

A REVIEW OF THE SUBFAMILY PSELAPHINAE (COLEOPTERA, STAPHYLINIDAE) IN EASTERN UKRAINE

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Abstract

The paper summarizes all known information about the findings of the subfamily Pselaphinae in Eastern Ukraine, based on the study of collections stored in the country, collected in the Donetsk, Luhansk, Kharkiv, and Sumy administrative Regions of Ukraine. As a result of the study, it was found that the subfamily Pselaphinae is represented in the fauna of the Region 58 species. The data on ecological features and distribution of the identified species are presented. The obtained results can be used for solving a number of theoretical issues of faunistics, zoogeography and ecology, as well as for the preparation of the fauna cadastre of Ukraine, for comparative faunal studies, analysis of species distribution, biogeographical constructions, study of faunogenesis, environmental monitoring and prediction of the effects of human activity on natural ecosystems of the region.

Keywords: fauna, ecology, Pselaphinae, Ukraine, Sumy, Kharkiv, Luhansk, Donetsk.

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INTRODUCTION

Rove beetles (Coleoptera: Staphylinidae) are one of the largest families of beetles; to date, the world fauna comprises more than 66,900 species belonging to 35 subfamilies and

4038 genera (Newton 2025). More than 1,300 species are known in the fauna of Ukraine (Schülke & Smetana, 2015). The representatives of the family are ubiquitous in all natural zones of the planet, inhabiting almost all terrestrial natural and anthropogenic, involved in natural and artificial biogeocenoses. Larvae and adult rove beetles actively inhabit forest cover, plant and animal remains, excrements, as well as fungi (Glotov 2021).

Pselaphinae is a species-rich subfamily of the Staphylinidae comprising more than 10,000 species of small predators, which occur in soil, forest litter, in ant and termite nests, and in dead wood feeding on Collembola and mites. The Pselaphinae are small beetles (1–5 mm) with shortened elytra leaving, generally, five abdominal tergites exposed. They differ from other rove beetles, by the immovable abdominal segments, and the tarsi normally 3-segmented. The head with two interocular pits (tentorial foveae). The antennae are normally 11-segmented, and more or less claviform at the apex. Maxillary palpi are normally 4-segmented and can be very short or rather long. Pronotum of various shape but often with basal foveae and sulci. Elytra with basal foveae, with sutural and dorsal striae. Some species show pronounced sexual characters in the males, and species associated with ants can exhibit spectacular morphology (Jeannel 1950, Besuchet 1974, Chandler 2001, Parker 2016, Staverløkk & Ødegaard 2021).

In Ukraine, the Pselaphinae is represented by 128 species (Krivosheyev, 2015, 2018, 2020, 2023). According to previous literature data and general number of expeditions, the Eastern Regions of Ukraine are poorly examined compare to the West of the country, and stays sparse so far: three species (*Euplectus karstenii*, *Rybaxis longicornis*, *Pselaphus heisei*) are reported from Kharkiv Region (Krynicky 1832, Jakobson 1905–1915). Donetsk, Kharkiv, Lugansk and Sumy Regions were examined only based on museum and private collections; all these records are by Krivosheyev

(2015, 2020). Since then, one of the co-authors (REK) took additional collecting trips to Donetsk Region, in Ukrainian State Steppe Nature Reserve (May, 2018) and Sviati Hory National Park (October, 2019).

MATERIAL AND METHODS

Study region

The territory of Eastern Ukraine is currently one of the areas of Ukraine and Eastern Europe that have been insufficiently studied by entomologists. The presence of various biogeographical zones and their corresponding faunal communities allows us to assess the spatial dynamics of the fauna and conduct a number of modern comparative faunal and ecological studies. The high degree of anthropogenic pressure on the natural landscapes of this Region and the extremely weak network of nature reserve areas make it important to describe and analyze the structure and dynamics of the entomofauna in order to ensure the protection of this group of animals and biodiversity in general. The proposed study is based on the analysis of original data and generalization of all the information accumulated so far on the findings of rove beetles of the subfamily Pselaphinae in the territory of Eastern Ukraine.

In administrative terms, the territory of Eastern Ukraine includes the entire territories of the Sumy, Kharkiv, Luhansk, and Donetsk administrative Regions (Fig. 1) of Ukraine.

The border of the Donetsk-Don and Donetsk-Pryazovia steppes in the Northeast, East, and Southeast is the state border of Ukraine with the Russian Federation. In the south, the natural border is the North-Eastern coast of the Azov Sea.

A characteristic feature of Eastern Ukraine is that it covers two physical and geographical zones: Wood-and-Steppe (Sumy and northern Kharkiv Regions) and Steppe (southern

Kharkiv, all of Luhansk and Donetsk Regions).

Collections

The study was based on the collections of the authors, which have been sampled over many years and are currently deposited in the collection of R. Krivosheyev (deposited in SIZK), collection of S. Glotov (deposited in SMNHL and SIZK) and collection of O. Drogvalenko (deposited in KUMN); KUMN – V. N. Karazin Kharkiv National University State Museum of Nature, Kharkiv, Ukraine; SIZK – I. I. Schmalhausen Institute of Zoology National Academy of Sciences of Ukraine, Kyiv, Ukraine; SMNHL – State Museum of Natural History of the National Academy of Sciences of Ukraine, Lviv, Ukraine; ZMDONU – collection of Zoological Museum Donetsk National University, Donetsk, Ukraine.

Collecting and laboratory processing of the material was carried out according to standard methods of entomological research (Kryzhanovskiy & Emets 1972). Current taxonomic status, nomenclature and general distribution of the species follow Schülke & Smetana (2015) and Newton (2025). The geographical coordinates of localities and places of collecting are given according to www.google.com/maps/place.

Additional abbreviations used in the text (including province codes of Ukraine): DON – Donetsk, KHR – Kharkiv, LUH – Luhansk, SUM – Sumy, NR – Nature Reserve; RLP – Regional Landscape Park; NNP – National Nature Park; dep. – department; ex. – exemplar or exemplars; l. – lake; riv. – river.

The list of localities (with coordinates) of all the records of Subfamily Pselaphinae mentioned in this work is given in the table below (Tab. 1).

Table 1. The list of localities of all the records subfamily Pselaphinae in Eastern Ukraine.

Region		Locality	Coordinates	
			N	E
DON		Blahodatne	47.68	37.42
DON		Dronivka	48.92	38.04
DON		Khomutovskyi Steppe, department of the Ukrainian State Steppe Nature Reserve	47.42	38.03
DON		Donetsk	47.99	37.86
DON		Doniestk city, Putilov forest	48.07	37.78
DON		Makiivka	48.07	37.97
DON		Novoazovsk	47.05	38.13
DON		Sviati Hory NNP, Bohorodychne	49.03	37.50
DON		Sloviansk	48.84	37.56
DON		Kamiani Mohyly, department of the Ukrainian State Steppe Nature Reserve, Nazarivka	47.30	37.08
DON		Pyshchevyk	47.24	37.79
DON		Bilosaraiska Kosa Landscape Reserve of National Importance, Yalta	46.88	37.33
DON		Avdiyivka	48.13	37.76
DON		Pisky	48.06	37.67

Region		Locality	Coordinates	
DON	Starobesheve		47.74	38.09
DON	Donetsky Kryazh RLP, Petrivske		48.19	37.67
LUH	Provalskyi Steppe, department of the Luhansk Nature Reserve, Provallia		48.15	39.86
LUH	Pyatyhorivka		48.35	39.41
LUH	Djakove		47.96	39.13
LUH	Triokhizbenka		48.79	38.96
LUH	Kreminna		39.08	38.26
LUH	Stanichno-Luhanske, department of the Luhansk Nature Reserve, Stanitsa-Luhanska		48.75	39.36
LUH	Striltsivskyi Steppe, department of the Luhansk Nature Reserve, Krynychne		49.28	39.85
KHA	Lozovenka, Mala Danylivka		50.07	36.15
KHA	Cheremushna		49.87	35.78
KHA	Kostiantivka		49.78	36.22
KHA	Chuhuiv		49.84	36.70
KHA	Levkivka		49.72	36.33
KHA	Saryi Saltiv		50.08	36.77
KHA	Vodyane		49.79	36.33
KHA	Zadonetske		49.64	36.36
KHA	Borova		49.78	36.34
KHA	Bukine		49.13	37.39
KHA	Izium		49.20	37.28
KHA	Topolske		49.13	37.20
KHA	Dachi		49.82	36.60
KHA	Kharkiv		50.07	36.25
KHA	Lysogirka		49.32	37.14
KHA	Pivdenne		49.89	36.06
KHA	Vasysheve		49.83	36.27
KHA	Dvorichna NNP, Krasne Pershe		49.95	37.78
KHA	Dvorichna NNP, Novomlynsk		49.89	37.74
KHA	Homilsha Woods NNP, Haidary		49.61	36.32
SUM	Lebedyn		50.56	34.46
SUM	Mykhaylivska Tsilyna NR		50.75	34.19
SUM	Hetmanskyi NNP, Klymentove		50.39	34.92
SUM	Bytytsya		51.00	39.99
SUM	Sumy		50.89	30.80

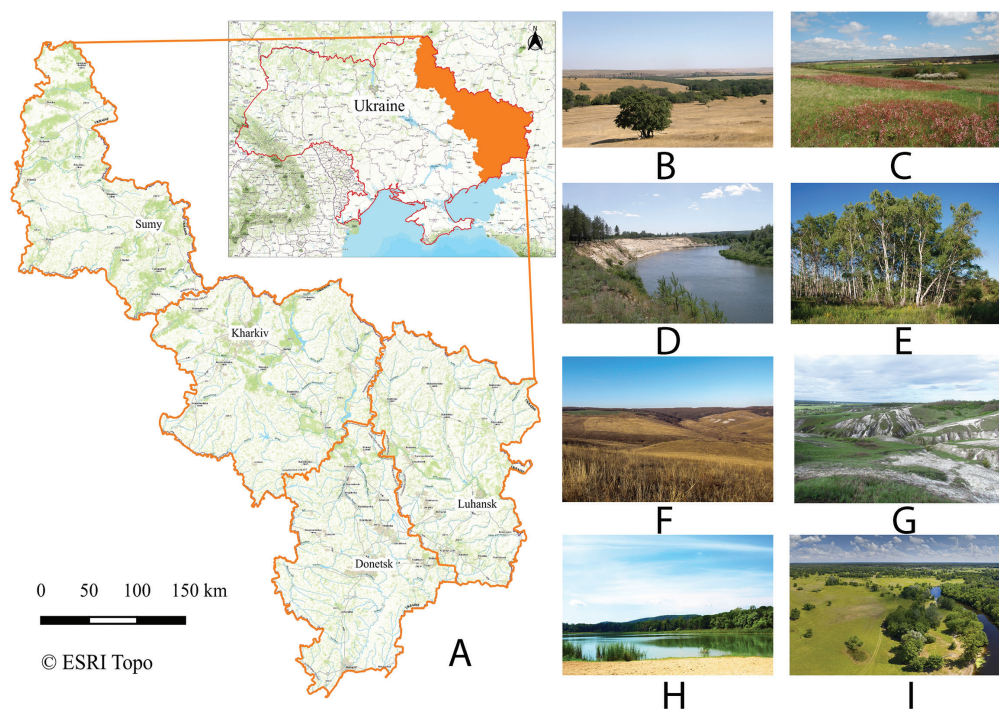


Figure 1. Map of the study area and different types of biotopes of Eastern Ukraine: A – Map of Eastern Ukraine (Borovyk et al., 2024); B – Luhansk Region, Provalia, Provalskiyi Steppe, (photo: S. Demyanenko); C – Luhansk Region, Krynychne, Streltsovska Steppe (photo: G. Gouz); D – Luhansk Region, Stanichno-Luhanske, department of the Luhansk Nature Reserve; E – Luhansk Region, Triokhizbenka (photo: V. Moroz); F – Kharkiv Region, Krasne Pershe, Dvorichna NNP (photo: V. Kletyonkin); G – Kharkiv Region, Novomlynsk, Dvorichna NNP (photo: V. Kletyonkin); H – Kharkiv Region, Homilsha Woods NNP (photo: D. Yevsteyhnyeyeva, www.gomilsha.org.ua); I – Kharkiv Region, Hetmanskyi NNP. Image courtesies: M. Omelchenko, CC BY-SA 4.0, www.wownature.in.ua.

RESULTS AND DISCUSSION

ANNOTATED LIST OF THE SUBFAMILY PSELAPHINAE OF EASTERN UKRAINE

Subfamily Pselaphinae Latreille, 1802
Supertribus Batrisitae Reitter, 1882
Tribus Batrisini Reitter, 1882
Subtribus Batrisina Reitter, 1882
Genus *Batrisodes* Reitter, 1882

Batrisodes (Batrisodes) adnexus
(C. Hampe, 1863) (Fig. 2.1)

Records. Donetsk and Kharkiv Regions (Krivosheyev 2014b).

