

UDC 595.768.2(477-25)

DOI: 10.36016/KhESG-2021-29-1-1

© 2021 V. N. FURSOV, V. Yu. NAZARENKO

## NEW DATA ON DISTRIBUTION OF ACALLOCRATES COLONNELLII BAHR, 2003 (COLEOPTERA: CURCULIONIDAE: MOLYTINAE) IN UKRAINE

Фурсов, В. Н., Назаренко, В. Ю. Нові відомості про поширення *Acallocrates colonnellii* Bahr, 2003 (Coleoptera: Curculionidae: Molytinae) в Україні. *Віснік Харківського ентомологічного товариства*. 2021. Т. XXIX, вип. 1. С. 5–7. DOI: 10.36016/KhESG-2021-29-1-1.

Наведено відомості про першу знахідку *Acallocrates colonnellii* у центральній частині України. Раніше цей вид в Україні був відомий лише з Карпат (Львівська область).

5 рис., 6 назв.

**Ключові слова:** Coleoptera, Curculionidae, Molytinae, *Acallocrates colonnellii*, жуки, довгоносики, Україна, Київ, фауна.

Фурсов, В. М., Назаренко, В. Ю. Новые данные о распространении *Acallocrates colonnellii* Bahr, 2003 (Coleoptera: Curculionidae: Molytinae) в Украине. *Известия Харьковского энтомологического общества*. 2021. Т. XXIX, вып. 1. С. 5–7. DOI: 10.36016/KhESG-2021-29-1-1.

Приводится информация о первой находке *Acallocrates colonnellii* в центральной части Украины. Ранее этот вид в Украине был известен только из Карпат (Львовская область).

5 рис., 6 назв.

**Ключевые слова:** Coleoptera, Curculionidae, Molytinae, *Acallocrates colonnellii*, жуки, долгоносики, Украина, Киев, фауна.

Fursov, V. N., Nazarenko, V. Yu. New data on distribution of *Acallocrates colonnellii* Bahr, 2003 (Coleoptera: Curculionidae: Molytinae) in Ukraine. *The Kharkov Entomological Society Gazette*. 2021. Vol. XXIX, iss. 1. P. 5–7. DOI: 10.36016/KhESG-2021-29-1-1.

The first record of *Acallocrates colonnellii* in central part of Ukraine is given. The species was so far known in Ukraine from the Carpathians (Lviv Region).

5 figs., 6 refs.

**Keywords:** Coleoptera, Curculionidae, Molytinae, *Acallocrates colonnellii*, beetles, weevils, Ukraine, Kyiv, fauna.

**Introduction.** The genus *Acallocrates* Reitter, 1913 contains four species (*A. colonnellii* Bahr, 2003, *A. denticollis* (Germar, 1824), *A. fasciatus* Colonnelli, 1980, and *A. minutesquamulosus* (Reiche, 1860)) distributed in Europe from Spain to the Caucasus. Weevils of the genus are poorly known and rare in collections because of rare occurrence and hidden life cycle, cryptic behaviour and coloration of adults. *A. denticollis* (fig. 5, triangles) and *A. colonnellii* (Fig. 5, circles) were previously recorded from Ukraine (Yunakov *et al.*, 2018; Khrapov, Yunakov, 2020).

**Materials and methods.** Single male of *A. colonnellii* was collected under the bark in the Kyiv National Botanical Garden by the first author. The taxonomy is adopted from Alonso-Zarazaga *et al.* (2017). Image of habitat and GPS coordinates were received by smartphone ZTE Blade A7 using Geo-Tracker soft v. 4.0.2.1750. The photographs of specimen have been taken using Leica Z16 APO stereo-microscope equipped with a Leica DFC 450 camera and processed with LAS v. 3.8 software, then edited with GIMP v. 2.8.4 and Inkscape v. 0.48.4 r9939. Mapping was done using modified relief Ukraine map from <https://www.maps-of-the-world.ru/europe/ukraine/large-relief-map-of-ukraine>. Abbreviation: SIZK — I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine.

### Results and discussions.

#### Family CURCULIONIDAE

#### Subfamily MOLYTINAE Schoenherr, 1823

#### Tribus CRYPTORHYNCHINI Schoenherr, 1825

#### Genus *Acallocrates* Reitter, 1913

#### *Acallocrates colonnellii* Bahr, 2003

**References.** Bahr, Stüben, 2002; Bahr, 2003; Pešić, 2004; Alonso-Zarazaga *et al.*, 2017; Yunakov *et al.*, 2018; Khrapov, Yunakov, 2020.

