

Description of a new species of *Cnestus* SAMPSON, 1911 from Vanuatu (Coleoptera: Curculionidae: Scolytinae)

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Abstract

A new species of *Cnestus* SAMPSON, 1911, *C. atkinsoni* (Coleoptera: Curculionidae: Scolytinae: Xyleborini), is described from Vanuatu.

Key words: Coleoptera, Curculionidae, Scolytinae, Xyleborini, *Cnestus*, taxonomy, Vanuatu, Pacific Ocean.

Introduction

The genus *Cnestus* was described by SAMPSON (1911) based on *C. magnus* SAMPSON, 1911 from Sri Lanka. This genus is distributed in the Oriental Region, Japan, Australia, and North and South America (DOLE & COGNATO 2010, SMITH et al. 2017, WOOD 1986, 2007). *Cnestus* is related to *Xylosandrus* REITTER, 1913, but distinguished by the subcontiguous procoxae (SAMPSON 1911, HULCR et al. 2007). Females have four- or five-segmented antennal funicles; in *Cnestus*, the anterior margin of the pronotum bears four or fewer asperities, with a pair of coarse asperities medially, and the pronotum is often produced anteriorly (DOLE & COGNATO 2010).

A new species of *Cnestus* from Vanuatu (Pacific Ocean) is described below.

Methods

The photographs were made with a Cannon 50D camera body and a MP-e65 mm macro lens.

Cnestus atkinsoni sp.n.

TYPE LOCALITY: Cumberland Peninsula, Espiritu Santo Island, Vanuatu.

TYPE MATERIAL: **Holotype** ♀ (Zoological Museum of Moscow State University, Moscow, Russia): VANUATU: Espiritu Santo Is., Cumberland Peninsula, Saratsi Range, 600 m a.s.l., 14°57'50.8"S 166°38'52.4"E, 6.–7.XI.2006, leg. A.K. Tishechkin.

DESCRIPTION (female): 3.9 mm long, 1.69 times as long as wide (Fig. 1a–b). Body dark brown, antennae and femora brown (Fig. 1a–b).

Head dark brown to black, weakly shining, Frons convex from epistoma to vertex, with very small median tubercle at level of eyes; surface of frons reticulate, punctures numerous and deep, in center of frons and sparse on vertex (Fig. 1c). Gula shallowly shagreened, with very small punctures. Vestiture of numerous brown long erect setae on central part of frons, longer in epistomal area, sparse long brown setae at upper level of eyes. Eyes shallowly emarginate, oval. Antennae yellowish brown, scape long, as long as funicle and club together; funicle five-segmented; club as long as wide, rounded, with corneous area occupying basal third of club length, covered by pale setae.

Pronotum weakly shining; subquadrate, 0.9 times as long as wide. Lateral margins subparallel on 2/3 of length, widest near middle of pronotum, lateral margins with short carina from base to

central part of pronotum; apical margin rounded with two pairs of serrations (one large pair in centre and a second very small lateral pair); summit in middle of pronotum length, anterior slope steep; surface with asperities from anterior part to the middle of pronotum, asperities coarse anteriorly, becoming much smaller and more numerous toward summit, central area of basal part of pronotum occupied by very small asperities, lateral margins of pronotum without asperities, anterior part with very small punctures between asperities; basal and lateral parts of pronotum with dense small punctures. Vestiture of numerous short adjacent pale setae and erect longer setae on anterior margin of pronotum. Middle of basal margin of pronotum with mycangial tuft of dense setae. Scutellum very small, triangular.



Fig. 1: *Cnestus atkinsoni*, holotype: a) dorsal view, b) lateral view, c) frons, d) elytral declivity.

Elytra dark brown, weakly shining on disc; as long as wide, 1.28 times as long as pronotum; disc occupying 40 percent of elytral length. Surface of disc reticulate, with numerous punctures, with straight rows of dense punctures, base of disc without striae, they are developed in 2/3 of length of disc only; interstriae flat, five times as wide as striae, with numerous mixed, very small punctures. Declivity subtruncate, circumdeclivital ring not abrupt, evenly slanting from base to apex, with costa along borders. Surface reticulate, striae straight, weakly impressed, punctures small, round, punctures on declivity equal to punctures on disc; interstriae with irregular row of

numerous very small tubercles (Fig. 1d). Vestiture of numerous erect pale setae on disc, more abundant and longer setae on declivity.

Metaventricle and metepisternum brown, with adjacent pale fine setae. Abdomen yellowish brown, ventrites 1–5 with numerous small punctures, vestiture of short sparse pale setae. Legs with yellowish brown femora and tarsi, dark brown tibiae; all tibia with vestiture of long pale setae; outer apical margin of protibia armed with seven teeth of about equal size; apex of protibia with one curved tooth.

DIFFERENTIAL DIAGNOSIS: The new species is closely related to *Cnestus mutilatus* (BLANDFORD, 1894), but can be distinguished by numerous longer setae on declivity, very small scutellum, and pronotum lacking asperities on lateral margins.

DISTRIBUTION: Known only from the type locality.

ETYMOLOGY: The new species is named in honor of Dr. Thomas H. Atkinson (University of Texas Insect Collection, USA), expert of Scolytinae and Platypodinae taxonomy.

Acknowledgements

The author expresses his most sincere gratitude to Dr. Alexey K. Tishechkin (California Department of Food and Agriculture, Sacramento, California, USA) for providing material from Vanuatu and Dr. Roger A. Beaver (Chiang Mai, Thailand) for sharing his great knowledge of Asian *Cnestus*.

The research was supported by a grant from the Russian Fund for Basic Research (No. 17-04-00360).

References

- DOLE, S.A. & COGNATO, A.I. 2010: Phylogenetic revision of *Xylosandrus* Reitter (Coleoptera: Curculionidae: Scolytinae: Xyleborina). – Proceedings of the California Academy of Sciences (ser. 4) 61 (10): 451–545.
- HULCR, J., DOLE, S.A., BEAVER, R.A. & COGNATO, A.I. 2007: A cladistic review of generic taxonomic characters in Xyleborina (Coleoptera: Curculionidae: Scolytinae). – Systematic Entomology 32 (3): 568–584.
- SAMPSON, F.W. 1911: On two new wood-boring beetles (Ipidae). – Annals and Magazine of Natural History (ser. 8) 8 (45): 381–383.
- SMITH, S.M., PETROV, A.V. & COGNATO, A.I. 2017: Beetles (Coleoptera) of Peru: A survey of the families. Curculionidae: Scolytinae. – The Coleopterists Bulletin 71 (1): 77–94.
- WOOD, S.L. 1986: A reclassification of the genera of Scolytidae (Coleoptera). – Great Basin Naturalist Memoirs 10: 1–126.
- WOOD, S.L. 2007: Bark and ambrosia beetles of South America (Coleoptera: Scolytidae). – Provo: Monte L. Bean Life Science Museum, Brigham Young University, Utah, 900 pp.

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