

A new species of the genus *Carpelimus* Leach, 1819 (Coleoptera, Staphylinidae, Oxytelinae) from South Africa

Новый вид рода *Carpelimus* Leach, 1819 (Coleoptera, Staphylinidae, Oxytelinae) из Южной Африки

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Ключевые слова: Coleoptera, Staphylinidae, *Carpelimus*, новый вид, Тропическая Африка.

Abstract. A new species, *Carpelimus (Bucephalinus) kwazulensis* sp.n., closely related to *C. (Bucephalinus) bicyclus* (Fauvel, 1907) and *C. (Bucephalinus) turneri* Gildenkov, 2012, is described from the Republic of South Africa.

Резюме. Описан новый вид *Carpelimus (Bucephalinus) kwazulensis* sp.n. из Южной-Африканской Республики, близкий к *Carpelimus (Bucephalinus) bicyclus* (Fauvel, 1907) и *Carpelimus (Bucephalinus) turneri* Gildenkov, 2012.

Introduction

The fauna of *Carpelimus* of tropical Africa can be confidently regarded as well-studied [Gildenkov, 2007a, b; 2011; 2012; 2013a, b; 2015]. For this reason, the discovery of a new species of *Carpelimus* from the eastern part of the Republic of South Africa presents considerable interest.

Material and methods

This paper is based on the specimens deposited in the following collections: cMG — private collection of M. Gildenkov (Smolensk, Russia); HNHM — Hungarian Natural History Museum (Budapest, Hungary). In the present study, standard methods were used for the taxonomic research of insects; the preparations were made on an MBS-10 binocular microscope. The genital preparations were processed using 10 % KOH and then fixed in euparal. In the descriptions and diagnoses giving the length to width ratio for the head, pronotum, and elytra, the following standard units were used: 7 standard units = 0.1 mm; thus, 1 standard unit constitutes about 0.0143 mm. The labels are given in the original transcription. Photographs were taken with a Canon EOS 5D Mark III camera and a Canon MP-E 65 mm objective using the extended focus technology.

Results

Carpelimus (Bucephalinus) kwazulensis Gildenkov, sp.n.

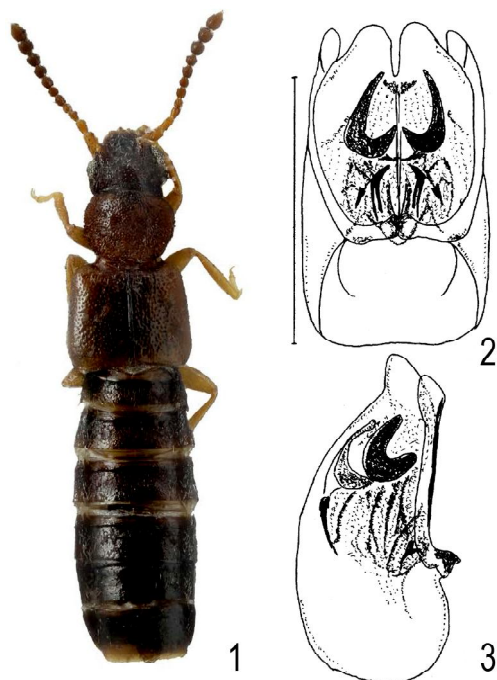
Figs 1–3.

Material. Holotype (♂): Republic of South Africa, KwaZulu-Natal province «RSA (NE) KwaZulu-Natal — 27.6454S/32.1501E at west gate of Mkhuzi Game Res., along stream and pastures, 140 m, 12.2012 leg. P. Jałoszyński (HNHM). Paratypes: 2♂♂, 2♀♀ «RSA (NE) KwaZulu-Natal — 27.6454S/32.1501E at west gate of Mkhuzi Game Res., along stream and pastures, 140 m, 12.2012 leg. P. Jałoszyński» (HNHM; 1♂ — cMG).

Description (holotype). Length 2.1 mm. Colouration brown, with reddish tint. Head and abdomen slightly darker than pronotum and elytra; legs and antennal bases yellow brown. Integument slightly shining, body with short, light-coloured hairs.

Head transverse, with wide base, ratio of its length (from posterior margin of head to anterior margin of clypeus) to maximum width about 20:26. Neck constriction prominent. Eyes small, slightly convex. Temples well-developed, round, eye diameter in dorsal view about equal to temple length. Head about as wide across eyes as across temples (Fig. 1). Head surface with rather distinct, fine and dense punctation. Puncture diameter about 1.5 times as small as eye facet, distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining. Antennae rather long, antennal segments 1–3 elongate; segments 4–7 about as wide as long; segments 8–10 slightly transverse; segment 11 elongate, conical. Last 3 segments more massive than others and form loose club (Fig. 1).

Pronotum widest about 2/3 its length from base, then narrowed. Lateral margins slightly notched at base of pronotum, then smoothly rounded (Fig. 1). Ratio of pronotum length to its maximum width about 24:29. Surface of pronotum with rather distinct, fine and dense punctation. Puncture diameter slightly smaller than eye facet, distances between punctures in central part of pronotal disc slightly smaller than their diameter, interspaces smooth, slightly shining. At



Figs 1–3. *Carpelimus (Bucephalinus) kwazulensis*, sp.n., male, holotype: 1 — habitus, dorsal view; 2 — aedeagus, ventral view; 3 — aedeagus, lateral view. Scale bars: 0.25 mm (2–3).

Рис. 1–3. *Carpelimus (Bucephalinus) kwazulensis*, sp.n., самец, голотип: 1 — габитус, сверху; 2 — эдеагус, снизу; 3 — эдеагус, сбоку. Масштаб: 0,25 мм (2–3).

base of pronotum and along its lateral margins punctures very densely, almost confluent, placed; some punctures umbilicate. Pronotal disc with 2 pairs of rather prominent, symmetric depressions. Base of pronotal disc with narrow, crescent-shaped depressions separated by small medial ridge. Central part of disc with 2 small depressions fused along midline to single crescent-shaped depression oriented parallel to depressions at base of pronotal disc (Fig. 1).

Ratio of length of elytra to their combined width about 34:39. Scutellum with shallow, rounded depressions (Fig. 1). Elytra with distinct, rather fine and dense punctation. Puncture diameter about equal to diameter of eye facet. Distances between puncture significantly smaller than their diameter, interspaces smooth, slightly shining (Fig. 1).

Abdomen delicately shagreened.

Aedeagus of characteristic structure with well developed crescent sclerites in the apical part (Figs 2, 3).

Female. Sexual dimorphism absent, female morphologically similar to male.

Spermatheca failed to isolate and its structure is unknown.

Differential diagnosis. The new species is most similar in its size, colouration, punctation patterns and the structure of the aedeagus [Gildenkov, 2012: P.250: fig.1: 4; Gildenkov, 2015: P.376: fig.10: 5, 7] to closely related species living in tropical Africa, *Carpelimus (Bucephalinus) bicyclus* (Fauvel,

1907) and *Carpelimus (Bucephalinus) turneri* Gildenkov, 2012. It can be clearly distinguished from these species by the structure of the aedeagus (Figs. 2, 3).

Distribution. Republic of South Africa, KwaZulu-Natal province.

Etymology. Named for its geographical distribution.

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