**Fursov V. N.** I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine,

15, Bohdana Khmelnytskoho St., Kyiv, 01030, UKRAINE; e-mail: ufensia@gmail.com, ORCID: 0000-0002-3318-2491

**Nazarenko V. Yu.** I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine,

15, Bohdana Khmelnytskoho St., Kyiv, 01030, UKRAINE; e-mail: nazarenko@izan.kiev.ua, ORCID: 0000-0003-4245-5049

**Material.** Kyiv Region: Kyiv, M. M. Gryshko National Botanical Garden of the National Academy of Sciences of Ukraine, steppes exposition, under the bark of tree (50.411, 30.567), 01.10.2020 (V. Fursov) — 1 ♂ (SIZK) (Figs. 1–4, 5, gray circle).



Fig. 1. *A. colonellii*, ♂, dorsal view.



Fig. 2. *A. colonellii*, ♂, lateral view.



Fig. 3. *A. colonellii*, ♂, median lobe: dorsal view and apex.

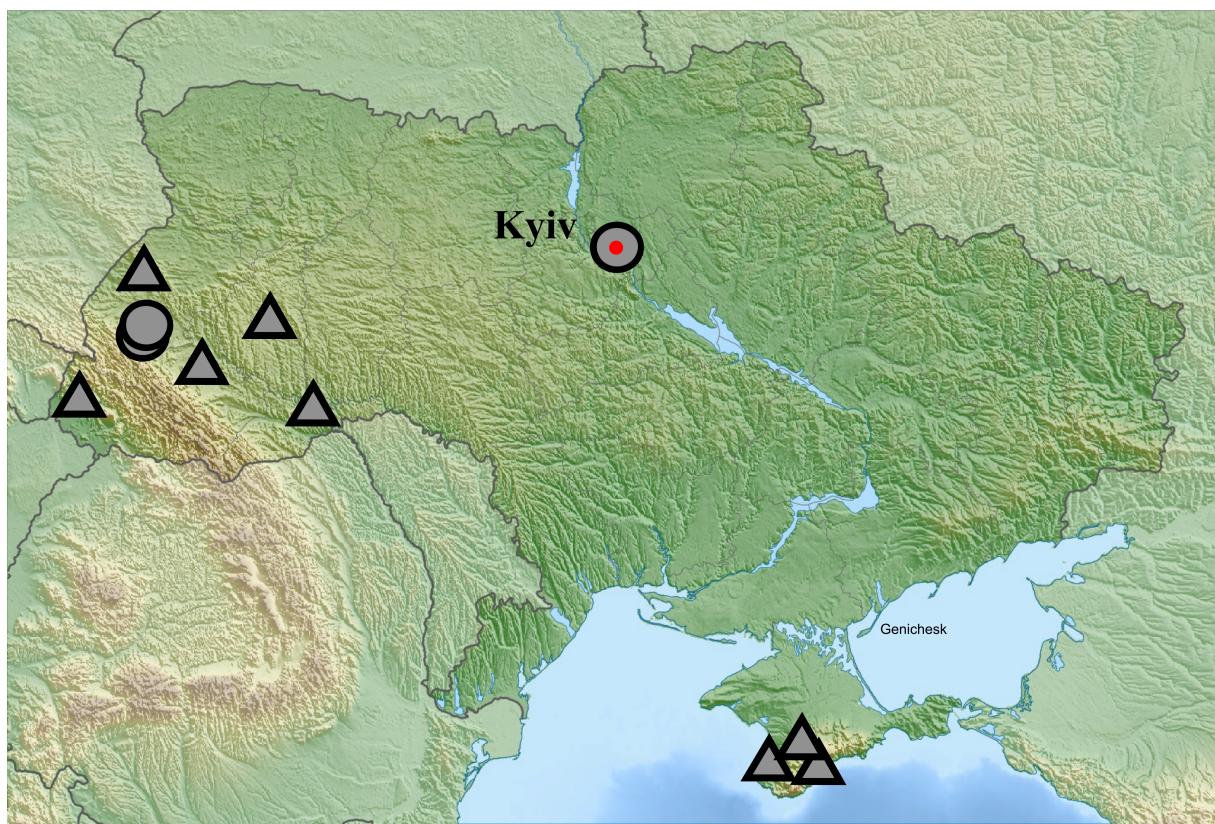


Fig. 4. The habitat of *A. colonellii*.

