

## A new genus and species of the subfamily Zeuzerinae Boisduval, [1828] (Lepidoptera: Cossidae) from Brazil

### Новый род и вид подсемейства Zeuzerinae Boisduval, [1828] (Lepidoptera: Cossidae) из Бразилии

A.E. Naydenov<sup>1</sup>, R.V. Yakovlev<sup>1, 2</sup>, F.C. Penco<sup>3</sup>, Th.J. Witt<sup>4</sup>  
А.Е. Найденов<sup>1</sup>, Р.В. Яковлев<sup>1, 2</sup>, Ф. Пенко<sup>3</sup>, Т.Й. Витт<sup>4</sup>

<sup>1</sup> Altai State University, pr. Lenina 61, Barnaul 656049, Russia. E-mail: colias24@mail.ru; yakovlev\_asu@mail.ru

<sup>2</sup> Tomsk State University, Laboratory of Biodiversity and Ecology, Lenin pr. 36, 634050 Tomsk, Russia. E-mail: yakovlev\_asu@mail.ru

<sup>3</sup> Fundación de Historia Natural “Félix de Azara”, Departamento de Ciencias Naturales y Antropología, Universidad Maimónides, Hidalgo 775 piso 7 (1405BDB) Ciudad Autónoma de Buenos Aires, Argentina. E-mail: fernando\_penco@hotmail.com

<sup>4</sup> Museum Witt, Tengstrasse 33, D-80796, Munich, Germany. E-mail: thomas@witt-thomas.com

<sup>1</sup> Алтайский государственный университет, пр. Ленина 61, Барнаул 656049, Россия.

<sup>2</sup> Томский государственный университет, пр. Ленина 36, Томск 634050, Россия.

KEY WORDS: Lepidoptera, Carpenter moths, Zeuzerinae, fauna, Neotropical Region.

КЛЮЧЕВЫЕ СЛОВА: Lepidoptera, древооточцы, Zeuzerinae, фауна, Неотропический регион.

**ABSTRACT.** The new species and new genus, *Listrada sulbaiana* Naydenov, Yakovlev, Penco et Witt, **gen. et sp.n.**, from Brazil (Lepidoptera: Cossidae: Zeuzerinae) are described. The apomorphies of the new genus are: the specific external characters (the alternation of longitudinal pale and dark strokes on the fore wing), the simple valves, the absence of subsuncuses, the very short thick phallus and the semicircular base of the juxta.

**РЕЗЮМЕ.** Описаны новый род и вид *Listrada sulbaiana* Naydenov, Yakovlev, Penco et Witt, **gen. et sp.n.** из Бразилии (Lepidoptera: Cossidae: Zeuzerinae). Апоморфиями нового рода являются: характерный внешний вид (чередование продольных светлых и тёмных мазков на переднем крыле), простые вальвы, отсутствие субсункусов, очень короткий толстый фаллос, полукруглое основание юксты.

The Cossidae of Neotropical region are studied very poorly. In recent years, there has been some progress in research of the subfamily Cossinae Leach, [1815] and Zeuzerinae Boisduval, [1828]. Several genera were re-described: *Miacora* Dyar, 1905 [Yakovlev, 2014], *Psychonoctua* Grote, 1865 [Yakovlev et al., 2016], *Bryopoctia* Schoorl, 1990 and *Schreiteriana* Fletcher et Nye, 1982 [Penco et al., 2016]; five new species of the genus *Schreiteriana* were described [Yakovlev et al., 2017]. Examining the materials deposited in the collec-

tion of Thomas Witt (Museum Witt, Munich, Germany), we found a species and genus from Brazil, new to science, its description is provided below.

In the study, the materials have been used from MWM Museum of Thomas Witt (Munich, Germany). The male genitalia slides were examined with a Zeiss Stemi 2000 C microscope and the images were taken with the Olympus XC 50 camera.

