



## Taxonomic study of the genus *Promalactis* Meyrick (Lepidoptera, Oecophoridae) from Hainan Province, China

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### Abstract

Fifteen species of the genus *Promalactis* Meyrick, 1908 are recorded from Hainan Province, China, including ten new species: *P. rostriformis* sp. nov., *P. fascispinata* sp. nov., *P. apicisetifera* sp. nov., *P. hainanensis* sp. nov., *P. tauricornis* sp. nov., *P. clavata* sp. nov., *P. lunularis* sp. nov., *P. carinata* sp. nov., *P. serrata* sp. nov. and *P. uncignatha* sp. nov. The previously unknown female of *P. multimaculella* Lvovsky, 2000 is described. Images of adults and genitalia are provided.

**Key words:** Lepidoptera, Oecophoridae, *Promalactis*, new species, China

### Introduction

The genus *Promalactis* Meyrick, 1908 is a large Palaearctic and Oriental genus with 163 valid species. It is represented by the combination of the following characters: the colorful forewing has various patterns; the male genitalia are symmetrical or asymmetrical, and the gnathos is usually tongue-shaped; the female lamella postvaginalis is much developed or indistinct. To date, eighty-nine species are recorded in China, distributed throughout most of the country (Wang 2006; Wang & Jin 2007; Du *et al.* 2009; Wang *et al.* 2009). However, only one species, *P. suzukiella* (Matsumura, 1931), was recorded from Hainan Province prior to this study. The aim of this paper is to report fifteen species based on specimens collected from Hainan Province during an entomological expedition carried out from June, 2007 to September, 2010.

Little is known of the habitat of *Promalactis* larvae. In Asia, some pupae of *P. suzukiella* (Matsumura) were found under the bark of *Prunus persica*, and the pupae of *P. odaiensis* Park were collected under the bark of *Pinus densiflora* and *Prunus persica* (Park 1981; Park & Park 1998). In the United States, larvae of *P. suzukiella* (Matsumura) lived under the bark of rotting logs of chokecherry, *Prunus virginiana*, and oak, *Quercus* sp. (Adamski *et al.* 2009).

### Material and methods

The examined specimens were collected using light traps. Genitalia dissections follow Li (2002). All of the studied specimens, including types, are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

### Key to species of *Promalactis* from Hainan Province based on external characters

- 1 Forewing with white markings ..... 2
- Forewing with black or deep gray markings and white lines or streak. .... 13
- 2 Forewing without basal fascia or streak (fig. 12) ..... *P. multimaculella* Lvovsky
- Forewing with basal fascia/e or streaks. .... 3