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BRACHYSOMUS BULBOSUS SP. NOV. FROM MONTENEGRO (COLEOPTERA, CURCULIONIDAE, ENTIMINAE)

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We describe *Brachysomus bulbosus* sp. nov. from Plav municipality in Montenegro. The habitus of the new species shows similarities with *Brachysomus* (*Hippomias*) *albanicus* (Apfelbeck, 1911), *B.* (*Hippomias*) *commutatus* Kostal, 1992, but also with *B.* (s. str.) *deceptorius* Białooki & Krátký, 2015. Based on characteristics of the head, vestiture and genitalia we suggest a placement in the *Brachysomus simplex* species group. The new species differs remarkably from all congeners by its comparatively bare, shiny and subglobose body.

Key words: *Brachysomus*, taxonomy, new species, subalpine habitat, Montenegro

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U radu opisujemo novu vrstu *Brachysomus bulbosus* sp. nov. iz općine Plav u Crnoj Gori. Habitus nove vrste pokazuje sličnosti s *Brachysomus* (*Hippomias*) *albanicus* (Apfelbeck, 1911), *B.* (*Hippomias*) *commutatus* Kostal, 1992, ali i s *B.* (s. str.) *deceptorius* Białooki & Krátký, 2015. Na temelju karakteristika glave, pokrova i genitalija predlažemo svrstavanje u grupu *Brachysomus simplex*. Nova vrsta značajno se razlikuje od svih srodnika svojim razmjerno golim, sjajnim i subgloboznim tijelom.

Ključne riječi: *Brachysomus*, taksonomija, nova vrsta, pretplaninsko stanište, Crna Gora

INTRODUCTION

Recently, Yunakov (2022) provided a thorough revision of the genus *Brachysomus* Schoenherr, 1823, parts of which he had revised years before (Yunakov, 2006), with additional contributions by Białooki (2007), Yunakov & Germann (2012), Białooki & Krátký (2015) and Germann *et al.* (2016).

As already highlighted by Yunakov (2022), the boundaries, and often intriguing characters due to numerous homoplasies between *Brachysomus* and morphologically similar genera such as *Eurosphalmus* Yunakov & Nadein, 2006 (Fig. 3), *Nanomias* Yunakov, 2003 and *Amicromias* Reitter, 1913 are blurred and not straightforward to interpret. The assignment to different tribes (Brachyderini and Sciaphilini) is highly debatable.

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Here, as a result from a particularly successful excursion by one of the authors (P. Z. Białooki), in which a new *Otiorhynchus* had already been described (Białooki, 2023), a series of a species belonging to *Brachysomus* was collected on the mountains close to Čakor Pass in the east of Montenegro. The weevil fauna of Montenegro is still far from being well known (Germann *et al*., 2022; Szénási, 2017). The genus *Brachysomus* is represented in Montenegro by *B. hirtus*, where both parthenogenetically reproducing and amphigonic populations are known, and also by *Brachysomus mucronatus* Yunakov, 2006 and *B. subtilis* Yunakov, 2006 from the same species group within *Brachysomus* s. str.

A comparison with specimens of the extensive collections at the Natural History Museum Basel, and the accessible private collections allowed the present description of *B. bulbosus* sp. nov. from Montenegro.

MATERIAL & METHODS

The following specimens for comparison were used: *B. commutatus*: 1 male, Klein Asien, Alem –Dagh, v. Bodemeyer // Sammlung Apfelbeck (NMBA). 1 female Byzant, Belgr. Wald, Apfelbeck, coll. A. Rätzer, det. N. Yunakov 2010 (NMBE). *B. deceptorius*: 1 male, 1 female Macedonia, Šar pl. Mts., Tetovo, Popova Šapka (KRAT). *B. albanicus*: 1 female Oroshi, M. Sheit, Apfelbeck // Sammlung Apfelbeck, coll. G. Frey (NMBA). *Eurosphalmus breiti*: 1 male, Dobrutscha, Kloster Kokos, leg. Breit, coll. G. Frey (NMBA).

