



<http://dx.doi.org/10.11646/zootaxa.3641.5.3>

<http://zoobank.org/urn:lsid:zoobank.org:pub:303D5CEC-E7B1-4988-8479-CD51BB278C24>

Taxonomic review of Chinese *Phalonidia* Le Marchand, 1933 (Lepidoptera: Tortricidae: Cochylini)

YINGHUI SUN & HOUHUN LI¹

College of Life Sciences, Nankai University, Tianjin 300071, P. R. China

¹Corresponding author. E-mail: lihounun@nankai.edu.cn

Abstract

The Chinese species of *Phalonidia* Le Marchand, 1933 are reviewed. Sixteen species and one subspecies are treated, including three new species (*P. brevifasciaria*, **sp. nov.**, *P. rotundiventralis*, **sp. nov.**, and *P. tenuispiniiformis*, **sp. nov.**) and three newly recorded species or subspecies (*P. affinitana tauriana* (Kennel, 1899), *P. aliena* Kuznetsov, 1966, and *P. coreana* Byun & Li, 2006). The female of *P. lydiae* (Filipjev, 1940) is described for the first time. Images of adults and genitalia are provided, along with a key and a distribution map for the genus in China.

Key words: Lepidoptera, Tortricidae, Cochylini, *Phalonidia*, new species, new record, China

Introduction

The genus *Phalonidia* Le Marchand, 1933 is one of the larger genera in Cochylini (Tortricinae). Gilligan *et al.* (2012) list 102 valid *Phalonidia* species, but omit *Phalonidia felix* (Walsingham, 1895), a species recently transferred from *Platphalonidia* by Razowski (2011).

Phalonidia historically included many species currently assigned to *Gynnidomorpha*. Fifteen *Phalonidia* (*sensu lato*) species were listed in Byun (1998), which were divided into two groups: the *aliena*-group and the *minima*-group. The *aliena*-group contains nine species belonging to *Phalonidia* (*sensu stricto*). Razowski (2009) recorded 21 species of *Phalonidia* from the Palearctic Region, and Liu (2002) recorded 19 species of *Phalonidia* (*sensu lato*) from China, 11 of which belong to *Phalonidia* (*sensu stricto*); Byun & Li (2006) reported the first record of *P. fraterna* Razowski, 1970 from China. Prior to this study, 12 species of *Phalonidia* (*sensu stricto*) were recorded from China.

The aim of the present paper is to review the Chinese species of *Phalonidia*. Of the 16 species and one subspecies treated herein, three are described as new and three are newly recorded for China. The female of *Phalonidia lydiae* (Filipjev, 1940) is described for the first time.

Material and methods

This study is based on the examination of specimens collected using light traps in the nature reserves and mountainous areas of China. Morphological terminology follows Razowski (1987). Genitalia were prepared and mounted according to the methods presented by Li (2002). Images of adults were taken with a Nikon D300 digital camera with a macro lens, and images of the genitalia were captured using an Olympus C-7070 digital camera attached to an Olympus BX51 microscope. The distribution map was made using DIVA-GIS 7.5.0 software (Hijmans *et al.* 2011) based on longitude and latitude and subsequently modified in Photoshop CS5. All examined specimens, including the types of the new species, are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China. Type locality is abbreviated as “TL”.