



Three new species, two newly recorded species and one newly recorded genus of Lithocolletinae (Lepidoptera: Gracillariidae) from China

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Abstract. The Chinese representatives of the genera *Chrysaster* Kumata and *Cameraria* Chapman (Gracillariidae: Lithocolletinae) were studied. *Chrysaster* is recorded for the first time in China. Three species belonging to *Cameraria*, *C. diplodura* Bai, **sp. nov.**, *C. rhynchophysa* Bai, **sp. nov.** and *C. jiulianshanica* Bai, **sp. nov.**, are described as new. *Chrysaster hagicola* Kumata and *Cameraria magnisignata* Kumata are new records for China. Adults and genitalia of the five species are illustrated. A key to the Chinese species of *Cameraria* is provided.

Key words: China, Gracillariidae, Lithocolletinae, new species, new records, taxonomy

Introduction

The genus *Chrysaster* was established by Kumata in 1961 based on Japanese species. It consists of two species, distributed in Japan, Korea, Far East of Russia, U.S.A. and Canada (Kumata 1961; De Prins & De Prins 2005, 2014). In the present paper, we record this genus for the first time in China.

De Prins & Kawahara (2012) studied the Afrotropical species of *Cameraria* Chapman and provided a new and comprehensive concept on this genus. Of the 11 lithocolletine genera *Cameraria* is the second largest genus, comprising 79 species worldwide, mainly distributed in the Nearctic, Palearctic, Oriental and Afrotropical regions. A total of 18 named species are recorded in the Palearctic and Oriental regions, 13 of them described by Kumata. One species, *C. pongamiae* Kumata, has previously been recorded in China. Based on the Chinese specimens now examined, four species are added to the fauna of China. Three of them are herewith described as new: *Cameraria diplodura* Bai, **sp. nov.**, *C. rhynchophysa* Bai, **sp. nov.** and *C. jiulianshanica* Bai, **sp. nov.** *C. magnisignata* Kumata is recorded for the first time from China.

Material studied

Adult specimens of *Cameraria jiulianshanica* Bai, **sp. nov.** and *Chrysaster hagicola* Kumata were collected by light trap. The other species were reared from immature stages.

All the specimens studied are deposited in the Insect Collection, Department of Bioscience and Biotechnology, Changzhi College, Changzhi, Shanxi, China.

Methods

Wingspan was measured from the tip of the left wing to the tip of the right wing based on well-mounted specimens. Adult external morphology was examined by using an Olympus SZX-7 stereomicroscope (maximum magnification 56×), and photographs were taken with a Leica DFC-450 digital camera connected to a Leica M-205C stereomicroscope. Genitalia were prepared following the methods of Li & Zheng (1996). Dissections of genitalia were conducted under an