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A NEW SPECIES OF *LYMANTRIA* (SUBGENUS *NYCTRIA*) FROM CHINA (LEPIDOPTERA: EREBIDAE: LYMANTRIINAE)

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ABSTRACT

A new species, *Lymantria* (*Nyctria*) *furvinis* H. Wang, Kishida and M. Wang **sp. nov.**, is described from Guangdong Nanling National Nature Reserve, South China. The new species can be distinguished from all previously described species by the basal area on the forewing yellow with black spots, valve with a transverse sclerite connecting a long digitate process medially. Illustrations of the adults, wing venation and genitalia are provided.

Key Words: Guangdong, Nanling, *Lymantria*, *furvinis*, subgenera

RESUMEN

Se describe una nueva especie, *Lymantria* (*Nyctia*) *fuvinis* H. Wnag, Kishida y M. Wang **sp. nov.** de la Reserva Natural Nacional de Guangdong Nanling del Sur de China. La nueva especie se distingue de todas las especies descritas previamente por el área basal en el ala delantera que es amarilla con manchas negras, la valvula con un esclerito transversal que conecta un proceso digitado largo por el medio. Se proveen ilustraciones de los adultos, la nervadura de las alas y los genitales.

Lymantria is a worldwide distributed genus with high diversity in the Indo-Australia and Eastern Asian regions (Ferguson 1978; Holloway 1999). The genus can be clearly defined by the telescopic female ovipositor and the eighth segment structures being as long or longer than the ductus bursae and corpus bursae combined (Holloway 1999). Schintlmeister (2004) reviewed the genus including 167 species and divided it into 12 subgenera. Pogue and Schaefer (2007) revised selected *Lymantria* species of subtropical and temperate regions of Asia, with 3 new species. In China, 53 species of the genus have been reported to date (Chao 2003; Xu et al. 2010). In this paper, we describe a new *Lymantria* species collected in Guangdong Nanling National Nature Reserve, South China during our Lepidoptera field survey.

MATERIALS AND METHODS

The specimens examined were collected by light trapping from Nanling National Nature Reserve, Guangdong province, China, and were deposited in the Insect Collection, Department of Entomology, South China Agricultural University, Guangzhou, China, and National Museum of Nature and Science, Tokyo, Japan. Adults, wing venation and genitalia were treated and photographed following Wang et al. (2010).

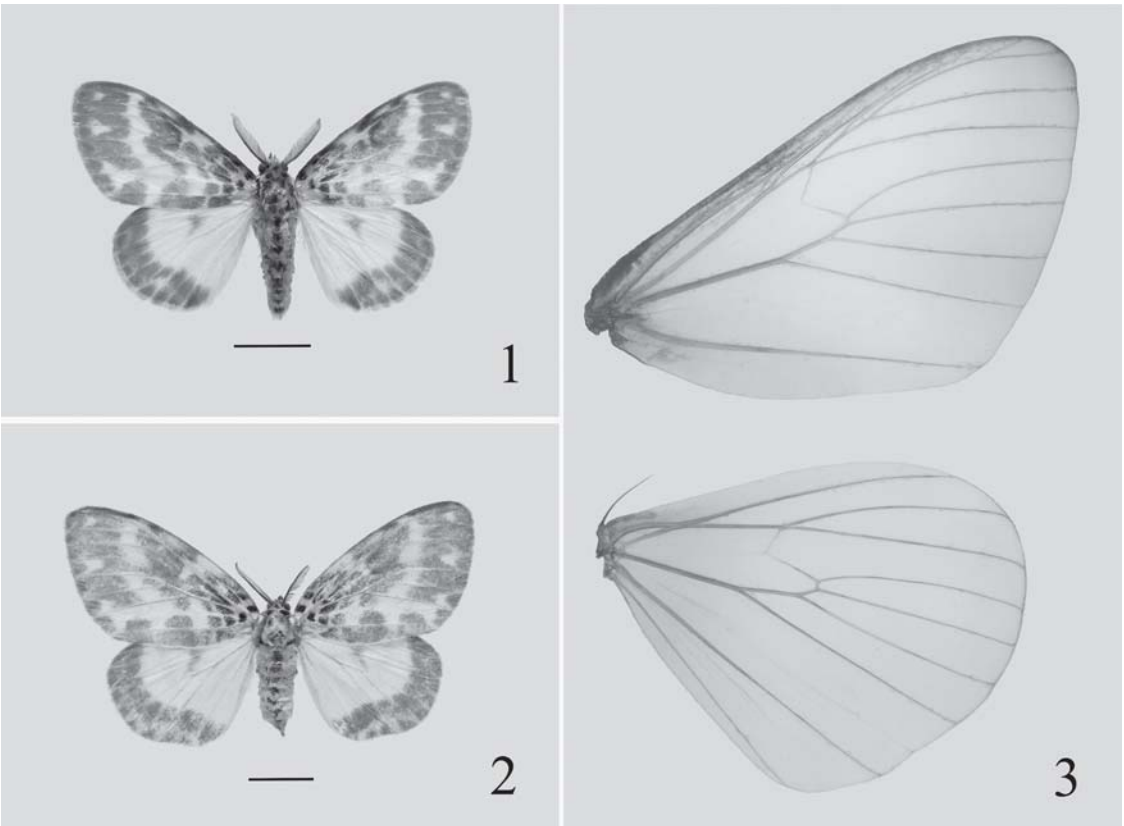
Lymantria (Nyctria) furvinis H. Wang, Kishida and M. Wang **sp. nov.** (Figs. 1-5)

Diagnosis

The new species is very close to *Lymantria (Nyctria) murzini* Schintlmeister in male genitalia structure, but can be easily separated from the latter by the base of forewing yellow with black spots and a shorter and wider valve.

