Two new species of the genus *Carpelimus* Leach, 1819 from Malaysia (Coleoptera: Staphylinidae: Oxytelinae)

Два новых вида рода *Carpelimus* Leach, 1819 из Малайзии (Coleoptera: Staphylinidae: Oxytelinae)

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ABSTRACT: Two new species of genus *Carpelimus* are described from the Malaysia: *Carpelimus* (s. str.) *pulchrus*, *sp.n.* and *Carpelimus* (Bucephalinus) *fereus*, *sp.n.*

РЕЗЮМЕ: Описываются два новых вида рода *Carpelimus* из Малайзии: *Carpelimus* (s. str.) *pulchrus*, *sp.n.* и *Carpelimus* (Bucephalinus) *fereus*, *sp.n.*

This study is a continuation of the previous studies on the genus *Carpelimus* for the Oriental biogeographic region [Gildenkov, 2015, 2018, 2019a, c]. This paper is based on the specimens deposited in the following collections: cMG — private collection of M. Gildenkov (Smolensk, Russia); cPB — private collection of Petr Bahař (Strážnice, Czech Republic); MHNG — Muséum d’Histoire Naturelle, Genève (Suisse); MMBC — Moravian Museum in Brno Collection (Czech Republic). 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 solution (Figs 1–2), with length of all segments significantly exceeding their width (Fig. 2). Pronotal heart-shaped (Fig. 1–2), widest about 2/3 its length from base, then narrowed. Lateral margins serrated (Figs 1–2). Ratio of pronotum length to its maximum width about 33:49. Surface of central part of pronotum densely shagreened. Puncture diameter more than 5 times as small as eye facet. Distances between punctures significantly smaller than their diameter, interspaces smooth, slightly shining. Antennae not completely preserved in holotype (Fig. 1), only 4 and 5 first segments present on left and right antennae, respectively. In paratype (female) antennae similar in morphology (Figs 1–2), with length of all segments significantly exceeding their width (Fig. 2). Ratio of pronotum length to its maximum width about 33:49. Surface of central part of pronotum with very delicate, extremely fine and dense punctuation. Puncture diameter more than 5 times as small as eye facet. Distances between punctures significantly smaller than their diameter, interspaces smooth, slightly shining. Antennae not completely preserved in holotype (Fig. 1), only 4 and 5 first segments present on left and right antennae, respectively. In paratype (female) antennae similar in morphology (Figs 1–2), with length of all segments significantly exceeding their width (Fig. 2). Pronotum heart-shaped (Figs 1–2), widest about 2/3 its length from base, then narrowed. Lateral margins serrated (Figs 1–2). Ratio of pronotum length to its maximum width about 33:49. Surface of central part of pronotum densely shagreened. Puncture diameter more than 5 times as small as eye facet. Distances between punctures significantly smaller than their diameter, interspaces smooth, slightly shining. Antennal disc with two pronounced symmetrical longitudinal parallel depressions and 1 weak unpaired depression along midline near apex (Figs 1–2).

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Two new species of the genus *Carpelimus*

Two new species of the genus *Carpelimus* are described. The new species are similar in size to *Carpelimus (s. str.) magnus* Gildenkov, 2014, that lives in Indonesia and Philippines [Gildenkov, 2014c, 2019b], but differ from this species in having a lighter coloration, slightly more pronounced temples, wider pronotum with serrated lateral margins and elytra with a significantly finer punctuation; clearly differs in the structure of the aedeagus (Fig. 3).

**DISTRIBUTION.** Malaysia: Malacca.

**ETYMOLOGY.** From Latin “pulchram, pulchrå” (beautiful, fine); the name refers to the external appearance of the beetle: its large size, a rather bright colouration and wide pronotum with serrated margins.

*Carpelimus (Bucephalinus) fereus* Gildenkov, sp.n.

Figs 5–7.

**MATERIAL.** Holotype, ♀, Malaysia, Borneo: with labels “SABAH: Crocker Ra. 1270 m, km 60 rte Kota Kinabalu-Tambunan 17.V.1987 Burckhardt - Löbl” (MHNG).

**DESCRIPTION (holotype).** Length 1.8 mm. Colouration brown, legs and antennae yellow brown. Integument slightly shining, body with short, light-coloured hairs.

Head transverse, with a wide base, ratio of its length (from posterior margin of head to anterior margin of clypeus) to maximum width about 16:24. Neck constriction prominent. Eyes small, convex. Temples well-developed, round, eye diameter in dorsal view significantly (about 1.5 times) smaller than temple length. Head widest across temples (Fig. 5). Head surface with extremely delicate, very fine and dense punctation. Puncture diameter about 4.0 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 and 5 elongated; segments 4 and 6–7 slightly elongated; segments 8–10 about as long as wide; segment 11 elongated, conical. Last 3 segments more massive than others and form loose club (Fig. 5).

Pronotum widest about 2/3 its length from base, then narrowed. Lateral margin smoothly rounded (Fig. 5). Ratio of pronotum length to its maximum width about 19:26. Surface of pronotum with extremely delicate, very fine and dense punctuation. Puncture diameter about 4.0 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 and 5 elongated; segments 4 and 6–7 slightly elongated; segments 8–10 about as long as wide; segment 11 elongated, conical. Last 3 segments more massive than others and form loose club (Fig. 5).

Ratio of length of elytra to their combined width about 27:32. Scutellum with weak, round depressions (Fig. 5). Surface of elytra with extremely delicate, very fine and dense punctuation. Puncture diameter about 3.0 times as small as eye facet. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shining.

Abdomen delicately shagreened.

Aedeagus of characteristic structure (Figs 6–7).

**Female.** Unknown.

**COMPARATIVE REMARKS.** The new species is similar in colouration, body morphology, punctation patterns and depressions on the pronotal disc with species of the “silvestris” group [Gildenkov, 2014a, b; 2015; 2019a] and can belong to this group. It differs from *Carpelimus silvestris* (Cameron, 1918) and *C. pseudosilvestris* Gildenkov, 2014 that share the same habitats with the new species on Borneo in having shorter antennae and a slightly smaller body size. It can also be distinguished from *C. pseudosilvestris* by the shape of the depressions on the pronotum and from *C. silvestris* by more rounded temples. The new species clearly differs from all species of the “silvestris” group [Gildenkov, 2015: p.377, Figs 7, 9–10, 12; p.378, Figs 1, 3, 5] in the structure of the aedeagus (Figs 6–7).

**DISTRIBUTION.** Malaysia: Borneo.
ETYMOLOGY. From Latin “fere” (approximately, almost); the name refers to a significant similarity of the new species to *C. silvestris* and *C. pseudosilvestris*.

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References


