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Eutheia bekchievi sp. n. (Coleoptera, Staphylinidae, Scydmaeninae) from Bulgaria

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Forty-one species of the ant-like stone beetle genus *Eutheia* Stephens, 1830 are known, distributed mostly in the Palaearctic (34 species, Taiwan included), and also Nearctic (3 spp.) and Neotropical (4 spp., exclusively Mesoamerican) regions (Jałoszyński 2014). As nearly all Eutheini, *Eutheia* is a rare genus and even Central European species are usually represented in large museum collections by a small number of specimens. A substantial progress has been made in the recent years in the alpha-taxonomic study of East Palaearctic and Neotropical species (Hoshina 2007; Jałoszyński 2004, 2008a, 2008b, 2010a, 2010b, 2011, 2013; Kurbatov 1990, 1991; O'Keefe 1999). Phylogenetic relationships of *Eutheia* to other genera of Eutheini were also recently clarified (Jałoszyński 2014). However, the West Palaearctic region remained largely neglected and the only comprehensive revision is that by Franz (1971), in which several new species are described and most of previously known members of *Eutheia* are redescribed. Franz (1971) did not include only *E. praeclara* Normand, 1909 from Tunisia and *E. ptinelloides* Sahlberg, 1913 from Israel, apparently because the type specimens were not available for study.

In this paper a description of a new Palaearctic species of *Eutheia* is presented, based on a male specimen collected in Bulgaria. This is the first European *Eutheia* discovered in the past 43 years after the Franz's paper cited above.

Material and methods

A specimen preserved in ethanol was dissected and dry-mounted; the aedeagus was mounted in Canada balsam. A habitus image was taken by a Nikon Coolpix 4500 camera mounted on a Nikon Eclipse 1500 stereoscopic microscope (Nikon, Tokyo, Japan); image stacks were processed using COMBINE ZP (Hadley 2010). Details of morphology were figured by a freehand drawing, with exact proportions and general shapes sketched from photographs. Morphological terms are used after Jałoszyński (2014). The measurements and abbreviations are as follows:

AeL—length of aedeagus (from base of median lobe to distal margins of apical projections, without membranous apical part)

AnL—length of antennae

BL—body length, a sum of lengths of head, pronotum, elytra and pygidium measured separately

EI—elytral index, length of elytra divided by their combined width

EL—length of elytra measured along suture

EW—maximum width of elytra, combined

HW—width of head, including eyes

HL—length of head measured from anterior margin of clypeus to posterior margin of vertex

PL—length of pronotum measured along midline

PW—width of pronotum

Depositories

MNHW—Museum of Natural History, University of Wrocław, Wrocław, Poland

vertex shallow and diffused (i.e., without sharp margins) but dense, separated by spaces equal to 0.5–1 puncture diameters; setae short, sparse and suberect. Antennae (Fig. 1) slender and gradually thickened distally, AnL 0.65 mm, antennomeres I–II, V–VII and IX–XI distinctly elongate, antennomere III slightly transverse, antennomeres IV and VIII barely noticeably longer than wide.

Pronotum (Fig. 1) subrectangular with rounded anterior and lateral margins, broadest near anterior third; PL 0.33 mm, PW 0.38 mm; hind angles nearly right; posterior margin shallowly bisinuate; pronotal base with five well-defined pits, median one smallest and lateral pair largest. Punctures on pronotal disc similar to those on head dorsum, setae short, sparse and suberect.

Elytra oval, broadest near middle; EL 0.73 mm, EW 0.53 mm, EI 1.38. Punctures on median part of elytra slightly larger and more distinct than those on head and pronotum but distinctly sparser; setae short, sparse and suberect. Hind wings well developed.

Legs moderately long and slender, unmodified.

Aedeagus (Figs. 2–3) elongate; AeL 0.35 mm; in ventral view basal capsule of median lobe strongly elongate; apical part narrowing toward apex, subtrapezoidal, with a pair of elongate apical projections; parameres in ventral view strongly broadened in middle and strongly narrowing distally, each with two long and one short apical setae.

Female. Unknown.

Distribution. SW Bulgaria (Belasitsa Mountains) (Figs. 4–5).

Etymology. This species is dedicated to Rostislav Bekchiev, a specialist on Pselaphinae and a collector of the only known specimen of *E. bekchievi*.

Remarks. All West Palaearctic species of *Eutheia* revised by Franz (1971) have simple apices of the aedeagus, without lateral apical projections. The projections, in various forms, are known in East Palaearctic *Eutheia* (summarized by Jałoszyński (2010a)). *Eutheia bekchievi* is remarkable not only because of this unusual feature, but also by extremely broadened median parts of parameres, long and slender antennae without delimited club, small head (much narrower than the pronotum), and large, darkly pigmented body. Franz (1971) did not illustrate aedeagi of two European species: *E. clavicornis* Reitter, 1884 from Greece (known from a single female only) and *E. merkliei* Simon, 1880 (from Hungary and Romania), known from a single male. These both species, however, can be readily distinguished from *E. bekchievi* on the basis of the light brown or even yellowish-brown pigmentation, head only slightly narrower than pronotum, and the antennomeres III–X (in *E. clavicornis*) or VIII–X (in *E. merkliei*) transverse (elongate in *E. bekchievi*).

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