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# Four new species of the genus *Chrysoteuchia* Hübner (Lepidoptera: Crambidae: Crambinae) from China

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## Abstract

Four new species of the genus *Chrysoteuchia* Hübner are described from China: *C. rotundiprojecta* Li & Li, **sp. n.**, *C. nonifasciaria* Li & Li, **sp. n.**, *C. furva* Li & Li, **sp. n.** and *C. shafferi* Li & Li, **sp. n.** The female of *C. hyalodiscella* (Caradja, 1927) is described for the first time. Images of both adults and genitalia of the new species are provided. The distribution data of the thirty-two known Chinese species are presented, along with two maps showing the localities of these species.

**Key words:** Lepidoptera, Crambidae, Crambinae, *Chrysoteuchia*, new species, China

## Introduction

The genus *Chrysoteuchia* was established by Hübner in 1825, with *Tinea hortuella* Hübner, 1796 as the type species. Members of the genus usually have a well-developed sacculus with a distal prong in the male genitalia, which is supposed to be a potential synapomorphy of the genus through our observation.

*Chrysoteuchia* comprises thirty species worldwide (Bleszynski 1965; Inoue 1989; Landry 1995; Chen *et al*. 2001, 2003), distributed mostly in the Oriental and eastern Palearctic regions except *C. culmella* (Linnaeus, 1758) which extends to Europe and *C. topiaria* (Zeller, 1866) which is endemic to North America. Prior to this study, twenty-eight species of *Chrysoteuchia* were recorded in China. In the present paper, we describe four new species and report the female of *C. hyalodiscella* (Caradja, 1927) for the first time. The distribution data of all the known Chinese species are provided (Appendix) based on the specimens deposited in the Insect Collection, College of Life Sciences, Nankai University (NKUM) and the related literature (Caradja & Meyrick 1935; Bleszynski 1965; Yoshiyasu 1992; Chen *et al*. 2001; Wang *et al*. 2003). Two maps are given showing the localities of these species (Figures 1–2).

## Material and methods

The specimens examined were collected from different Nature Reserves and Mountains in China from 1980 to 2009. Terminology follows Bleszynski (1965). Genitalia were prepared and mounted according to the methods described by Li (2002). Images of the adults were taken using the digital camera NIKON D300. Illustrations of the genitalia were prepared using the digital camera ZEISS AxioCam MRc5 attached to a microscope NIKON Eclipse 600. The geographic coordinates were taken from Wu *et al.* (1997). Cartographs were made using DIVA GIS 5.2 (Hijmans *et al.* 2005) based on the longitude and latitude degrees shown in Appendix. All the studied specimens are deposited in NKUM.

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