Schelodontes medvedevi, a new species from South Africa (Coleoptera: Tenebrionidae: Platynotina)

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Schelodontes medvedevi, новый вид из Южной Африки (Coleoptera: Tenebrionidae: Platynotina)

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Abstract. Schelodontes medvedevi sp. n., a new species from Africa is described, illustrated and compared with its relatives. A key to species of the Sch. nigerrimus group is provided.

Key words. Coleoptera, Tenebrionidae, Platynotini, *Schelodontes*, Africa, entomology, taxonomy, new species.

Резюме. Описан новый вид из Южной Африки *Schelodontes medvedevi* sp. n., приведены его иллюстрации, сравнение с близкими видами и таблица для определения видов группы *Sch. nigerrimus*.

Ключевые слова. Coleoptera, Tenebrionidae, Platynotini, *Schelodontes*, Африка, энтомология, таксономия, новый вид.

Introduction

The genus *Schelodontes* was erected by Koch (1956: 81), with *Trigonopus immundus* Mulsant & Rey, 1853 as type species by original designation.

My interpretation of the genus was presented in the revision of the trigonopoid Platynotina (Iwan, 1998) and the revision of the tribe Platynotini (Iwan, 2002a). In *Schelodontes*, like in *Eviropodus* Koch, *Zophodes* Fåhraeus and *Warchalowskiellus* Iwan, the anterior elytral margin has an abruptly convex upper edge (forming a ridge); the genus is the closest related to *Warchalowskiellus* having the anterior margin of elytra V-shaped. *Schelodontes* differs from the remaining genera in a peculiar, arcuate shape of the pronotal base and presence of the longitudinal concavity along lateral border (narrow in middle of length and strongly widened near angles).

At present, *Schelodontes* consists of 14 species (Iwan, 2002b) (including *Sch. medvedevi* sp. n. described here) distributed in South Africa.

Key for species determination

(part of key presented in Iwan, 1998, modified)

- 7. Pronotal surface matte, very delicately punctate, punctures almost invisible; lateral border of pronotum strongly widened at posterior angles, more than twice as wide as in middle; pronotal sides paral-Pronotal surface shiny, distinctly punctate; lateral border of pronotum slightly widened at posterior angles, less than 1.5× as wide as in middle; pronotal sides rounded; anterior pronotal angles sharp, 7a. Lateral border of pronotum ca 1.0× width of antennal segment 3; pronotal punctation very delicate, but visible; elytral intervals slightly convex, delicately punctate; elytral striae punctate-sulciform; Lateral border of pronotum ca 0.7× width of antennal segment 3; pronotal punctation obsolete; elytral intervals flat, not convex, smooth, punctures invisible; elytral striae sulciform; male hind femur with small or medium-sized denticle 9 8. Body length 13.0–15.0 mm; middle part of mentum with strongly convex blunt keel grandis Koch Body length 10.3 mm; middle part of mentum with moderately convex sharp keel ... medvedevi sp. n. 9. Upper margin of elytral epipleura clearly visible in their apical part; male hind femur with small den-Upper margin of elytral epipleura invisible in their apical part; male hind femur with large denticle

 Lateral border of pronotum strongly narrowed in middle; lateral pronotal margins with narrow and shallow longitudinal concavity; elytral striae disappearing posteriorly ... nigerrimus (Mulsant & Rey)

Schelodontes medvedevi Iwan, sp. n. (Figs 1–12)

Diagnosis. The characters of the pronotal surface (matte, very delicately punctate) and structure (anterior angles rounded, sides parallel at base, lateral border strongly widened posteriorly) place Sch. medvedevi close to the group formed by Sch. dormitorius Iwan, Sch. grandis Koch, Sch. nigerrimus (Mulsant & Rey) and Sch. parvus Iwan.

Sch. medvedevi, like Sch. grandis Koch, differs from the remaining members of the group in the punctation of pronotum and elytra (delicate, but visible), width of lateral pronotal border (ca 1.0× width of antennal segment 3) and structure of male hind femur (with very large denticle). The two species differ in the shape of mentum and size of the body (see Key for species determination).

Description. Body length 10.3 mm, pl/pb = 0.74, el/eb = 1.37, el/pl = 1.78, eb/pb = 0.95; surface matte with greasy sheen.

Head and pronotum delicately punctate, punctures clearly visible (distance between punctures equal to 3–4 puncture diameters); elytral intervals with very small, sparsely distributed punctures, dense punctation visible in apical part; underside slightly shiny, prosternum with rugosity in middle, sides of prosternum and process delicately punctate.

