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First record of *Barynotus makolskii* Smreczyński, 1955 and *Coelositona cambricus* (Stephens, 1831) in Ukraine, with faunistic and nomenclature notes on other weevils (Coleoptera: Curculionidae)

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Abstract
Barynotus makolskii Smreczyński, 1955 and *Coelositona cambricus* (Stephens, 1831) are newly recorded species for Ukraine. Specimens, including male and female genitalia of *Barynotus makolskii* have been photographed. The key to *Barynotus* species of Ukraine is provided. *Primula elatior* (L.) Hill is identified as a host plant of *Barynotus makolskii.* The distribution data for eight poorly-known weevil species in Lviv, Ivano-Frankivsk, Khmelnytskyi, Ternopil and Zakarpatska Provinces of Ukraine are given: *Barynotus makolskii* Smreczyński, 1955, *B. moerens* (Fabricius, 1792), *B. obscurus* (Fabricius, 1775), *Otiorhynchus* (*Magnanotius*) *norici* Alonso-Zarazaga, 2013, *Argoptochus quadrisignatus* (Bach, 1856), *Coelositona cambricus* (Stephens, 1831), *Phloeophagus thomsoni* (Grill, 1898), and *Rhabdorrhynchus echii* (Brahm, 1790). Nomenclature issues in *Otiorhynchus norici* are also discussed.

Key words: Entiminae, Sitoninae, Cossoninae, Lixinae, new records, geographic distribution, nomenclature, host plant.

http://zoobank.org/urn:lsid:zoobank.org:pub:8E2862E1-89E0-49AF-8367-47304BF7EED5

Introduction

Many species recently listed in the first edition of the survey of weevils of Ukraine (Yunakov et al. 2018) were represented exclusively by literature data. The survey struggled with a shortage of material from the State Museum of Natural History in Lviv, the major repository of weevils from the west of the country and lacked new samples (Yunakov et al. 2018). This paper aims to fill some of these gaps and continues representing the new results from the study of the distribution and ecology of weevils in western regions of Ukraine.

Barynotus Germar, 1817 is known in Ukraine by two species based on little and mainly old material. *Barynotus obscurus* (Fabricius, 1775) is distributed in the forest zone (Yunakov et al. 2018), and *B. moerens* (Fabricius, 1792) is known only from Transcarpathia (Roubal 1941). Here, we add a third species *B. makolskii* Smreczyński, 1955, recently collected in Lviv Province.

Coelositona González, 1971 consists of 10 species from West Palaearctic with no species previously known from Ukraine (Alonso-Zarazaga et al. 2023).

Phloeophagus Schoenherr, 1838 comprises four species in Ukraine, including the widespread Palaearctic *Ph. lignarius* (Marsham, 1802), *Ph. turbatus* Schoenherr, 1845, *Ph. thomsoni* (Grill, 1898) and the Ponto-Caucasian *Ph. schoenherri* (Hochhuth, 1847) (Alonso-Zarazaga et al. 2023). *Phloeophagus thomsoni* (Grill, 1898) was recently recorded from a single specimen in Zakarpatska Province (Chumak et al. 2015) but the record was omitted from the survey of Ukrainian weevils (Yunakov et al. 2018).

Otiorhynchus norici Alonso-Zarazaga, 2013 one of the rarest species among the seven taxa of the subgenus *Magnanotius* Alonso-Zarazaga & Lyal, 2002 in Ukraine. Despite extensive collection efforts, it has not been seen for decades in the comprehensive material from the Ukrainian Carpathians. It was previously recorded by Roubal (1941)

from a single locality in Kuzy, and by Nazarenko & Parkhomenko (2016) from Synevyr Lake, Zakarpatska Province.

Argoptochus Weise, 1883 comprises six species in Ukraine, with their range split into two main areas: the Podolian Upland and the Crimean Mountains (Yunakov et al. 2018). *Argoptochus quadrisignatus* (Bach, 1856) marks the northwestern limits of the genus range in the Podolian Upland. Together with *A.* (*Neohenschia*) *lukjanovitshi* Arnoldi, 1965, they highlight the specificity of northwestern forest steppes and link this biome with Balkan grasslands, represented by a larger number of *Argoptochus* species (Angelov 1987; Borovec 2006). On the other hand, *A. lukjanovitshi* indicates faunal links between the Podolian Upland and the steppes of the Central Russian Upland. The role of South European montane fauna in the development of the fauna of Eurasian steppes was suggested by Korotyaev (1992: 880) for *Otiorhynchus* Germar 1822, *Trachyphloeus* Germar, 1817, *Omias* Germar, 1817, *Sauromates* Korotyaev, 1992, and *Argoptochus* (*Neohenschia*) Korotyaev, 1992.

Assuming that historical material of *Barynotus makolskii* and *Coelositona cambricus* might be found, we examined the collection of SMNHL and Adam Ulyanowski's collection housed at the Zoological Museum, Ivan Franko National University of Lviv. We found a specimen of *Barynotus makolskii* collected in Komarnyky, located in the valley of Stryi River, and a *B. moerens* specimen from Vorokhta, collected 100 years ago, which is the only known specimen from Ukraine. Three specimens from SMNHL identified as "*Sitona cambricus*" are reidentified here as *Sitona sulcifrons* (Thunberg, 1798). Six specimens of *Barynotus obscurus* and five of *B. moerens* from Adam Ulyanowski's collection in ZMD, lack labels. Recovery of the large unlabeled materials accumulated by Ulyanowski requires searching through the manuscripts, lab journals and field notebooks in his private archive.