Material. Donetsk Region: Bohorodychne, Sviati Hory NNP, under the bark of *Betula*, 4.IV.2008, 2 ex., Yu. Guglia (KUMN). Kharkiv Region: environs of Haidary, Homilsha Woods NNP, 15.IV.1998, 1 ex., O. Drogvalenko;

idem, under the bark of *Quercus*, 26.IV.2004, 5 ex., O. Droghvalenko; idem, under the bark of rotten log of *Quercus*, 23.V.2003, 2 ex., O. Droghvalenko; idem, under the bark of rotten log of *Quercus*, together with white mold, 25.V.2003, 1 ex., O. Droghvalenko; idem, under the bark of dry *Quercus*, together with ants, 4.VI.1999, 1 ex., O. Droghvalenko; idem, under the bark of *Betula*, 25.V.2001, 1 ex., O. Droghvalenko; idem, under the bark of *Tilia*, 27.VI.2001, 1 ex., O. Droghvalenko; idem, under the bark of *Quercus*, 14.IV.2008, 1 ex., O. Droghvalenko; environs of Zmiiv, under the bark of dry *Quercus*, 19.VI.1997, 1 ex., O. Droghvalenko; Vodyane, forest, in dead *Quercus*, 4.VI.2002, 1 ex., E. Moskalets (all – KUMN). Sumy Region: Sumy, under the bark of *Populus*, together with ants *Lasius brunneus*, 3.VII.2014, 7 ex., R. Krivosheyev; idem, d. Topoli, under the bark of stump of *Populus*, 4.VII.2014, 1 ex. (♀), R. Krivosheyev (all – SIZK).

Ecology. A stenotopic forest species, in natural and artificial deciduous and mixed forests, in parks, and often together with ants (*Lasius brunneus*, *L. fuliginosus* and *Camponotus* spp.), in hollows of old trees, under the bark of dead fallen trees, in moist forest litter. Adults occur in III–XI (Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Distributed in Europe, including northern European part of Russia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk, Kharkiv and Sumy Regions.

***Batrissodes (Batrissodes) delaporti* (Aubé, 1833)** (Fig. 2.2)

Records. Donetsk Region (Krivosheyev, 2014b).

Material. Donetsk Region: Peski, forest steppe, 29.IX.–6.X.2009, 2 ex., V. Martynov; Petrivske, Donetskyi Kryazh, 5.VI.2004, 1 ex., M. Segeyev; idem, by mowing over grass, 1 ex., M. Segeyev (all – ZMDONU). Kharkiv Region: environs of Dachi, 25.V.1998, 4 ex., M. Yunakov; idem, 14.V.1995, under the bark of a pine stump, 7 ex., O. Droghvalenko; idem, 15.V.2006, under the bark of a fallen pine tree, 6 ex., O. Droghvalenko; Kostiantivka, 1 ex., D. Donets-Zakharzhevsky; environs of Haidary, Homilsha Woods NNP, under the bark of a fallen tree, 10.VIII.1992, 1 ex., O. Droghvalenko; Staryi Saltiv, sweeping under the forest canopy, 6.VIII.2000, 1 ex., M. Yunakov (all – KUMN).

Ecology. A eurytopic forest species, in natural and artificial deciduous and mixed forests, in parks, and often together with ants (*Lasius brunneus*), in hollows of old trees, under the rotten bark of dead fallen trees and in forest litter at the base of old trees. Adults occur in III–XI (Aubé 1833, Schaufuss 1916, Jeannel 1950, Pearce 1957, Koch 1989).

Distribution. Distributed in Europe, and Armenia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Kharkiv Regions.

***Batrissodes (Batrissodes) exsculptus* (Hampe, 1850)** (Fig. 2.3)

Records. Kharkiv Region (Krivosheyev 2014b).

Material. Kharkiv Region: environs of Haidary, Homilsha Woods NNP, under the bark of a dry tree, 15.IV.1998, 2 ex., O. Droghvalenko; environs of Dachi, 10.VI.1999, under the bark of a dead *Pinus*, 1 ex., O. Droghvalenko; environs of Zadonetske, under the bark of *Pinus*, 9.V.1998, 1 ex., K. Nadein (all – KUMN).

Ecology. A stenotopic forest species, in deciduous forests, in rotten wood and under rotten bark, often together with ants (*Lasius brunneus*, sometimes with *L. emarginatus*, *L. niger*, *Myrmica laevinodis*, and *M. rugosa*). Adults occur in III–XI (Koch 1989, Neuhäuser-Happe 1995, Krivosheyev 2015).

Distribution. Sporadically distributed in Central and Eastern Europe (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Batrisodes (Batrisodes) hubenthali* Reitter, 1913**

Records. Donetsk and Kharkiv Regions (Krivosheyev 2014b).

Material. Donetsk Region: Peski, forest steppe, 29.IX.–6.X.2009, 2 ex., V. Martynov (ZMDONU). Kharkiv Region: environs of Dachi, under the bark of stumps of *Pinus*, 18.V.1998, 1 ex., M. Yunakov; idem, 25.V.1998, 7 ex., M. Yunakov (all – KUMN).

Ecology. A stenotopic myrmecophilous species, under the bark of dead fallen trees and in rotten wood. Adults occur in III–V and IX–XI (Koch 1989, Krivosheyev 2015).

Distribution. Distributed in Europe (including northern European part of Russia), also occurs in the Caucasus (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Kharkiv Regions.

***Batrisodes (Batrisodes) oculatus* (Aubé, 1833)**

Records. Kharkiv Region (Krivosheyev 2014b).

Material. Kharkiv Region: environs of Zadonetske, under the bark of *Pinus*, 12.VI.1996, 2 ex., O. Droghvalenko (KUMN).

Ecology. Species collected in deciduous, mixed, and coniferous forests, along the banks of rivers and reservoirs, under the bark of dead fallen trees and in rotten wood, often with ants. Adults occur in III–XI (Ganglbauer 1895, Schaufuss 1916, Koch 1989, Neuhäuser-Happe 1996).

Distribution. Distributed in Central and Eastern Europe (including central territories of European Russia), also recorded for Turkey (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Batrisodes (Batrisodes) venustus* (Reichenbach, 1816) (Fig. 2.4)**

Records. Donetsk and Kharkiv Regions (Krivosheyev 2014b, 2020).

Material. Donetsk Region: Peski, forest steppe, 29.IX.–6.X.2009, 2 ex., V. Martynov (ZMDONU). Kharkiv Region: environs of Dachi, 25.V.1998, 4 ex., M. Yunakov; idem, under the bark of a pine stump, 14.V.1995, 7 ex., O. Droghvalenko; idem, under the bark of a pine stump, 15.V.2006, 6 ex., O. Droghvalenko; Kostiantivka, 1 ex., D. Donets-Zakharzhevsky; environs of Haidary, Homilsha Woods NNP, under the bark of a fallen tree, 10.VIII.1992, 1 ex., O. Droghvalenko; Staryi Saltiv, sweeping under the forest canopy, 6.VIII.2000, 1 ex., M. Yunakov (all – KUMN); Krasne Pershe, Dvorichna NNP, deciduous forest, under the *Pinus* bark with ants, 5–6.V.2019, 2 ex., R. Krivosheyev (SIZK).

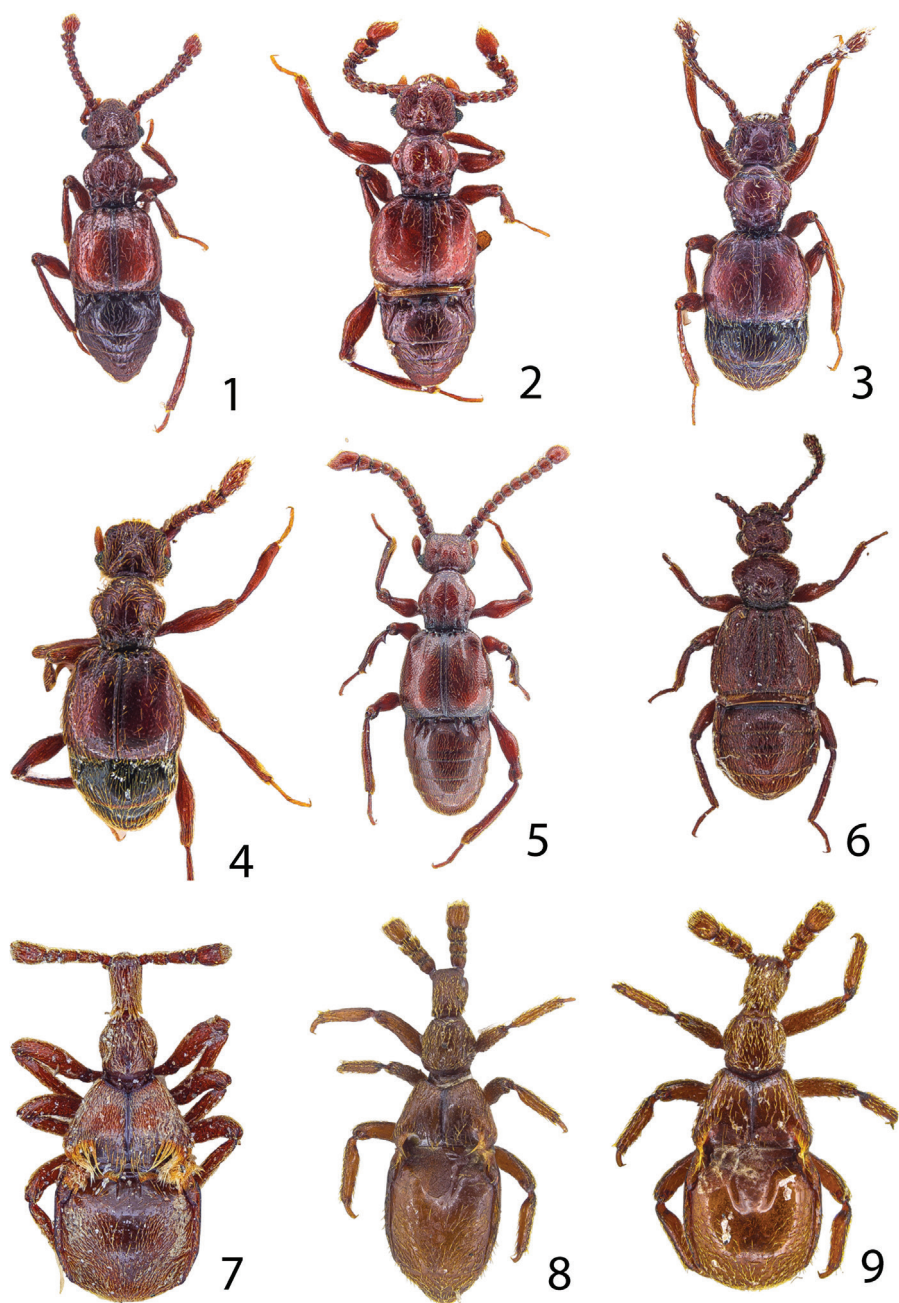


Figure 2. Diversity of Pselaphinae in Eastern Ukraine. 1 – *Batrisodes adnexus*; 2 – *B. delaporti*; 3 – *B. exsculptus*; 4 – *B. venustus*; 5 – *Batrisus formicarius*; 6 – *Amauronyx maerkelii*; 7 – *Claviger longicornis*; 8 – *C. testaceus testaceus*; 9 – *C. testaceus testaceus*, habitus. Scale bar 0.5 mm. 1–9 original photo courtesy: R. Krivosheyev.

Ecology. A eurytopic forest species, in natural and artificial deciduous and mixed forests, in parks, along the banks of rivers in floodplain forests, often with ants (*Lasius* ssp. and *Formica* ssp.), under the bark of dead fallen trees, in rotten wood and in mosses. Adults occur in III–XI (Koch 1989, Neuhäuser-Happe 1995).

Distribution. Distributed in Europe including central and northern territories of European Russia (Schülke & Smetana 2015, Newton, 2025). In Eastern Ukraine recorded from the Donetsk and Kharkiv Regions.

Genus *Batrisus* Aubé, 1833

***Batrisus formicarius* Aubé, 1833 (Fig. 2.5)**

Material. Kharkiv Region: environs of Haidary, Homilsha Woods NNP, 16.IV.2004, under the bark of a fallen *Quercus*, together with ants, 1 ex., O. Drogvalenko; idem, deciduous forest, together with ants, 15.IV.1998, 1 ex., O. Drogvalenko; idem, 4.VI.1999, under the bark of a dry *Quercus*, 20 ex., O. Drogvalenko (all – KUMN).

