

A NEW SPECIES OF CAVERNICOLOUS GENUS *MACHAERITES* MILLER, 1855 (COLEOPTERA, STAPHYLINIDAE, PSELAPHINAE) FROM CROATIA

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Machaerites udrzali sp. nov., a new cavernicolous species of the tribe Bythinini from Croatia, Plitvice, Rodičeva pećina is described and illustrated; the systematic position of the species is discussed.

Key words: Coleoptera, Staphylinidae, Pselaphinae, Bythinini, *Machaerites udrzali* sp. nov., taxonomy, cavernicolous, Croatia

Hlaváč, P. & Lakota, J.: Nova vrsta špiljskoga roda *Machaerites* Miller, 1855 (Coleoptera, Staphylinidae, Pselaphinae) iz Hrvatske. *Nat. Croat.*, Vol. 13, No. 2., 137–141, 2004, Zagreb.

U radu se opisuje nova špiljska vrsta *Machaerites udrzali* sp. nov. iz skupine Bythinini iz Hrvatske (Plitvice, Rodičeva pećina); raspravlja se o položaju vrste u sistematici.

Ključne riječi: Coleoptera, Staphylinidae, Pselaphinae, Bythinini, *Machaerites udrzali* sp. nov., taksonomija, špiljski, Hrvatska

INTRODUCTION

The genus *Machaerites* Miller, 1855 is a strictly cavernicolous and endemic genus of Croatia, Slovenia and Italy, and is certainly one of the best studied genera of Pselaphinae (SCHAUFUSS, 1863; JEANNEL, 1954; POGGI, 1992). Although the first species, *Machaerites spelaeus* Miller, was described in 1855 and the second one, *Machaerites ravasinii* Müller, in 1922, we had to wait for 79 years before other species were discovered (NONVEILLER & PAVIČEVIĆ, 2001). During a recent biospeleological trip ma-

