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Revision of the family Metarbelidae (Lepidoptera) of the Oriental Region. X. Description of *Stueningeria bretschnideri* sp. n. from the Andaman Islands (India)

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Abstract

The article describes *Stueningeria bretschnideri* Yakovlev & Hulsbosch sp. n. from the Andaman Islands (India) on both sexes. The detailed diagnosis is given. The article is illustrated with four figures.

Key words: biodiversity, Cossoidea, Asia, Paleotropics, Metarbelidae, taxonomy.

Introduction

Lehmann (2019) described the monotypic genus *Stueningeria* Lehmann, 2019 (type species: *Stueningeria nepalensis* Lehmann, 2019 from Nepal. Nine species were included into the genus (Yakovlev & Zolotuhin, 2021a): *S. nepalensis* Lehmann, 2019 (Type locality: Nepal, Kathmandu Valley, Godavari (Lalitpur District, Bagmati Zone, Central Region)), *S. campbelli* (Hampson, 1910) (Type locality: Madras, Horsleykonda [Horsley Hills, 13.651105 N / 78.403806 E]), *S. phaga* (Swinhoe, 1894) (Type locality: Cherra Punji), *S. htetae* Yakovlev & Zolotuhin, 2021 (Type locality: Myanmar, 21 km E Putao), *S. csovarui* Yakovlev & Zolotuhin, 2021 (Type locality: Thailand, Changwat Nan, 15 km N of Bo Luang), *S. loeffleri* Yakovlev & Zolotuhin, 2021 (Type locality: Thailand, Sakhon Nakhon Prov., Phu Pan NP), *S. ihlei* Yakovlev & Zolotuhin, 2021 (Type locality: Vietnam (C.), Prov. Thua-Thien-Hue, Kreis A Luoi, Gemeinde A Rong, Passastrasse ca. 30 km S A Luoi.), *S. murzini* Yakovlev & Zolotuhin, 2021 (Type locality: China, SW Yunnan, Xishuanbanna, Guanping env., 60 km N Jinghong), and *S. pinratanai* Yakovlev & Zolotuhin, 2021 (Type locality: NW Thailand, Chiangmai, Doi Pui Forest Res. Stat.).

Material and methods

The materials for the study were the adult Metarbelidae specimens deposited in private collection of second author.

The specimens were photographed with a digital Canon EOS 1000D camera with Rodenstock Rodagon 1.4, f=80mm lens. The male genitalia were mounted in euparal on slides following Lafontaine & Mikkola (2004). The digital photographs of the genitalia were made with a Olympus X-TR binocular microscope and a digital Canon EOS 1000D camera. The images were processed using CorelDraw software.

Taxonomical part

Stueningeria bretschneideri Yakovlev & Hulsbosch sp. n.

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Figs 1–4

Material. Holotype, male, India, Andaman Islands, North Andamans, near Ramnagar, 15–25.iv.2008, 100 Hm, N 13.103°, E 092.988°, leg. Bretschneider (private collection of Ramon Hulsbosch); paratypes, 2 females, India, Andaman Islands, North Andamans, Saddle Peak, 25–30.iv.2008, 200 Hm, N 13.238°, E 093.033°, leg. Bretschneider (private collection of Ramon Hulsbosch).

Description. Male. Length of fore wing 11 mm. Antenna light-brown, bipectinate, setae twice longer than antenna rod diameter. Thorax and abdomen covered with brown scales. Fore wing brown, discally with darker area, light-yellow longitudinal strokes along veins Sc, M, Cu and CuP, more extended in basal part of wing. Hind wing brown with poorly developed light-yellow stroke in anal area. Fringe light-brown between veins, brown at veins.