Material and methods

Sampling was conducted by Denys Khrapov in Lviv, Ivano-Frankivsk, Khmelnytskyi and Zakarpatska Provinces during 2015-2024 using pitfall traps, sweep net and manual collection with aspirator from the host plants. Taxonomy mainly follows Alonso-Zarazaga et al. (2023), and is according with Baird et al. (2021) regarding Sitoninae. Images of beetles were captured using a Nikon D3200 camera with Laowa 25mm Ultra Macro lens. Genitalia were photographed with SWIFT SW350T Microscope and Digital Microscope Camera AmScope MU1000 10MP. Zerene Stacker software was used for image stacking.

Institution and collection abbreviations are as follows:
AGC: Private collection of Gabriel Alziar (Cassagnes-Bégonhès, France)
KhDC: Private collection of Denys Khrapov (Lviv, Ukraine)
SMNHL: State Museum of Natural History (Lviv, Ukraine)
NYC: Insect collection of Nikolai Yunakov (Melrose, Massachusetts, USA)
ZMD: Zoological Museum, Ivan Franko National University (Lviv, Ukraine).

Morphological character abbreviations: ELD: longitudinal diameter of eye, VW: width of vertex (distance between interior margins of eyes). The occurrence maps are based on examined specimens, photo observations (iNaturalist.org), online databases GBIF (2024a; 2024b; 2024c; 2024d), Käferfauna Deutschlands (Benisch 2023) and UkrBIN (2024) , and references (Kelch 1846; Stierlin 1861; Bielz 1887; Kuthy 1896; Petri 1912; Montandon 1908; Trella 1934; Roubal 1941; Endrődi 1959, 1961; Dieckmann 1963, 1980; Lodos 1971, 1977; Lazorko 1963; Angelov 1978; Podlussány & Kocs 1998; Voolma et al. 2003; Petryszak & Radwanski 2006; Cholokava 2008; Teodor & Milin 2014; Nazarenko & Parkhomenko 2016; Benedikt et al. 2017; Germann 2017; Krátký & Sprick 2020).

Results and discussion

Subfamily Entiminae

***Barynotus makolskii* Smreczyński, 1955**

(Figs 1 A-C, 2 A-F)

Ukraine [first country record] - **Lviv Province**: "KARPATY KOMARNIKI [= Komarnyky, Sambir distr.]." [printed label, specimen probably from the collection of Józef Grolle], 1 ♂, SMNHL; Stryi Distr., 3 km ESE Tyshivnytsia, Mt. Grabnyk, 49.081149N, 23.650418E, 615 m, 4 May 2021, edge of forest, sweeping, V. Khrapova leg., 1 ♀, KhDC; *ibidem*, 49.084274N, 23.644334E, 614 m, 4 May-5 Jun 2021, pitfall trap, D. Khrapov leg., 1 ♂, KhDC.

This is the only amphigonic *Barynotus* species endemic to the Carpathians (Fig. 3 D), inhabiting meadows on foothills of the mountains in the river valleys at up to 800 m a.s.l. It was described from Olchowice, Poland (Smreczyński, 1955a, 1955b) and from the specimens of Trella's collection from Brylińce and Turnica near Przemyśl. The latter were previously identified by Trella (1934) as *B. elevatus* (Marsham, 1802), a synonym of *B. moerens*. Leo Arnoldi (Arnoldi et al. 1965) has assumed occurrence of *B. makolskii* in the Ukrainian Carpathians. *Barynotus makolskii* has recently been found in Romania (Krátký & Sprick 2020). Krátký and Sprick revised old collections and collected new material that revealed the occurrence of *B. makolskii* in Putna and in several other locations of the East Carpathians.

Beetles were found on the edge of deciduous forests by sweeping of *Primula elatior* (L.) Hill (Fig. 2 I, J), and in a pitfall trap. A live beetle was moved to the breeding cages to confirm the host plant. In addition to *Primula elatior*, the beetle was offered with *Anemone nemorosa* L., which was growing at the spot where the beetle was found. However,

