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**A NEW SPECIES OF THE GENUS *CARPELIMUS* LEACH, 1819
(COLEOPTERA: STAPHYLINIDAE: OXYTELINAE) FROM LUZON
ISLAND, THE PHILIPPINES**

M. Yu. Gildenkov

*Department of Biology and Chemistry, Smolensk State University, Smolensk, 214000,
Russia. E-mail: mgildenkov@mail.ru*

Summary. A new species, *Carpelimus (Trogophloeus) bacillus* **sp. n.**, is described and illustrated from Luzon Island (Philippines). The specimens of this species was previously designated by the same name by Max Bernhauer but not described. In Chicago, in the collection of Max Bernhauer, there were two specimens with the label "*bacillus*" and one specimen with the same label was stored in Vienna, in the collection of Otto Scheerpeltz. The new species is quite small and reliably differs from all known species of *Carpelimus* in the structure of the aedeagus.

Key words: beetles, Staphylinidae, *Carpelimus*, taxonomy, new species, Oriental Region.

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Резюме. С острова Лусон (Филиппины) описан и проиллюстрирован новый вид *Carpelimus (Trogophloeus) bacillus* **sp. n.** Экземпляры этого вида были обозначены под этим же названием Максом Бернхауером, но вид не был описан. В Чикаго, в коллекции Макса Бернхауера, сохранились два экземпляра с этикеткой «*bacillus*» и один экземпляр с такой же этикеткой обнаружен в Вене, в коллекции Отто Шерпельтца. Новый вид имеет мелкие размеры и надёжно отличается от всех известных видов *Carpelimus* строением эдеагуса.

INTRODUCTION

At present, 21 species of the genus *Carpelimus* have been known from the Philippines (Gildenkov, 2015, 2019a): *Carpelimus* (s. str.) *elegantus* Gildenkov, 2012; *C.* (s. str.) *indicus indicus* (Kraatz, 1859); *C.* (s. str.) *magnus* Gildenkov, 2014; *C.* (s. str.) *orientalis* (Cameron, 1918); *C.* (s. str.) *papuensis* (Fauvel, 1879); *C.* (s. str.) *philippinensis* Gildenkov, 2013; *C.* (s. str.) *planicollis* (Bernhauer, 1902); *C.* (s. str.) *sadiyanus* (Cameron, 1945); *C.* (s. str.) *siamensis* (Fauvel, 1886); *C. (Bucephalinus) chagosanus* (Bernhauer, 1922); *C. (Bucephalinus) foveicollis* (Kraatz, 1859); *C. (Bucephalinus) nothus* Gildenkov, 2019; *C. (Bucephalinus) postremus* Gildenkov, 2014; *C. (Bucephalinus) terribilis* Gildenkov, 2014; *C. (Troginus) atomus* (Saulcy, 1864); *C. (Trogophloeus) notatus* Gildenkov, 2019; *C. (Trogophloeus) notumus* Gildenkov, 2019; *C. (Trogophloeus) padangensis* (Cameron, 1928); *C.*

(*Trogophloeus*) *plenus* Gildenkov, 2019; *C. (Trogophloeus) pseudosimplex* Gildenkov, 2013; *C. (Trogophloeus) saigonensis* (Cameron, 1940). Among them, 4 species are known only from the Philippines: *C. nothus*; *C. postremus*; *C. notatus* and *C. notumus*. The new species is the smallest *Carpelimus* known from the Philippines, which justifies its name. With the same body length as *C. postremus* (1.3 mm), the new species less flattened and significantly narrower, somewhat resembling the habitus of species from the subgenus *Troginus*. In the structure of the aedeagus, the new species somewhat resembles species from the “*notumus*” group (Gildenkov, 2019a, 2023a), but we do not classify it as one of them.

The paper continues the author's series of works on the fauna of the genus *Carpelimus* Leach, 1819 of the Oriental Region and New Guinea (Gildenkov, 2015, 2018a, b, 2019a–d, 2020a–c, 2021a, b, 2022, 2023a, b, 2024a–c).

MATERIAL AND METHODS

This paper is based on the specimens deposited in the following collections: cMG – private collection of M. Gildenkov (Smolensk, Russia); FMNH – Field Museum of Natural History (Chicago, USA); NHMW – Naturhistorisches Museum Wien (Austria).

The dissections, measurements, and drawings were made using the MBS-10 binocular microscope provided with an eyepiece-micrometer and a measuring grid. In the description 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 preparations of genitalia were processed in 10% KOH and then fixed in Euparal. Photographs were taken using a Canon EOS 5D Mark III camera and a Canon MP-E 65mm lens with Extended Focus Technology.

TAXONOMY

Carpelimus (Trogophloeus) bacillus Gildenkov, sp. n.