Description

Male and Female (Figs. 1-3). Forewing length 24-30 mm. Frons dark brown. Vertex yellow with a black spot. Labial palpus short, upturned, yellow on ventral surface, fuscous on dorsal and lateral surface. Thorax yellow, with 3 pairs of black dots. Tegula dark brown, with a white marking. Forewing pattern brown, basal area yellow, with black spots, ground color white, forming a prominent costal patch at basal 1/3, a broad postmedial band, crossed by a dumbbell-shaped band from below discal cell to anal angle, spot at apex and between M_1 and M_3; venation with R_2, R_3, R_4 and R_5 stalked, R_5 diverging from stem after R_2, M_1 arising from upper angle of discal cell, M_2 and M_3 arising from under angle of discal cell, CuA_1 parallel to CuA_2. Hind wing white with a broad brown marginal band, discal spot brown, fringe white; venation with Rs and M_1 branching from upper angle of discal cell, M_3 arising from under angle of discal cell, M_2, M_3 and CuA_1 free, nearly parallel. Abdomen yellow, with a row of black dorsal spots medially.



Figs. 1-3. Adults and wing venation of *Lymantria (Nyctria) furvinis* H. Wang, Kishida and M. Wang **sp. nov.**. 1. Male, holotype, upperside; 2. Female, paratype, upperside; 3 Wing venation (male, paratype). Scale bar = 10 mm.

Male Genitalia (Fig. 4): Tegumen wide on both sides, concave medially; uncus long, digitate, apically with small acute hook; valve broad, transvere sclerite connecting long digitate process at middle; cucullus with two digitate processes, dorsal one short, ventral one long, slightly bent medially; saccus relatively small; aedeagus straight, almost twice as long as valve, slender at base.

Female Genitalia (Fig. 5): Papillae anales tougue-shaped; ostium bursae oval, membranous, with 2 sclerotized lobes; posterior apophysis longer than anterior apophysis; ductus bursae shorter than corpus bursae, slightly sclerotized; corpus bursae oblong, with a signum.

Type Data

Holotype: ♂, Nanling National Nature Reserve, Guangdong Province, China, 8-VI-2008, leg. Min Wang. Paratypes: 1♀, same locality as holotype, 18-VI-2003, leg. Yasunori Kishida; 11♂, 3♀, same locality as holotype, 18-22-VI-2004, leg. Yasunori Kishida; 2♂, 6♀, same locality as holotype, 11-15-VI-2005, leg. Yasunori Kishida; 1♂, 2♀, same locality as holotype, 5-VI-2011, leg. Houshuai Wang.

Distribution: China (Guangdong Province).

Etymology

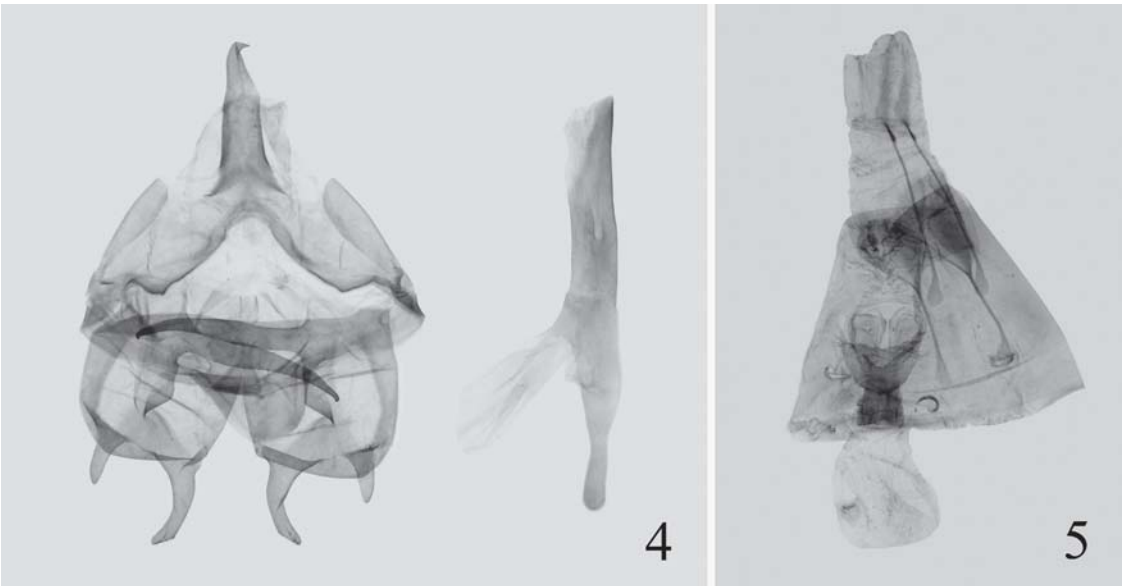
The specific name is derived from Latin prefix, "furv-" (black) and suffix "-inis", referring to the color of dorsal spots on the abdomen.

Discussion

Due to no suitable subgenus for it, the new species is temporarily assigned into *Nyctria* based on the similarity of its male genitalia characters with *Lymantria (Nyctria) murzini Schintlmeister*. However, the new species lacks sexual dimorphism and has a signum on the female genitalia, and is greatly different from the other members of the subgenus, especially the type species *L.* (*Nyctria*) *mathura* illustrated by Schintlmeister (2004). Further study is therefore required to reconsider the taxonomic position of the new species within the genus *Lymantria*.

Acknowledgments

We greatly appreciate Dr. Alexander Schintlmeister (Dresden, Germany) for helping us identify the species.



Figs. 4 and 5. Genitalia of *Lymantria (Nyctria) furvinis* H. Wang, Kishida and M. Wang **sp. nov.**. 4. Male; 5. Female.

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