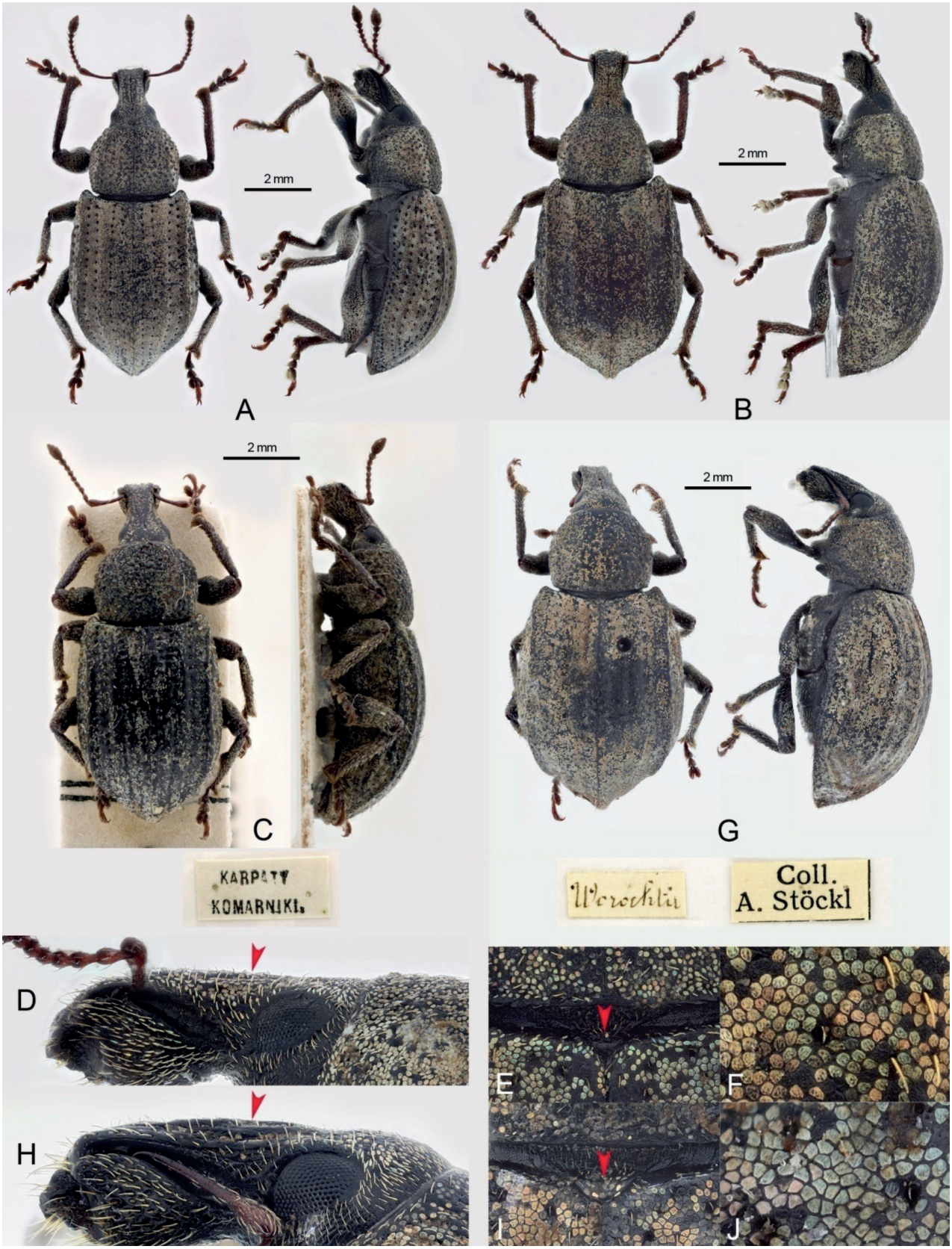

Fig. 1 - A-F. *Barynotus makolskii* Smreczyński, 1955: A, dorsal and lateral habitus of ♂ (Ukraine, Mt. Grabnyk); **B**, dorsal and lateral habitus of ♀; **C**, dorsal and lateral habitus of ♂ from SMNHL; **D**, ♀ head, lateral view; **E**, scutellum; **F**, scales on elytra. **G-J,** *Barynotus moerens* (Fabricius, 1792): **G**, ♀ from SMNHL; **H**, ♀ head, lateral view; **I**, scutellum; **J**, scales on elytra.

the beetle fed only on the leaves of *Primula elatior* avoiding the flowers. The beetle lived in the breeding cages for 35 days.

***Barynotus moerens* (Fabricius, 1792)**
(Figs 1 G-J, 2 H)
Ukraine: Ivano-Frankivsk Province: "Worochta [=Vorokhta]", "Coll. A. Stöckl", 1 ♀, SMNHL.
This is the only known specimen from Ukraine.

***Barynotus obscurus* (Fabricius, 1775)**
Ukraine: Ivano-Frankivsk Province: "KOŁOMYJA [=Kolomyia] 19.IV.1899", 2 ♀, SMNHL; "2/4 Bochor[odczany]" [= Bohorodchany, 2.IV], 1 ♀, SMNHL; "15/8 Jasien" [= Yasen, 15.VIII], "Ясень 15.VIII. зб. Занько", 1 ♀, SMNHL; 4 km ESE Rohatyn, Mt. Chortova (Devil's Mountain), 49.402028N, 24.664503E, 330 m, 28 Jul-6 Sep 2020, steppe, pitfall trap, D. Khrapov leg., 1 ♀, KhDC. **Lviv Province**: "10/5 P[iaskowa]g[óra]" [= Lviv, Lysa Hora, 10.V], 5 ♀, SMNHL; "Sichów" [= Lviv, Sychiv], "Coll. A. Stöckl", 1♀, SMNHL; "Janów" [= Ivano-Frankove], "Coll. A. Stöckl", 1 ♀, SMNHL; "20/4 [18]52 K[rzywczyce]" [= Lviv, Kryvchytsi, 20.IV.1852], 1♀, SMNHL; "Lwów 16/4 24" [= Lviv, 16.IV.1924], "Coll. A. Stöckl", 1♀, SMNHL; "10/5 K[rzywczyce]" [= Lviv, Kryvchytsi, 10.V], 1 ♀, SMNHL; 0.5 km E Kyikiv, the right bank of Zolochivka Riv., 49.782964N, 24.969595E, 11 Jun-10 Jul 2021, steppe, pitfall trap, D. Khrapov leg., 1 ♀, KhDC; 2.2 km SW Yaseniv, 49.945085N, 25.017106E, 378 m, 8 May-12 Jun 2021, steppe, pitfall trap, D. Khrapov leg., 2 ♀, KhDC; *ibidem*, 12 Jun-11 Jul 2021, 5 ♀; *ibidem*, 11 Jul-14 Aug 2021, 2 ♀; *ibidem*, 49.945481N, 25.017077E, 20 May-4 Jul 2020, 1 ♀; 2.8 km NW Buchyna, SW slope Mt. Makitra, 50.036259N, 25.263337E, 20 May-4 Jul 2020, steppe, pitfall trap, D. Khrapov leg., 1 ♀, KhDC; between Vilshanytsa and Gologirky, Lysa Hora, 49.798542N, 24.713128E, 21 May-27 Jun 2020, steppe, pitfall trap, D. Khrapov leg., 1 ♀, KhDC; 1.4 km NW Buchyna, Mts. Drancha, 50.031016N, 25.283051E, 328 m, 9 May-21 Jun 2019, steppe, pitfall trap, D. Khrapov & R. Panin leg., 2 ♀, KhDC; 1.3 km NW Slovita, Kizia Hill, 49.765944N, 24.579639E, 271 m, 6 May-12 Jun 2023, steppe, pitfall trap, R. Panin leg., 1 ♀, KhDC; *ibidem*, 12 Jun-18 Jul 2023, 3 ♀. **Ternopil Province**: "6/6 K[o]r[o]p[iec]" [= Koropets, 6.VI], 1 ♀, SMNHL.