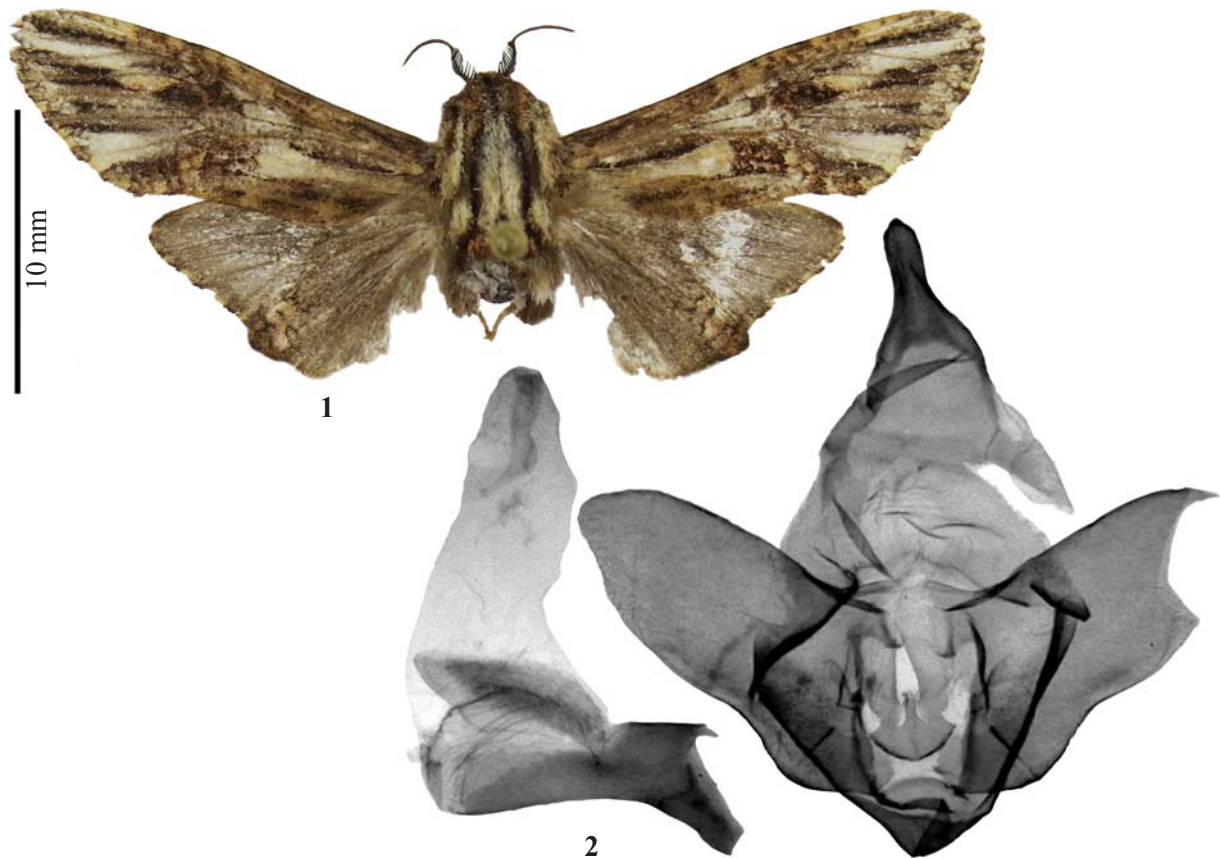
*Listrada* Naydenov, Yakovlev, Penco et Witt, **gen.n.**

Type species — *Listrada sulbaiana* Naydenov, Yakovlev, Penco et Witt, **sp.n.**

**DESCRIPTION.** Size medium, antenna bipectinate from base to middle, distal half filiform. Fore wing elongated, apically sharp, with pattern of longitudinal dark and pale strokes. Hind wing short, apically sharp, anal angle round, color grey with poorly expressed pattern.

Male genitalia (Fig. 2). Uncus short, narrowing in middle third, apically extended clavately; tegumen trapezoidal; gnathos arms belt-shaped, basally wide, apically narrowing; gnathos reduced; valva relatively narrow, of medium length, curved in proximal third of abdominal edge, apically pointed; juxta robust, with wide semicircular base and long wide lateral processes directed dorsally; saccus small, slightly pointed apically; phallus thick, its length approximately equal to valve length, robust cornutus on lateral surface of vesica, small thorn at base.