<https://zoobank.org/NomenclaturalActs/652CC8C3-431F-4157-A7AD-E39F989DBECF>

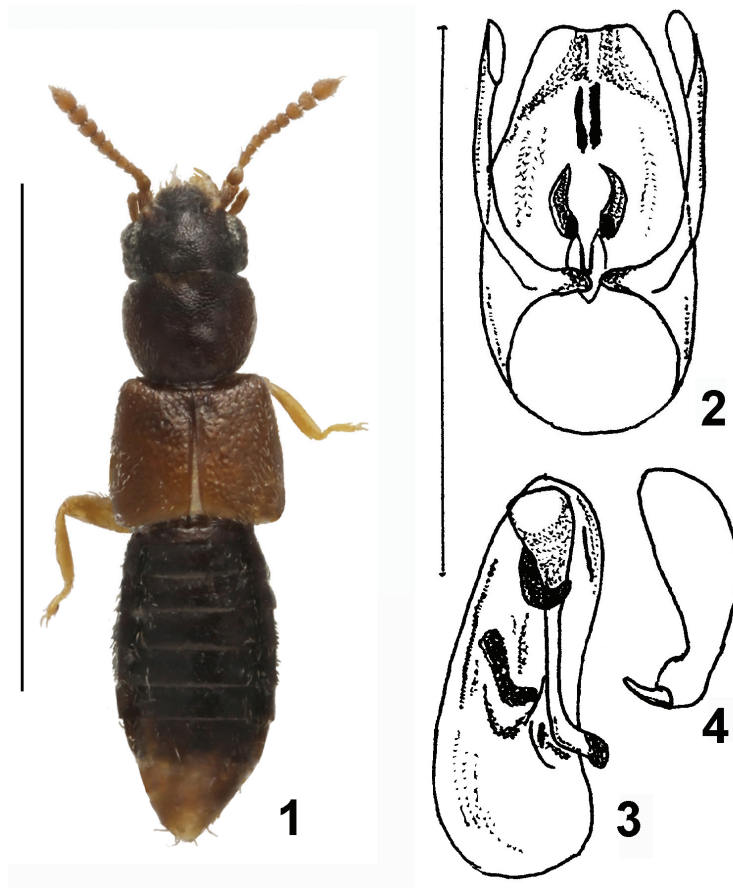
Figs 1–4

TYPE MATERIAL. Holotype – ♂, **Philippines**: Luzon “Los Banos Luzon” “Chicago NHMus M. Bernhauer Collection” (FMNH). Paratypes: 1 ♂, Philippines, Luzon “Luzon, P. I. Montalban” “Chicago NHMus M. Bernhauer Collection” (cMG); 1 ♀, Philippines, Luzon “Los Banos Luzon” “leg. Boettcher 3. Los; Staudinger” “*Cotypus Trogophloeus bacillus* Bernhauer” “*Trogophloeus bacillus* Brh.” “ex. coll. Scheerpeltz” (NHMW).

DESCRIPTION. MALE (holotype). Length 1.3 mm, slightly flattened. Head, pronotum and abdomen dark brown; elytra brown; legs and antennae yellowish-brown. Integument slightly shining, body with short, light-coloured hairs.

Head quite transverse, with wide base, ratio of its length (from posterior margin of head to anterior margin of clypeus) to maximum width about 12:19. Neck constriction prominent. Eyes small, slightly convex. Temples well developed, eye diameter in dorsal view slightly less than temple length. Head widest across temples. Head surface with very delicate and uniform shagreen (Fig. 1). Antennae short (Fig. 1), antennal segments 1–2 conical, elongate; 3 – conical, slightly elongate, significantly narrower and shorter than 1st and 2nd antennal segments; 4–6 approximately equal in length and width; 7–10 slightly transverse; antennal segment 11 elongate, cone-shaped. 9–11 segments more massive than others, forming a loose club.

Pronotum widest about 2/3 its length from base, then narrowed. Lateral margins smoothly rounded (Fig 1). Ratio of pronotum length to its maximum width about 17:20. Surface of pronotum delicate and uniform shagreened as that on head. Base and central part of pronotal disc with two pairs of small, flat and symmetrical rounded depressions, barely noticeable (Fig. 1).



Figs 1–4. *Carpelimus (Trogophloeus) bacillus* sp. n. (1–3 – male, holotype; 4 – female, paratype). 1 – body, dorsal view; 2 – aedeagus, dorsal view; 3 – the same, lateral view; 4 – spermatheca. Scale bars: fig. 1 – 1 mm; figs. 2–4 – 0.25 mm.

Length of elytra related to their combined width approximately as 23:24. Scutellum area with less developed oval depressions (Fig. 1). Elytra covered with delicate, fine and dense punctation. Diameter of punctures approximately equal to diameter of eye facet. Distances between punctures slightly smaller than their diameter, interspaces smooth, slightly shiny.

Abdomen delicately shagreened.

Aedeagus of characteristic structure (Figs. 2, 3).

FEMALE. Sexual dimorphism absent, female morphologically similar to male. Spermatheca of characteristic structure (Fig. 4).

DISTRIBUTION. Philippines: Luzon.

ETYMOLOGY. From Latin “bacillus” – the name is associated with the small size of the new species and, possibly, with the rather cylindrical body shape.

DIAGNOSIS. The new species is the smallest of all known species of the genus from the Philippines and is reliably differs from all known species of *Carpelimus* by the structure of the aedeagus (Figs. 2–3).

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Address: Federal Scientific Center of the East Asia Terrestrial Biodiversity (former Institute of Biology and Soil Science), Far East Branch of the Russian Academy of Sciences, 690022, Vladivostok-22, Russia.

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