Despite the wide geographical distribution of this species, it appears to be rare in materials from Ukraine (Yunakov et al. 2018). Most of specimens come from pitfall traps from the zone of Central European Mixed Forests. The record from Odesa (Globova 1958) is not confirmed by any specimens in the collections of the Zoological Museum of T.G. Shevchenko National University and I.I. Schmalhausen Institute of Zoology, Kyiv.

Updated key of Ukrainian species of the genus *Barynotus* (partly adapted from Smreczyński 1968)

1. Even and odd elytral interstriae bear erected setae .... ***Barynotus obscurus*** (Fabricius, 1775)
- Only odd elytral interstriae bear erected setae.....2
2. Eyes smaller (VW/ELD m: 2.08), convex (Fig. 2 G); basal part of epifrons flat (Fig. 1 D) (to be observed in lateral view); scutellum vestigial, narrower than the distance from the elytral suture to the first row of punctures, bare (Fig. 1 E); scales on elytra rounded (Fig. 1 F) ..... ***Barynotus makolskii*** Smreczyński, 1955
- Eyes larger (VW/ELD m: 1.88), flat or slightly convex (fig. 2 H); basal part of epifrons slightly arcuate (Fig. 1 H) (to be observed in the lateral view); scutellum distinct, wider than the distance from the elytral suture to the first row of punctures, covered with scales (Fig. 1 I); scales on elytra polygonal (Fig. 1 J) .... ***Barynotus moerens*** (Fabricius, 1792)

***Otiorhynchus* (*Magnanotius*) *norici* Alonso-Zarazaga, 2013**
(Fig. 4 A, B)

Ukraine: Lviv Province: Stryi Distr., 3 km SW Rozhirche, Hlybokyi Creek, 49.095792N, 23.658464E, 28 Apr 2018, sweeping, D. Khrapov leg., 1 ♀, KhDC; Stryi Distr., 1.4 km SW Rozhirche, 49.1083N, 23.672506E, 364 m, 6 Oct 2018, sweeping, D. Khrapov leg., 1 ♀, KhDC; Stryi Distr., 3 km SW Rozhirche, Hlybokyi Creek, 49.093061N, 23.660029E, 400 m, 29 May 2019, sweeping, D. Khrapov leg., 11 ♀ (KhDC), 2♀ (AGC). **Zakarpatska Province**: Mezhyhirya Distr., 1.2 km SW Kolochava, 48.418778N, 23.686511E, 575 m, 21 Aug 2018, bank of steam, sweeping, D. Khrapov leg, 1 ♀, KhDC.

The species is distributed in the Eastern Alps, extending northward to the Vosges and the Eastern Sudetes, the Carpathians, known from the Dinaric Mountains southward to the Rhodopes (Fig. 3 A). The range of *O. norici* roughly encircles the Great Hungarian Plain. It is also known from Drava River Valley. An isolated population occurs in the Mecsek Mountains. Amphigonic populations occur in the Eastern Alps and the Drava Valley. The males are unknown in the Balkans (Angelov 1976) and the Ukrainian Carpathians. The species is protected in Bavaria (Sprick et al. 2003); Knutelski & Tykarski (2010) noted that *O. norici* is vulnerable in Poland.

In the Ukrainian Carpathians *O. norici* was known from Kuzy (Roubal 1941) and vicinity of Lake Synevyr (Nazarenko & Parkhomenko 2016).

Ecology. The first author collected *O. norici* on *Petasites hybridus* (L.) G.Gaertn., B.Mey. & Scherb. along mountain streams (Fig. 4 C); beetles hide underneath the foliage during the day. In Scharfling (Austria) some specimens were found by Teodor & Milin (2014) swept a single specimen in a spruce forest from *Rumex* and *Urtica* in the South Carpathians.

