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New species of *Trismelasmos* Schoorl, 1990 (Lepidoptera, Cossidae: Zeuzerinae) from Eastern Indonesia

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Received 6 January 2022 | Accepted by V. Pešić: 15 January 2022 | Published online 19 January 2022.

Abstract

The article describes *Trismelasmos vavilovi* Yakovlev sp. nov. distributed in Lesser Sundas Islands (Pantar, Lomblen and Alor) in Indonesia. The article has 4 illustrations.

Key words: biodiversity, species richness, Cossidae, Paleotropics, taxonomy, new species.

Introduction

The genus *Trismelasmos* was established by Schoorl (1990: 170) for *Cossus maculatus* Snellen, 1879 (by original designation). Schoorl included into the genus 12 previously described species distributed in the Sunda Islands and the Australian part of Melanesia (New Guinea and the Solomon Islands). Additionally, Schoorl indicated 12 “undescribed species” from the same region and one from the Philippines. According to Yakovlev (2011a, b) the genus includes 37 valid species. Most of the species are endemics of the Pacific Ocean islands from the Philippines to New Guinea, the Solomon Islands and the Bismarck Archipelago (Yakovlev 2015). Examining the materials in Witt Museum, Munich (MWM) we found a new species of the genus from the eastern part of Indonesia (the islands of Pantar, Lomblen and Alor), its description is given in this article.

Material and methods

The male genitalia were mounted in euparal on slides following Lafontaine and Mikkola (1987). The slides were photographed using an Olympus DP74 camera attached to an Olympus SZX16 stereomicroscope at the Altai State University. The type material is deposited in the MWM. The images were processed using Corel Photo-Paint 2017 software.

Taxonomical part

Trismelasmus vavilovi Yakovlev sp. nov.

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Figs 1–2

Material. Holotype (Fig. 1): male, Indonesia, Lesser Sundas, Pantar Isl., Tanah Labang, 09–21.iii.2006, leg. Jakl (Museum Witt, Munich, Genitalpräparat Heterocera Nr. 25.298).

Paratypes: 4 males, same locality (MWM); 3 males, Indonesia, Lesser Sundas, Lomblen Isl., S. Coast, 100–400 m, 08–14.xi.2006, leg. Jakl (MWM); 4 males, Indonesia, Alor Isl., 8°16'S, 125°05'E, Moru, 7 km S Kalabahi, 25.03–03.iv.2006, leg. Jakl (MWM).

Description. Length of fore wing 25–31 mm. Antenna short, proximal half bipectinate, distal simple filiform. Thorax brown from top, tegula covered with ocher scales; abdomen densely covered with ocher scales. Fore wing with poorly expressed pattern, thin brown stroke along costal edge from base to middle of its length, wing light-brown, light-ocher with rare brown dots in radial and cubital area and small brown stroke at base of cubital trunk. Hind wing light-brown with ocher portion along costal edge, without pattern.



Figure 1. *Trismelasmus vavilovi* Yakovlev sp. nov. – holotype (Museum Witt, Munich).

Male genitalia (Fig. 2). Genital structure typical of the genus. Uncus short with parallel edges, apex pyramidal; gnathos arms thin, belt-like; gnathos absent; costal edge of valve straight, apex semicircular, abdominal edge semicircular, uneven, expressed deep notch on border between proximal and medium thirds; juxta robust with long leaf-like lateral processes; saccus very massive, cylindrical, apically semicircular; phallus shorter than valve, thin, almost straight, vesical aperture 2/3 of phallus in length, with long thin rod-like cornutus in lateral surface of vesica.

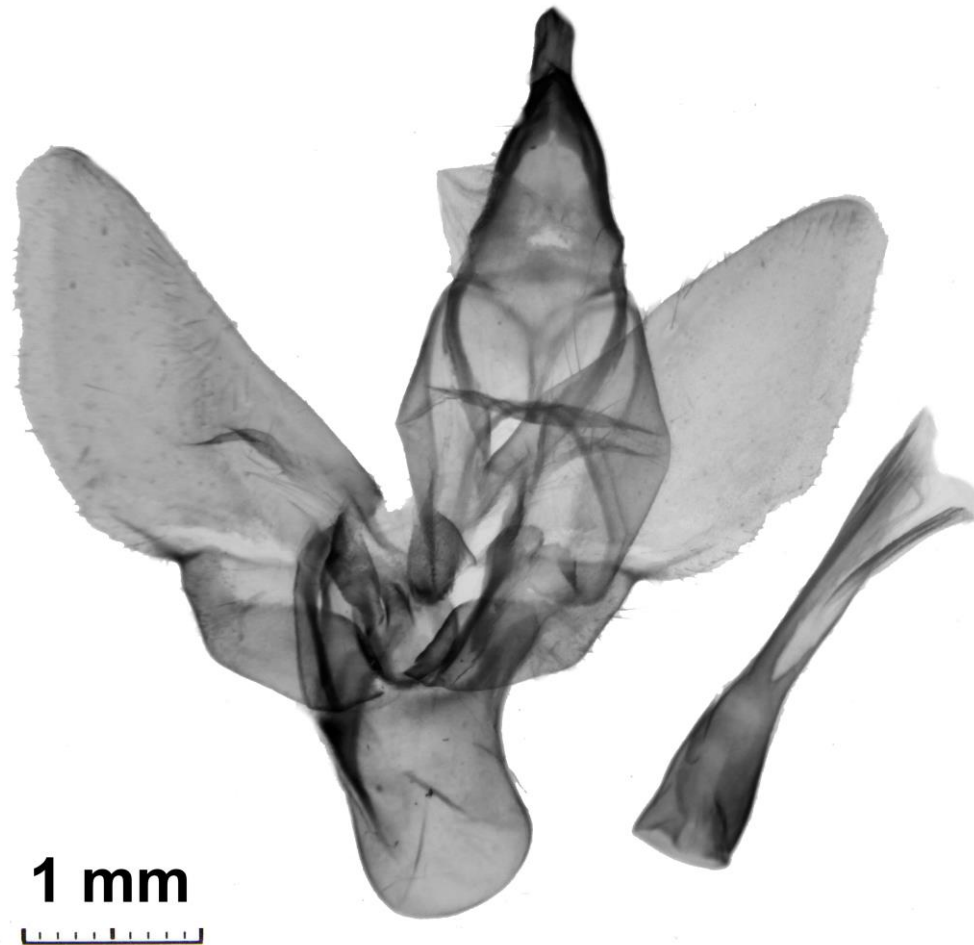


Figure 2. *Trismelasmos vavilovi* Yakovlev sp. nov. – male genitalia (Slide: Genitalpräparat Heterocera Nr. 25.298).

Female unknown.

Diagnosis. The new species clearly differs from all the known species of the genus in the poorly modified pattern of the fore wing and in the valve with an expressed deep notch on the border between the proximal and medium third of the valve.

Distribution. Indonesia (Lesser Sunda Islands) (Fig. 3).



Figure 3. Distributional map of *Trismelasmos vavilovi* Yakovlev sp. nov.

Etymology. The new species is named after the great Russian botanist, geneticist and breeder, academician Nikolai Vavilov (1887–1943) (Fig. 4) the creator of the doctrine of the cultivated plants origin centers, who died in the Stalinist prisons due to a false accusation.



Figure 4. Nikolai Vavilov (1887–1943)

Acknowledgments

The author is indebted to Mr. Thomas Witt† and Mr. Harald Sulak (Museum Witt, Munich) for their kind assistance provided during studying the deposited material. The author is grateful to Anna Ustjuzhanina (Tomsk, Russia) for language improvements

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