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Short Communication

FIRST RECORD OF *Brachycerus sinuatus* Olivier, 1807 (COLEOPTERA: CURCULIONIDAE) IN SERBIA

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ABSTRACT. The unusually looking weevil species *Brachycerus sinuatus* Olivier, 1807 was collected in April 2019 in the vicinity of Preševo (southern Serbia). It is the first finding of this species for Serbia. By this data, its area of distribution is substantially extended westwards. Very precise data about the locality where it was found in contributing to the knowledge of its ecology.

Keywords: weevil, new record, southern Serbia, Pčinja District, Preševo.

Brachycerus Olivier, 1790 is quite unusuall looking weevil genus. These robust, 6-18 mm long (АНГЕЛОВ, 1978), black flightless beetles, with dorsally flattened rostrum, have got very furrowed, embossed relief structure on the surface and reminiscent of unordinary armored warriors, resembling aliens. Their short, compact antennas are not of elbow type (as found in most weevils) and consist of only nine segments. The elytra are fused and roughly sculptured. This genus belongs to the subfamily Brachycerinae that comprises six very different tribes. In the Palearctic region, one of these six tribes, Brachycerini, is represented by only one genus, *Brachycerus* (ALONSO-ZARAZAGA and LYAL, 1999). This genus encompasses approximately 300 species, mostly in Ethiopian zoogeographical region, much less in the Palaearctic (49 species and two subspecies), primarily in North Africa (АНГЕЛОВ, 1978; ALONSO-ZARAZAGA *et al*., 2017).

This genus was in the scientific focus more than a hundred years ago (BEDEL, 1874a, 1874b; REY, 1894; VITALE, 1903; BOVIE, 1909; ESCALERA, 1918; ZUMPT, 1937a, 1937b; PARDO ALCAIDE, 1945; SOLARI, 1949; HAAF, 1957a, 1957b, 1958), but a century later interest for it has been refreshed (ARZANOV, 2005, 2011; ARZANOV and FRIEDMAN, 2012; COLONNELLI, 2014; ALZIAR, 2016; FRIEDMAN, 2017; ELMETWALY and HAMED, 2019; VERDUGO and LE PEN, 2020). It is a little surprising that so robust and unusually looking beetles remains mysterious to the science, and even new species have been recently described, such as *armeniacus, kubanicus, mlokosevitschi* and *turkmenicus* from the Caucasus and surrounding countries (ARZANOV, 2005), *hermoniacus, groneri* and *wizeni* from Israel (FRIEDMAN and SAGIV, 2010), *skopyi* from Syria (ARZANOV, 2011), *anatolicus* from Turkey (ARZANOV and FRIEDMAN, 2012), *makrisi* from Cyprus (ALZIAR, 2016) and *socotranus* from Socotra (FRIEDMAN, 2017).

Brachycerus sinuatus, together with 18 similar species belongs to the *aegyptiacus* group (FRIEDMAN and SAGIV, 2010). All of them are oval and with rounded elytra and distinct elytral ridges neither of which stands out and all are subdivided into irregular and uneven tubercles.

During the wider collecting entomological expedition organized by "HabiProt" in the south of Serbia in spring 2019, on April 25th 2019 two male specimens of *Brachycerus sinuatus* Olivier, 1807 were collected. After genitalia preparing, one specimen was determined with a help of printed (АНГЕЛОВ, 1978) and digital (SKUHROVEC *et al*. 2013) keys, and confirmed by specialist, Dr Friedman A.-L.-L. from Israel. The prepared specimen is stored in S. Pešić's weevils collection, at the Faculty of Science in Kragujevac. The other specimen (undetermined by sex) from the same location is a part of HabiProt entomological collection.

Taxonomically, *B. sinuatus* belongs to family Curculionidae, subfamily Brachycerinae Billberg, 1820, tribe Brachycerini Billberg, 1820, subtribe Brachycerina Billberg, 1820, genus *Brachycerus* Olivier, 1789 (ALONSO-ZARAZAGA *et al*., 2017).

