

## A new *Octavius* species from Vernon Crookes, South Africa (Coleoptera: Staphylinidae: Euaesthetinae)

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**Taxonomy, new species, Coleoptera, Staphylinidae, Euaesthetinae, *Octavius*, Afrotropical Region, South Africa**

**Abstract.** A new species of the genus *Octavius* Fauvel, 1873, *Octavius tesinskyi* sp. nov. is described and illustrated from Vernon Crookes, South Africa.

### INTRODUCTION

There are about 280 extant species of the genus *Octavius* Fauvel, 1873, of which fifty three valid species and two subspecies are known from South Africa (Janák 2014, Newton 2019). Rich South-African material has been collected in recent years comprising some additional new species. One of these species collected by Petr Bulirsch and Marek Těšinský in January 2018 is described in the present paper.

### MATERIAL AND METHODS

Dry-mounted specimens were studied under a binocular stereomicroscope MBS 10. Measurements were taken with the above-mentioned stereomicroscope using an ocular scale. Images were taken with a Canon EOS 700D camera mounted on a Motic BA 410E-T compound microscope using diffuse reflected or transmitted light. Resulting images were focus stacked using Zerene Stacker and then postprocessed in Paint.Net, Paint, XnView and Live Photogallery.

Measurements and indices in this study are based on all type specimens. Body length was measured from the tip of the closed mandibles to the end of abdomen, the length of the forebody was measured from the tip of closed mandibles to the end of elytra. For terminology of impressions on head, pronotum and elytra see Janák (2014).

All males were dissected and male genitalia were embedded in Euparal on celluloid plates.

Locality labels for the material examined were quoted verbatim and marked with quotation marks (“ ”).

The material examined is deposited in the following collections:

JJRC Jiří Janák, private collection, Rtyně nad Bílinou, Czech Republic;

TMSA Ditsong Museum (formerly Transvaal Museum), Pretoria, South Africa (Ruth Müller).

Abbreviations: M- arithmetic mean, R- ratio, HT- holotype, PT- paratype, NR- National Reserve.

## TAXONOMY

### *Octavius tesinskyi* sp. nov.

(Figs. 1-5)

**Type locality.** South Africa, KwaZulu-Natal Province, Vernon Crookes National Reserve, 30°16.0-3' S, 30°36.4-7' E.

**Type material.** Holotype (♂): “South Africa, KwaZuluNatal, Vernon Crookes NR; 430-480m, 30°16.0-3'S, 30°36.4-7'E, 13.i.2018; ind. forest, P.Bulirsch & M.Těšínský lgt.”, “HOLOTYPUS *Octavius tesinskyi* sp. nov., J. Janák det. 2019” (TMSA). Paratypes: (2 ♂♂, 4 ♀♀): same data as holotype, but “PARATYPUS *Octavius tesinskyi* sp. nov., J. Janák det. 2019” (TMSA, JJRC, abdomen of one \* paratype preserved in absolute alcohol for possible future studies).

**Description.** Body length 1.3-1.5 mm (M 1.4 mm, HT 1.4 mm), forebody length 0.65-0.75 mm (M 0.70 mm, HT 0.68 mm). Macrophthalmous, apterous, light brownish to dark brownish, abdominal segments VII and VIII darker brownish, head and pronotum slightly shiny, elytra and abdomen moderately shiny (Fig. 1).

