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A new monotypic genus of the subfamily Hypoptinae Neumoegen et Dyar, 1894 (Lepidoptera: Cossidae) from Brazil

Новый монотипный род подсемейства Hypoptinae Neumoegen et Dyar, 1894 (Lepidoptera: Cossidae) из Бразилии

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KEY WORDS: biodiversity, new genus, new species, Carpenter moths, taxonomy, Neotropical Region.

КЛЮЧЕВЫЕ СЛОВА: биоразнообразие, новый род, новый вид, древоточцы, таксономия, Неотропический регион.

ABSTRACT. The article describes a new monotypic genus *Givirella* Naydenov, Yakovlev et Penco, **gen.n.** with type species *Givirella batesi* Naydenov, Yakovlev et Penco, **sp.n.** from South-east Brazil.

РЕЗЮМЕ. В статье описан новый монотипный род *Givirella* Naydenov, Yakovlev et Penco, **gen.n.** с типовым видом *Givirella batesi* Naydenov, Yakovlev et Penco, **sp.n.** из Юго-Восточной Бразилии.

Introduction

The subfamily of Hypoptinae was allocated by Neumoegen and Dyar, [1894] and currently is the least studied group of Cossidae (Lepidoptera). Most of their range occupies the Neotropical region, and only a few representatives are distributed in the southern part of the Non-arctic region. The most complete composition of the subfamily was reflected in the generalizing works of a number of authors [Dyar, 1940; Schoorl, 1990; Donahue, 1995]. Recently, the authors of this work have begun to revise some of the genera of this group [Penco et al., 2019a, b; Naydenov et al., 2020; Yakovlev et al., 2020a], also, several new genera have been described [Yakovlev et al., 2019, 2020b; Penco et al., 2020].

Examining the collection materials in the Museum of Thomas Witt, Munich, Germany (MWM), we found specimens of a species new to science which was impossible to attribute to any of currently known genera. Here we describe this unique taxon.

Materials and methods

The images of imago were taken by the camera of Canon EOS 70D and illuminated in Lightbox. The genitalia slides were examined with a Zeiss Stemi 2000 C microscope. The images were taken with the camera of Canon EOS 70D. The photos were enhanced and arranged to plates with Adobe Photoshop software. The morphological terminology used in the description follows Kristensen [2003]. The genital preparations were made according to Lafontaine and Mikkola [1987].

Results

Givirella Naydenov, Yakovlev et Penco, **gen.n.**

Type species (designated there) " *Givirella batesi* Naydenov, Yakovlev et Penco, **sp.n.**

DESCRIPTION. Size medium, antenna bipectinate, setae 2.5 times longer than antenna rod diameter. Wings brown with poorly expressed light pattern on the fore wing.

Male genitalia. Uncus short, thin, rod-like, slightly extended apically; tegumen trapezoidal; gnathos arms thin, short, not fused; costal edge of valve poorly curved, abdominal edge strongly curved, outer edge semicircular; transtilla uncinated, with sclerotized prong; juxta ring-shaped, intensively sclerotized, with mastoid process directed abdominally; saccus small, semicircular; phallus shaped as isosceles acute triangle, apically sharp, about half of valve in length, vesica without cornuti.

DIAGNOSIS. The new genus has significant structural differences in the male genitals, especially in the triangular

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Figs 1–2. *Givirella batesi*, **sp.n.**, adults: 1 — holotype, ♂, Brazil, Espirito Santo, ix.1999, (MWM); 2 — paratype, ♂, Brazil, Espirito Santo, 15.ii.1997, (MWM).

Рис. 1–2. *Givirella batesi*, **sp.n.**, имаго: 1 — голотип, ♂, Бразилия, Эспириту Санту, ix.1999, (MWM); 2 — паратип, ♂, Бразилия, Эспириту Санту, 15.ii.1997, (MWM).

phallus, which is different from all the other Neotropical genera of the subfamily Hypoptinae. The genus is most close to the representatives of *Givarbela* Clench, 1957, that also have the curved elongated valves and the short sclerotized prong on the transtilla.

ETYMOLOGY. The new genus is named in consonance with the genus *Givira* Walker, 1856.

COMPOSITION. The new genus includes a single species, here described below.

DISTRIBUTION. Brazil, Espírito Santo Province.

Givirella batesi Naydenov, Yakovlev et Penco, **sp.n.**
Figs 1–4.