Synonyms: besseri Krynicki, 1832, and *insularis* Desbrochers des Loges, 1871.

- *Collecting date*: April 25th 2019.
- *Locality data*: in the Pčinja District of southern Serbia, close to a small stream (Fig. 1A), between the Miratovac and Trnava villages (Fig. 1B), on the territory of Preševo, near the Serbia-North Macedonia border (Fig. 1C).
- *Geographic coordinates*: 42°16′20″ N, 21°39′1,6″ E, altitude approximately 550 m.
- *Habitat*: rocky, warm habitat with strong submediterranean influence from the south, covered with limited vegetation of mosaic composed from small fragments of forests with *Quercus pubescens* and dry pastures (Fig. 1A), with flowering *Muscari* sp.

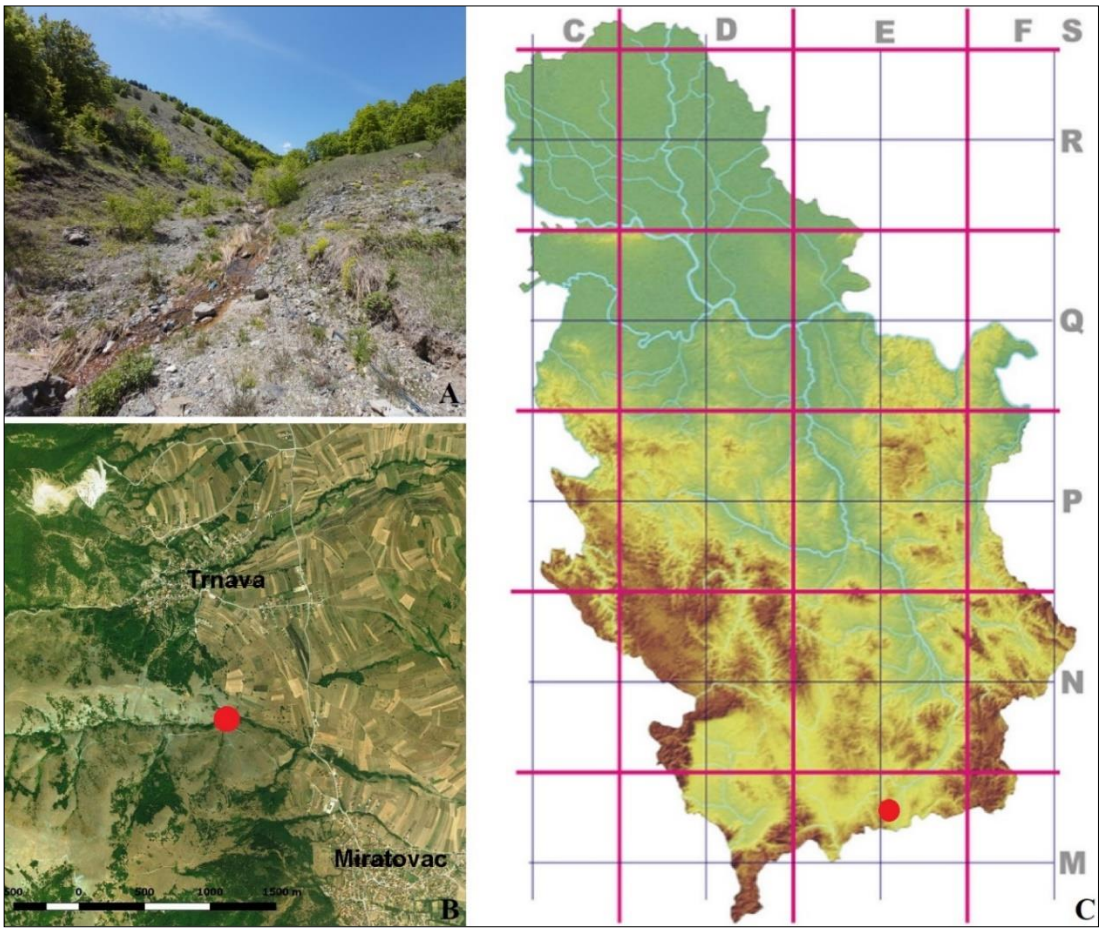

Figure 1. *Brachycerus sinuatus* finding place: A – habitat, photo M. Vujić 2019; B – Google map of the explored place; C – position of finding place in UTM map of Serbia.

One collected specimen is male, 16 mm long including the rostrum, the other one is 1 mm shorter. Literally, entire surface of their bodies is covered with round punctures of variable size and density. The anterior edge of the pronotum in the middle is clearly elongated forward, towards the forehead. Two strong ridges start from there, enclosing the median grove on the pronotum that starts there and extends to the pronotum posterior edge, i.e. distinctly is present in its entire length. Median grove is slightly shallower in the middle, and wider on the end.

Thanks to the small scales, dust and dirtiness collected in the groves among the tubercles, it looks like beetles possess zig-zag elytral ridges. The first ridges, near the elytral suture, together have a viper-like pattern (Fig. 2 A, C).

