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Burmostrichus brunneus gen. nov., sp. nov. from Mid-Cretaceous Burmese amber, with other taxonomic notes on the family Bostrichidae (Coleoptera)

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Abstract: *Burmostrichus brunneus* **gen. nov., sp. nov.** from Mid-Cretaceous Burmese amber (Myanmar) is described, illustrated and compared with the similar genera *Elongatus* Wang, Lin & Wang, 2024 and *Micrapate* Casey, 1898. A list of Bostrichidae known from Mid-Cretaceous Burmese amber is added.

Keywords: Taxonomy, new genus, new species, Coleoptera, Bostrichidae, Burmostrichus, Mid-Cretaceous Burmese amber, Myanmar.

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). In the present, paper a new genus and species is described.

The amber piece with the described specimen was obtained from mines in the Hukawng Valley of the state of Kachin (Myanmar). It is likely from the Cenomanian radiometric age and was mined from sedimentary beds, indicating that it had been redeposited. An araucarian tree, 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 by Canon EOS 550 D camera and a Canon Macro Photo Lens MP-E, images were modified with Helicon Focus 7.7.5. software.

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The mentioned 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 *Burmostrichus* gen. nov. *brunneus* sp. nov. Jiří Háva & Petr Zahradník det. 2025".

Taxonomy

Family **Bostrichidae** Latreille, 1802
Subfamily **Bostrichinae** Latreille, 1802

Genus ***Burmostrichus*** gen. nov.
Type species: *Burmostrichus brunneus* sp. nov., by monotypy.

Description. Body dark brown, parallel, length 3.0 mm (Figs. 1-2). Integument covered with semierect, short setae. Head missing. Pronotum almost flat and square (length 1.0 mm, width 1.1 mm), in middle, and at base, with short semierect setae, slightly rugose. Laterally with very small denticles and short setae. Elytra parallel (length 8.0 mm width 1.2 mm), with semierect, short setae, finely punctate (punctures forming longitudinal rows), posterior part of elytra without costae or tubercles. Scutellum small, triangular without setation. Prosternal process broad and short. Metaventrite finely punctate with median longitudinal carina. Legs: femora short and broad, tibiae short apically with short small spines, tarsomeres small and short. Abdomen missing.

Diagnosis. The new genus, because of the very small body is similar to the recently described fossil genus *Elongatus* Wang, Lin & Wang, 2024, which belongs to the subfamily Dinoderinae and the extant genus *Micrapate* Casey, 1898, which belongs to the subfamily Bostrichinae. The new genus differs from them by the following characters:

Elongatus: body length 3.0 mm; antennae with 9 antennomeres; antennal funicle with short setae; pronotum cylindrical with dense verrucous protuberances.

Micrapate: body length 2.5-6.5 mm; antennae with 9 or 10 antennomeres; pronotum strongly convex, strongly declivous, and dentate anteriorly, anterior angles of pronotum without large horns, lateral margins without carinae. *A similar* species known from the Oriental Region is *M. simplicipennis* (Lesne, 1895) as in Fig 4.

Burmostrichus: body length 3.0 mm; pronotum almost flat and square, lateral parts with very small denticles and short setae (Fig. 2).

Etymology. The name is composed of *Burmo-* (Burma (Myanmar) State) and the genus name *Bostrichus*. Masculine gender

Burmostrichus brunneus sp. nov.
(Figs. 1-2)

Type material: Holotype (not sexed): „Hukawng Valley southwest of Maingkhwan in Kachin State, Myanmar" / „No. BOSTR_2024/BBA", (JHAC). The beetle is included in a transparent amber piece. Syninclusions consist of numerous small to minute organic particles.

Description. Body dark brown, parallel, length 3.0 mm (Figs. 1-2). Integument covered with semierect, short setae. Head missing. Pronotum almost flat and square (length 1.0 mm, width 1.1 mm), in middle, and at base, with short semierect setae, slightly rugose. Laterally with very small denticles and short setae. Elytra parallel (length 8.0 mm width 1.2 mm), with semierect, short setae, finely punctate (punctures forming longitudinal rows), posterior part of elytra without costae or tubercles. Scutellum small, triangular without setation. Prosternal procces broad and short. Metaventrite finely punctate with median longitudinal carina. Legs: femora short and broad, tibiae short apically with short small spines, tarsomeres small and short. Abdomen missing.

Differential diagnosis. See the diagnosis of the genus.

Etymology. Named according to the dark brown body.

Figs. 1-3: *Burmostrichus brunneus* sp. nov.: 1: habitus, dorsal view; 2: pronotum; 3: holotype in piece

Fig. 4: ***Micrapate simplicipennis*** **(Lesne, 1895), (according to Liu (2021))**

Other taxonomic notes

Poinarinius kachinus Wang, Peng & Wang, 2025

Material examined: "Hukawng Valley southwest of Maingkhwan in Kachin State, Myanmar, No. 2" / „Alitrepanum aladelicatum Peng et., Jiří Háva det., 2022" / „Poinarinius kachinus Wang, Jiří Háva det., 2024", 1 spec., (JHAC); „Hukawng Valley southwest of Maingkhwan in Kachin State, Myanmar, No. 3" / „Alitrepanum aladelicatum Peng et., Jiří Háva det., 2022" / „Poinarinius kachinus Wang, Jiří Háva det., 2024", 1 spec., (JHAC).

Remarks. According to the characters mentioned by WANG et. al (2025) the two specimens examined belong to *P. kachinus* and not in *P. aledelicatum* (Peng, Jiang, Engel & Wang, 2022). The key published in the Wang´s article is not complete because it is missing the type species *P. burmaensis* Legalov, 2018 , *P. coziki* Háva & Legalov, 2023, and *P. decimus* Háva & Legalov, 2023.

List of Bostrichidae known from Burmese amber

Subfamily **Alitrepaninae**

Genus ***Poinarinus*** Legalov, 2018
= *Alitrepanum* Peng, Jiang, Engel & Wang, 2022

Poinarinius aladelicatum (Peng, Jiang, Engel & Wang, 2022)
Poinarinius antonkozlovi Legalov & Háva, 2022
Poinarinius aristovi Legalov & Háva, 2022
Poinarinius borowskii Legalov & Háva, 2022
Poinarinius burmaensis Legalov, 2018
Poinarinius coziki Háva & Legalov, 2023
Poinarinius cretaceus Legalov & Háva, 2022
Poinarinius decimus Háva & Legalov, 2023
Poinarinius kachinus Wang, Peng & Wang, 2025
Poinarinius lesnei Legalov & Háva, 2022
Poinarinius perkovskyi Legalov & Háva, 2022
Poinarinius vetus Wang, Peng & Wang, 2025
Poinarinius zahradniki Legalov & Háva, 2022

Subfamily **Bostrichinae**
Genus ***Burmostrichus*** **gen. nov.**
Burmostrichus brunneus **sp. nov.**

Subfamily **Dinoderinae**
Genus ***Elongatus*** Wang, Lin & Wang, 2024
Elongatus kachinus Wang, Lin & Wang, 2024

Subfamily **Polycaoninae**
Genus ***Cretolgus*** Legalov & Háva, 2020
Cretolgus minimus Legalov & Háva, 2020
Genus ***Melalgus*** Dejean, 1835
Melalgus cretaceous Háva, 2024

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