

Rasa litanga — a new genus and species of Carpenter Moth (Lepidoptera: Cossidae: Cossinae) from Sichuan Province (China)

Rasa litanga — новый род и вид древооточцев (Lepidoptera: Cossidae: Cossinae) из провинции Сычуань (Китай)

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КЛЮЧЕВЫЕ СЛОВА: Cossidae, таксономия, систематика, фауна, новый таксон.

ABSTRACT. The article gives a description of a new genus and species, *Rasa litanga*, **gen. et sp.n.** from highlands of Sichuan (China). The description is given on two female. The images of the adult and genitalia are provided. The taxonomic position of the genus in the subfamily Cossinae has not been exactly defined.

РЕЗЮМЕ. По двум самкам описан новый род и вид *Rasa litanga* **gen. et sp.n.** из высокогорий провинции Сычуань (Китай). Даны изображения имаго, гениталий. Систематическое положение рода внутри подсемейства Cossinae четко не определено.

Introduction

Cossidae of China are quite well studied. All the known data were generalized in the monograph by our colleagues from China [Hua et al., 1990]. Later, we published some supplementary materials: new faunistic data, descriptions of new species, establishing new synonyms [Yakovlev, 2004a, b, 2011; Saldaitis & Ivinskis, 2010; Ivinskis et al., 2012; Yakovlev et al., 2013, 2016]. Examining the highlands of Sichuan province, we collected a female of a species new to science, which was impossible to be attributed to the already described genera.

Material and methods

The genitalia were mounted in Euparal on slides following Lafontaine [2004]. The photographs of collection specimens were taken by the digital camera of Apple

iPhone 7 32GB, illuminated in Lightbox. The genital preparation was made using standard methods, is deposited in a microcapsule on a pin under the holotype. The images were processed using CorelDraw software. The single female was collected at ultraviolet light.

Results

Rasa Saldaitis et Yakovlev, **gen.n.**

Type species *Rasa litanga* Saldaitis et Yakovlev, **sp.n.**

DESCRIPTION. Female. Size medium. Antenna bipectinate, length of crest processes (in middle third of antenna) 1.2 times bigger than rod diameter. Length of antenna equal to 0.5 of fore wing length. Tegula and patagium pale brown. Abdomen covered with orange hairs. Fore wing pale brown, with poorly expressed dark brown pattern of transverse strokes and blurred patches and spots. Hind wing pale brown without pattern.

Female genitalia: ovipositor long, papilla analis semicircular, smooth; posterior apophyses thin, 2 times longer than anterior apophyses; posterior apophyses basally thick, apically narrowing; ostium poorly immersed, cup-like, of small diameter; antrum short, thick; ductus short; bursa bag-like, of medium size, without signa, ductus seminalis flows into place of antrum transition into ductus.

Male unknown.

DIAGNOSIS AND TAXONOMIC POSITION. Judging by the external characters and female genital structure, the new genus belongs to the subfamily Cossinae Leach, 1815 (type genus *Cossus* Fabricius, 1793). This is indicated by the long ovipositor, the small cup-like ostium, the specific appearance of the adult. It is necessary to note that females only of fifteen Cossinae genera (among the 69 described valid genera of the world fauna) have bipectinate antenna: *Paropta*

Staudinger, 1899 (type species *Cossus paradoxus* Herrich-Schäffer, [1851], by monotypy), *Semitocossus* Yakovlev, 2007 (type species *Paropta johannes* Staudinger, 1899, by monotypy), *Brachylia* Felder, 1874 (type species *Brachylia terebroides* Felder, 1874, by monotypy), *Gumilevia* Yakovlev, 2011 (type species *Gumilevia zhiraph* Yakovlev, 2011, by original designation), *Wiltshirocossus* Yakovlev, 2007 (type species *Cossus aries* Püngeler, 1902, by monotypy), *Acossus* Dyar, 1905 (type species *Cossus undosus* Lintner, 1878, by original designation), *Chingizid* Yakovlev, 2011 (type species *Lamellocossus transaltaica* Daniel, 1970, by original designation), *Gobibatyr* Yakovlev, 2004 (type species *Cossus colossus* Staudinger, 1887, by original designation), *Coryphodema* Felder, 1874 (type species *Coryphodema capensis* Felder, 1874, by monotypy), *Brachygystia* Schoorl, 1990 (type species *Cossus mauretanicus* Lucas, 1907, by monotypy), *Eogystia* Schoorl, 1990 (type species *Hypopta sibirica* Alpheraky, 1885, by monotypy), *Isoceras* Turati, 1924 (type species *Isoceras kruegeri* Turati, 1924, by monotypy), *Stygioides* Bruand, 1853 (type species *Stygia colchica* Herrich-Schäffer, 1851, by monotypy), *Dieida* Strand