**DIAGNOSIS.** The new genus has significant distinctive features due to which it is different from all other Neotropical genera of the subfamily Zeuzerinae. The apomorphic features of the new species are: the specific external characters (alternation of longitudinal pale and dark strokes on the fore wing),



Figs 1–2. *Listrada sulbaiana* Naydenov, Yakovlev et Penco, **gen. et sp.n.**, holotype (MWM), male: 1 — Imago; 2 — genitalia (GenPr-Heterocera MWM 28.651)

Рис. 1–2. *Listrada sulbaiana* Naydenov, Yakovlev et Penco, **gen. et sp.n.**, голотип (MWM), самец: 1 — имаго; 2 — гениталии (GenPr-Heterocera MWM 28.651)

the simple valves, absence of the subsuncuses, the very short thick phallus and semicircular base of the juxta.

**ETYMOLOGY.** The name of the new genus is associated with striped pattern on the wings. “Listrado” (Portuguese) means striped.

**COMPOSITION.** The new genus includes a single species.

**DISTRIBUTION.** Currently, this genus is known only from Bahia state of Brazil.

*Listrada sulbaiana*

Naydenov, Yakovlev, Penco et Witt, **sp.n.**

Figs 1–2.

**MATERIAL.** Holotype, ♂, Brasilien, Bahia, Mun. Marau, Fazenda AGUA BOA, 14°13'S/39°29'W, 150 m, 15–22.11.2010, leg. Th. Greifenstein (GenPr-Heterocera MWM 28.651). Paratype, 1 ♂, Brasil, Bahia, env. Camacan, Fazenda “Paris”, 200 m, 15°25'S, 39°32'W, October 2011, leg. H. Thöny (GenPr-Heterocera MWM 29.404).

**DESCRIPTION.** Length of fore wing 12–16 mm. Top of thorax covered with dark and pale brown hairs, from which two dark bands symmetrically fall down. The rest of thorax covered with white hairs. Fore wing elongated, pale brown, with dark chaotic pattern, mostly in form of bands directed to outer edge and also with several light oblong inserts, mainly located in medial-cubital cell, near apex of radial-medial cell, closer to outer edge of wing below vein R3 and near vein M3. Hind wing with small protrusion on outer edge near cubital veins area. In this area, small pattern of transverse wavy

strips. The rest of hind wing without pattern, color grey beige.

Male genitalia. See description of the genus.

**ETYMOLOGY.** The name of the new species is associated with its habitat, the region of South Bahia — “Sul Baiano” (Portuguese).

**DISTRIBUTION.** Known only from South Bahia (Brazil).

**Acknowledgments.** The authors are grateful to Anna Ustjuzhanina (Tomsk, Russia) and Prof. Boris Kondratieff (Fort Collins, USA) for language improvements.

## References

- Penco F.P., Yakovlev R.V., Witt Th.J. 2016. Taxonomic notes on the genera *Brypocxia* Schoorl, 1990 and *Schreiteriana* Fletcher & Nye, 1982 (Lepidoptera, Cossidae) // Zootaxa. Vol.4205. No.3. P.297–300. DOI: 10.11646/zootaxa.4205.3.10.
- Yakovlev R.V. 2014. Redescription of the genus *Miacora* Dyar, 1905 from South America (Lepidoptera, Cossidae) // SHILAP Revista de lepidopterologia. Vol.42. No.165. P.57–60.
- Yakovlev R.V., Penco F.C., Witt T.J. 2016. Redescription of genus *Psychonoctua* Grote, 1865 (Insecta: Lepidoptera, Cossidae, Zeuzerinae) // Biological Bulletin of Bogdan Chmelnitkiy Melitopol State Pedagogical University. Vol.6. No.3. P.46–50.
- Yakovlev R.V., Penco F.C., Witt T.J. 2017. Five new species of the genus *Schreiteriana* Fletcher et Nye, 1982 (Lepidoptera: Cossidae) from Peru and Columbia (South America) // Russian Entomological Journal. Vol.26. No.4. P.339–342.