Ecology. Species collected in deciduous and mixed forests, in parks, along the banks of rivers in floodplain forests, with ants (*Lasius brunneus* and *L. niger*), often under the bark of dead fallen trees and in rotten wood. Adults occur in III–XI (Reitter 1909, Roubal, 1930, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread in Europe including European part of Turkey (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Kharkiv Region.

Supertribus *Clavigeritae* Leach, 1815 **Tribus *Clavigerini* Leach, 1815** **Subtribus *Clavigerina* Leach, 1815** **Genus *Claviger* Preyssler, 1790**

***Claviger (Claviger) longicornis* P. W. J. Müller, 1818 (Fig. 2.7)**

Material. Kharkiv Region: environs of Vasyshcheve, deciduous forest, 20.V.1995, 4 ex., O. Drogvalenko; environs of Haidary, Homilsha Woods NNP, under the bark of *Quercus*, 24.V.03, 1 ex., O. Drogvalenko; outskirts Kharkiv, deciduous forest, together with ants *Lasius flavus*, 26.IV.1997, 2 ex., O. Drogvalenko; idem, together with *Lasius flavus*, 27.V.1996, 1 ex., O. Drogvalenko (all – KUMN).

Ecology. A stenotopic myrmecophilous species, in forests and open landscapes, in parks, along the banks of rivers in floodplain forests, in rotten wood under stones with ants (*Lasius mixtus*, *L. umbratus*, *L. alienus*, *L. flavus* and *L. niger*, and sometimes in dead wood with *Lasius brunneus*). Adults occur in III–V and IX–X (Aubé 1833, Ganglbauer 1895, Reitter 1909, Schaufuss 1916, Roubal 1930, Jeannel 1950, Pearce 1957, Besuchet 1974, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread in Europe (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Claviger (Claviger) testaceus testaceus* Preyssler, 1790 (Figs 2.8 and 2.9)**

Material. Kharkiv Region: outskirts Kharkiv, 1.VI. 1996, deciduous forest, together with ants *Lasius flavus*, 4 ex., O. Drogvalenko; idem, 7.VI.1996, 5 ex., O. Drogvalenko; environs of Topolske, 1.V.2001, ravine forest, together with ants of genus *Lasius*, 1 ex., O. Drogvalenko (all – KUMN).

Ecology. A eurytopic xerophilous and myrmecophilous species, in forests and open landscapes, on xerothermic slopes, river banks, in meadows and on dry steppe slopes with ants (*Lasius alienus*, *L. flavus*, *L. niger*,

sometimes with *Myrmica* ssp.) and under stones. Adults occur in III–V and IX–X (Aubé 1833, Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Jeannel 1950, Pearce 1957, Besuchet 1974, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread in Europe (nominotypical subspecies), including central and northern territories of European Russia, recorded also for Turkey (Schülke & Smetana 2015, Newton 2025). In Portugal and Spain, the species is represented by subspecies *C. t. perezii* Reitter, 1882, and in Iran, it is also represented by subspecies *C. t. persicus* Bodemeyer, 1927 (Newton 2025). In Eastern Ukraine recorded only from the Kharkiv Region.

Supertribus Euplectitae Streubel, 1839

Tribus Euplectini Streubel, 1839

Genus *Euplectus* Leach, 1817

***Euplectus bonvouloiri narentinus* Reitter, 1881** (Fig. 3.1)

Records. Kharkiv Region (Krivosheyev 2020).

Material. Kharkiv Region: Krasne Pershe, Dvorichna NNP, 5–6.V.2019, 3 ex., R. Krivosheyev (SIZK).

Ecology. A stenotopic hygrophilic forest subspecies, in deciduous forests, in parks, usually can be found in debris and holes of old trees (*Quercus*), in dead wood in litter, often with ants. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1995).

Distribution. Distributed in Central and Eastern Europe. It is divided into five subspecies: the nominotypical subspecies, restricted to France (Corsica); *E. b. felschei* Reitter, 1887, restricted to France (Corsica) and Italy (Sardinia); *E. b. siculus* Raffray, 1910, restricted to Italy (Sicily); *E. b. rosae* Raffray, 1910, sporadically distributed in Europe (Austria, Denmark,

France, Great Britain, Germany, Hungary, Italy, Slovenia, Sweden, Switzerland); and *E. b. narentinus* Reitter, 1882, distributed in Central and Eastern Europe (Austria, Bulgaria, Croatia, Czech Republic, Denmark, France, Germany, Hungary, Italy, Macedonia, Poland, Slovenia, Switzerland) (Schülke & Smetana 2015, Newton 2025). The taxonomic status and distribution of these five subspecies has never been rigorously investigated. In Eastern Ukraine, it has been recorded only from the Kharkiv Region.

***Euplectus brunneus* Grimmer, 1841** (Fig. 3.2)

Records. Kharkiv Region (Krivosheyev 2012).

Material. Kharkiv Region: Kharkiv, forest park, under the bark of *Acer*, 18.VI.1998, 5 ex., O. Drovalenko; Staryi Saltiv, under the bark of *Quercus*, together with myxomycetes *Fuligo septica*, 6.VIII.2000, 1 ex., M. Yunakov (all – KUMN).

Ecology. A stenotopic hygrophilic forest species, in deciduous forests, in parks, along the banks of rivers in floodplain forests, under the bark of dead fallen trees and in rotten wood, in forest litter at the base of old trees and often with ants. Adults occur in III–V and IX–XI (Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread in Europe and reported also from Turkey (Schülke & Smetana 2015, Newton, 2025). In Eastern Ukraine recorded only from the Kharkiv Region.

***Euplectus infirmus* Raffray, 1910** (Fig. 3.3)

Material. Sumy Region: Sumy, under the bark of *Populus*, together with ants *Lasius brunneus*, 3.VII.2014, 7 ex., R. Krivosheyev; idem, in stump of *Populus*, under the bark, 4.VII.2014, 1 ex., R. Krivosheyev (all – SIZK).

Ecology. A stenotopic hygrophilic forest species, in deciduous forests, in forest litter and often with ants. Adults occur in III–V and IX–XI (Koch 1989).

Distribution. Distributed in Europe, Morocco, Azores and Canary Islands (Krivosheyev 2015, Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Sumy Region.

***Euplectus karstenii* (Reichenbach, 1816)**
(Fig. 3.4)

Records. Kharkiv Region (Jakobson 1905–1915, Krivosheyev 2012).

Material. Kharkiv Region: outskirts Chuhuiv, waste deposit, in the skin of a rabbit, 21.IV.1995, 1 ex., O. Drogvalenko (KUMN).

Ecology. A eurytopic hygrophilic species, in forests and open landscapes, in parks, along the banks of rivers in floodplain forests, in rotting plant remains, in dead wood, forest litter, dung and dry carrion and in compost pits. Adults occur in III–V and IX–XI (Reitter 1881, Łomnicki 1890, Ganglbauer 1895, Reitter 1909, Schaufuss 1916, Roubal 1930, Besuchet 1974, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread Palearctic species, introduced in various regions of the world, subcosmopolitan (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Euplectus kirbii kirbii* Denny, 1825** (Fig. 3.5)

Material. Sumy Region: Bytysya, ravine forest, in a log of *Salix*, in nest of *Lasius meridionalis*, 2.VII.2014, 2 ex., R. Krivosheyev (SIZK).

Ecology. A eurytopic hygrophilic species, in

forests and open landscapes, in dead wood, often with ants *Lasius brunneus*, in litter and in the straw of field barns. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1996b, 2000).

Distribution. Widespread in Europe (nominotypical subspecies), including central and northern territories of European Russia, Cyprus, eastward to Asia Minor and West Siberia (Krivosheyev 2015, Schülke & Smetana 2015, Newton 2025). In Italy and France (Corsica) represented by the subspecies *E. k. dilutum* Reitter, 1885. In Eastern Ukraine recorded only from the Sumy Region.

***Euplectus nanus* (Reichenbach, 1816)**
(Fig. 3.6)

Material. Donetsk Region: Novoazovsk, 3.V.1998, 1 ex., E. Ivanova (KUMN).

Ecology. A eurytopic hygrophilic species, prefers decaying wood and other plant debris, rarely occurs with *Lasius* and *Formica* ants. Adults occur in III–V and IX–XI (Denny 1825, Ganglbauer 1895, Schaufuss 1916, Reitter 1909, Roubal 1930, Koch 1989, Neuhäuser-Happe 1995, 2000, Krivosheyev 2015).

Distribution. Distributed in Europe, including central and northern territories of European Russia, and recorded also from the Caucasus (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Donetsk Region.

***Euplectus piceus piceus* Motschulsky, 1835**
(Fig. 3.7)

Records. Kharkiv (Krivosheyev 2012) and Luhansk Regions (Krivosheyev 2015, Borovyk et al. 2024).

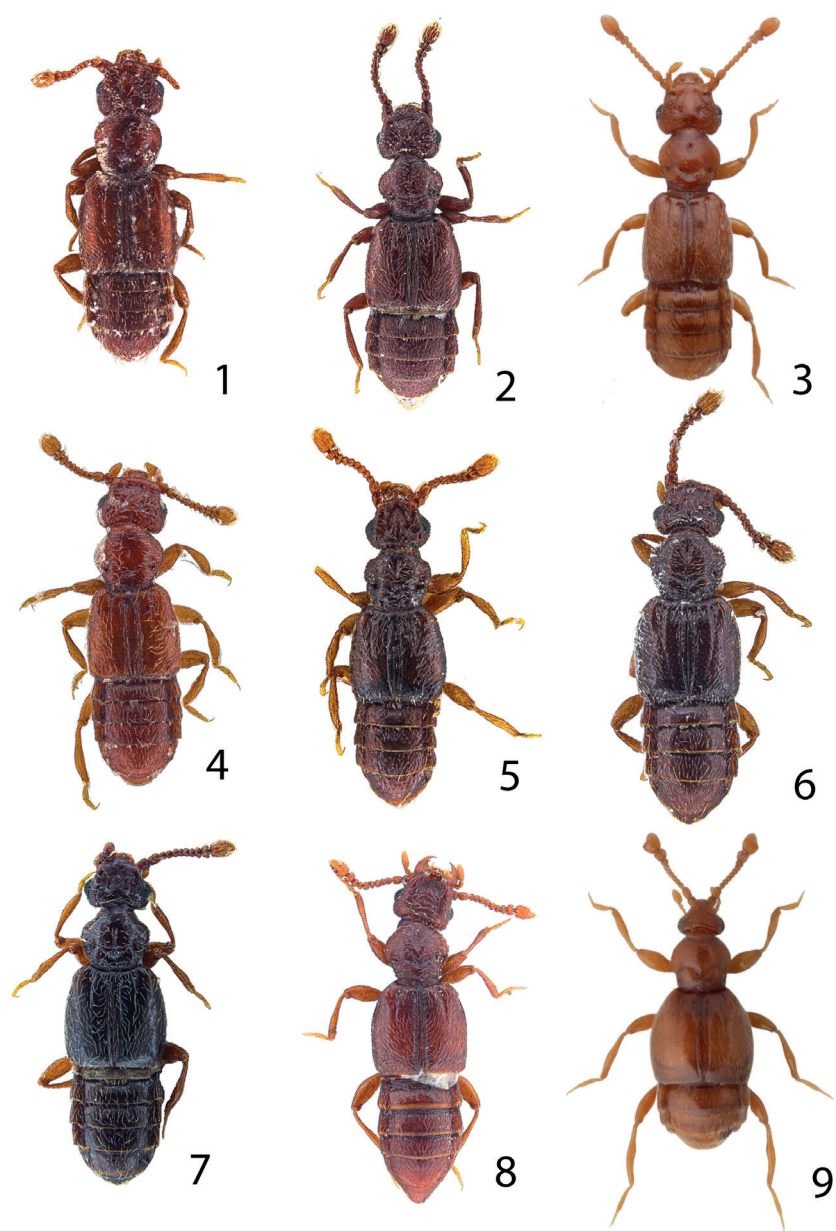


Figure 3. Diversity of Pselaphinae in Eastern Ukraine. 1 – *Euplectus bonvouloiri narentinus*; 2 – *E. brunneus*; 3 – *E. infirmus*; 4 – *E. karstenii*; 5 – *E. kirbii kirbii*; 6 – *E. nanus*; 7 – *E. piceus piceus*; 8 – *E. validides*; 9 – *Saulcyella schmidtii*, habitus. Scale bar 0.5 mm. 1–2, 4–8 image courtesy: R. Krivosheyev; 3, 9 photo from <https://www.danbiller.dk>

Material. Luhansk Region: Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, in plant remains, 4.VII.2000, 1 ex., T. Trikhleb (ZMDONU).