MATERIAL EXAMINED. Type material. Holotype ♂: Brazil, Espirito Santo, Santa Leopoldina, Dorf Tirol, 700 m, ix.1999, leg. Hubert Thöny, Genitalpräparat Heterocera MWM: 28.517 (MWM); Paratype 1 ♂: same locality, 15.ii.1997, leg. Hubert Thöny, Genitalpräparat Heterocera MWM: 28.506 (MWM).

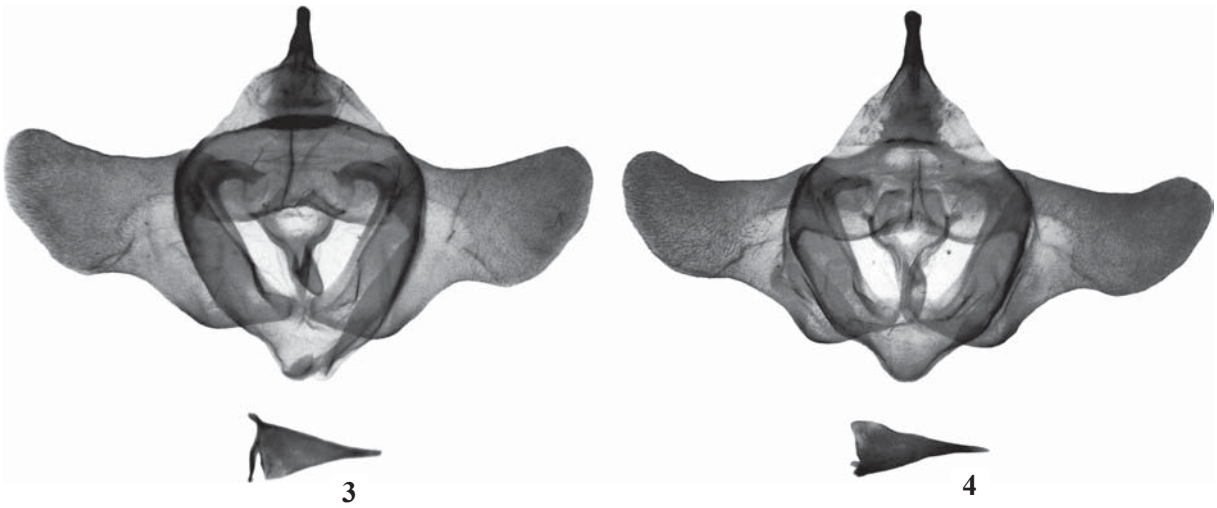
DESCRIPTION. Head and antenna dark-brown; antennae bipectinate, setae 2.5 times longer than antenna rod diameter; thorax covered with dense dark scales, thorax of lighter color in middle; abdomen of the same color as thorax. Wingspan 33–35 mm. Length of fore wing 15–16 mm, wing light-brown with smooth darkening along costal edge; transverse intermitted beige band discally, passing in lower part along cubital and anal veins; group of small beige round spots postdiscally and submarginally (along costal edge); single rounded beige dot discally at vein A_2; hind wing unicolorous, light-brown. Fringe on all wings unicolorous brown.

Male genitalia. See generic description.

Female unknown.

ETYMOLOGY. The new species is named after English naturalist and explorer Henry Walter Bates (1825–1892) who gave the first scientific account of mimicry in animals. He, together with Alfred Russel Wallace, organized an expedition to the South America (rainforests of the Amazon) in which explored thousands of miles of the Amazon and collected over 14,000 species.

DISTRIBUTION. Brazil, Espírito Santo Province.



Figs 3–4. *Givirella batesi*, **sp.n.**, male genitalia: 3 — holotype, ♂, Brazil, Espirito Santo, ix.1999, GenPrMWM: 28.517, (MWM); 2 — paratype, ♂, Brazil, Espirito Santo, 15.ii.1997, GenPrMWM: 28.506, (MWM).

Рис. 3–4. *Givirella batesi*, **sp.n.**, гениталии самцов: 3 — голотип, ♂, Бразилия, Эспириту Санту, ix.1999, GenPrMWM: 28.517, (MWM); 2 — паратип, ♂, Бразилия, Эспириту Санту, 15.ii.1997, GenPrMWM: 28.506, (MWM).

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Competing interests. The authors declare no competing interests.

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