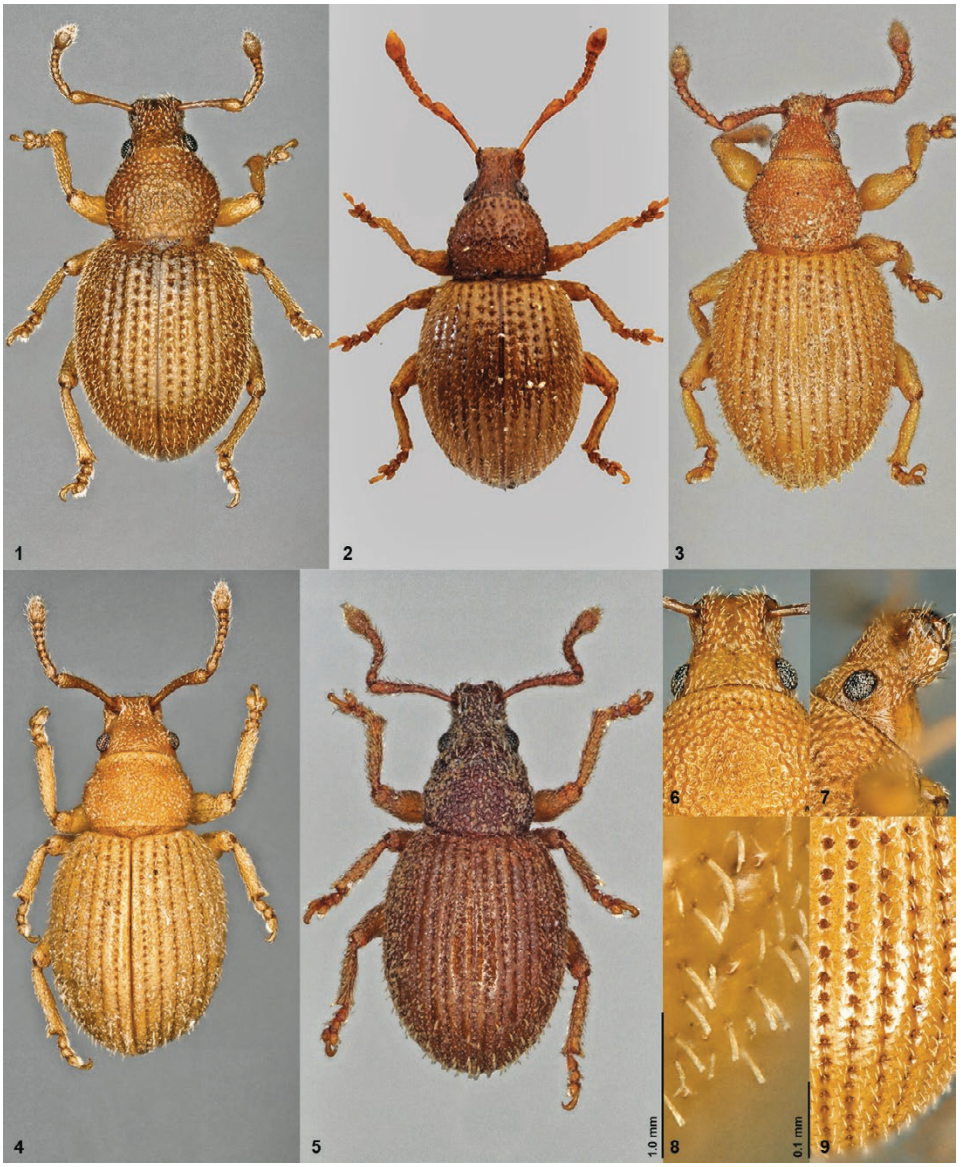
Abbreviations used: BIAL – collection Piotr Z. Białooki; KRAT – collection Jiří Krátký; NMBA – Naturhistorisches Museum Basel. Photos were taken with a Keyence VHX-6000 photosystem at the NMBA. For details of the endophallus we use the specific terminology proposed by Goldson & Emberson (1981).

RESULTS

Description

Material. Holotype male: 27.06.2016 W Montenegro mt. Planinica > 2000 m NE pass Cakor, 42.6849N, 20.0191E, leg. P.Z. Białooki (BIAL). – Paratypes: dito 4 males, 1 female [where two specimens, male and female, solely consist of an abdomen with genitalia] (NMBA); Dito 8 ex. (BIAL); Dito but 2023 58 ex. (BIAL).

Size: males 2.3–2.6 mm; females 2.4-2.9 mm; holotype: 2.5 mm. Habitus: Figs 1; 6-9. Colour: body including antennae and legs yellowish-brown to light brown. Head broad, eyes oval, lateral, protruding from the head's outline (Figs 1; 6-7). Rostrum rectangular, as long as wide, interocular distance one fourth wider than epifrons between antennae. Epifrons in lateral view bulging in middle (Fig. 7). Head with weak transverse impression before eyes. Pterygia visible in dorsal view (Fig. 6). Margins of antennal scrobes in lateral view distinct, pointing downwards. Head and rostrum irregularly and coarsely punctured. Vestiture consisting of narrow, lanceolate bristles. Antennal scape thin, weakly bowed and clubbed, 1.5 longer than width of epistome. First two antennal segments 1.4 as long as wide, following 5 segments transverse, gradually broadening, club ovate, twice as wide as last funicle segment. Antennal segments and club set with whitish hairs. Pronotum transverse (length/width: 0.6–0.7), widest in middle, globular, laterally strongly rounded, irregularly and coarsely punctured, interspaces between punctures reduced to small ridges. Vestiture consisting



Figs: 1-5. Dorsal habitus of **1.** *Brachysomus bulbosus* sp. nov., male. **2.** *B. deceptorius*, male. **3.** *Eurosphalmus breiti*. **4.** *B. commutatus*, male. **5.** *B. albanicus*, female. **Figs. 6-9.** *B. bulbosus* sp. nov. **6-7.** Details of head (dorsal and lateral). **8-9.** Elytra (scales on elytra and striae) (Photos: C. Germann and J. Krátký).