Ecology. A stenotopic hygrophilic forest species, in deciduous forests, in parks, along the banks of rivers in floodplain forests, under the bark of dead fallen trees and in rotten wood, sometimes in grass and moss. Adults occur in III–V and IX–XI (Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread in Europe (nominotypical subspecies), including central and northern territories of European Russia, and recorded also for Turkey, Georgia, Armenia, and Russian Far East. In Italy (Lucania) represented by the subspecies *E. p. lucanus* Meggiolaro, 1966. (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Luhansk Region.

***Euplectus validides* Newton, 2015** (Fig. 3.8)

Records. Kharkiv Region (Krivosheyev 2012).

Material. Kharkiv Region: environs of Haidary, Homilsha Woods NNP, under the bark of a fallen tree, 2.VI.2010, 1 ex., O. Droghvalenko; idem, under the bark of *Quercus*, 15.IV.1998, 1 ex., O. Droghvalenko; outskirts Kharkiv, 6.V.1996, deciduous forest, on flowing sap of *Betula*, 1 ex., O. Droghvalenko (all – KUMN).

Ecology. A stenotopic hygrophilic forest species, under the rotten bark of dead fallen trees and in forest litter at the base of old trees. Adults occur in III–V and IX–XI (Besuchet 1974, Koch 1989).

Distribution. Distributed in Italy (Lombardia) and Switzerland (Ticino), and Ukraine (Krivosheyev 2015). In Eastern Ukraine

recorded only from Kharkiv Region forest; the record is not unlikely from the biogeographic standpoint but needs confirmation.

Tribus Trichonychini Reitter, 1882

Subtribus Bibloporina O. Park, 1951

Genus *Bibloporus* Thomson, 1859

***Bibloporus (Bibloporus) bicolor bicolor* (Denny, 1825)** (Fig. 4.1)

Material. Kharkiv Region: environs of Dachi, under the bark of *Pinus*, 29.VI.1992, 1 ex., O. Droghvalenko; environs of Haidary, Homilsha Woods NNP, under the bark of dry *Quercus*, 24.V.2001, 1 ex., O. Droghvalenko; Kharkiv, forest park, under the bark of *Tilia*, 21.VII.1998, 1 ex., O. Droghvalenko; idem, 18.VI.1998, under the bark of logs of *Quercus*, 3 ex., O. Droghvalenko; idem, under the bark of fallen trees *Quercus*, 30.VI.1998, 3 ex., O. Droghvalenko; idem, under the bark of fallen trees *Acer*, 18.VI.1999, 2 ex., O. Droghvalenko (all – KUMN).

Ecology. A stenotopic hygrophilic forest species, in deciduous forests, in parks, under the bark, in dead wood of trunks and litter. Adults occur in III–VI and IX–XI (Weise 1876, Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread in Europe (nominotypical subspecies), including central and northern territories of European Russia, known, also, from Russian Far East. In France and Italy represented by the subspecies *B. b. devillei* Jeannel, 1950, and *S. b. franzi* Besuchet, 1958 is known from Spain. (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Kharkiv Region.

***Bibloporus (Bibloporus) mayeti* Guillebeau, 1888** (Fig. 4.2)

Material. Kharkiv Region: outskirts Chuhuiv, under the bark of a dead *Prunus armeniaca*, 17.IV.1994, 1 ex., O. Droghvalenko; outskirts Kharkiv, deciduous forest, under the bark of fallen trees *Betula*, 29.IV.1998, 1 ex., O. Droghvalenko; idem, under the bark of dry *Quercus*, 29.IV.1998, 1 ex., O. Droghvalenko; Staryi Saltiv, under the bark of a dead *Quercus*, together with myxomycetes *Fuligo septica*, 6.VIII.2000, 7 ex., M. Yunakov (all – KUMN).

Ecology. A eurytopic hygrophilic forest species, in dead wood, under the bark of dead fallen trees and in rotten wood. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1996).

Distribution. Sporadically distributed in Europe (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Bibloporus (Bibloporus) minutus* Raffray, 1914** (Fig. 4.3)

Material. Kharkiv Region: environs of Haidary, Homilsha Woods NNP, 25.V.2003, 2 ex., O. Droghvalenko (KUMN).

Ecology. A eurytopic hygrophilic forest species, in dead wood, under the bark and in rotten wood. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread in Europe, including central and northern territories of European Russia, known, also, from Russian Far East (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

Subtribus Panaphantina Jeannel, 1950
Genus *Biblopectus* Reitter, 1882

***Biblopectus (Biblopectus) ambiguus* (Reichenbach, 1816)** (Fig. 4.4)

Material. Sumy Region: Lebedyn, forest near a swamp, 6.VII.2014, 3 ex., R. Krivosheyev (SIZK).

Ecology. A eurytopic hygrophilic species, in forests and open landscapes, in deciduous forests and parks, in the turf of meadows, in moss and litter, sometimes under the bark, in dead wood, often with ants. Adults occur in III–XI (Reichenbach 1816, Ganglbauer 1895, Reitter 1909, Kuhn 1913, Roubal 1930, Pearce 1957, Neuhäuser-Happe 1995).

Distribution. Widespread in Europe, eastward to reaching central and northern territories of Russia and East Siberia, recorded also from European part of Turkey (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Sumy Region.

***Biblopectus (Biblopectus) hungaricus* Besuchet, 1955** (Fig. 4.5)

Material. Donetsk Region: Novoazovsk, evening flight, seashore, 3.V.1998, 1 ex., T. Trikhleb (SIZK).

Ecology. A stenotopic hygrophilic species, the banks of rivers, in detritus. Adults occur in III–V and IX–XI (Koch, 1989).

Distribution. Sporadically distributed in Central and Eastern Europe, known also from Turkey (Krivosheyev 2015, Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Donetsk Region.

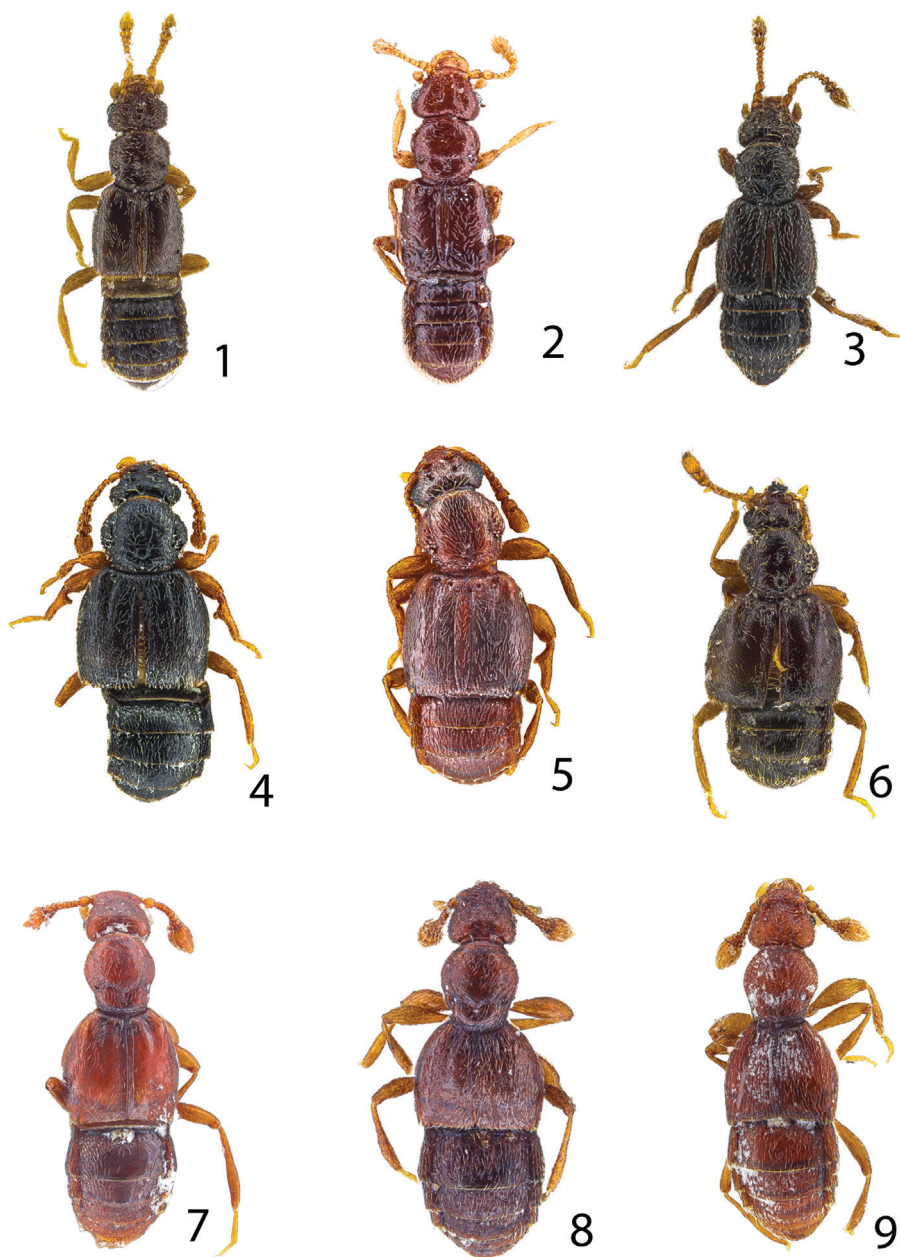


Figure 4. Diversity of Pselaphinae in Eastern Ukraine. 1 – *Bibloporus bicolor bicolor*; 2 – *B. mayeti*; 3 – *B. minutus*; 4 – *Biblopectus ambiguus*; 5 – *B. hungaricus*; 6 – *B. spinosus*; 7 – *Trimium brevicorne*; 8 – *T. latiusculum*; 9 – *T. minimum*, habitus. Scale bar 0.5 mm. 1–9 image courtesy: R. Krivosheyev.

Biblopectus (Biblopectus) spinosus

Raffray, 1914 (Fig. 4.6)

Records. Kharkiv Region (Krivosheyev 2020). Material. Kharkiv Region: Krasne Pershe, Dvorichna NNP, dry chalk hills, in litter, 30.IV.–4.V.2020, 10 ex., R. Krivosheyev; idem, deciduous forest, 5–6.V.2019, 9 ex., R. Krivosheyev. Sumy Region: Sumy, the bank of the Psel river, city park, in the litter under *Alnus*, 3.VII.2014, 2 ex., R. Krivosheyev; Lebedyn, forest near a swamp, under *Alnus*, 6.VII.2014, 25 ex., R. Krivosheyev (all – SIZK).

Ecology. A stenotopic hygrophilic species, occur in moss, grass and deciduous forest litter along the riverbanks, swamps and lakes. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread in Europe, known, also, from Turkey (Schülke & Smetana 2015). In Eastern Ukraine recorded from the Kharkiv and Sumy Regions.

Subtribus Trichonychina Reitter, 1882

Genus *Amauronyx* Reitter, 1882

***Amauronyx maerkelii* (Aubé, 1844)** (Fig. 2.6)

Records. Kharkiv Region (Krivosheyev 2020).

Material. Donetsk Region: Makiivka, 30.V.1998, 1 ex., T. Trikhleb (SIZK). Kharkiv Region: environs of Haidary, Homilsha Woods NNP, under the bark of *Quercus* together with ants, 4.VI.1999, 1 ex., O. Droghvalenko; Kharkiv, d. Pavlovo Pole, under the bark of a dead *Salix*, 6.VI.1997, 1 ex., O. Droghvalenko; idem, forest park, 25.IV.1999, under the bark of *Quercus*, 1 ex., O. Droghvalenko (all – KUMN); Krasne Pershe, Dvorichna NNP, deciduous forest, 5–6.V.2019, 4 ex., R. Krivosheyev (SIZK).

Ecology. A eurytopic hygrophilic species, in

forests and open landscapes, in parks, along the banks of rivers in floodplain forests, in rotting plant remains, in dead wood, forest litter, in the straw of field barns and under the bark, often with *Lasius* and *Formica* ants. Adults occur in III–V and IX–XI (Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995, 1996, 2000).

Distribution. Widespread in Europe, including central part of European Russia, Easternmost records coming from Ukraine (Schülke & Smetana 2015). In Eastern Ukraine recorded from the Donetsk and Kharkiv Regions.

Subtribus Trimiina Bowman, 1934

Genus *Saulcyella* Reitter, 1901

***Saulcyella schmidtii* (Märkel, 1844)** (Fig. 3.9)

Material. Kharkiv Region: Pivdenne, 3.IX.1932, 1 ex., G. Kakhovskiy; idem, 12.IX.1932, 1 ex., G. Kakhovskiy; idem, 13.IX.1932, 1 ex., G. Kakhovskiy; idem, 25.IX.1932, 1 ex., G. Kakhovskiy (all – KUMN).

