

The moth *Joelminetia kostjuki* Speidel & Witt, 2007 (Lepidoptera: Pyralidae) newly recorded from China

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Abstract: A newly recorded genus *Joelminetia* Speidel & Witt, 2007 in the family Pyralidae and the newly recorded species *Joelminetia kostjuki* Speidel & Witt, 2007 are reported from South China. Morphological descriptions and illustrations of the genus and species are given.

Key words: Pyraloidea; Galleriinae; taxonomy

中国螟蛾科一新纪录属——靛腊螟属 *Joelminetia* (鳞翅目: 螟蛾科)

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摘要: 记述采自广西那坡的螟蛾科 1 中国新纪录属—*Joelminetia* Speidle & Witt, 2007 和 1 中国新纪录种—柯氏靛腊螟 *Joelminetia kostjuki* Speidel & Witt, 2007, 提供了成虫和外生殖器官特征图。

关键词: 螟蛾总科; 蜡螟亚科; 分类

Introduction

The genus *Joelminetia* was described by Speidle & Witt (2007), based on *Joelminetia kostjuki*, 2007 from Vietnam. *J. latimedia* and *J. michaelshafferi* were described simultaneously. All the three species are very close in outward appearance, but can be distinguished by the male genitalia. Speidle and Witt created the new tribe Joelminetiini for these three species because they did not fit with any known genus or subfamily. *Joelminetia* was provisionally placed in the subfamily Galleriinae (Lepidoptera: Pyralidae). Speidle & Witt (2007) made a detailed comparative analysis of its systematic position. Up to the present, all three species of *Joelminetia* occurred in Asia adjacent to China, but none of them had been found in China before the surveys on the biodiversity of Lepidoptera from South China. This genus is now represented in China by the species *J. kostjuki* Speidle and Witt, 2007 from Guangxi.

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Speidel & Witt named the genus as *Joelminetia* recognizing Dr. Joël MINET (Paris) for his important contributions in the higher systematics of the Pyraloidea. The specific epithet *kostjuki* is derived from Igor KOSTJUK (Zoological Museum, Kiev University, Ukraine). The author named the genus in Chinese as “beautiful”, and the specific epithet in Chinese is from the pronunciation of “KOSTJUK”.

Taxonomy

Joelminetia Speidel & Witt, 2007, new record to China

Joelminetia Speidel & Witt, 2007, *Entomofauna*, 28(17): 202.

Type species: *Joelminetia kostjuki* Speidel & Witt, 2007.

Ocelli present, hidden in strong scaling. Proboscis basally scaled. Labial palpi large, measuring about 2 times the eye-diameter, moderately upturned in both sexes. Maxillary palpi small, but distinct, upturned, scaling different in species. Retinaculum elongate, bar-shaped. Female frenulum consisting of 3 bristles. Forewing with only 4 radial veins, the missing vein is probably R_1 or R_2 , R_3 stalked with R_4 , R_{3+4} stalked with R_5 . M_3 shortly stalked with CuA_1 . Hindwing quadrifine, with M_2 present. $Sc+R_1$ separated from Rs . No clear cubital pecten present.

Uncus narrower or broader, always more or less bilobed, but not densely covered by hairs of spines; Tegumen rather large, with no clear separation towards the uncus; Vinculum with one small saccus. Two large processes with a broad base inserting in the region where tegumen and uncus meet, while only an unpaired process in *J. michaelshafferi*. Valva deeply cleft into a costal and ventral arm, the ventral arm can possibly be interpreted as a saccular process; Aedeagus simple, without specialization. The long bulbus ejaculatorius inserts in the inner dorsal end of the aedeagus, one long aedeagus fold is traced which gives the impression of a cornutus. Ovipositor strongly sclerotized, not specialized. Corpus bursae oval, signum simple or absent.

Joelminetia kostjuki Speidel & Witt, 2007 (Figs. 1–4), new record to China

Joelminetia kostjuki Speidel & Witt, 2007, *Entomofauna*, 28(17): 206. Plate 2, Figs. 6, 8. Plate 3, Figs. 10, 14.

Wingspan. male 35–36 mm, female 44 mm.

