskrzydłe. (Coleoptera). IV. Zoologiczny Oddział zwierząt bezkręgowych. Dział I. Muzeum imienia Dzieduszyckich we Lwowie. Muzeum imienia Dzieduszyckich, Lwów, 31, 308 p.

Łomnicki M. A. 1890. Fauna Lwowa i okolicy. Chrząszcze I. Część I. Sprawozdanie Komisyi Fizyjograficznéj, pp. 141–217.

Łomnicki M. A. 1891. Wykaz chrząszczów nowych dla fauny galicyjskiéj. Sprawozdanie Komisyi Fizyjograficznéj 26: 16–25.

Łomnicki M. A. 1913. Wykaz chrząszczów czyli Tęgopokrywych (Coleoptera) ziem polskich. (Catalogus coleopterorum Poloniae). Kosmos 38: 21–155.

Marcu O. 1936. Coleopterenfunde aus der Bucovina. Verhandlungen und Mitteilungen des Siebenburgischen Vereins fur Naturwissenschaften 15–16: 56–83.

Maruyama M. 2006. Revision of the Palearctic species of the myrmecophilous genus *Pella* (Coleoptera, Staphylinidae, Aleocharinae). National Science Museum Monographs 32 (1-4): 1–207.

Mateleshko A. Yu. 2007. Faunistic findings of rove beetles (Coleoptera, Staphylinidae) from Zakarpattya. Scientific Bulletin of Uzhhorod University 17: 127–130 (In Ukrainian).

Medvedev S. I. & Vysotskaya S. O. 1969. Beetles (Coleoptera) from burrows of small mammals of the Zakarpattya region. Entomological Review 48 (4): 787–801 (In Russian).

Medvedev S. I. & Skljar V. E. 1974. Beetles (Coleoptera) from burrows of small mammals of the Donetsk region. Entomological Review 53 (3): 561–571 (In Russian).

Miller L. 1868. Eine entomologische Reise in die ostgalizischen Karpathen. Verhandlungen der Kaiserlich-Koniglichen Zoologisch-Botanischen Gesellschaft in Wien 18: 3–34.

Nazarenko V. Yu. & Petrenko, A. A. 2008. On studying of the fauna of beetles (Insecta: Coleoptera) of the area Lysa Hora (Kyiv). Proceedings of the Kharkov Entomological Society 15 (1–2): 43–48 (In Ukrainian).

Nowicki M. S. 1858. Coleopterologisches öber Ostgalizien. Program du Obergymnasiums in Sambor, Lemberg, 24 p.

Nowicki M. S. 1864. Przyczynek do owadniczej fauny Galicyi. Drukarnia Uniwersytetu Jagiellońskiego, Kraków, 87 p.

Nowicki M. S. 1865. Insecta Haliciae Musei Dzieduszyckiani. Typis Universitatis Jagellonicae, Cracoviae, 47 p.

Nowicki M. 1873. Beiträge zur Insektenfauna Galiziens. Jagellonische Universität, Krakau, pp. 7–52.

Petrenko A. A. 1974. Short-winged beetles, or staphylinids (Coleoptera, Staphylinidae) of the Middle Dnipro region. Abstract of the thesis for a candidate degree in biological sciences, Kyiv, 25 p. (In Russian).

Petrenko A. A. 2009. Species composition of rove beetles (Coleoptera, Staphylinidae) of the Shatsk National Nature Park. Scientific Bulletin of Volyn National University named after Lesya Ukrainka, Animal World 2: 154–158.

Petrenko A. A. & Glotov S. V. 2008. Materials on the fauna of rove beetles (Coleoptera, Staphylinidae) of the department Stanytsia Luhanska of the Luhansk Nature Reserve. Natural Almanac 10: 98–107 (In Russian).

Petrenko A. A. & Zhuravchak R. O. 2009. Short-winged beetles (Coleoptera, Staphylinidae) of the Rivne Nature Reserve. Preservation and reproduction of biodiversity of nature reserves. Materials of the International scientific and practical conference dedicated to the 10th anniversary of the Rivne Nature Reserve (Sarny, June 11-13, 2009), Rivne, Rivne Printing House JSC, 517–525 (In Ukrainian).