Head widest anterior to eyes; clypeus with shallow emargination, frontoclypeal suture weak, almost invisible. Eye between tempus and genal canthus very narrow (only 1 ommatidium visible), circumocular depression absent. Antenna short and slender, 3rd antennomere moderately short (length ratio of antennomeres 3/2 = 2.2), distal segments (antennomeres 7–11) evenly widened, transverse. Mentum with short lateral wings and with moderately convex sharp median keel (Fig. 1). Submentum triangular with slightly elongated base. Last segment of maxillary palpus moderately wide.

Pronotum with slightly rounded sides, subparallel-sided at base (Fig. 2), anterior angles obtuse, rounded, slightly produced anteriad; posterior angles rectangular; longitudinal concavity along lateral borders narrow and deep, strongly widened at posterior and anterior angles; lateral border roll-like convex, very wide (ca 1.0× as wide as antennal segment 3), considerably widened at posterior angles; bordering of base widely interrupted in middle.

Scutellum narrow, width ratio anterior margin of elytra/scutellum at base ca 3.0.

Elytron with 9 rows (striae punctate-sulciform) connected as follows: 1–9, 2–7, 3–6, 4–5, 8 free; elytral humeri sharp, strongly protruding outwards (Fig. 3); intervals slightly convex; upper margin of elytral epipleura invisible apically.

Mesosternal process between insertions of middle coxae flat. Metasternum between insertions of middle and hind coxae short. Wings absent.

Male fore tibia arcuately incurved, inner margin sharp, with sparse, long setae and sharp, elongate apical angle (Figs 4, 5); male middle and hind tibiae as in Figs 6–9; male hind femur hairy on inner side, provided with very large, sharp denticle bent outwards (Figs 10, 11).

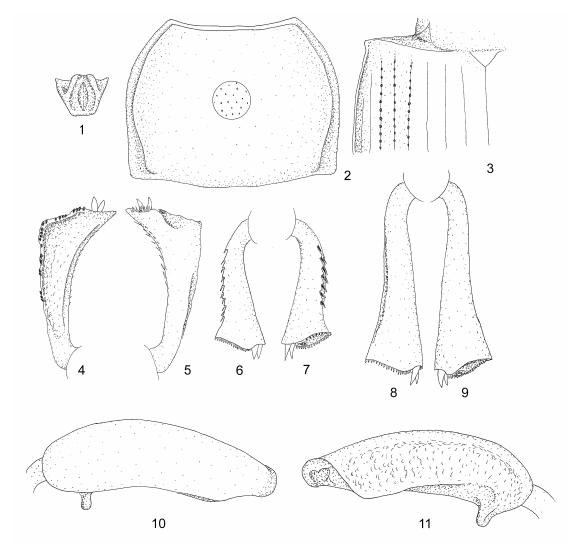
Last abdominal ventrite bordered.

Aedeagus 1.4 mm, length ratio body/aedeagus = 7.4, length ratio basal/apical part = 2.2.

Material. Holotype: ♂, "Pearston, 13 km West, Cape Prov.; 9.VI.1995, Collin R. Owen", "no 234, under stone"; in Naturhistoriska Riksmuseet (Stockholm, Sweden).

Etymology. The species is dedicated to Gleb S. Medvedev of the Zoological Institute, Russian Academy of Sciences, St. Petersburg, my mentor and master.

Distribution. South Africa (Cape Province: Pearston) (Fig. 12).



Figs 1–11. *Schelodontes medvedevi* sp. n., male (holotype). 1 – mentum; 2 – pronotum; 3 – anterior part of left elytron; 4–9 – fore, middle, and hind tibiae, ventral (4, 6, 8) and dorsal (5, 7, 9) views; 10, 11 – hind femur, dorsal (10) and ventral (11) views.

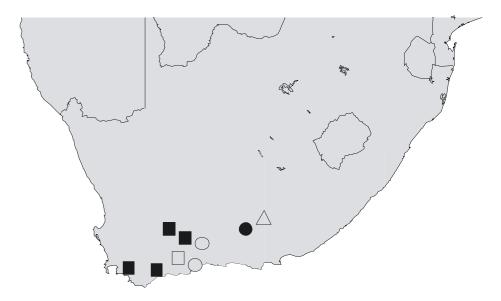


Fig. 12. Distribution of the *Schelodontes nigerrimus* group. *Sch. medvedevi* sp. n. (open triangle), *Sch. nigerrimus* (Mulsant & Rey) (solid square), *Sch. parvus* Iwan (open square), *Sch. grandis* Koch (solid circle), *Sch. dormitorius* Iwan (open circle).

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