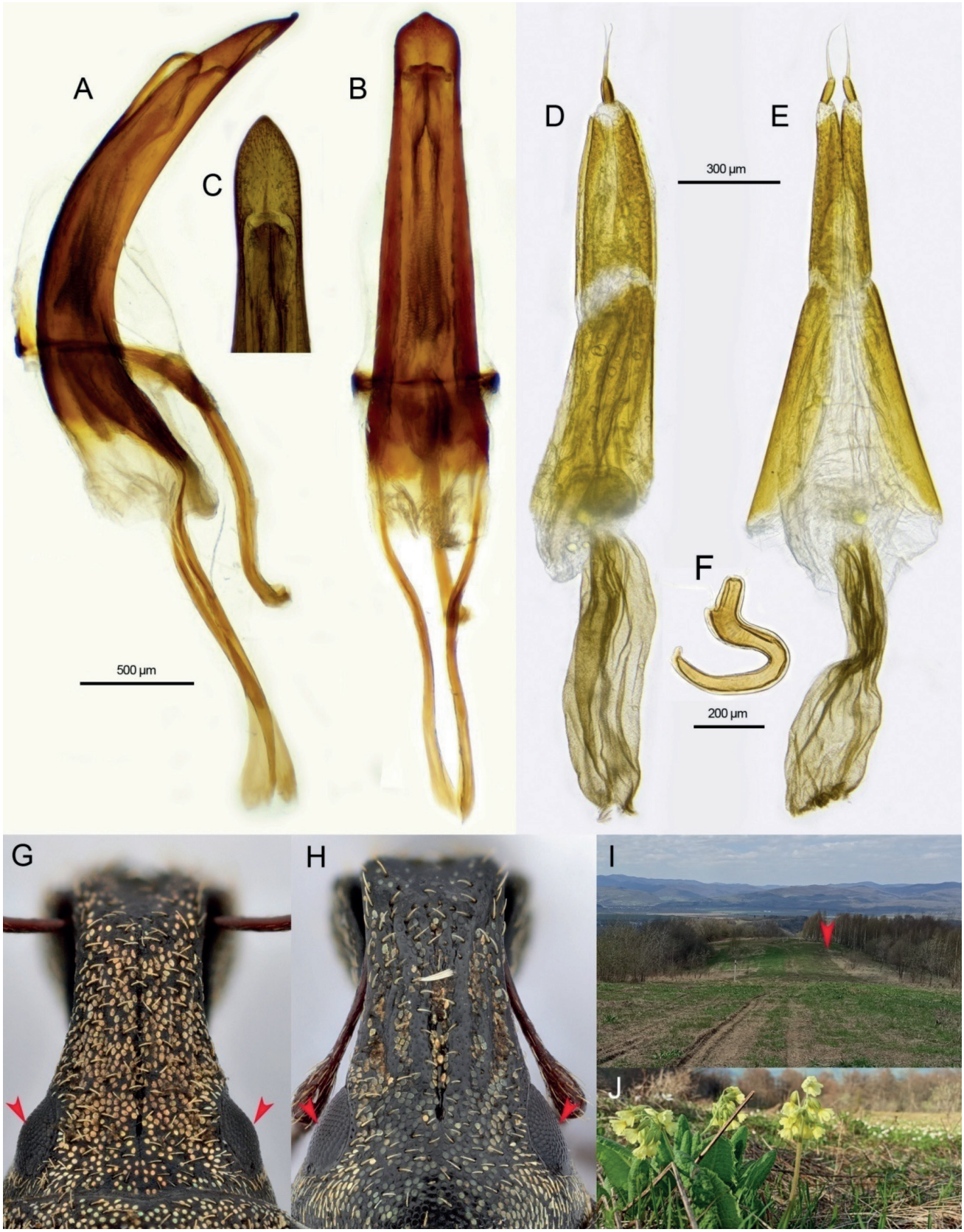

Fig. 2 - *Barynotus makolskii* Smreczyński, 1955 morphology (from Ukraine, Mt. Grabnyk) and habitats: **A**, aedeagus, lateral view; **B**, aedeagus, dorsal view; **C**, apical part of median lobe; **D,** ♀ terminalia, lateral view; **E**, ♀ terminalia, dorsal view; **F**, spermatheca; **G**, ♀ head, dorsal view; **H**, *B. moerens* ♀ head, dorsal view; **I**, habitats view from Grabnyk Mountain to the Stryi River valley; **J**, *Primula elatior,* a host plant of *Barynotus makolskii*.