Petrenko A. A. & Kapelyukh Y. I. 2010. On studying of rove beetles (Coleoptera, Staphylinidae) of the Medobory Nature Reserve. Materials of the International scientific and practical conference "Nature Reserve Fund of Ukraine – past, present, future" dedicated to the 20th anniversary of the Medobory Nature Reserve (Grymailiv, May 26-28). Ternopil: Textbooks and manuals, pp. 712–714 (In Ukrainian).

Petrenko A. A. & Sheshurak P. N. 2013. Species composition

of rove beetles (Coleoptera, Staphylinidae) of the Desniansko-Starohutskyi National Nature Reserve. Ukrainian Entomological Journal, 1 (6): 50–64 (In Ukrainian).

Petrenko A. A., Foroshchuk V. P. & Sheshurak P. N. 2003. On studying of beetles of the family Staphylinidae Latreille,1802 (Coleoptera) of the Luhansk Nature Reserve. The state and problems of the natural and socio-economic environment of the regions of Ukraine (Materials of the All-Ukrainian scientific and practical conference dedicated to the 65th anniversary of the formation of the Luhansk region. Within the framework of the 5th All-European Conference "Environment for Europe", May 20-22, Luhansk), 59–61 (In Russian).

Plyhynskyi V. H. 1928. Beetles of Crimea V. Notes of the Crimean Society of Naturalists and Nature Lovers 10: 40–100 (In Russian).

Puchkov A. V., Brygadyrenko V. V., Faly L. I. & Komaromi N. A. 2020. Staphylinids (Coleoptera, Staphylinidae) of Ukrainian metropolises. Biosystems Diversity 28 (1): 41–47. DOI:10.15421/012007

Reitter E. 1878. Beitrag zur Coleopteren-Fauna der Carpathen unter Mitwirkung der Herren Dr. Eppelsheim, F. de Saulcy und J. Weise. Deutsche Entomologische Zeitschrift 22: 33–64.

Rybiński M. 1903. Wykaz chrząszczów zebranych na Podolu galicyjskim przy szlaku kolejowym Złoczów-Podwołoczyska w latach 1884–1890. Sprawozdania Komisyi fizyograficznej 37: 57–175.

Roubal J. 1930. Katalog Coleopter (brouků) Slovenska a Podkarpatska. Praha 1: 527 p.

Schülke M. & Smetana A. 2015. Staphylinidae Latreille, 1802. pp. 304–1134. In: Löbl I. & Löbl D. Catalogue of Palaearctic Coleoptera. Vol. 1 and 2, Hydrophiloidea–Staphylinoidea, revised and updated edition. Brill, Leiden & Boston, XXV + 1702 p. DOI: 10.1163/9789004296855

Semenov V. B. 2008. Rove beetles of the subfamily Aleocharinae (Coleoptera: Staphylinidae) of the Moscow region. Part 2. Tribes Falagriini — Aleocharini. Eversmannia 13–14: 18–34. (In Russian).

Semenov V. B. & Blinshtein S. Ya. 1989. Materials on the fauna and ecology of Aleocharinae (Coleoptera, Staphylinidae) of halophytic habitats of southern Ukraine. Theses of the conference "Ecology and Taxonomy of Insects of Ukraine", Kyiv – Odesa 3, pp. 46–55 (In Russian).

Sumarokov A. M. & Zamoroka A. M. 2020. Spatial patterns and habitat differentiation of the beetle (Insecta: Coleoptera) fauna of protected areas in the Eastern Carpathians (Ivano-Frankivsk Region, Ukraine). Kharkov Entomological Society Gazette 28 (2): 5–25. DOI: 10.36016/KhESG-2020-28-2-1

Weise J. 1876. Coleopterologische Ergebnisse einer Bereisung der Czernahora. Verhandlungen des Naturforschenden Vereins in Brunn 14: 85–114.

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