of long, thin, clubbed, semierect (angle between 20° and 45°), whitish scales. Scutellum not visible. Elytra short-oval (length/width: 1.12 to 1.24) widest in or just before middle, rounded to basis (apterous) and apex, in lateral view weakly flattened before disc, regularly rounded at declivity. Striae regularly and strongly punctured; punctures lateral, with small sharp tubercles (Fig. 9). Intervals more than twice as wide as striae, glabrous, faintly and irregularly punctured. Intervals set with up to three irregular

rows of long, thin, semierect scales, distally diverging and truncate at apex (Fig. 8). Underside: vestiture sparse with the same long thin scales as on intervals. Apical edge of fifth ventrite in both males and females semicircular (Fig. 13), slightly bulging in males, flat in females. Legs: Femora strongly swollen in middle. Tibiae strong, inner margin weakly s-shaped, distal comb consisting of yellowish spines. First tarsal segment shaped as an equilateral triangle, in cross section roundish, second segment transverse, third bilobed, fourth minute and tube-like, onychium gracile and elongate, longer than first two segments combined. Vestiture consisting of long thin recumbent whitish scales. Male genitalia: Figs 10–11. Aedeagus elongate, tip triangular with pointed apex, dorso-ventrally flattened, dorsally weakly sclerotized. Apodeme as long as pedon. Internal sac with large, triangular, well-sclerotized lateral ostial valves; large waved endophallic sclerite (Fig. 12). Tegmen with well-developed parameres, only somewhat shorter than width of pedon (Fig. 10). Female genitalia: Figs 14-18. Gonocoxites weakly sclerotized, without styli, set with long sensillae (Fig. 14). Spermatheca with c-shaped cornu, and small globular nodulus and ramus (Fig. 15). Tergites VII and VIII feebly sclerotized, rounded (Figs 16-17). Sternite VIII narrow, weakly sclerotized, with long apodeme, four times longer than sternite, setose along distal margin (Fig. 18). Sexual dimorphism weakly pronounced: males with elytral apex more truncate, in females more pointed, tibiae more robust in males than in females.

Figs. 10-13. Male of *Brachysomus bulbosus* sp. nov. **10-11.** Aedeagus dorsal and lateral. **12.** internal sac. **13.** Underside (sternites) of male.
Figs. 14-18. Dito, female genitalia. **14.** Gonocoxites. **15.** Spermatheca. **16.** Tergite VIII. **17.** Tergite VII. **18.** Sternite VIII (Photos: C. Germann and P. Z. Białooki).

Etymology: the specific epithet, the adjective "bulbosus", often used in botany, refers to the characteristic tuberose (globose) external morphology of the new species.

Remark on variability: The color of most specimens of *B. bulbosus* sp. nov. was yellowish-brown to bright brown; only few specimens were darker. Even specimens

extracted one month after collection in the field from the sifted litter were still rather bright brown.

Ecology: The new species was sifted from ground litter under *Juniperus communis*, but also under herbaceous plants in the peak area of a mountain (Fig. 19).

Fig. 19. Habitat at about 2000 m a.s.l. northeast of Čakor Pass in Montenegro, mountain top with herbaceous plants and *Juniperus communis* (Photo: P. Z. Białooki).

DIAGNOSIS AND DISCUSSION

Based on the apically narrowed epifrons and the easily visible antennal sockets in the dorsal view, *B. bulbosus* sp. nov. shares some similarities with the subgenus *Hippomias*. What votes against this placement is the presence of the distinct and well developed parameres of the tegminal ring, which is reduced in *Hippomias* in general, however with one exception, *Brachysomus rhinomioides* Košťál, 1992. The new species shows similarities in external morphology with both *B. ponticus* and *B. transsylvanicus* species groups – according to the key by Yunakov (2022). Regarding the globular shape of elytra and pronotum, both *Brachysomus commutatus* (Fig. 4) and *B. albanicus* (Fig. 5) show similarities with *B. bulbosus* sp. nov., and its habitus with comparatively long and strong legs shows certain similarities with that of *Eurosphalmus breiti* (Fig. 3). In its transverse broad head it is most similar to *B. commutatus*, but the rostrum of *B. bulbosus* sp. nov. is more rectangular with a broad rostral dorsum, making it closer to *B. albanicus*. The latter shows similar vestiture of the elytra, whereas *B. bulbosus* sp. nov. has

strongly punctured and glabrous elytral striae and only thin, hair-like scales. In summary, the rather scarce vestiture, the shape of rostrum without lateral process of the epistoma in males (e. g. present in the *B. mihoki* group), the acute tip of the median lobe of the aedeagus, the rather long apodemes (at least as long as the median lobe), and the internal sac of the aedeagus with only inconspicuous microspicules with the internal sclerite containing a large waved endophallic sclerite and well sclerotized lateral ostial valves, allows is to place *B. bulbosus* in the *Brachsomus simplex* species group sensu Yunakov (2022) in the close morphological vicinity of *B. deceptorius* Białooki & Krátký, 2015 (Fig. 2).

With its globose habitus, rather long and strong legs and a broad head with a rectangular rostrum, which are typical for *B. bulbosus*, the species is well separated from all other *Brachysomus*.

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