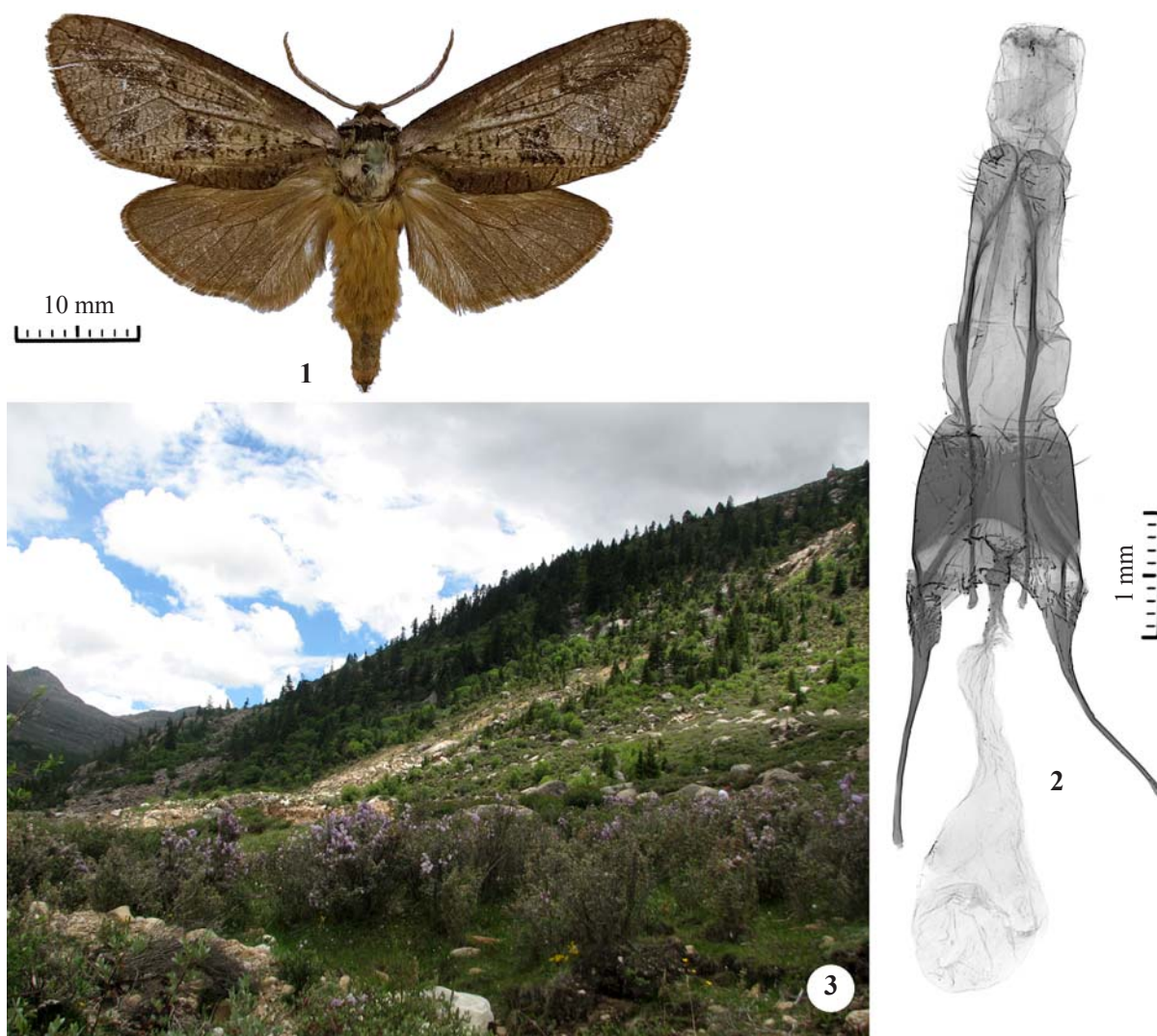
in Stichel, 1911 (type species *Dieida persa* Strand in Stichel, 1911, by monotypy), *Semagystia* Schoorl, 1990 (type species *Endagria agilis* Christoph, 1884, by original designation). The most important distinctive features of the new genus are: the specific fore wing pattern and strong basal thickening of the anterior apophyses. Currently, it is impossible to indicate exactly the allied genera.

Rasa litanga Saldaitis et Yakovlev, **sp.n.**

Figs 1–3.

MATERIAL: holotype, ♀, China, W. Sichuan, near Litang, H4000 m, N 29°49.136', E 100°20.576', 15.vi.2015, leg. Floriani & Saldaitis, (in the micro tube) (coll. ASV = A. Saldaitis (Vilnius, Lithuania) later to be deposited in the WIGJ = World Insect Gallery, Joniškis, Lithuania); paratype, ♀, China, W. Szechuan, 80 km NW Litang, Haizy-Shan, lake, 4500–4600 m, 8.07.2018, leg. M. Markhasev (RYB).

DESCRIPTION. Wingspan 51 mm. Antenna bipectinate. Length of crest processes (in middle third of antenna) 1, 2 times bigger than rod diameter. Length of antenna equal to 0.5 of fore wing length. Tegula and patagium pale brown. Abdomen covered with orange hairs. Fore wing pale brown, with dark brown pattern: costal edge brown with poorly



Figs 1–3. *Rasa litanga*, **gen. et sp.n.**: 1 — female, holotype (ASV/WIGJ); 2 — female genitalia; 3 — biotope (photo by A. Saldaitis).
 Рис. 1–3. *Rasa litanga*, **gen. et sp.n.**: 1 — самка; голотип (ASV/WIGJ); 2 — гениталии самки; 3 — биотоп (фото А. Салдайтиса).

noticeable dark brown transverse strokes, poorly contrast dark brown undulate strokes throughout wing, blurred dark brown patches in discal area (between veins of cubital trunk), dark brown spots merging into oblique band in postdiscal area (between veins of medial trunk), fringe pale brown, unicolorous. Hind wing pale brown without pattern, fringe pale brown, unicolorous.

Female genitalia (Fig. 2) — see the genus description.

Male unknown.

BIOLOGY AND DISTRIBUTION. Single female was collected at ultraviolet light at 15 June, 2015 in a remote part of Litang County in southwestern Sichuan Province's Shaluli Shan mountain range. The new species was collected at altitudes of approximately 4000 meters in mountain mixed forests dominated by various conifer trees, bushes and rhododendron.

ETYMOLOGY. The new genus is named in honor of Rasa Saldaitienė (Vilnius, Lithuania) for her deep understanding and support of the entomological activities of the senior author, "rasa" in Lithuanian language means "morning dew"; species name is toponymical.

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