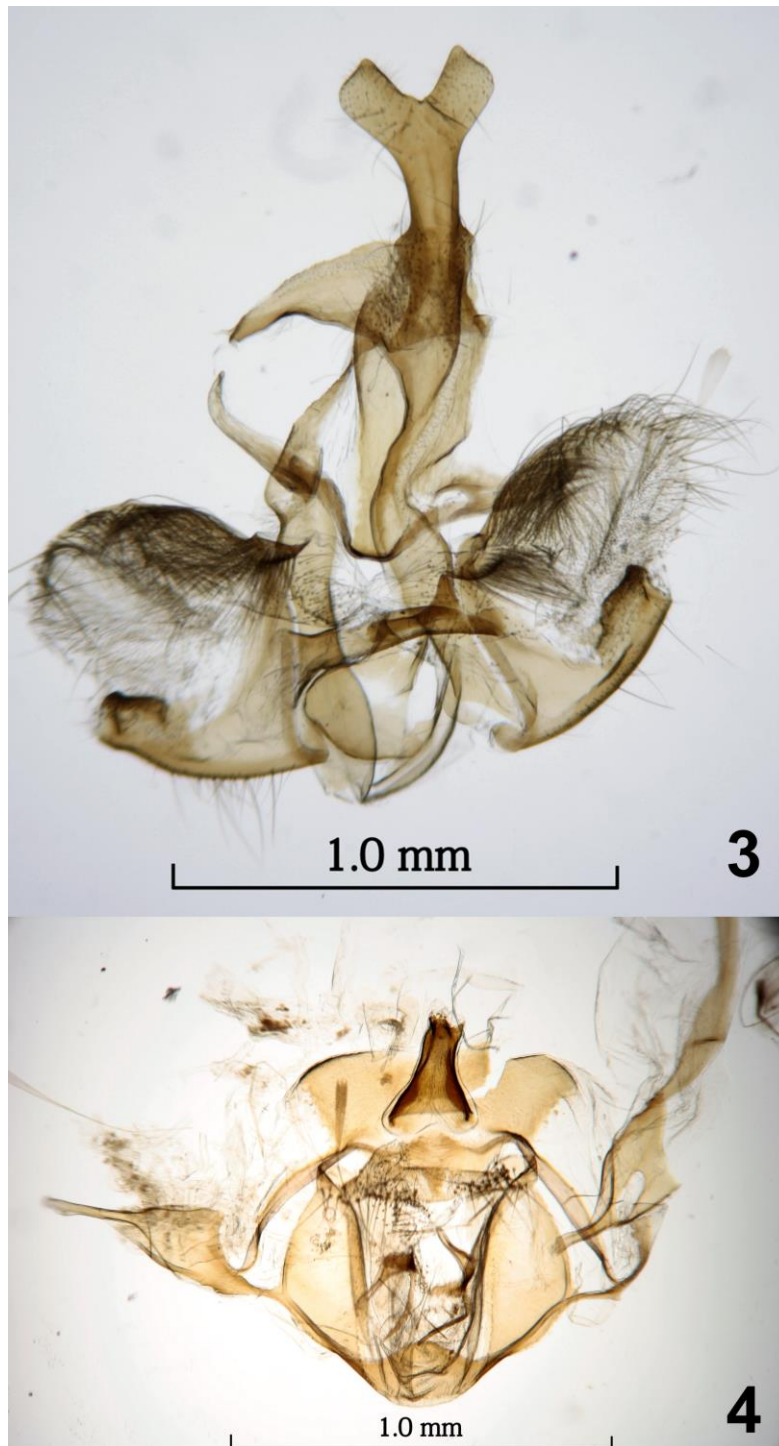
Male genitalia. Uncus long, with parallel edges, apically bifurcated as wide fork with extended lobes, diverged at angle of 90°; scaphium and subscaphium fused into long extended spindle-like tube; gnathos arms short, lamellar; gnathos lamellar, with long thin lateral processes; valve short, wide, semicircular; saccular process of valve robust, strongly sclerotized, apically blunt, 1.5 times shorter than valve; juxta shaped as oval plate; saccus poorly expressed, semicircular; phallus thick, short, with large cuneal spike in distal third.

Female. Bigger than male. Length of fore wing 14–15 mm. Antenna light-brown, bipectinate, setae equal to rod diameter in length. Fore wing light-brown with brown pattern: series of small brown strokes along costal edge, semicircular brown spot discally, blurred round brown spots and sputtering of brown scales on all wing area. Fringe on fore wing light-brown between veins and brown at veins. Hind wing brown without pattern, costal edge light-yellow, with thin light-yellow border. Fringe on hind wing light-brown between veins and brown at veins.

Female genitalia. Ovipositor very short, genitals identical to those of the genus representatives described earlier, no significant difference from *Stueningeria campbelli*, *S. csovarai*, and *S. pinratana*.



Figures 1–2. *Stueningeria bretschneideri* sp. n.: 1. Holotype, male; 2. Paratype, female.



Figures 3–4. *Stueningeria bretschneideri* sp. n.: 3. Male genitalia, holotype; 4. Female genitalia, paratype.

Diagnosis. A very special species, externally similar to the genus *Marcopoloia* Yakovlev & Zolotuhin, 2021 (Type species: by original designation: *Arbela discipuncta* Wileman, 1915) (Yakovlev & Zolotuhin, 2021b), but in the male genital structure (the extended uncus with strongly bifurcated apex, the robust saccular process on the valve) and in the female genitalia, it completely corresponds to the genus *Stueningeria*. From the genera listed in the Introduction, it differs externally: the wing pattern of the male is poorly modified, without sputtering of special hair-like scales on the fore wing.

Etymology. The new species is named after the type series collector, Mr. Gil Bretschneider, a German collector of Lepidoptera and Coleoptera, a world champion in extreme sports.

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