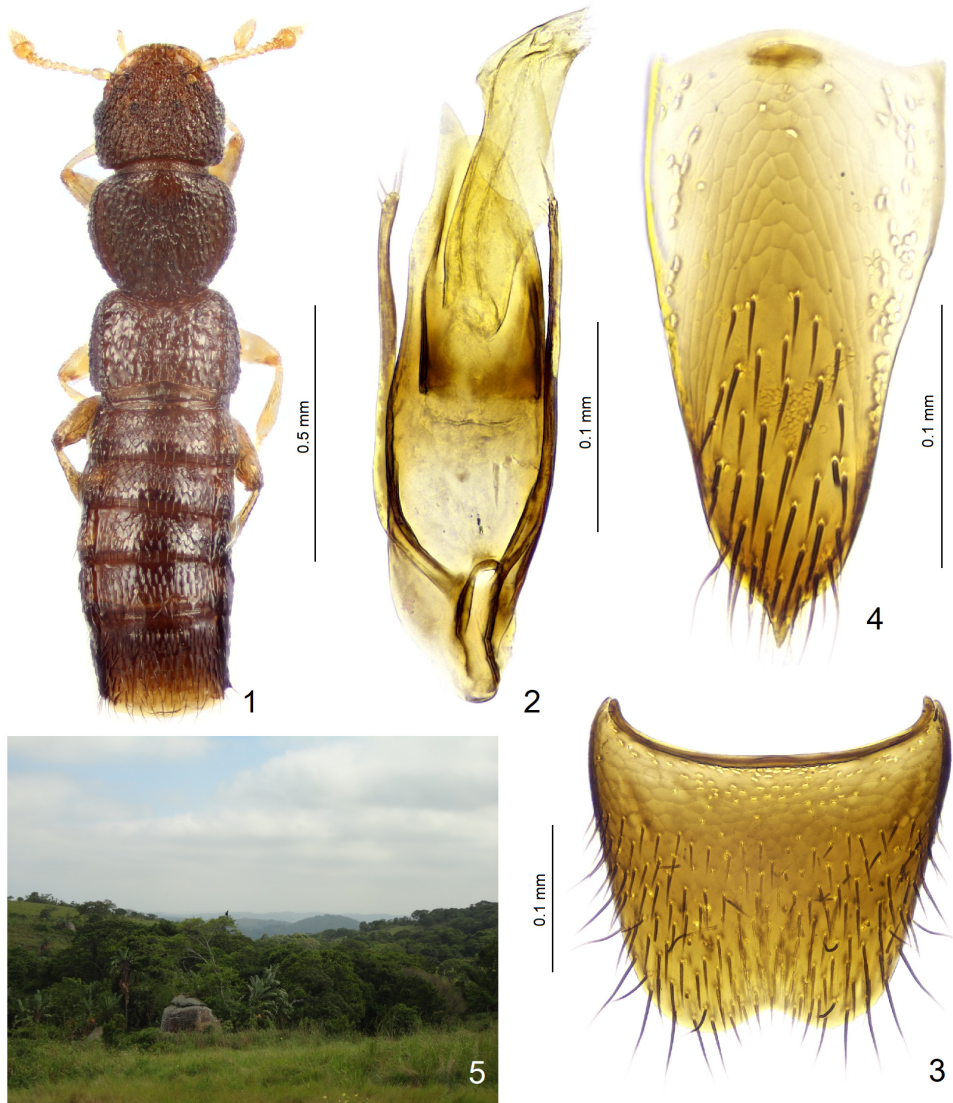
Head slightly narrower than pronotum (R 0.89-0.94, M 0.91, HT 0.89), eyes moderately large, temples less than twice as long as eyes (R 1.39-1.53, M 1.45, HT 1.53), straight, rounded posteriorly, median impression on frons absent, lateral parts of head finely granulate, median part moderately granulate, moderately densely and finely reticulate, frons densely and finely reticulate.

Pronotum slightly broader than long (R 1.09-1.11, M 1.10, HT 1.10), strongly narrowed posteriorly; anterior angles slightly angular, dorsal impressions shallow, transverse impression moderately deep, lateral impressions deep and delimited by a sharp longitudinal ridge laterally; lateral parts beside lateral impressions densely granulose, remainder of surface moderately granulate, moderately densely and finely reticulate.

Elytra subquadrate, much broader than long (R 1.45-1.51, M 1.49, HT 1.51), with a sharp longitudinal ridge laterally; irregularly punctate, granulate and finely reticulate.

Male. Aedeagus (Fig. 2) elongate, asymmetrically pointed apically (length 0.26-0.29 mm (M 0.27 mm, HT 0.29 mm)). Parameres distinctly shorter than median lobe, with four apical setae (Fig. 2). Sternite VIII broadly emarginate in posterior twelfth (Fig. 3), sternite IX as in Fig. 4.

**Differential diagnosis.** *Octavius tesinskyi* sp. nov. belongs to species with large eyes, with the temples at most twice as long as the eyes, with the head not or at most slightly widened posteriorly, with small body size and the disc of the head without a median impression. In the last key to species of *Octavius* from South Africa, the new species can be arranged among small species near *O. gamai* Puthz, 1986 due to the similarly wide emargination



Figs. 1-5. *Octavius tesinskyi* sp. nov., 1-4- holotype, male: 1- habitus; 2- aedeagus, ventral; 3- sternite VIII; 4- sternite IX; 5- Vernon Crookes National Reserve, upper part of the indigenous forest (photo by M. Těšínský).

of sternite VIII. But the shape of the median lobe of the aedeagus is completely different, being characterised by a pointed apex that is quite similar to that of *O. microps* (Kistner, 1967). However, *O. microps* differs from *O. tesinskyi* sp. nov. in having a larger body and a much narrower apical emargination of sternite VIII, but also mainly by the totally different sculpture of the forebody and the very deep transverse impression on the pronotum.

**Etymology.** This species is dedicated to Marek Těšínský (Praha, Czech Republic), one of the collectors of the new species, for his enthusiastic collecting activities in South Africa.

**Bionomics.** All specimens have been found in siftings of forest litter from indigenous forest in a river valley.

**Distribution.** *O. tesinskyi* sp. nov. is currently known only from the Vernon Crookes National Reserve in KwaZulu-Natal Province, South Africa (Fig. 5).

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