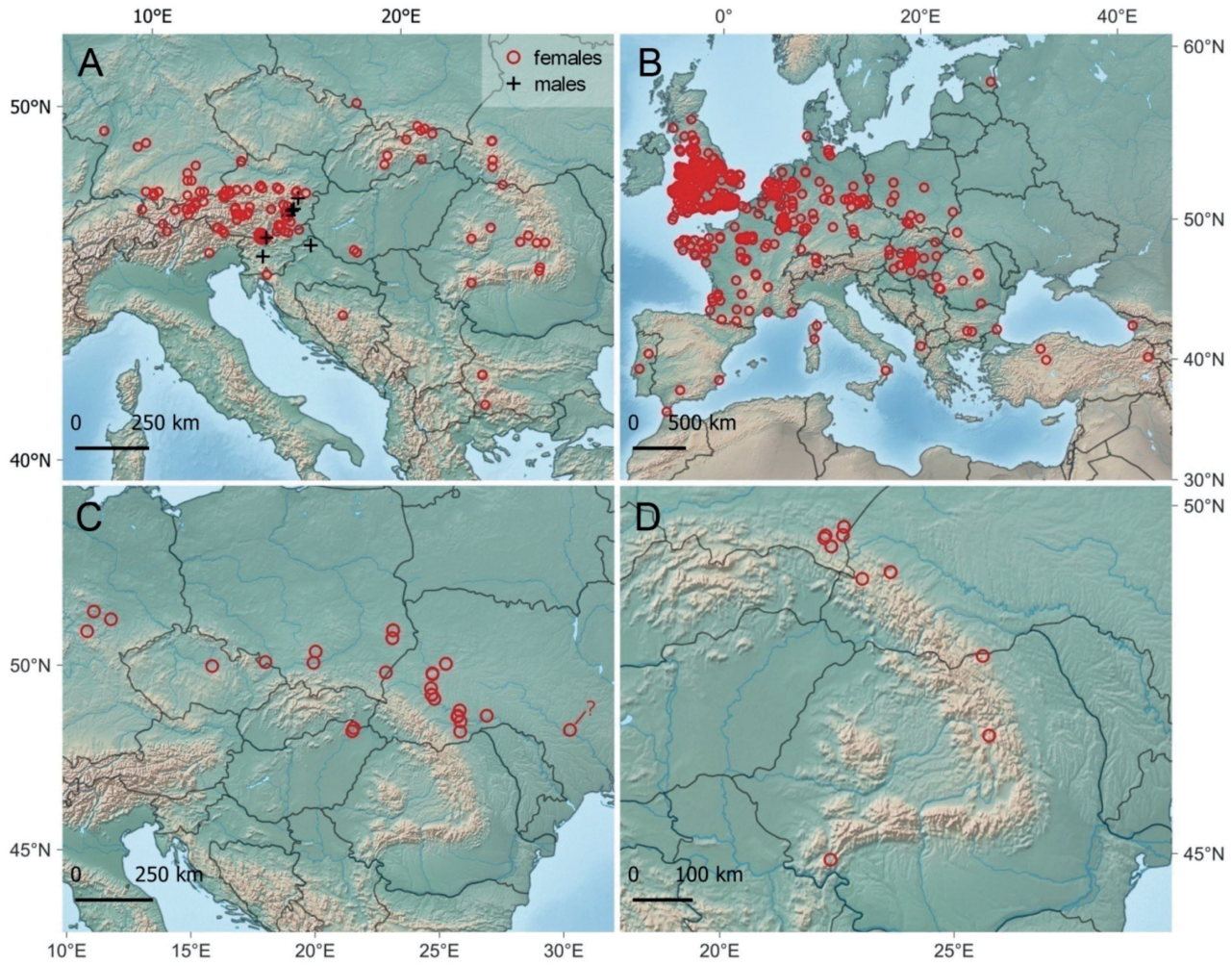

Fig. 3 - Occurrence maps in Europe and Ukraine: **A**, *Otiorhynchus* (*Magnanotius*) *norici* Alonso-Zarazaga, 2013; **B**, *Coelositona cambricus* (Stephens, 1831); **C**, *Argoptochus* (*Argoptochus*) *quadrisignatus* (Bach, 1856), the question mark highlights a doubtful record by Pjatakowa (1930; see text for details); **D**, *Barynotus makolskii* Smreczyński, 1955.

Nomenclature notes. As recently discussed by Colonnelli (2024), Alonso-Zarazaga (in Magnano & Alonso-Zarazaga 2013) introduced the replacement name of *Otiorhynchus norici* for *O. austriacus* (Fabricius, 1801), described as *Curculio* Linnaeus, 1758 and thus primary homonym of *Curculio austriacus* Schrank, 1781. Among the synonyms of this species of *Otiorhynchus* are listed two other names, namely *O. carinatus* Gyllenhal, 1834 and *O. costatus* Stierlin, 1861, both homonyms. However, a replacement name had already been given to *O. carinatus* Gyllenhal by Csiki (1943), as *O. austriacus* ab. *carinatostriatus*. The alternative use for this taxon of the specific epithet *norici* Alonso-Zarazaga, 2013 or *carinatostriatus* Csiki, 1943 has been the subject of debate during a recent meeting of some ICZN's members. They acknowledge the complexity of the case due to potential dual interpretations of Articles 45.5 and 45.6 of the ICZN (International Commission on Zoological Nomenclature 1999), but all finally agreed that the name *O. carinatostriatus* Csiki, 1943 is unavailable (because originally explicitly introduced as an infrasubspecific name). Waiting for a formal decision of the ICZN, we therefore decided to use herein the name *Otiorhynchus norici,* following Magnano & Alonso-Zarazaga (2013) and Alonso-Zarazaga et al. (2023).

***Argoptochus (Argoptochus) quadrisignatus* (Bach, 1856)**
(Fig. 4 D)

Ukraine: Ivano-Frankivsk Province: "Kasowa Ga. / 19.VII.1924" [= Kasova Hora near Burshtyn], 1 ♂ 1 ♀, SMNHL; "KASOWA Ga /. k. Bursztyna / 15.VI.1923" [printed label], 1 ♂, SMNHL; "KASOWA Ga. k. Bursztyna 25.V.1923" [printed label], 1♂, SMNHL; "Kasowa Ga k. Bursztyna 5.VIII.1923", 1 ♀, SMNHL; Ivano-Frankivsk Distr., 4.5 km ESE Burshtyn, Kasova Hora, 49.23125N, 24.687056E, 295 m, 15 Jun 2020, steppe, sweeping, D. Khrapov leg., 6 ♀ 2 ♂, KhDC; Ivano-Frankivsk Distr., 5.5 km ESE Burshtyn, Kasova Hora, 49.22564N, 24.697782E, 295 m, 3 May-15 Jun 2020, steppe, pitfall trap, D. Khrapov &