**Distribution.** Central and southern Europe (Austria, Bosnia and Herzegovina, Greece, Hungary, Montenegro, Romania, Serbia, Slovakia, Slovenia); the Caucasus (Georgia); Turkey (Alonso-Zarazaga *et al.*, 2017). Ukraine: Lviv Region (Krapov, Yunakov, 2020), Kyiv (Fig. 5).

**Differential diagnosis.** *A. colonellii* differs from other *Acallocrates* species by the aedeagus structures (Fig. 3). From closely related *A. denticollis* it also differs by shape of pronotum and shape of the scales on pronotal disc, and elytral suture basis (Figs. 1–2) (Bahr, Stüben, 2002; Bahr, 2003; Pešić, 2004).

**Biology.** The species occurs in a broad-leaves and mixed forests under bark or on dry twigs of different deciduous trees and shrubs, especially of *Corylus*, *Quercus*, *Fagus* or in leaf litter near them (Fig. 4). In Lviv Region it inhabits mixed forests of foothills (*Carpinus betulus*–*Quercus robur*–*Populus tremula*–*Picea abies*) with hazel understory (*Corylus avellana*) (Bahr, Stüben, 2002; Bahr, 2003; Pešić, 2004; Yunakov *et al.*, 2018; Krapov, Yunakov, 2020). Adults occur in III–X. Immature stages unknown.



**Fig. 5.** Findings of *Acallocrates* in Ukraine: ○ — *A. colonnellii* (red dot marks new record); △ — *A. denticollis* (cited locations).

**Conclusion.** This is the first record of *A. colonnellii* and of the genus in central part of Ukraine. Previously this species was found in the Carpathians only (Khrapov, Yunakov, 2020). Since *A. colonnellii* is missing in comprehensive material from Kyiv we assume occasional introduction with plants or soil to the botanical garden.

#### REFERENCES

- Alonso-Zarazaga, M. A., Barrios, H., Borovec, R., Bouchard, P., Caldara, R., Colomelli, E., Güttekin, L., Hlavač, P., Korotyaev, B., Lyal, C. H. C., Machado, A., Meregalli, M., Pierotti, H., Ren, L., Sanchez-Ruiz, M., Sforzi, A., Silfverberg, H., Skuhrovec, J., Tryzna, M., Velazquez de Castro, A. J., Yunakov, N. N. 2017. Cooperative Catalogue of Palaearctic Coleoptera Curculionoidea. Sociedad Entomológica Aragonesa, Zaragoza, 1–729. URL: <http://sea-entomologia.org/monoelec.html>. LSID: urn:lsid:zoobank.org:pub:911EF526-33F0-4970-8EC2-A7F5AC1E1D3D.
- Bahr, F. 2003. Revision des Genus *Acallocrates* Reitter, 1913 (Coleoptera: Curculionidae: Cryptorhynchinae). *Snudebiller: Studies on Taxonomy, Biology and Ecology of Curculionoidea*, **4**, 101–115.
- Bahr, F., Stüben, P. E. 2002. Digital-Weevil-Determination for Curculionoidea of West Palearctic: Transalpina: Cryptorhynchinae. *Snudebiller: Studies on Taxonomy, Biology and Ecology of Curculionoidea*, **3**, 14–87.
- Khrapov, D., Yunakov, N. 2020. Addenda to the knowledge of the weevil fauna (Coleoptera: Curculionidae) of Ukraine. *Proceedings of the State Natural History Museum*, **36**, 141–146. DOI: <https://doi.org/10.36885/nzdpm.2020.36.141-146>.
- Pešić, S. 2004. The first findings of *Acallocrates colonnellii* Bahr, 2003 (Coleoptera: Curculionoidea, Curculionidae, Cryptorhynchinae) in Central Serbia. *Kragujevac Journal of Sciences*, **26**, 131–136. URL: <http://www.pmf.kg.ac.rs/KJS/volumes/kjs26/kjs26pesic131.pdf>.
- Yunakov, N., Nazarenko, V., Filimonov, R., Volovnik, S. 2018. A survey of the weevils of Ukraine (Coleoptera: Curculionoidea). *Zootaxa*, **4404**(1), 1–494. DOI: <https://doi.org/10.11646/zootaxa.4404.1.1>.

I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukraine