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Stephanopachys cretaceus sp. nov., a new species from mid-Cretaceous Burmese amber (Coleoptera: Bostrichidae: Dinoderinae)

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Taxonomy, new species, Coleoptera, Bostrichidae, *Stephanopachys*, mid-Cretaceous Burmese amber, Myanmar

Abstract. *Stephanopachys cretaceus* sp. nov. from mid-Cretaceous Burmese amber (Myanmar) is described, illustrated and compared with similar cretaceous species.

INTRODUCTION

The family Bostrichidae currently contains about 600 species including fossil species (Zahradník & Háva 2024). New species from Burmese amber were recently described by Legalov (2018), Legalov & Háva (2020, 2022, 2024), Háva & Legalov (2023a, b), Peng et al. (2022), Wang et al. (2024, 2025) and Háva & Zahradník (2025). In the present article a new species is described.

The amber piece with the described specimen was obtained from mines in the Hukawng Valley of the state of Kachin (Myanmar). This site was dated to the earliest Cenomanian (the late Cretaceous), and was mined from sedimentary beds, indicating that it had been re-deposited, thus placing the age at 98.79 Ma (Shi et al. 2012). An araucaria, possibly *Agathis salisbury*, was the source of the amber.

MATERIAL AND METHODS

The amber piece was mined in Hukawng Valley site, a deposit dated as Cenomanian, approximately 99 Ma (Shi et al., 2012).

Photographs were made with a Canon EOS 550 D camera and a Canon Macro Photo Lens MP-E, and images were modified with Helicon Focus 7.7.5. software.

The mentioned type material is deposited in (JHAC) - Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

In the mentioned material, a slash (/) separates different labels.

The specimen described here is provided with a red, printed label with text as follows: „HOLOTYPE *Stephanopachys cretaceus* sp. nov. Jiří Háva det. 2025".

TAXONOMY

Family Bostrichidae Latreille, 1802

Subfamily Dinoderinae C. G. Thomson, 1863

Stephanopachys cretaceus sp. nov.
(Figs. 1-3)

Type material. Holotype (not sexed): „Hukawng Valley, Maingkhwan, Kachin State, Myanmar“ / „No. BOSTR-2025-Step“, (JHAC). The beetle is included in a transparent amber piece. Syninclusions consist of numerous small and minute organic particles, with one Cleroidea (Coleoptera) specimen, two *Unimeinertellus* sp. (Archaeognatha) specimens, one Auchenorrhyncha specimen and one Psocoptera specimen.

Description. Body black, cylindrical, elongated, length 2.2 mm (Figs. 1-2). Integument covered with semierect, short setae. Head finely punctate, with long, erect setation. Antennae composed with 10 antennomeres, with distinct three antenomered club (Fig. 3). Labrum finely punctured. Clypeus probably finely but distinctly separated from frons. Palpomeres small, terminal palpomere narrow. Pronotum markedly narrowed forward and backward, the widest just behind midlength. Pronotum length 0.8 mm, width 0.6 mm, at base with short semierect setae. Anterior and lateral parts with prominent dents. Scutellum small. Elytra parallel, between rows of punctures with semierect, short setae, posterior part of elytra without costae or tubercles. Apical margins of elytra smooth, without denticles or wrinkles. Prosternal process broad and short. Metaventrite finely punctate with median short, longitudinal carina. Legs: femora short and broad, tibiae short, apically with short small spines, tarsomeres small and short. Abdomen with five ventrites, finely punctate.

Differential diagnosis. Only one species of subfamily Dinoderinae, *Elongatus kachinus* H. Wang, Lin & S. Wang, 2024 has been described from Burmese amber, the new species differs from it by the following characters.

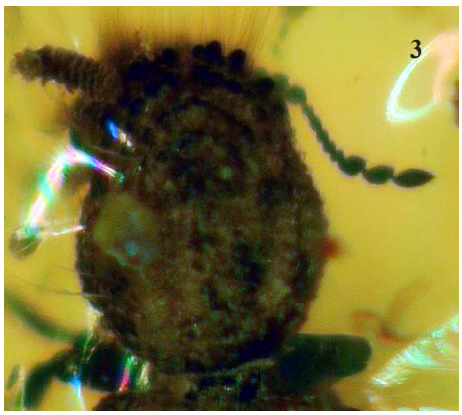
Elongatus kachinus: body length 3.0 mm; antennae with 9 antennomeres; antennae without distinct antennal club; head with short setae.

Stephanopachys cretaceus sp. nov.: body length 2.2 mm; antennae with 10 antennomeres; antennae with distinct 3 antennomere club; head with long setae.

Key to *Stephanopachys* species known from amber.

1 Antennae consisting of 11 antennomeres ..... *S. vetus*
- Antennae consisting of 10 antennomeres 2
2 Pronotum markedly narrowed forward and backward, the widest just behind midlength ..... *S. cretaceus*
- Sides of pronotum slightly and evenly rounded, the widest at midlength 3
3 Punctures on elytron almost touched ..... *S. electron*
- Distance between punctures on elytron is equal approximately to half their diameter ..... *S. ambericus*

Etymology. Named according to Cretaceous age.



Figs. 1-3. *Stephanopachys cretaceus* sp. nov.: 1- habitus, dorsal aspect; 2- habitus, ventral aspect; 3- pronotum and antenna.

LIST OF FOSSIL *STEPHANOPACHYS* SPECIES

Genus *Stephanopachys* Waterhouse, 1888

S. ambericus Zahradník & Háva, 2015	Baltic amber, Danish amber
S. cretaceus sp. nov.	Burmese amber
S. electron Zahradník & Háva, 2015	Baltic amber
S. vetus Peris, Delclòs & Perrichot, 2014	French amber

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