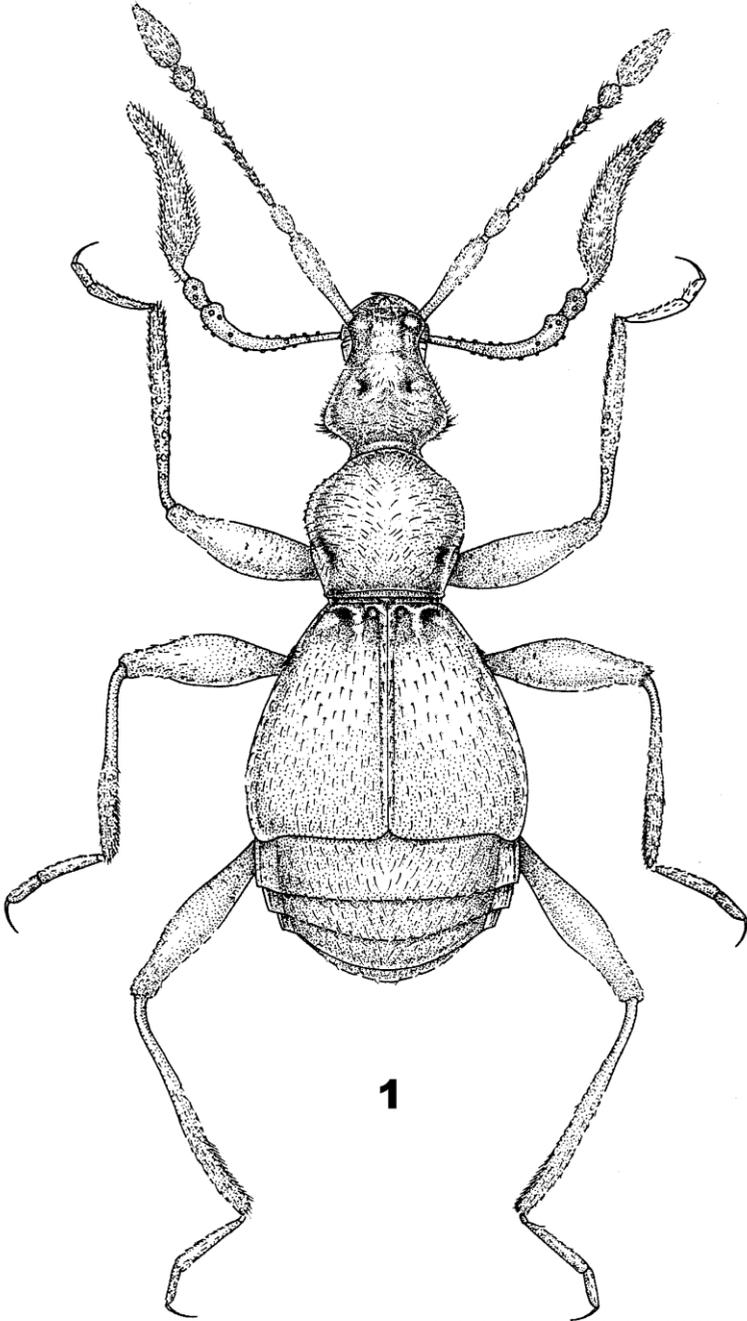


Fig. 1. – habitus

de by Mr. R. Udržal to Croatia, another new species was found in Rodičeva pećina in Plitvice; the species is described here below. The following abbreviations are used in the text: CNHMZ – Croatian Natural History Museum, Zagreb; CPH – coll. Peter Hlaváč, Košice; CJL – coll. Jan Lakota, Ružomberok; CRU – coll. Radek Udržal, Pardubice.

Machaerites udrzali sp. nov.

Etymology: Patronymic, dedicated to Mr. Radek Udržal, the collector of the species.

Material examined: Holotype male: CROATIA: Plitvice, Rodičeva pećina, Rodičeve Kuće, 4.9.2002, (CNHMZ); Paratypes: 9 specimens with the same data as the holotype but collected on: 16.10.2001 (2 specimens); 25.6.2002 (3 specimens); 4.9.2002 (3 specimens) and 29.4. 2003 (1 specimen), (CRU, CPH, CJL).

Description. Body (Fig. 1) shiny, reddish brown, sparsely pubescent, legs, antennae, maxillary palpi slightly lighter, length 1.61–1.73 mm, maximal width of elytra

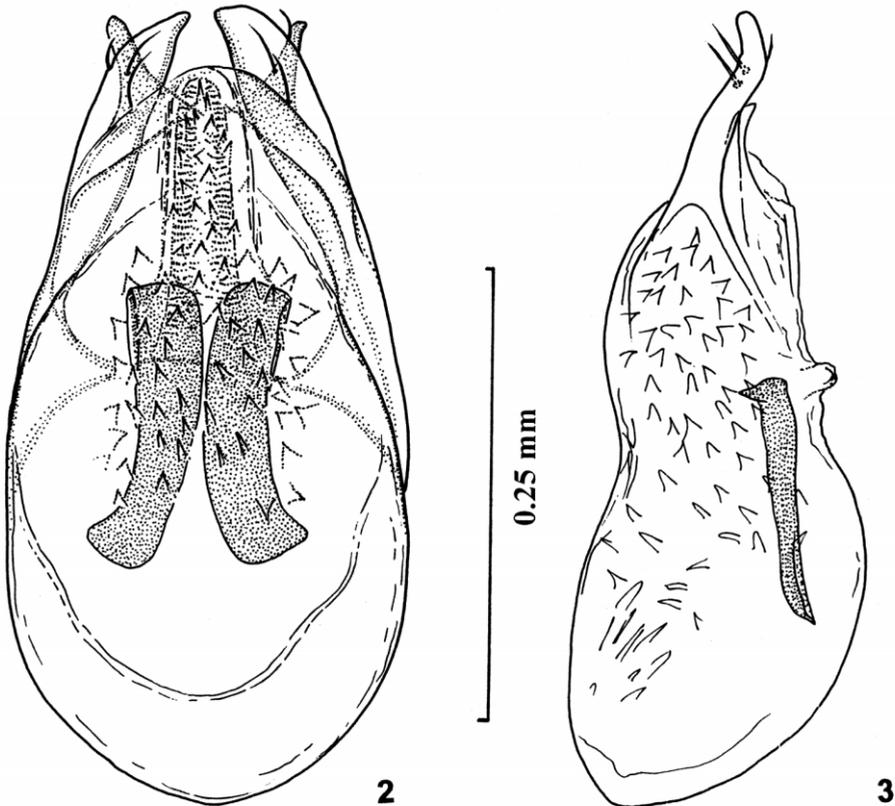


Fig. 2. – aedeagus, dorsal aspect; Fig. 3. – aedeagus, lateral aspect

0.67–0.75 mm. Head triangular, about as long as wide, with distinct wide neck; eyes completely atrophied, vertex roundly pointed, vertexal foveae well defined, frons between antennal tubercles with deep excavation, reaching vertexal foveae; maxillary palpi very long, segments II–III granulate, segment IV regularly and densely pubescent, about as long as segment II which is pedunculate; antennae long, scape more than 4.5 times as long as wide, expanded apically, about 3.7 times as long as pedicel, pedicel oval, segment III about 2.5 times as long as wide, segments IV–VIII slightly elongate, IX globular and twice as large as VIII, segment X globular and twice as large as IX, apical segment about 1.5 times as short as scape, pointed at apex.

Pronotum wider than long (ratio pronotal wide/length: 1.09–1.15) and 1.3–1.4 times as wide as head, widest in apical third, lateral antebasal foveae well defined.

Elytra 1.15–1.20 times as wide as long, broadly widened from base to apex, 1.6–1.7 times as long (at suture) as pronotum, two basal foveae present on each elytron, sutural stria well defined through whole length of elytra.

Abdomen slightly narrower than elytra, first visible tergite longest.

Legs slender and relatively long, with all tibiae simple, posterior tibiae slightly curved in apical third.

Aedeagus as in figs 2, 3, short, large, elongate, parameres meeting apically, with 3 apical setae, endophallous with two equal, sclerotized corpuscles.

Sexual dimorphism: None apparent

DISCUSSION

Machaerites can be divided according to the structure of aedeagus and by the degree of modification of the posterior tibia into two well defined groups (NONVEILLER & PAVIČEVIĆ, 2001). The first is characterized by having the aedeagus with parameres meeting apically and posterior tibiae modified: this includes *M. spelaeus* Miller and *M. curvistylus* Nonveiller & Pavičević; the second group is characterized by having the aedeagus with parameres separated at their apices and the posterior tibiae simple: this includes *M. mekotiensis* Nonveiller & Pavičević and *M. novissimus* Nonveiller & Pavičević. Two species (*M. ravasinii* and *M. udrzali*) seem to be intermediate species as they have the aedeagus of the first group, but tibiae are simple. *M. udrzali* will key to couplet 13, »mekotiensis« in the key to species provided by NONVEILLER & PAVIČEVIĆ (2001: 332). The new species can be easily distinguished from *M. mekotiensis* by having a scape more than 4.5 times as long as wide (only 4.5 as long as wide in *M. mekotiensis*), a different structure of aedeagus and by its smaller size.

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REFERENCES

- JEANNEL, R., 1954: Les Psélaphides troglobies de la Slovénie. *Notes Biospéologiques* 9, 7–15.
- NONVEILLER, G. & PAVIČEVIĆ, D. R., 2001: Description d'une sous-espèce nouvelle et de six espèces nouvelles du genre *Machaerites* Miller, 1855 de Slovénie et de Croatie (Coleoptera, Pselaphinae, Bythinini). *Nouvelle Revue d'Entomologie*, **18**(4), 317–333.
- SCHAUFUSS, L. W., 1863: Monographie der Gattung *Machaerites* Mill. *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien* 13, 1241–1250, pl. 25.
- POGGI, R., 1992: Forme nuove o poco note di Pselaphidae cavernicoli del Friuli-Venezia Giulia e della Jugoslavia (Coleoptera). *Memorie della Società entomologica italiana*, **70** (1991) (2), 207–224.