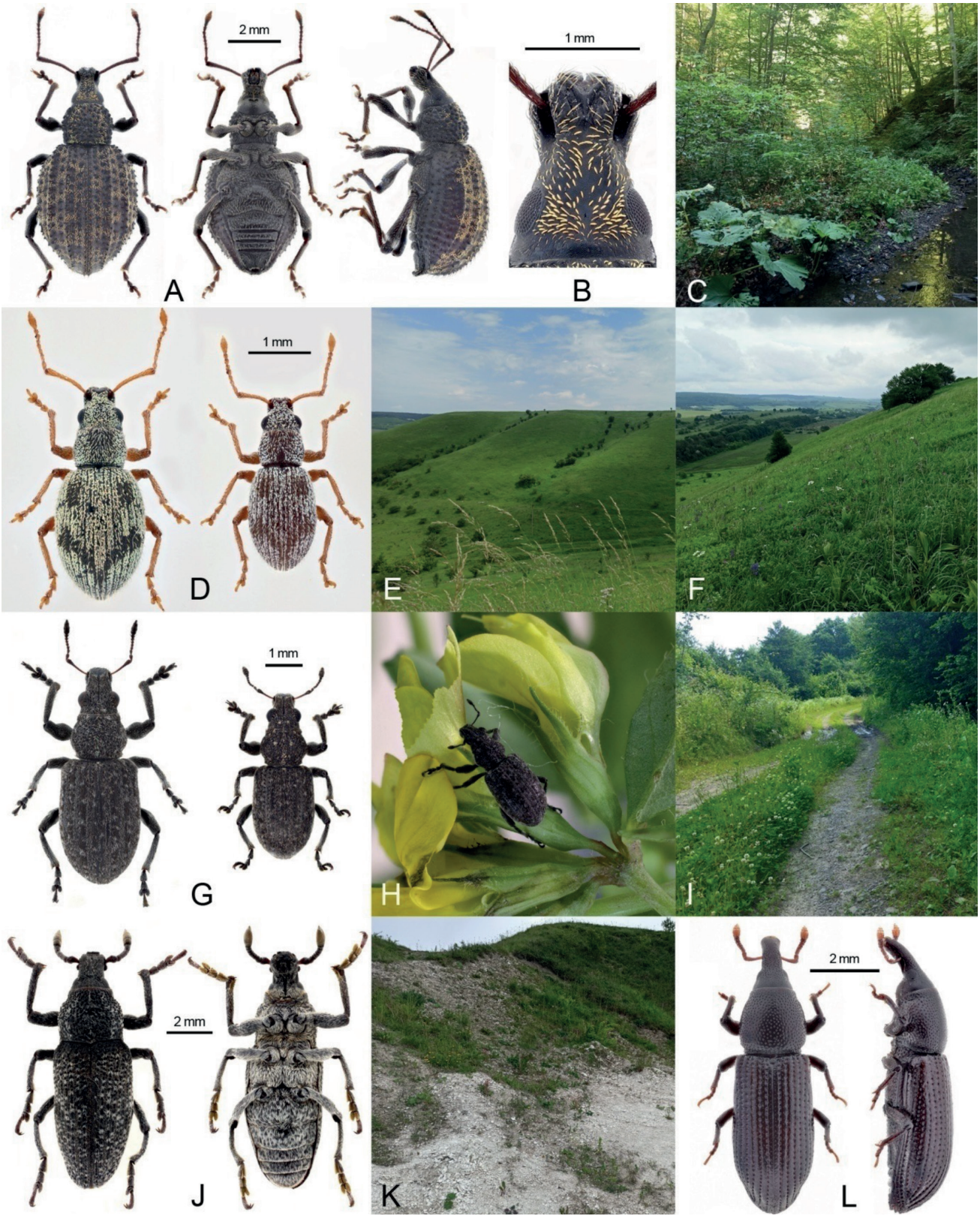

Fig. 4 - A-C, *Otiorhynchus* **(***Magnanotius***)** *norici* Alonso-Zarazaga, 2013: **A**, dorsal, ventral and lateral habitus of ♀; **B**, ♀ head, dorsal view; **C**, beech forest near Rozhirche, Hlybokyi Creek. **D-F**, *Argoptochus* (*Argoptochus*) *quadrisignatus* (Bach, 1856): **D**, dorsal, habitus of ♀ and ♂; **E**, steppe site near Holohirky; **F**, Chortova Hora (Devil's Mountain), near Rohatyn. **G-I**, *Coelositona cambricus* (Stephens, 1831): **G**, dorsal, habitus of ♀ and ♂; **H**, imago on *Lotus pedunculatus* in breeding cage; **I,** road along the deciduous forest edge near Rozhirche. **J**, **K**. *Rhabdorrhynchus echii* (Brahm, 1790): **J**, dorsal and ventral habitus of ♂; **K**, xerothermic habitat of *Rhabdorrhynchus echii* near Luka. **L**, *Phloeophagus thomsoni* (Grill, 1898), dorsal and lateral habitus of ♀.

R. Panin leg., 3 ♀, KhDC; Ivano-Frankivsk Distr., 4 km ESE Rohatyn, Mt. Chortova (Devil's Mountain), 49.402028N, 24.664503E, 330 m, 8 May 2020, steppe, sweeping, D. Khrapov leg., 1 ♀, KhDC; ibidem, 14 Jun 2020, 1 ♀ 1 ♂, KhDC; Halych Distr., 1.4 km SE Mezhyhirtsi, 49.120509N, 24.802935E, 300 m, 22 May-19 Jun 2021, steppe, pitfall trap, D. Khrapov leg., 1 ♀ 1 ♂, KhDC. **Khmelnytskyi Province:** Kamianets-Podilskyi Distr., 2 km W Krushanivka, Sovyi Yar Landscape Reserve, 48.675053N, 26.906114E, 270 m, 7 Jun 2015, steppe, sweeping, D. Khrapov leg., 10 ♀ 9 ♂, KhDC. **Lviv Province:** "Makutra / ad Brody [=Mt. Makitra near Brody] / 16.VI.1930" [handwritten by Roman Kuntze], 1♂, SMNHL; Brody Distr., 2.8 km NW Buchyna, SW slope Mt. Makitra, 50.036259N, 25.263337E, 20 May 2020, steppe, sweeping, D. Khrapov leg., 7 ♀ 5 ♂, KhDC; Zolochiv Distr., Lysa Hora, 49.788442N, 24.721698E, 333 m, 22 May 2020, steppe, sweeping, D. Khrapov leg, 8 ♀ 9 ♂, NYC; Zolochiv Distr., 0.8 km E Holohirky, 49.762699N, 24.723155E, 360 m, 11 Jun 2021, steppe, sweeping, D. Khrapov leg., 65 ♀ 24 ♂, KhDC; ibidem, 11 Jun-10 Jul 2021, pitfall trap, 1 ♂, KhDC. **Ternopil Province**: "Szerszeniowce / ad Tłuste [=Shershenivka, Chortkiv Distr.]/ 4.VI.1932" handwritten by Roman Kuntze], 1♀, SMNHL; "Obieżowa / k. Zaleszczyk / 21.V.1924" [=Chortkiv Distr., Obizheva botanical reserve, near Zalishchyky], 1 ♂ 1 ♀, SMNHL.

The prosperity of grasslands in the postglacial period led to the formation of common assemblages of weevils associated with grass vegetation in Central Europe. The wide distribution of these preferred habitats most probably allowed the expansion of *Argoptochus* species from the Balkans, where the genus is most diverse, northwestward to the Thuringian grassland, northward to the Podolian Upland, and northeastward to the steppes of the Central Russian Upland (small remnants of those are now persist in the Central Black Soil Reserve, Kursk Province of Russia).