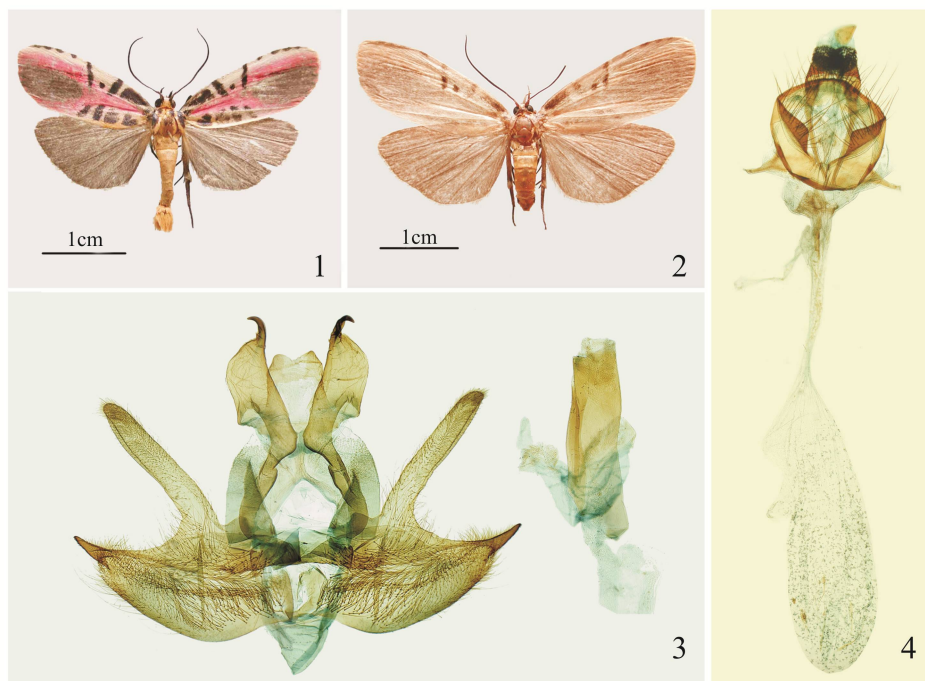
Specimens examined. 3♂1♀, Nian Jing village, Ping Meng town, Laohutiao, Napo County, Guangxi Zhuang Autonomous Region, 30-VII-2008. All materials are deposited in the collection of the Department of Entomology, College of Natural Resources and Environment, South China Agricultural University (SCAU), Guangzhou, China.

Distribution. China (Guangxi); North and South Vietnam.

Differential diagnosis. According to Speidel & Witt (2007), *J. kostjuki* can be distinguished from other species by the following characters.

The medial area of the forewing is narrower than in the other two species. The hindwing is uniformly grey, the other two species hindwing is pale with dark grey marginal area. Uncus slender, apically bilobed. Socii large, stout, especially towards base, slender and larger in *J. latimedia*. Valvae deeply cleft in a dorsal and ventral branch, the ventral branch is much wider than in *J. latimedia*, valvae not cleft into two branches in *J. michaelshafferi*. Aedeagus smaller

than in *J. latimedia*, with an elongate fold which is broad and apically blunt. Corpus bursae is without distinct signum.



Figures 1–4. *Joelminetia kostjuki* Speidel & Witt, 2007. 1, 2. Adults. 1. Male; 2. Female (the color of forewing is similar to male, this specimen was vitiated by ammonia); 3. Male genitalia; 4. Female genitalia.

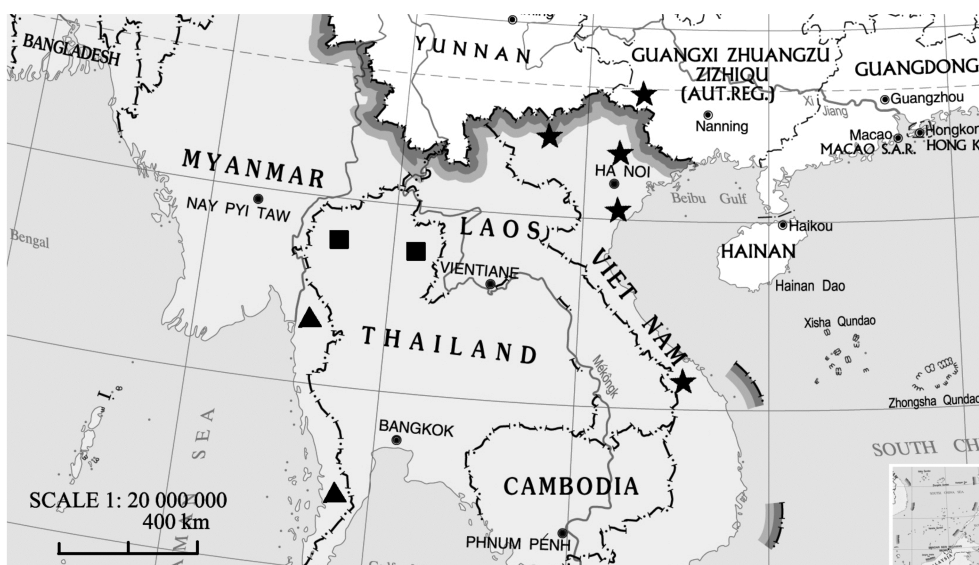


Figure 5. Distribution of *Joelminetia*. *J. kostjuki* (★); *J. michaelshafferi* (▲); *J. latimedia* (■).

Biogeographical features. *J. kostjuki* Speidel & Witt, 2007, the type species of the genus, was originally described from North and South Vietnam. There is no surprise finding it in this new locality, Napo County, South of Guangxi Zhuang Autonomous Region, where this species was newly recorded in this survey. This location is near the northern Vietnam border area, both areas belonging to the subtropical Karst landforms, and also one of the global biodiversity hotspots. This is also the northernmost locality for *J. kostjuki*. The collection localities of all species were marked in the map (Fig. 5).

It is reasonable to suppose that Indochina is the origin of the genus, a hypothesis based on the main distribution of the genus. All three species belonging to *Joelminetia* are distributed in Indochina, but have been discovered from South China, Vietnam, Thailand and Burma separately but are not sympatric. We expect that species of *Joelminetia* will also be found in other regions of Indochina. The current distribution pattern provides guidance for further surveys.

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