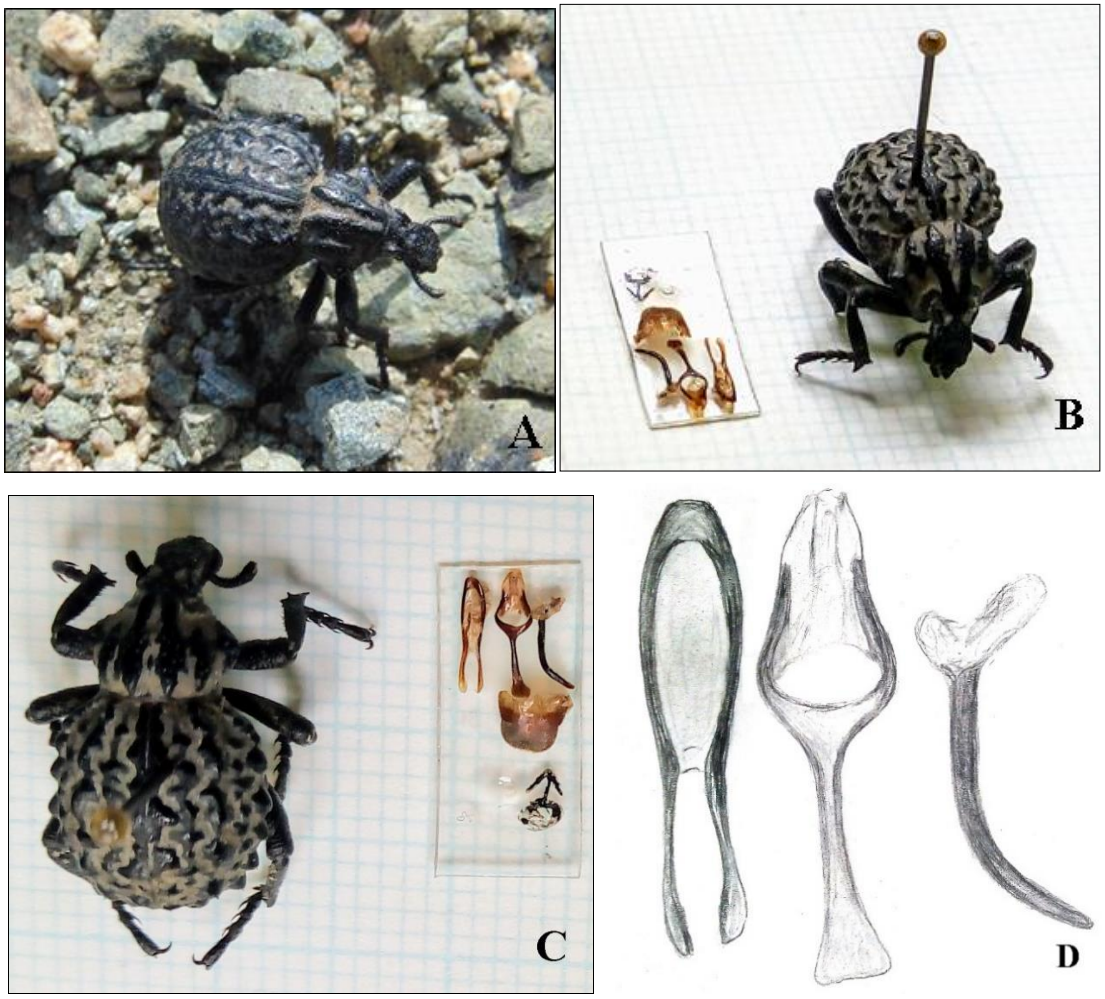

Figure 2. *Brachycerus sinuatus*: A – *in situ*, photo M. Đurić 2019;
B – afore, from the collection, photo S. Pešić 2020; C – dorsal view, photo S. Pešić 2020;
D – aedeagus, tegmen and spiculum ventrale, S. Pešić.

Ecological note: Muscari sp. is registered as a *B. sinuatus* host plant in Bulgaria (АНГЕЛОВ, 1978), while in the Rostov region in Russia that role is taken by *Bellevalia sarmatica* (Gregori) and *Hyacinthella pallasiana* (Stev.) (ARZANOV, 2005). All three species are from fam. Asparagaceae.

Distribution: According to SKUHROVEC *et al*. (2013) and the newest Palaearctic weevils catalogue (ALONSO-ZARAZAGA *et al*., 2017), *B. sinuatus* lives in Sicily, south-eastern Europe, and Middle East, or more precisely, by countries in Europe: in Bulgaria, Greece (BAHR *et al.