Ecology. A eurytopic hygrophilic forest species, in deciduous forests and parks, under the bark, in dead wood of trunks and litter, often with ants (*Lasius brunneus*, *L. fuliginosus* and *Formica rufa*). Adults occur in III–XI (Reitter 1909, Kuhnt 1913, Roubal 1930, Jeannel 1950, Besuchet 1974, Koch 1989, Neuhäuser-Happe 1996b).

Distribution. Sporadically distributed in Central and Eastern Europe, including Georgia and central part of European Russia, known, also, from Russian Far East and Japan (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Kharkiv Region.

Genus *Trimium* Aubé, 1833

***Trimium brevicorne* (Reichenbach, 1816)**
(Fig. 4.7)

Records. Kharkiv Region (Krivosheyev 2020).

Material. Kharkiv Region: environs of Haidary, Homilsha Woods NNP, forest litter under an old *Quercus*, 23.V.03, 1 ex., O. Drogvalenko; idem, under the bark of a dead *Betula*, 6.VI.1994, 2 ex., O. Drogvalenko; outskirts Kharkiv, deciduous forest, 31.V.2004, 2 ex., O. Drogvalenko; environs of Topolske, ravine forest, in forest litter, 12.V.2011, 2 ex., O. Drogvalenko (all – KUMN).

Ecology. A eurytopic hygrophilic forest species, in forests and open landscapes, in deciduous forests and parks, in the turf of meadows, in moss and litter, sometimes under the bark and in dead wood. Adults occur in III–XI (Ganglbauer 1895, Kuhnt 1913, Roubal 1930, Besuchet 1974, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread through Europe, introduced to the Nearctic Region (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Trimium latiusculum* Reitter, 1880** (Fig. 4.8)

Material. Donetsk Region: Kamyani Mohyly Nature Reserve, in a dry stump of *Populus tremula*, 2.X.2000, 1 ex., T. Trikhleb (ZMDONU). Kharkiv Region: outskirts Kharkiv, deciduous forest, 31.V.2004, 2 ex., O. Drogvalenko (KUMN).

Ecology. A stenotopic termophilic species, in forests and open landscapes, in litter under rocks and cliffs in ravines of deciduous forests. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1995, 2000).

Distribution. Sporadically distributed in

Central and Southern Europe (Schülke & Smetana, 2015). In Eastern Ukraine recorded from the Donetsk and Kharkiv Regions.

***Trimium minimum* Doderò, 1900** (Fig. 4.9)

Material. Kharkiv Region: environs of Topolske, ravine forest, 14.V.2009, 8 ex., O. Drogvalenko; idem, in forest litter, 12.V.2011, 1 ex., O. Drogvalenko (all – KUMN).

Ecology. A stenotopic forests species, in moss and litter, sometimes under the bark and in dead wood. Adults occur in III–V and IX–XI (Ganglbauer 1895, Kuhnt 1913, Roubal 1930, Besuchet 1974, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Sporadically distributed in Southern Europe (Schülke & Smetana 2015). Distributed in Southern Europe, and Ukraine (Krivosheyev 2015). In Eastern Ukraine recorded only from Kharkiv Region forest; the record is not unlikely from the biogeographic standpoint but needs confirmation.

Tribus Trichonychini, taxa incertae sedis
Genus *Plectophloeus* Reitter, 1891

***Plectophloeus binaghii* Besuchet, 1964**

Material. Kharkiv Region: outskirts Kharkiv, deciduous forest, in a stump, 29.IV.1998, 2 ex., O. Drogvalenko (KUMN).

Ecology. A stenotopic hygrophilic forest species, in rotten wood. Adults occur in III – V and IX – XI (own observations).

Distribution. Distributed in Italy and Switzerland, and Ukraine (Krivosheyev 2015). In Eastern Ukraine recorded only from Kharkiv Region forest; the record is not unlikely from the biogeographic standpoint but needs confirmation.

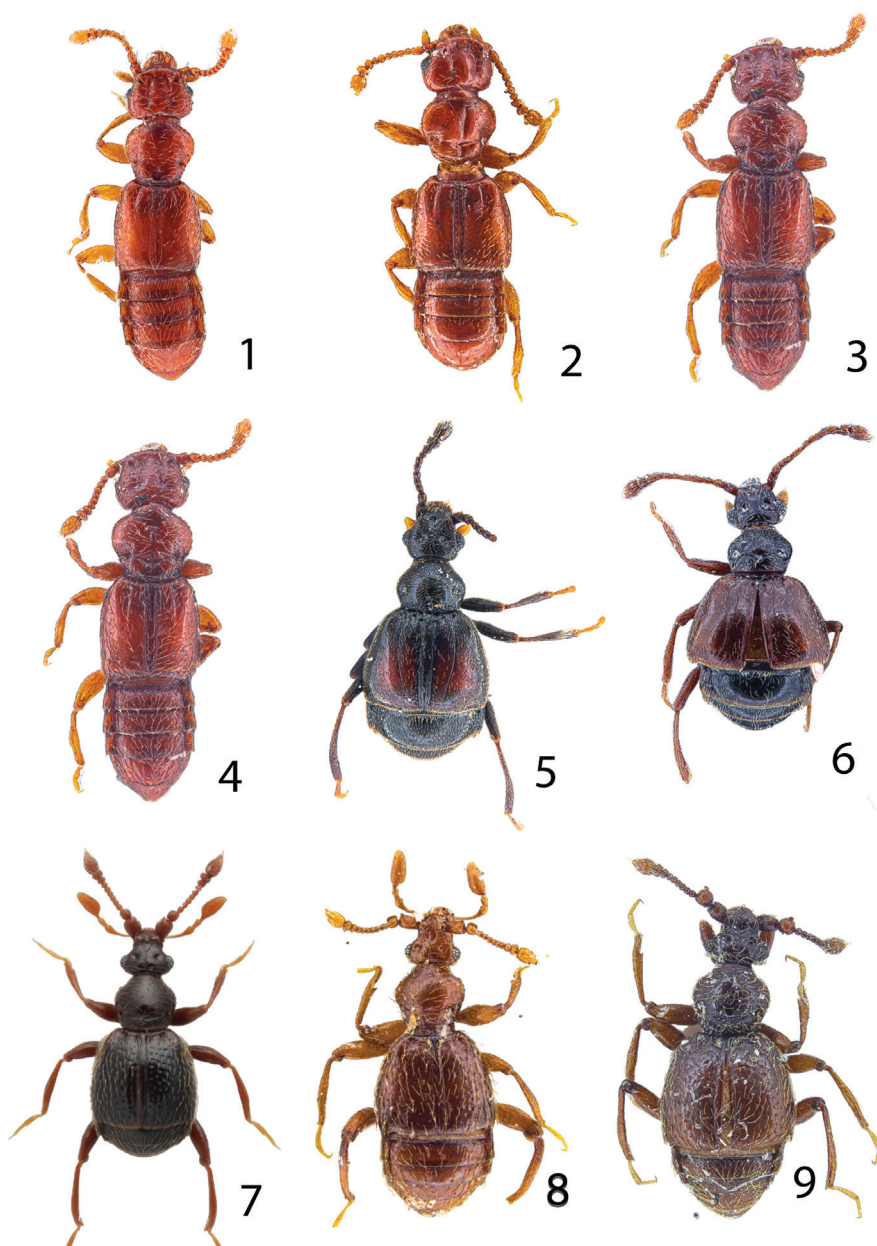


Figure 5. Diversity of Pselaphinae in Eastern Ukraine. 1 – *Plectrophloeus erichsoni erichsoni*; 2 – *P. fleischeri*; 3 – *P. nubigena nubigena*; 4 – *P. rhenanus*; 5 – *Fagniezia impressa*; 6 – *Rybaxis longicornis*; 7 – *Bryaxis bulbifer*; 8 – *B. chaudiarii*; 9 – *B. curtisii orientalis*, habitus. Scale bar 0.5 mm. 1–6, 8–9 image courtesy: R. Krivosheyev; 7th photo from <https://www.danbiller.dk>

***Plectrophloeus erichsoni erichsoni* (Aubé, 1844)** (Fig. 5.1)

Material. Kharkiv Region: outskirts Kharkiv, deciduous forest, 29.IV.1998, 1 ex., O. Droghvalenko (KUMN).

Ecology. A stenotopic hygrophilic forest species, occurs in deciduous and mixed forests, prefers decaying wood and other plant debris, rarely occurs with *Lasius* ants. Adults occur in III–XI (Schaufuss 1916, Roubal 1930).

Distribution. Distributed in Central and Eastern Europe (nominotypical subspecies). In Central and Southern Europe (Belgium, France, Great Britain, Germany, Italy, Switzerland) represented by the subspecies *P. e. occidentalis* Besuchet, 1969, and *P. e. orientalis* Besuchet, 1969 is known from Georgia, Russia (Caucasus) and Turkey (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Kharkiv Region.

***Plectrophloeus fischeri* (Aubé, 1833)**

Material. Kharkiv Region: environs of Dachi, under the bark of *Pinus*, 14.V.1995, 1 ex., O. Droghvalenko (KUMN).

Ecology. A stenotopic hygrophilic forest species, in dead wood and litter, often with ants. Adults occur in III–V and IX–XI (Weise 1876, Ganglbauer 1895, Schaufuss 1916, Roubal 1930, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Distributed from Central and Eastern Europe, to eastward to Ukraine (Schülke & Smetana, 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

***Plectrophloeus fleischeri* Machulka, 1929** (Fig. 5.2)

Records. Luhansk Region (Krivosheyev 2015; Borovyk et al. 2024).

Material. Kharkiv Region: environs of Izium, floodplain of the Siverskyi Donets river, under the bark of *Populus*, 18.VIII.2004, 1 ex., O. Droghvalenko; environs of Bukine, 1.V.1997, 1 ex., O. Droghvalenko; environs of Haidary, Homilsha Woods NNP, 25.V.2003, under the bark of *Quercus*, 2 ex., O. Droghvalenko; idem, under the bark of a fallen *Quercus*, 24.V.2001, 2 ex., O. Droghvalenko; outskirts Kharkiv, 30.VI.1998, deciduous forest, under the bark of the stump of a *Betula*, 3 ex., O. Droghvalenko; idem, under the bark of the log of a *Quercus*, 16.VII.1996, 2 ex., O. Droghvalenko; idem, forest park, on a mycelial layer, 5.VI.1998, 2 ex., O. Droghvalenko; idem, under the bark of the log of a *Quercus*, 18.VI.1998, 2 ex., O. Droghvalenko; idem, under the bark of the log of a *Quercus*, 24.IV.1999, 1 ex., O. Droghvalenko (all – KUMN). Luhansk Region: Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, gully of the Verkhnie Provallia river, 3.VII.2006, 1 ex., T. Trikhleb (ZMDONU).

Ecology. A stenotopic hygrophilic forest species, under the bark, in dead wood and litter, often with ants, as well as in small mammal (*Talpa*) passages and nests. Adults occur in III–V and IX–XI (Koch 1989, Neuhäuser-Happe 1996, 2000).

Distribution. Distributed from Central Europe, eastward to Ukraine (Schülke & Smetana 2015). In Eastern Ukraine recorded from the Donetsk, Kharkiv and Luhansk Regions.

***Plectrophloeus nubigena nubigena* (Reitter, 1877)** (Fig. 5.3)

Material. Kharkiv Region: environs of Dachi, under the bark of a pine stump, 25.V.1998, 2 ex., M. Yunakov; Kharkiv, logs of *Pinus*, under the bark, 20.III.1999, 1 ex., O. Droghvalenko (all – KUMN).

Ecology. A stenotopic hygrophilic forest

species, in deciduous forests, in parks, along the banks of rivers in floodplain forests, in rotten wood, often with ants. Adults occur in III–V and IX–XI (Koch 1989, Neuhauser-Happe 1995, 1996).

Distribution. Widespread in Europe (nominotypical subspecies), including Belarus and southern part of European Russia, also mentioned for Armenia, Turkey and Iran (Schülke & Smetana 2015, Newton 2025). In Croatia, Greece, Italy and Turkey represented by the subspecies *bosnicus* Besuchet, 1964. In Eastern Ukraine recorded only from the Kharkiv Region.

***Plectrophloeus rhenanus* (Reitter, 1882)**
(Fig. 5.4)

Material. Kharkiv Region: Kharkiv, forest park, on a mycelial layer, 5.VI.1998, 2 ex., O. Droghvalenko; idem, western outskirts of the city, deciduous forest, under the bark of *Quercus*, 29.IV.1998, 2 ex., O. Droghvalenko; idem, under the bark of fallen trees *Betula*, 26.IV.1997, 1 ex., O. Droghvalenko; environs of Zadonetske, under the bark of a dead *Pinus*, 12.VI.1996, 2 ex., O. Droghvalenko (all – KUMN).

