



Five species of the genus *Agonopterix* Hübner (Lepidoptera: Depressariidae) from China

ALEXANDR L. LVOVSKY¹ & SHUXIA WANG²

¹Zoological Institute, Russian Academy of Sciences, Universitetskaya nab., 1. 199034 St. Petersburg, Russia. E-mail: lepid@zin.ru

²College of Life Sciences, Nankai University, Tianjin 300071, P. R. China. E-mail: shxwang@nankai.edu.cn

Abstract

The *costaemaculella* species group of *Agonopterix* is reviewed. Six species are recognized: *A. costaemaculella* (Christoph, 1882), *A. leptopa* (Diakonoff, 1952), *A. burmana* Lvovsky, 1998, stat. rev., *A. likiangella* **sp. nov.**, *A. ventrangulata* **sp. nov.** and *A. hoenei* **sp. nov.** *Agonopterix burmana* and *A. leptopa*, previously known only from Myanmar (Burma), are newly recorded from China. Images of the adults and illustration of the genitalia are provided, along with a key to the species of the *costaemaculella* group.

Key words: Lepidoptera, Depressariidae, *Agonopterix*, new species, China

Introduction

The genus *Agonopterix* Hübner, [1825] is represented by about 240 species (Lvovsky 2001), distributed mainly in the Northern Hemisphere. It is characterized by having relatively broad wings which are folded horizontally at rest, the labial palpus upcurved, the forewing usually with veins Cu₁ and Cu₂ stalked, the male genitalia with the gnathos as a knob and the valva with a single narrow process (cuiller) on the distal end of sacculus. Among them is a group of species close to *A. costaemaculella* (Christoph, 1882). These species have a distinctive appearance: white or very pale forewings with a large black spot. *Agonopterix costaemaculella* is recorded from the Far East of Russia (Lvovsky 1999, 2001), Korea (Park 1983), Japan (Moriuti 1982), eastern China (Liu 1981) and Indian Himalayas (Meyrick 1910). *Agonopterix leptopa* (Diakonoff, 1952) was described from north-eastern Myanmar (Diakonoff 1952). The subspecies *Agonopterix costaemaculella burmana* Lvovsky, 1998 was also described from Myanmar, but now it and *A. leptopa* are here newly recorded from China. By comparison with the new species described here, *A. costaemaculella burmana* Lvovsky is considered to be a good species and its rank is thus elevated.

Key to species of the *costaemaculella* group based on male genitalia

- 1 (8). Gnathos rounded (Figs. 6–9)
- 2 (7). Aedeagus long, 3–4 times longer than cuiller (sclerotized process on the distal end of sacculus).
- 3 (6). Cuiller long, reaching upper margin of valva (Figs. 6–7)
- 4 (5). Socii large. Saccus oblong in shape. Aedeagus slightly curved (Fig. 6). *A. likiangella* **sp. nov.**
- 5 (4). Socii small. Saccus bow-shaped. Aedeagus strongly arched (Fig. 7). *A. leptopa*
- 6 (3). Cuiller short, not reaching upper margin of valva (Fig. 8) *A. ventrangulata* **sp. nov.**
- 7 (2). Aedeagus short, only 2 times longer than cuiller (Fig. 9). *A. hoenei* **sp. nov.**
- 8 (1). Gnathos oblong (Figs. 10–11)
- 9 (10). Aedeagus 4 times longer than cuiller (Fig. 10) *A. costaemaculella*
- 10 (9). Aedeagus 2.5 times longer than cuiller (Fig. 11) *A. burmana*