*, 2020), Italy (Sicilia), North Macedonia, Romania, Ukraine and South European territory of Russia; in Asia: in Azerbaijan, Armenia, Cyprus and Turkey.

Its potential IUCN status is not evaluated.

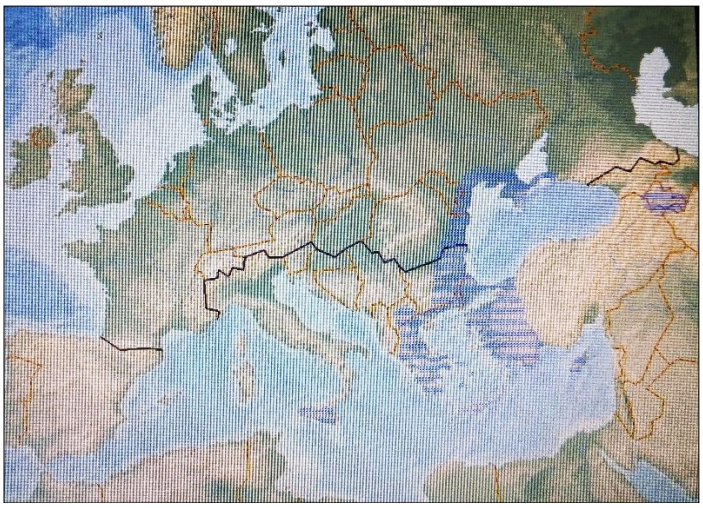

Fig. 3. Distribution of *Brachycerus sinuatus* Olivier, 1807 – hatched blue (from SKUHROVEC *et al*., 2013).

The finding reported here is already included in "Alciphron" - Online Database for Collecting Data on Insects in Serbia (HABIPROT, 2014–2020). The same database contains two findings of closely related species *B. foveicollis* Gyll. in Serbia, but those records are not yet confirmed.

Acknowledgments

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