Ecology. A stenotopic hygrophilic forest species, in deciduous and mixed forests, forests, in rotten wood, under the bark, often with ants. Adults occur in III–V and IX–XI (Roubal 1930, Koch 1989).

Distribution. Sporadically distributed in Central and Eastern Europe (Schülke & Smetana, 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

Supertribus Goniaceritae Reitter, 1882
Tribus Brachyglutini Raffray, 1904
Subtribus Brachyglutina Raffray, 1904
Genus *Brachygluta* Thomson, 1859

Brachygluta (Brachygluta) fossulata
(Reichenbach, 1816) (Fig. 6.1)

Records. Kharkiv Region (Krivosheyev 2020).

Material. Donetsk Region: Bohorodychne, Sviati Hory NP, sandy beach, on the surface of the sand, 15–18.VI.1999, 1 ex., V. Martynov; idem, Siverskyi Donets protected area, 17.XI.1999, 4 ex., V. Martynov; Donetsk, Putilovskyi forest, 29.IX.2001, 6 ex., V. Martynov; Dronivka, forest plantation, Barber traps, 28.VII.2002, 1 ex., V. Martynov (all – ZMDONU). Kharkiv Region: environs of Dachi, in the forest on the ground, 8.V.1996, 1 ex., O. Droghvalenko; environs of Haidary, Homilsha Woods NNP, under the bark of a fallen *Betula*, 24.IX.03, 1 ex., O. Droghvalenko; idem, under the bark of a fallen *Betula*, 5.VI.1999, 1 ex., O. Droghvalenko; idem, deciduous forest, under the bark of a fallen tree, 6.VIII.1992, 1 ex., O. Droghvalenko; idem, under the bark of a fallen *Betula*, 25.V.2001, 1 ex., O. Droghvalenko (all – KUMN). Sumy Region: Bytysya, poplar ravine forest, in the litter, 2.VII.2014, 1 ex., R. Krivosheyev; Sumy, Kozhedub Park, the bank of the Psel river, in the litter under a dead *Alnus*, 3.VII.2014, 2 ex., R. Krivosheyev (all – SIZK).

Ecology. An eurytopic hygrophilic species, in forests and open landscapes, along the banks of rivers in floodplain forests, in litter, grass and moss, and under the bark in moist places and near the water. Adults occur in III–XI (Kuhnt 1913, Roubal 1930, Pearce 1957, Koch 1989, Neuhauser-Happe 1995).

Distribution. Widespread from Europe to East Siberia, known also for Turkey, Azerbaijan and Armenia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk, Kharkiv and Sumy Regions.

Brachygluta (Brachygluta) guillemardi
(Saulcy, 1876) (Fig. 6.2)

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Ukrainian Steppe Nature Reserve, Khomutovskyi Steppe, 25–27.VI.2010, 7 ex., S. Glotov (all – cGl, SIZK); Novoazovsk, catching by light, 18.VI.2004, 5 ex., V. Martynov; Yalta, Bilosaraiska Spit Nature Reserve, beach, in coastal sediments, 15.VI.1999, 2 ex., E. Prokopenko. Luhansk Region: Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, лов на світло, 5.VII.2000, 1 ex., T. Trikhleb (ZMDONU).

Ecology. A stenotopic hygrophilic species, in open landscapes, in thickets of reeds, in sand, grass and moss, and in litter in forests and along the riverbanks. Adults occur in III–V and IX–XI (Reitter 1909, Roubal 1930, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Distributed in Central and Southern Europe and North Africa (Schülke & Smetana, 2015; Newton, 2025). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

***Brachygluta (Brachygluta) haematica* (Reichenbach, 1816) (Fig. 6.3)**

Records. Kharkiv (Krivosheyev 2020) and Luhansk Regions (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Bohorodychne, Sviati Hory NNP, floodplain oak forest, Barber traps, 15–18.V.1999, 1 ex., V. Martynov; Donetsk, within the city, Barber traps, 12–18.VIII.2001, 1 ex., E. Prokopenko (all – ZMDONU); Ukrainian Steppe Nature Reserve, Khomutovskyi, 25–27.VI.2010, 2 ex., S. Glotov (all – cGl); idem, 25–27.VI.2010, 2 ex., S. Glotov (SIZK); Ukrainian Steppe Nature Reserve, Kamiani Mohyly, Barber traps, 16–23.IX.07, 1 ex., K. Savchenko; Yalta, Bilosaraiska Spit Nature Reserve,

31.V.2003, 11 ex., E. Prokopenko; idem, 19–26.VI.2003, 2 ex., V. Martynov (all – ZMDONU). Kharkiv Region: environs of Haidary, Homilsha Woods NNP, the right bank of the Siverskyi Donets River, in organic remains under *Salix*, 4.VI.1999, 1 ex., M. Yunakov; idem, in deciduous forest, in rotten wood, 13.VI.1992, 3 ex., O. Drogvalenko; environs of Izium, under the logs of trees, 27.VIII.1999, 1 ex., O. Drogvalenko (all – KUMN). Luhansk Region: Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, near a river, 22.VII.2009, 5 ex. S. Glotov; Trikhizbenka, catching by light, 14.VI.2010, 1 ex., S. Konovalov (all – SIZK). Sumy Region: Bytytsya, poplar ravine forest, in litter, 2.VII.2014, 1 ex., R. Krivosheyev; Sumy, Kozhedub Park, the bank of the Psel river, in the litter under an alder tree, 3.VII.2014, 10 ex., R. Krivosheyev; idem, d. Topoli, bank of the Psel river, 4.VII.2014, 4 ex., R. Krivosheyev; Klymentove, Hetmanskyyi Hetmanskyyi NNP, oak and hornbeam forest near the Vorskla River, in the litter under the willow, 6.VII.2014, 4 ex., R. Krivosheyev (all – SIZK).

Ecology. An eurytopic hygrophilic species, in forests and open landscapes, along the banks of rivers in floodplain forests, in grass and moss, in litter, mostly near the water. Adults occur in III–XI (Ganglbauer 1895, Reitter 1909, Kuhnt 1913, Roubal 1930, Pearce 1957, Besuchet 1974, Koch, 1989, Neuhäuser-Happe 1995).

Distribution. Widespread species, distributed from Europe to Siberia, known also for Azerbaijan and Georgia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk, Kharkiv, Luhansk, and Sumy Regions.

***Brachygluta (Brachygluta) helferi longispina* (Reitter, 1884) (Fig. 6.4)**

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Bilosaraïska Spit peninsula, in coastal sediments, Barber traps, 1–3.V.2003, 5 ex., E. Prokopenko (ZMDONU).

Ecology. A stenotopic hygrophilic halophylic species in open landscapes, in thickets of reeds (Schaufuss, 1916; Pearce, 1957; Blinshtein, 1989; Koch, 1989).

Distribution. Widespread European species, with the nominotypical subspecies confined to Eastern Europe, in Eastern Europe, including Ukraine, and in Russia (s European), Cyprus, Turkey, Lebanon, Israel, Syria, Azerbaijan, Iran, Turkmenistan *B. h. longispina* (Reitter, 1884) is known to be a vicariant in these regions of *B. h. helferi* (Schmidt-Göbel, 1836) (Bekchiev 2013, Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded only from the Donetsk Region.

***Brachygluta (Brachygluta) lefebvrei lefebvrei* (Aubé, 1833)**

Material. Donetsk Region: Bilosaraïska Spit peninsula, 12.VIII.2002, 1 ex., E. Prokopenko (ZMDONU).

Ecology. A eurytopic hygrophilic species, in forests and open landscapes, river banks, in grass and litter. Adults occur in III–V and IX–XI (Kuhnt 1913, Besuchet 1974, Koch 1989, Neuhaus-Happe 1995).

Distribution. Distributed in Central and Southern Europe (nominotypical subspecies), the Easternmost records come eastward to Ukraine, also reported from Tunisia. In Spain, Algeria and Morocco represented by subspecies *B. l. lederi* (Saulcy, 1876) (Schülke & Smetana 2015, Newton, 2025). In Eastern Ukraine recorded only from the Donetsk Region.

***Brachygluta (Brachygluta) naretina* (Reitter, 1890)**

Material. Donetsk Region: Bilosaraïska Spit

peninsula, 5–13.VII.2001, 1 ex., E. Prokopenko (ZMDONU). Kharkiv Region: environs of Haidary, Homilsha Woods NNP, forest, in rotten wood, 13.VI.1992, 1 ex., O. Drovalenko (KUMN).

Ecology. An eurytopic hygrophilic species, in forests and open landscapes, river banks, in moss and grass of the flooded forests and meadows, sometimes in dead wood. Adults occur in III–V and IX–XI (Roubal 1930, Koch 1989, Neuhaus-Happe 1995, 1996).

Distribution. Distributed in Bosnia-Herzegovina, Croatia, Romania, and eastward to Ukraine (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Kharkiv Regions.

***Brachygluta (Brachygluta) pandellei* (Saulcy, 1876) (Fig. 6.5)**

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Donetsk, Putylovskiy forest, 15.IX.2001, 1 ex., T. Trikhleb; Yalta, Bilosaraïska Spit peninsula, 31.V.2003, 1 ex., E. Prokopenko; idem, beach, in coastal sediments, 17.VII.2001, 2 ex., E. Prokopenko; idem, Barber traps, 14 ex., K. Savchenko; Yalta, Bilosaraïska Spit Nature Reserve, Barber traps, 18–25.IX.2007, 1 ex., V. Martynov; Kamiani Mohyly, 21.VIII.2000, 1 ex., T. Trikhleb; idem, Barber traps, 16–23.IX.2007, 1 ex., K. Savchenko; Avdiyivka, 15.XI.2007, 1 ex., V. Martynov (all – ZMDONU); Ukrainian Steppe Nature Reserve, Khomutovskiy Steppe, 25–27.VI.2010, 1 ex., S. Glotov (cGl). Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, catching by light, 30.IV.2001, 3 ex., A. Maltseva; idem, under bark, 2.V.2003, 2 ex., M. Sergeyev; idem, meadow, mowing on grass, 2.VII.2000, 2 ex., T. Trikhleb (all – ZMDONU).

Ecology. A stenotopic hygrophilic species, in open landscapes, along the banks of rivers on rocky and muddy banks, in grass, in moist forest litter. Adults occur in III–V and IX–XI

(Pearce 1957, Koch 1989).

Distribution. Sporadically distributed in Central and Southern Europe, eastward to Ukraine (Schülke & Smetana 2015). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

***Brachygluta (Brachygluta) retowskii* (Simon, 1883)** (Fig. 6.6)

Records. Luhansk Region (Krivosheyev 2015; Borovyk et al. 2024).

Material. Donetsk Region: Donetsk, Putylovskiy forest, 29.IX.2001, 7 ex., V. Martynov (ZMDONU); Ukrainian Steppe Nature Reserve, Khomutovskyi Steppe, 25–27.VI.2010, 8 ex., S. Glotov (SIZK); Bilosaraiska Spit peninsula, catching by light, 12–19.V.2007, 12 ex., V. Martynov; Kamiani Mohyly Nature Reserve, 22.X.2006, 5 ex., V. Martynov; Novoazovsk, catching by light, 18.VI.2004, 4 ex., V. Martynov (all – ZMDONU); Sloviansk, shore of a salt lake, light trap, 4.VII.2010, 1 ex., S. Glotov. Luhansk Region: Diakove, catching by light, 4.IV.2000, 1 ex., S. Konovalov (all – SIZK); Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, near a river, 22.VII.2009, 18 ex., S. Glotov (SIZK); Krynychne, Luhansk Nature Reserve, dep. Striltsivskiy Steppe, 8.VI.2009, 1 ex., S. Glotov (all – cGI); Triokhizbenka, catching by light, 14.V.2010, 1 ex., S. Konovalov (all – SIZK).

Ecology. A stenotopic halophylic species, lives in litter and soil near the grass roots along the saltwater basins and in steppes, in detritus. Adults occur in III–VI and X–XI (Besuchet 1974, Koch 1989).

Distribution. Distributed in Southern and Eastern Europe, including southern part of European Russia; the Easternmost records come from Turkey and Georgia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

***Brachygluta (Brachygluta) simplicior* Raffray, 1904** (Fig. 6.7)

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Donetsk, Putylovskiy forest, 29.IX.2001, 7 ex., V. Martynov; Bilosaraiska Spit peninsula, catching by light, 12–19.V.2007, 2 ex., V. Martynov; Ukrainian Steppe Nature Reserve, Kamiani Mohyly Nature Reserve, 22.X.2006, 4 ex., V. Martynov; idem, 15.IV.2006, 1 ex., T. Nikulina; Bohorodychne, Sviati Hory NNP, sandy beach, on the surface of the sand, 15.VI.1999, 1 ex., V. Martynov; idem, 17.VI.1999, 1 ex., M. Sergeyev; Dronivka, catching by light, 7.VII.2002, 1 ex., V. Martynov; idem, 28.VII.2004, 1 ex., A. Maltseva; (all – ZMDONU). Kharkiv Region: outskirts Kharkiv, deciduous forest, in forest litter, 31.V.2004, 1 ex., O. Drovalenko; environs of Bukine, bank of the Oskil River, swamp, 24.VII.2002, 2 ex., O. Drovalenko (all – KUMN). Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, catching by light, 6.VI.2000, 1 ex., V. Martynov; idem, 12.V.2003, 4 ex., V. Martynov (all – ZMDONU).

Ecology. A stenotopic hygrophilic species, in forests and open landscapes, along the banks of rivers in floodplain forests, in thickets of reeds, in litter of the forests and meadows, sometimes under the bark. Adults occur in III–XI (Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Distributed in Europe (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk, Kharkiv and Luhansk Regions.



Figure 6. Diversity of Pselaphinae in Eastern Ukraine. 1 – *Brachygluta fossulata*; 2 – *B. guillemardi*; 3 – *B. haematica*; 4 – *B. helferi helferi*; 5 – *B. pandellei*; 6 – *B. retowskii*; 7 – *B. simplicior*; 8 – *B. tristis*; 9 – *B. xanthoptera*, habitus. Scale bar 0.5 mm. 1–9 image courtesy: R. Krivosheyev.

***Brachygluta (Brachygluta) sinuata*
(Aubé, 1833)**

Records. Kharkiv (Krivosheyev 2020) and Luhansk Regions (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Bohorodychne, Sviati Hory NNP, sandy beach, 15–18.VI.1999, 1 ex., V. Martynov; Yalta, Bilosaraiska Spit peninsula, Barber traps on salt marsh, 5.V.2002, 1 ex., E. Prokopenko; Dronivka, 5.VII.2002, 1 ex., V. Martynov. Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, catching by light, 12.V.2003, 7 ex., V. Martynov (all – ZMDONU).

Ecology. A stenotopic hygrophilic species, in open landscapes, along the banks of freshwater and saltwater basins, in thickets of reeds, in detritus. Adults occur in III–V and IX–XI (Koch 1989).

Distribution. Widespread through Europe, found in Algeria (Schülke & Smetana 2015, Newton, 2025). In Eastern Ukraine recorded from the Donetsk, Kharkiv and Luhansk Regions.

***Brachygluta (Brachygluta) tristis* (C. Hampe, 1863) (Fig. 6.8)**

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Blahodatne, 2.VIII.1990, 1 ex., V. Martynov (KUMN); Bohorodychne, Sviati Hory NNP, sandy beach, at night on the sand, 15.VI.2009, 6 ex., V. Martynov; Bilosaraiska Spit peninsula, 6.VII.2000, 1 ex., E. Prokopenko. Luhansk Region: Provallia, in rotten hay, 6.IV.2000, 1 ex., T. Trikhleb (all – ZMDONU).

Ecology. An erythropic hygrophilic species, on the riverbanks in litter and grass, in meadows under the stones. Adults occur in III–V and

IX–XI (Besuchet 1974, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Sporadically to Central and Southern Europe, eastward to Ukraine (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

***Brachygluta (Brachygluta) xanthoptera*
Reichenbach, 1816 (Fig. 6.9)**

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Donetsk, Putylivskiyi, 22–29.V.2004, 1 ex., V. Martynov; Kamiani Mohyly Reserve, 22.X.2006, 1 ex., V. Martynov; Yalta, Bilosaraiska Spit Nature Reserve, salt marsh, Barber traps, 4.V.2002, 5 ex., E. Prokopenko; idem, 6.VII.2000, 1 ex., E. Prokopenko. Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, catching by light, 12.V.2003, 1 ex., V. Martynov (all – ZMDONU).

Ecology. A stenotopic hygrophilic species, along the banks of rivers, on sand hills near the freshwater and saltwater basins. Adults occur in III–V and IX–XI (Roubal 1930, Koch 1989, Neuhäuser-Happe 1996).

Distribution. Widespread from Europe, except Northern, to Middle East (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

Genus *Fagniezia* Jeannel, 1950

***Fagniezia impressa* (Panzer, 1805) (Fig. 5.5)**

Records. Luhansk Region (Krivosheyev 2015, Borovyk et al. 2024).

Material. Donetsk Region: Ukrainian Steppe Nature Reserve, dep. Khomutovskyi Steppe, 25–27.VI.2010, 8 ex., S. Glotov (cGl); Bilosaraiska Spit Nature Reserv, catching by light, 12–19.V.2007, 2 ex., V. Martynov; Kamiani Mohyly Nature Reserve, 22.X.2006, 1 ex., V. Martynov (all – ZMDONU). Luhansk Region: Kreminna, 3–4.VII.2009, 1 ex., S. Glotov; Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, near a river, 22.VII.2009, 5 ex. S. Glotov; Krynychne, Luhansk Nature Reserve, dep. Striltsivskiy Steppe, 8.VI.2009, 1 ex., S. Glotov; Triokhizbenka, catching by light, 11.V.2010, 1 ex., S. Konovalov. Sumy Region: Lebedyn, alder forest near a swamp, 6.VII.2014, 18 ex., R. Krivosheyev (all – SIZK).

Ecology. A stenotopic hygrophilic species, along the banks of rivers, on sand hills near the freshwater and saltwater basins in the sand, grass, moss and under the bark. Adults occur in III–XI (Reitter 1909, Kuhnt 1913, Roubal 1930, Besuchet 1974).

Distribution. Widespread in Europe and reported also from European part of Turkey (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk, Luhansk and Sumy Regions.

Genus *Rybaxis* Sauley, 1876

Rybaxis longicornis (Leach, 1817) (Fig. 5.6)

Records. Kharkiv (Krynickyi 1832, Jakobson 1905–1915, Krivosheyev 2020) and Luhansk Regions (Krivosheyev 2015; Borovyk et al. 2024).

Material. Donetsk Region: Donetsk, on a spoil heap, under stones, 22.IV.1999, 1 ex., V. Martynov (ZMDONU). Kharkiv Region: Pivdenne, 1 ex., G. Kakhovskiy; environs of Lozovenka, in forest litter, 23.V.1934, 2 ex., S. Fedorov; idem, 6.IX.1938, 1 ex., G. Kakhovskiy; environs of Lysogirka, marsh,

in mosses, 9.VIII.1991, 1 ex., O. Drogvalenko (all – KUMN). Luhansk Region: Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, river bank, 22.VII.2009, 1 ex. S. Glotov (SIZK); Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, 12.V.2003, 1 ex., V. Martynov (ZMDONU). Sumy Region: Bytytsya, poplar gully forest, under willows in litter, 2.VII.2014, 1 ex., R. Krivosheyev; Lebedyn, alder forest, in litter near a marsh, 6.VII.2014, 6 ex., R. Krivosheyev (all – SIZK).

Ecology. A stenotopic hygrophilic species, along the banks of rivers, near the freshwater and swamps in litter under the trees, in grass and in detritus. Adults occur in III–XI (Schaufuss 1916, Roubal 1930, Jeannel 1950, Pearce 1957, Koch 1989).

Distribution. Widespread from Europe and North Africa to East Siberia and Middle Asia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk, Kharkiv, Luhansk, and Sumy Regions.

Tribus Bythinini Raffray, 1890

Genus *Bryaxis* Kugelann, 1794

Bryaxis bulbifer (Reichenbach, 1816)

(Fig. 5.7)

Records. Kharkiv (Krivosheyev 2020) and Luhansk Regions (Krivosheyev 2015, Borovyk et al. 2024).

Material. Kharkiv Region: Levkivka, in rotten wood, 29.IV.2002, 1 ex., E. Moskalets (KUMN). Luhansk Region: Provallia, Luhansk Nature Reserve, dep. Provalskiy Steppe, forest near a river, 22.VII.2009, 1 ex., S. Glotov (SIZK); Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, 15.V.2001, 1 ex., V. Martynov (ZMDONU).

Ecology. An erythropic hygrophilic species, in forests and open landscapes, in thickets of

reeds, in forest litter, in moss and in detritus, near the freshwater basins. Adults occur in III–V and IX–XI (Ganglbauer 1895, Reitter 1909, Schaufuss 1916, Roubal 1930, Pearce 1957, Besuchet 1974, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread from Europe to Turkey, Azerbaijan, Armenia, Nagorno-Karabakh, Georgia and East Siberia (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Kharkiv and Luhansk Regions.

Bryaxis chaudoirii (Chaudoir, 1845) (Fig. 5.8)

Records. Kharkiv Region (Krivosheyev 2020).

Material. Kharkiv Region: Dvorichanskiy National Park, dry chalk hills, in litter, 30. IV–4.V.2020, 15 ex., R. Krivosheyev (SIZK); idem, 2–5.V.2021, 15 ex.; Dvorichanskiy National Park, Zalomny forest, in litter of deciduous forest, 7–8.V.2021, 4 ex.

Ecology. A stenotopic xerophylic species, in open landscapes, lives on dry steppe slopes in moss under the trees. Adults occur in IV and X (Krivosheyev 2015, 2018, 2020).

Distribution. Known from Central European Russia and Ukraine (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Kharkiv Region.

Bryaxis curtisii orientalis (Karaman, 1952) (Fig. 5.9)

Material. Sumy Region: Klymentove, Vorskla River, Hetmanskyyi NNP, oak-hornbeam forest, in forest litter under oaks, 5.VII.2014, 1 ex., R. Krivosheyev (SIZK).

Ecology. An eurytopic hygrophilic species, in litter, moss and under the bark and with ants. Adults occur in III–V and IX–XI (Reitter 1909, Kuhnt 1913, Roubal 1930, Pearce 1957, Koch

1989, Neuhäuser-Happe 1995).

Distribution. Sporadically to Central and Southern Europe, including European part of Turkey, to eastward to Ukraine. In Central and North Europe the nominotypical subspecies and subspecies *B. c. hungaricus* (Reitter, 1882) is known from Romania (Schülke & Smetana 2015, Newton, 2025). In Eastern Ukraine recorded only from the Sumy Region.

Genus *Bythinus* Leach, 1817

Bythinus macropalpus Aubé, 1833 (Fig. 7.1)

Material. Sumy Region: Bytytsya, poplar ravine forest, 2.VII.2014, 8 ex., R. Krivosheyev; Sumy, bank of the Psel River, I. Kozhedub Park, 3.VII.2014, 3 ex., R. Krivosheyev; idem, Topoli, under the bark of a willow tree from *Lasius brunneus*, 4.VII.2014, 1 ex., R. Krivosheyev; Klymentove, Hetmanskyyi NNP, oak and hornbeam forest near the Vorskla river, in the understory under oaks, 5.VII.2014, 7 ex., R. Krivosheyev (all – SIZK).

Ecology. An eurytopic hygrophilic species, along the banks of rivers, in litter near the water, often in rotten wood and under rotten bark. Adults occur in III–V and IX–XI (Roubal 1930, Jeannel 1950, Pearce 1957, Neuhäuser-Happe 1995, 1996).

Distribution. Distributed in Europe, including central part of European Russia, and reaching East Siberia (Schülke & Smetana 2015). In Eastern Ukraine recorded only from the Sumy Region.

Tribus Tychini Raffray, 1904

Genus *Tychus* Leach, 1817

Tychus niger (Paykull, 1800) (Fig. 7.2)

Records. Donetsk and Luhansk Regions (Krivosheyev 2014a, 2015, Borovyk et al. 2024).

Material. Donetsk Region: Donetsk, Putylovskiy forest, 29.IX.2001, 1 ex., V. Martynov (ZMDONU); Bohorodychne, Svyati Hory NNP, along the Siverskiy Donets River, in forest litter, 10.X.2019, 1 ex., R. Krivosheyev (SIZK). Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, catching by light, 12.V.2003, 1 ex., V. Martynov; idem, 2.VII.2003, 1 ex., T. Trikhleb (all – ZMDONU).

Ecology. An eurytopic hygrophilic species, in natural and artificial deciduous and mixed forests, near riverbanks in litter, in grass. Adults occur in III–V and IX–XI (Ganglbauer 1895, Reitter 1909, Kuhnt, 1913, Schaufuss 1916, Roubal 1930, Jeannel 1950, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Distributed in Europe, including southern and central territories of European part of Russia, the Caucasus and Turkey (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

Supertribus Pselaphitae Latreille, 1802
Tribus Ctenistini C. É. Blanchard, 1845
Genus Chennium Latreille, 1807

Chennium bituberculatum Latreille, 1807
 (Fig. 7.3)

Records. Donetsk and Luhansk Regions (Krivosheyev 2014a, 2015, Borovyk et al. 2024).

