

SCIENTIFIC NOTE

Decuria smetanai (Angelini & De Marzo), new combination for a species previously placed in *Anisotoma* Panzer (Coleoptera: Leiodidae)

The genus *Decuria* (Leiodidae: Leiodinae: Agathidiini) was described by Miller and Wheeler (2004) to include a single species, *D. newtoni* Miller and Wheeler. The genus, however, was first mentioned by Peck *et al.* (1998) as “undescribed genus 6” in a study of agathidiines in Central and South America and mentioned briefly by Newton (1998). This genus is easily distinguished from other genera of Agathidiini by the combination of: 1) antenna with ten antennomeres and distinct interrupted five-segmented club (antennomere VII smaller than VIII) (Figs. 1, 4), 2) postocular temporum absent, 3) supraocular carina absent, 4) anterior clypeal margin extending distinctly anterior of the anterolateral margin of the frons, 5) elytra only moderately punctate and punctures not forming prominent longitudinal series, 6) first abdominal sternum with a prominent medial longitudinal carina, and 7) tarsi 4-4-4 in both sexes (Miller and Wheeler 2004). *Decuria* is similar to many *Anisotoma* Panzer in having only moderately punctate dorsal surfaces, no postocular temporum and supraocular carina and similar genitalia. However, *Decuria* is easily separated from *Anisotoma* by the combination of characters 1, 6 and 7 above, the generally smaller body size, and antennomere II longer than III (Figs. 1, 4).

Angelini and De Marzo (1995) described *Anisotoma smetanai* from Taiwan. Subsequently, Park *et al.* (2002) recorded this species from Korea. Examination of specimens of *A. smetanai* (six specimens) in light of the diagnostic characters of *Decuria* and compared with *D. newtoni* (ten specimens examined) indicated that the species should be transferred from *Anisotoma* to *Decuria*, which we do here (**new combination**).

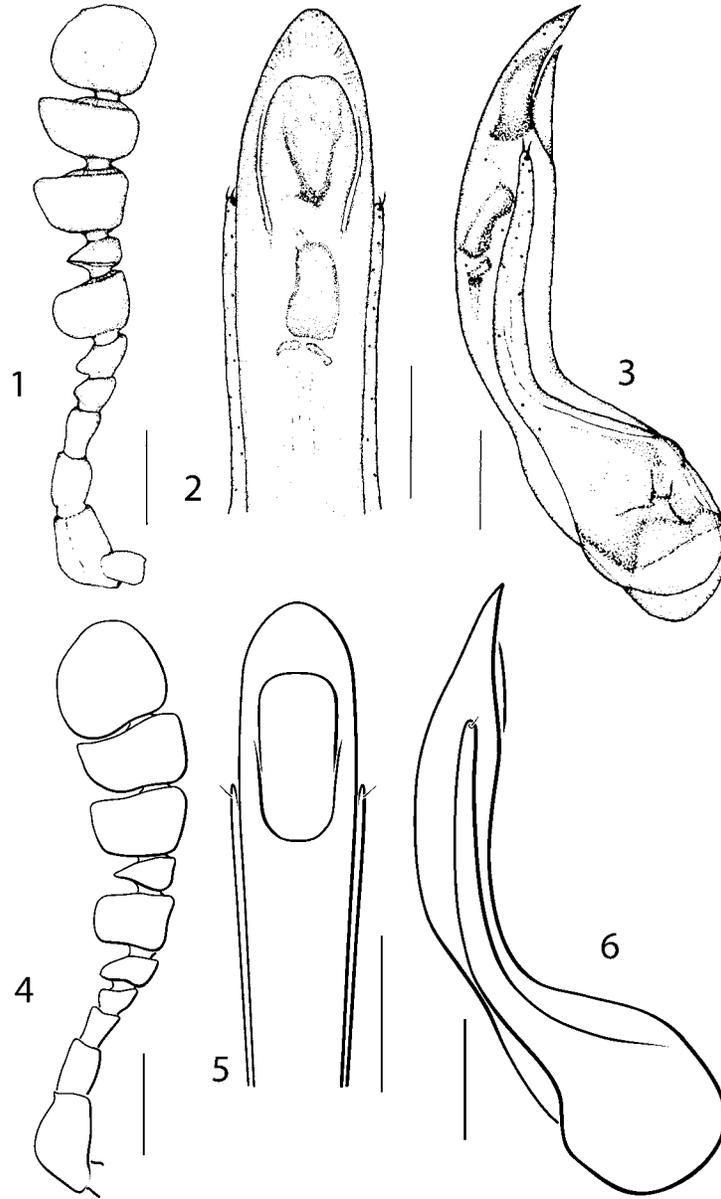
This species is very similar externally to *D. newtoni*. *Decuria smetanai* differs from that species in having the apex of the median lobe apically gradually tapered and pointed in ventral aspect (Fig. 2), the operculum laterally and apically rounded (Fig. 2), the median lobe in lateral aspect slightly broader and more strongly curved (Fig. 3), and the lateral lobes with two short apical setae (Figs. 2, 3). In *D. newtoni* the apex of the median lobe is slightly broadened and very broadly rounded in ventral aspect (Fig. 5), the median lobe in lateral aspect is slightly more narrow and less strongly curved (Fig. 6), the operculum has the lateral margins nearly parallel and straight with the apex broadly truncate (Fig. 5), and the lateral lobes have one short apical seta and are slightly more sinuate (Figs. 5, 6). Also, *D. smetanai* is slightly smaller (TL = 1.8–2.0 mm) than *D. newtoni* (TL = 2.0–2.4 mm) (measurements based on largest and smallest specimens available).

Relatively little is known of the biology of the two species of *Decuria*. *Decuria newtoni* was collected in Costa Rica from a “puffball-like slime mold,” which suggests a *Lycogala* species. The two species exhibit a rather interesting biogeographic pattern with *D. smetanai* found in Korea and Taiwan and *D. newtoni* found in Costa Rica, southern Mexico and Bolivia. Other agathidiine genera are found in both of these regions (*e.g.*, *Anisotoma*, *Agathidium*), but these are more generally distributed and species-rich, unlike *Decuria* which has two known species very similar to each other but with extremely disparate distributions. Interestingly, the genus *Creagrophorus* Matthews (Scotocryptini), a specialist on slime molds, has a disjunct distribution similar to that of *Decuria* with species known from Mesoamerica (Wheeler 1979), China (Cooter and Hoshina 2002), Indonesia (Cooter and Svec 2002), Japan (Daffner 1989), India and Nepal (Daffner 1985).

We thank Dr. G. Cuccodoro (Natural History Museum, Geneva, Switzerland) and Dr. S. B. Peck (Carleton University, Ottawa, Canada) for loan of type specimens. Some aspects of the research for this project done by KBM were funded by NSF grants #DEB-9983195 and #DEB-0329115.

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Figs. 1–6. *Decuria* species. 1–3) *D. smetanai*; 1) Right antenna, ventral aspect; 2) Median lobe of aedeagus, ventral aspect; 3) Median lobe of aedeagus, lateral aspect; 4–6) *D. newtoni*; 4) Right antenna, ventral aspect; 5) Median lobe of aedeagus, ventral aspect; 6) Median lobe of aedeagus, lateral aspect. Figs. 1–3 reproduced from Park *et al.* (2002). Scale bars = 0.1 mm.

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(Received 26 September 2005; accepted 4 February 2006. Publication date 2 November 2006.)