Argoptochus quadrisignatus is a Central European species (Fig. 3 C), distributed from Thuringia, Germany (Dieckmann 1980) through Czechia (Krátký 2011) and Poland, eastward to the Podolian Upland and southward to Hungary (Szénási et al. 2019). Smreczyński (1956) with reference to Kuntze & Noskievich (1938) delimited its easternmost occurrence near Balta, Odessa Province. In fact, Kuntze and Noskievich were actually referring to research by Vera L. Pjatakowa who collected the specimens in the vicinity of Hrushka, Kirovogradska Province (Pjatakowa 1930). This record by Pjatakowa is somewhat doubtful (Fig. 3 C, see the dot with a question mark) because a recent study of the specimens from Podilsk (a township near Balta) indicated the occurrence of *Argoptochus* (*Neohenschia*) *periteloides* (Fuss, 1861) (Yunakov et al. 2018). Thus, we suggest that Pjatakowa's record, whose vouchers are unknown and have not yet been verified, may refer to *Argoptochus periteloides* or indicate the co-occurrence of both species along the South Buh River. All old records of *A. quadrisignatus* from Bulgaria (Angelov 1976) and those represented in GBIF are misidentifications of other local species, as was already noted by Angelov (1987).

Podolian populations indicate the northeasternmost limit of the geographic range of *A. quadrisignatus*. Fragmentation and decline of relict grassland habitats along with the aptery of *A. quadrisignatus* have contributed to its extinction from some locations in Central Europe, such as Upper Silesia (Kuśka 2006).

Remarkably, the local distribution of *A. quadrisignatus* in the Podolian Upland is mostly constrained to the western rim of the upland. It prefers xerothermic slopes and meadows with low grass vegetation, and is less abundant in meadows with tall vegetation (Fig. 4 E, F).

Subfamily Sitoninae

***Coelositona cambricus* (Stephens, 1831)**

(Fig. 4 G)

Ukraine [first country record] - **Lviv Province**: Stryi Distr., 2.4 km E Rozhirche, 49.11959N, 23.72084E, 28 May 2023, edge of forest, sweeping, V. Khrapova leg., 1 ♂, KhDC; ibidem, 19 Jun 2024, hand picking, D. Khrapov leg., 2 ♀ 1 ♂, KhDC.

Coelositona cambricus is distributed from the British Isles (Morris 1997) northeastward to Estonia (Voolma et al. 2003), southeastward to Turkey and Georgia (Lodos 1977; Cholokava 2008), and southward to Spain and Morocco (Velázquez de Castro 2009). Data regarding the Canary Islands are based on a specimen from the Lund Museum; however, Peter Stüben's studies of the Canary Islands do not support this claim. The Albanian specimen in the collection of University of Wroclaw, collected in the early 20th century, also requires verification. The recent finding in Ukraine represents the northeasternmost location of *C. cambricus* in the Carpathians (Fig. 3 B).

We observed the beetles on the forest edge during the day on *Lotus pedunculatus* Cav. (Fig. 4 I), while no specimens were detected on *L. corniculatus* L. Three specimens were kept in breeding cages (Fig. 4 H) for two months, where they fed equally on the leaves and flowers of *Lotus pedunculatus* and *Lotus corniculatus*.

Subfamily Cossoninae

***Phloeophagus thomsoni* (Grill, 1898)**

(Fig. 4 L)

Ukraine: Zakarpatska Province: 2.4 km E Ruskyj Mochar, Y1000a, Javirnyk Mt. Range, 48.902513N, 22.560333E, 1005 m, 22 Jun 2021, montane forest, sifting, D. Khrapov leg., 1 ♀, KhDC; near Velyka Uholka, 48.2212708008N, 23.6514743481E, 30 Jun 2018, polytrap, V. Chumak leg., 1 ♀, KhDC.

This Transpalaearctic species (Alonso-Zarazaga et al. 2023) was absent in older material from Ukraine (Yunakov et al. 2018), but a single specimen was recently dis-

covered in a primary beech forest in the protected area near Velyka Uholka, Zakarpatska Province (Chumak et al. 2015). Folwaczny (1973) recorded *Ph. thomsoni* as being associated with rotten wood of various deciduous trees, including *Fagus sylvatica* L., *Carpinus betulus* L., *Acer*, *Castanea*, *Ulmus* and *Salix*. We found a second specimen from a rotten wood sample in a beech forest. Since the substrate was not certainly linked to the tree species, we assume it was beech wood. This finding suggests a broader distribution of *Ph. thomsoni* in the primary deciduous forests of the Carpathians; however, further monitoring using specialized traps for xylophagous beetles is required.

Subfamily Lixinae

***Rhabdorrhynchus echii* (Brahm, 1790)**

(Fig. 4 J)

Ukraine: Lviv Province: 1 km SSE Luka, 49.77335N, 25.020583E, 318 m, 10 Jul-14 Aug 2021, steppe, pitfall trap, D. Khrapov & R. Panin leg., 1 ♂, KhDC.

Recent findings of this *Rhabdorrhynchus,* including the current record, now comprise two specimens from Kharkiv Province (Yunakov *et al*. 2018). Previously, it was known from Ukraine only by an old record from Uzhgorod (Roubal 1941: 168; collected by Wenzel Vávra). Despite its wide distribution, the species is rarely observed, and its sightings typically indicate the presence of suitable xerothermic habitats. Surprisingly, this is the first record from the Podolian Upland, despite extensive studies by Polish entomologists in the early 20th century (Kuntze & Noskiewicz 1938) and further exploration by Soviet entomologists (Ter-Minassian 1988). No specimens were found in the largest collection of Galician insects in SMNHL. Notably, *Rh. echii* is absent from the comprehensive collections from Ukraine made by Ukrainian entomologists and appears to be a rare species there, despite the abundance of suitable habitats and presence of host plants. Meanwhile, Nolte & Haag (2020) noted that in Germany the species is abundant under viper's-bugloss (*Echium vulgare* L.) on dry slopes, even along the highways and in disturbed habitats. Our beetle was collected on a xerothermic grassy hill with marl outcrops (Fig. 4 K).

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