Material. Donetsk Region: Dronivka, catching by light, 27.VIII.2002, 1 ex., M. Segeyev; Starobesheve, limestone, under stone, 13.IV.2002, 1 ex., V. Martynov; Pyshevyk, Kalmius river, 22.IX.2007, 3 ex., V. Martynov. Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, catching by light, 12.V.2003, 4 ex., V. Martynov; idem, 14.VI.2001, 1 ex., V. Martynov; idem,

21.VIII.2002, 1 ex., A. Maltseva; idem, catching by light, 22.VII.1999, 2 ex., E. Ivanova (all – ZMDONU).

Ecology. An eurytopic xerophilous and myrmecophilous species, lives under the stones in steppes, often with *Tetramorium caespitum*. Adults occur in V–VIII (Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Jeannel 1950, Besuchet 1974, Koch, 1989, Neuhäuser-Happe 1995).

Distribution. Sporadically distributed from Central Europe to eastward of Ukraine (Schülke & Smetana 2015). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

Genus Ctenistes Reichenbach, 1816

Ctenistes (Ctenistes) palpalis (Reichenbach, 1816) (Fig. 7.4)

Records. Kharkiv Region (Krivosheyev 2014a, 2020), Luhansk, and Sumy Regions (Krivosheyev 2014a, 2015, Borovyk et al. 2024).

Material. Kharkiv Region: Kharkiv, Lypovy Hay, 6.IV.1934, 1 ex., S. Fedorov; idem, 5.IX.1932, 1 ex., G. Kakhovskiy (KUMN); Pivdenne, 1 ex., S. Fedorov; Cheremushna, 18.VIII.1931, 1 ex., S. Fedorov (all – KUMN). Luhansk Region: Krynychne, Luhansk Nature Reserve, dep. Striltsivskiy Steppe, 1–3.VI.2009, 1 ex., S. Glotov; idem, 8.VI.2009, 1 ex., S. Glotov; Piatyhorivka, 18.VI.2009, 1 ex., S. Glotov (cGl); idem, 18.VI.2009, 1 ex., S. Glotov; Triokhizbenka, catching by light, 25.VI.2009, 1 ex., S. Konovalov; idem, 9.VII.2009, 2 ex., S. Konovalov; idem, 31.V.2010, 1 ex., S. Konovalov; idem, 12.VI.2010, 1 ex., S. Konovalov; idem, 14.VI.2010, 1 ex., S. Konovalov; idem, 20.VI.2010, 2 ex., S. Konovalov; idem, 7.VII.2010, 3 ex., S. Konovalov; idem, 13.VII.2010, 4 ex., S. Konovalov; idem, 9.VII.2010, 7 ex., S. Konovalov; idem, 10.VII.2010, 6 ex., S. Konovalov; idem, 16.VII.2010, 1 ex.,

S. Konovalov; idem, 21.VII.2010, 1 ex.,
S. Konovalov; idem, 28.VII.2010, 3 ex.,
S. Konovalov; idem, 1.VIII.2010, 1 ex.,
S. Konovalov; idem, 7.VIII.2010, 2 ex.,
S. Konovalov; idem, 9.VIII.2010, 2 ex.,
S. Konovalov; idem, 10.VI.2011, 4 ex.,
S. Konovalov; idem, 15.VI.2012, 2 ex.,
S. Konovalov; idem, 18.VI.2012, 1 ex.,
S. Konovalov; idem, 15.VII.2012, 2 ex.,
S. Konovalov (all – SIZK). Sumy Region:
Mykhaylivska Tsilyna Nature Reserve, lower-
level meadow, 16.VIII.1949, 4 ex., D. Shapiro
(KUMN).

Ecology. An eurytopic subxerophilous species, sometimes lives with ants (*Tetramorium caespitum*) on dry steppe slopes in grass, under the stones and in pastures. Adults occur in V–VIII (Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Besuchet 1974, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread from Central and Southern Europe, including southern and central part of European Russia, to Middle East and the Oriental Region (Schülke & Smetana 2015, Newton 2025). In Eastern Ukraine recorded from the Kharkiv, Luhansk, and Sumy Regions.

Tribus Pselaphini Latreille, 1802

Genus *Pselaphaulax* Reitter, 1909

***Pselaphaulax dresdensis* (Herbst, 1792) (Fig. 7.5)**

Records. Donetsk and Luhansk Regions (Krivosheyev 2014a, 2015, Borovyk et al. 2024).

Material. Donetsk Region: Makiivka, bank of the Kalmius River, catching by light, 24.VIII.1999, 1 ex., T. Trikhleb (ZMDONU). Luhansk Region: Triokhizbenka, catching by light, 15.VII.2012, 1 ex., S. Konovalov (SIZK).

Ecology. A stenotopic hygrophilic species, in forests and open landscapes, along the banks of

rivers, in thickets of reeds, in grass, moss and litter. Adults occur in III–V and IX–XI (Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal 1930, Pearce 1957, Koch 1989, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread from Europe, including Belarus, and European part of Russia, eastwards to Central Asia and West-Siberia (Schülke & Smetana, 2015). In Eastern Ukraine recorded from the Donetsk and Luhansk Regions.

Genus *Pselaphus* Herbst, 1791

***Pselaphus heisei* Herbst, 1792 (Fig. 7.6)**

Records. Donetsk, Kharkiv and Luhansk Regions (Krynicky 1832, Jakobson 1905–1915, Krivosheyev 2014a, 2020).

Material. Donetsk Region: Bilosaraiska Spit Nature Reserve, catching by light, 12–19.V.2007, 1 ex., V. Martynov; Bohorodychne, Sviati Hory NNP, sandy beach, on the surface of the sand, 17.XI.1999, 2 ex., V. Martynov; Donetsk, within the city, 26.IV.1998, 1 ex., V. Martynov (all – ZMDONU). Kharkiv Region: environs of Haidary, Homilsha Woods NNP, under the bark of *Quercus*, 25.V.2003, 1 ex., O. Drovalenko; outskirts Kharkiv, deciduous forest, 31.V.2004, 1 ex., O. Drovalenko; Kharkiv, 26.VI.1928, 1 ex., S. Fedorov; Pivdenne, 18.IX.1932, 1 ex., G. Kakhovskiy; idem, 15.IX.1933, 1 ex., S. Fedorov (all – KUMN). Luhansk Region: Djakove, catching by light, 5.IV.1999, 1 ex., S. Konovalov (SIZK). Sumy Region: Klymentove, Hetmanskyi NNP, oak and hornbeam forest near the Vorskla river, in the litter under *Quercus*, 5.VII.2014, 8 ex., R. Krivosheyev (SIZK).

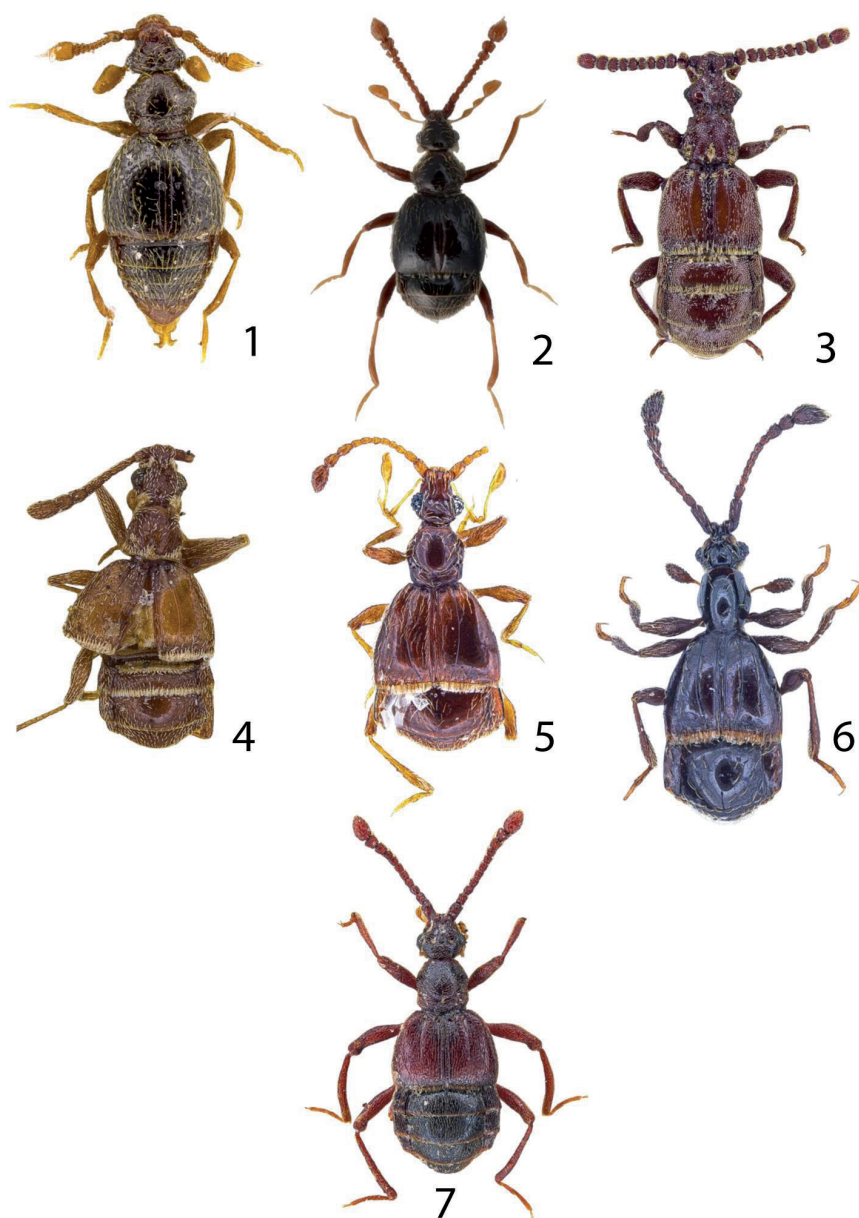


Figure 7. Diversity of Pselaphinae in Eastern Ukraine. 1 – *Bythinus macropalpus*; 2 – *Tychus niger*; 3 – *Chennium bituberculatum*; 4 – *Ctenistes palpalis*; 5 – *Pselaphaulax dresdensis*; 6 – *Pselaphus heisei*; 7 – *Tyrus mucronatus*, habitus. Scale bar 0.5 mm. 1, 3–7 image courtesy: R. Krivosheyev, 2nd photo from <https://www.danbiller.dk>

Ecology. An eurytopic hygrophilic (manchmal xerophilic) species, in forests and open landscapes, in deciduous, coniferous, and mixed forests, in grass, moss and forest litter along the water, sometimes under the bark and in anthills. Adults occur in III–XII (Reitter 1909, Kuhnt 1913, Roubal 1930, Jeannel 1950, Pearce 1957, Besuchet 1974, Koch 1989, Neuhäuser-Happe 1995).

Distribution. Widespread from Europe to the Russian Far East and Siberia (Schülke & Smetana 2015). In Eastern Ukraine recorded from the Donetsk, Kharkiv, Luhansk, and Sumy Regions.

Tribus Tyrini Reitter, 1882

Subtribus Tyrina Reitter, 1882

Genus *Tyrus* Aubé, 1833

***Tyrus mucronatus mucronatus* (Panzer, 1803)**
(Fig. 7.7)

Records. Luhansk Regions (Krivosheyev 2014a, 2015, Borovyk et al. 2024).

Material. Luhansk Region: Stanytsia Luhanska, Luhansk Nature Reserve, dep. Stanychno-Luhanske, under the bark of a tree, 10.XI.1999, 1 ex., V. Martynov; idem, under the bark of *Quercus*, 5.V.2000, 1 ex., T. Trikhleb (all – ZMDONU).

Ecology. An erythropic hygrophilic species, of all moist places, in rotting plant remains, in dead wood, forest litter, sometimes with ants. Adults occur in III–V and IX–XI (Reitter 1909, Kuhnt 1913, Schaufuss 1916, Roubal, 1930, Jeannel 1950, Besuchet 1974, Neuhäuser-Happe 1995, 1996).

Distribution. Widespread from Europe to the Russian Far East and Siberia, known also from European part of Turkey. In Spain, Italy (Campania), Morocco and Algeria represented by subspecies *T. m. maroccanus* Jeannel, 1956 (Schülke & Smetana 2015, Newton, 2025).

In Eastern Ukraine recorded only from the Luhansk Region.

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