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A new troglobitic species of the genus *Pholeuonopsis* (Coleoptera: Leiodidae: Cholevinae: Leptodirini) from western Serbia, with a key to the species from Serbia

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Abstract

A new leptodirine leiodid beetle species, *Pholeuonopsis* (*Pholeuonopsis*) *sljivovicensis* **sp. n.**, from a cave in western Serbia is described and diagnosed. The views of both male and female genitalia and other taxonomically important characters are imaged. The new species is clearly distinct from the closest relatives. It probably belongs to an old phyletic lineage of Mesogeid origin, like other known *Pholeuonopsis* taxa from the western part of the Balkan Peninsula. The new species is both an endemic and a relict inhabiting solely western Serbia. Morphological comparisons among the Serbian *Pholeuonopsis* species are provided, together with a key to the species. The genus *Serbopholeuonopsis* B. Ćurčić & Boškova, 2002 is regarded as a junior synonym of the genus *Pholeuonopsis* Apfelbeck, 1901.

Key words: Leiodidae, Cholevinae, Leptodirini, *Pholeuonopsis*, new species, troglobite, western Serbia

Introduction

The genus *Pholeuonopsis* Apfelbeck, 1901 comprises 13 species and six subspecies of both troglobitic and endogean leiodids distributed in a wider Dinaric area belonging to Bosnia and Herzegovina, Montenegro and Serbia (Jeannel 1924; Pretner 1968; Perreau 2000, 2004; Ćurčić & Brajković 2002; Ćurčić *et al*. 2006, 2014b). The genus is separated into the three subgenera: *Pholeuonopsis* s. str., *Scotosites* Knirsch, 1929 and *Silphanillus* Reitter, 1903 (Guéorguiev 1976; Perreau 2000, 2004). Altogether three troglobitic species are known from western Serbia so far, two of which have been recently described: *Pholeuonopsis* (*Pholeuonopsis*) *magdelainei* Jeannel, 1924, from the Mlađenovića Megara Cave, village of Stapari, near Užice, *P.* (*P.*) *cvijici* S. Ćurčić & Brajković, 2002, from the Potpećka Pećina Cave, village of Potpeće, near Užice, and *P.* (*P.*) *zlatiborensis* S. Ćurčić, Brajković, B. Ćurčić & N. Ćurčić, 2006, from theRšumska (= Markova) Pećina Cave, village of Gornji Ljubiš, Mt. Zlatibor (Jeannel 1924; Ćurčić & Brajković 2002; Ćurčić *et al.* 2006).

A few field trips organized by some of the contributing authors (S. Ć., D. A., M. P., and F. B.) in western Serbia resulted in the discovery of a new *Pholeuonopsis* species: *P.* (*P.*) *sljivovicensis* **sp. n.** Both description and diagnosis of the new *Pholeuonopsis* species are given in the current paper. The diagnosis of *Pholeuonopsis* (*Pholeuonopsis*) *sljivovicensis* **sp. n.** is based on a thorough analysis of the type series of nine males and 18 females collected during 2013 in the Cave by the Užice-Mt. Tara road, village of Šljivovica, near Čajetina, Mt. Zlatibor, western Serbia.

Material and methods

The type specimens were analyzed in the laboratories of the Institute of Zoology, University of Belgrade -Faculty

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2b. Body more elongate, posterior pronotal angles short, less protruding backwards, scutellum large, elytra inversely ovate, all parameral setae equidistant, outer gonostyl seta at the level between two inner setae 3

3a. Somewhat longer, antennae not exceeding the mid-elytra level in females, antennomere XI ovoid, pronotum widest slightly before the mid-portion, more rounded anteriorly, mesosternal carina high, more rounded, elytral margins almost straight anteriorly, elytra more elongate, protarsomere I shorter, median lobe thickened distally, with more rounded apex, parameres wider distally, sigmoidly curved laterally, basal bulb more elongate, median lobe less curved laterally, wider basally, urite oval, gonostyli less curved, spermatheca more elongate, narrower . . . . . *P.* (*P.*) *sljivovicensis* **sp. n.**

3b. Somewhat shorter, antennae exceeding the mid-elytra level in females, antennomere XI sub-elliptical, pronotum widest at hind pronotal angles, less rounded anteriorly, mesosternal carina low, more acute, elytral margins somewhat impressed anteriorly, elytra less elongate, protarsomere I longer, median lobe not thickened, with more pointed apex, parameres narrower distally, arcuate laterally, basal bulb less elongate, median lobe more curved laterally, narrower basally, urite sub-ovate, gonostyli more curved, spermatheca less elongate, wider . . . . . *P.* (*P.*) *cvijici* S. Ćurčić & Brajković, 2002

Taxonomical notes on the genus *Pholeuonopsis*

Recently, a new genus of leptodirine leiodids from Serbia, *Serbopholeuonopsis* B. Ćurčić & Boškova, 2002 (based on *Pholeuonopsis cvijici*), was erected based on the species formerly included in the genus *Pholeuonopsis* (Ćurčić & Boškova 2002; Ćurčić & Brajković 2002).

The former genus was based on morphological features that are shared with other species of *Pholeuonopsis* s. str., namely: sub-trapezoid shape of the pronotum (e.g., as in *P. magdelainei*), elytral lateral margins somewhat impressed anteriorly (e.g., as in *P. zlatiborensis*), presence of a large triangular scutellum (e.g., as in *P. zlatiborensis*, *P. perucensis* S. Ćurčić, Vrbica, Vesović, Mulaomerović & B. Ćurčić, 2014 and *P. sljivovicensis* **sp. n.**), presence of a rounded elytral apex (e.g., as in *P. zlatiborensis*), length of the elytral marginal furrows (e.g., as in *P. zlatiborensis*, *P. perucensis* and *P. sljivovicensis* **sp. n.**), length of setae on the legs (e.g., as in *P. zlatiborensis*), shape of the aedeagus (including the form of both the median lobe and the basal bulb) (e.g., similar as in *P. zlatiborensis* and *P. sljivovicensis* **sp. n.**), length of the paramerae compared with length of the median lobe (e.g., as in *P. zlatiborensis* and *P. sljivovicensis* **sp. n.**), and length and structure of the inner sac (e.g., as in *P. zlatiborensis*, *P. perucensis* and *P. sljivovicensis* **sp. n.**) (Jeannel 1924; Ćurčić & Boškova 2002; Ćurčić & Brajković 2002; Ćurčić *et al*. 2006, 2014b; current paper).

On the basis of the examination of available *Pholeuonopsis* specimens and the study of published literature data, we are of opinion that the type species designated for the genus *Serbopholeuonopsis* doesn't exhibit any autapomorphies or synapomorphies, respectively, which satisfactorily separate it from other *Pholeuonopsis* s. str. taxa and warrant erection of a new taxon. For these reasons, the following new synonym is proposed:

Pholeuonopsis Apfelbeck, 1901
= *Serbopholeuonopsis* B. Ćurčić & Boškova, 2002, **syn. n.**

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