A new species of the genus *Nygima* Hübner (Lepidoptera: Erebidae) from China

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Abstract: One new species in the tussock moth genus *Nygmia* Hübner, *N. sinustriata* Xie & Wang **sp. nov.**, is described from Hainan and Guangdong Provinces, China. Diagnosis for the new species is provided, along with illustrations of adults and their genitalia.

Key words: Noctuoidea; Lymantriinae; taxonomy

中国靓毒蛾属一新种（鳞翅目：裳蛾科）

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摘要：记述产自中国广东和海南的靓毒属 1 新种：弯带靓毒蛾 *Nygmia sinustriata* Xie & Wang **sp. nov.**，提供新种的鉴别特征、成虫和外生殖器图。

关键词：夜蛾总科；毒蛾亚科；分类

Introduction

The genus *Nygmia* was originally established by Hübner (1820), with *Phalaena icilia* Stoll, 1790 as the type species. These moths occur primarily in the India-Australia Region (Holloway 1999). Members of this genus usually have a slender and digitate uncus in male genitalia (Holloway 1999). Most species of *Nygmia* were previously placed in the *Euproctis* complex until Holloway (1999) revised this genus, mainly based on the moths of Borneo, and recorded 34 species including four new species, one new subspecies, and 29 new combinations. Afterwards, Rose *et al.* (2006) recorded two species from India, Wang *et al.* (2011) reported *Nygmia uniformis* (Moore, 1879) from South China, and Wang *et al.* (2015) assigned *Euproctis staudingeri* (Leech, 1889) to *Nygmia*. To date, approximately 60 species have been recorded in this genus. This paper describes a new species from Hainan and Guangdong Provinces, China, and provides diagnostic characters of this new species, with illustrations of its adults and genitalia.

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Material and methods

The materials were collected by light trapping in Hainan and Guangdong Provinces, China. Holotype and paratypes, are deposited in the Department of Entomology, South China Agricultural University (SCAU), Guangzhou, China. Adults and their genitalia were treated following Wang *et al*. (2010, 2014). Terminology used in this study follows Holloway (1999) and Chao (2003).

Taxonomy

***Nygmia sinustriata* Xie & Wang sp. nov.** (Figs 1–6)

Figures 1–4. Adults of *N. sinustriata* **sp. nov.** 1. Male, holotype; 2. Male, paratype; 3, 4. Females, paratypes. Scale bars = 1 cm.

Description. Adult. Forewing length: ♂26–31 mm, ♀31–40 mm. Antenna bipectinate, yellow, with brown pectinations. Vertex covered with orange-yellow dense hairs. Labial palpus porrect, yellow. Thorax and tegulae orange-yellow scales. Upperside: forewing ground color orange-yellow, with a curved stripe, from middle of dorsum across outer edge of cell to costa, fringe orange-yellow; hindwing and fringe yellow. Underside: forewing yellow, with blackish brown scales from basal costa near to apex; hindwing yellow. Abdomen and tufts yellow. Male genitalia. Uncus digitate, with sharp apex. Tegumen broad. Valva with three process: the dorsal process elongated, finger-shaped; the middle process relatively wide, with membrane at base, gradually pointed towards apex, inner side strongly sclerotized; the ventral process elongated, needle-shaped, arising from the proximal end of valva. Saccus small, triangular. Aedeagus

short, with a small sclerotized plate near the base of vesica.

Figures 5, 6. Genitalia of *N. sinustriata* **sp. nov.** 5. Male genitalia (A. Male genitalia; B. Aedeagus), holotype; 6. Female genitalia, paratype.

Female genitalia. Anterior apophysis and posterior apophysis almost equal in length; ostium larger; ductus slender, long, basally sclerotized; bursa long oval-shaped, with a signum.

Holotype. ♂, **China**, Hainan, Yinggeling National Nature Reserve, 470 m, 19.5°N, 109.30°E, 21-X-2018, coll. Fuhong WEI & Zhipeng MIAO. **Paratypes.** 1♂, same data as holotype; 1♂1♀, **China**, Hainan, Jianfengling National Forest Park, 19–21-X-2006, coll. Min WANG; 1♂, **China**, Guangdong, Xingba Village, Sanshui, Lianzhou, Qingyuan, 11–14-VI-2019, coll. Houshuai WANG; 1♂1♀, **China**, Guangdong, Shimentai Nature Reserve, 30-X-2006, coll. Min WANG.

Etymology. The species epithet is derived from the Latin “sinuosis” and “stria”, referring to forewings having a curved stripe in this new species.

Diagnosis. This new species resembles an unnamed *Euproctis* species from Nepal (Kishida 1993: figs 24, 212, 235), but can be clearly distinguished from the latter by forewing with a curved black stripe; valva with a shorter ventral process,female genitalia with a shorter ductus. This new species is also similar to *Euproctis gilva* (Chao 1983: figs 1, 2) in male genitalia, but can be easily separated from the latter by a curved black stripe on the forewing, and uncus arcuate apically.

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