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Article



The genus *Scrobipalpa* Janse (Lepidoptera, Gelechiidae) in China, with descriptions of 13 new species

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Abstract

Fifty-six *Scrobipalpa* species are recorded for China, with supplementary material from some other countries. A checklist of all the species and distribution data are given, with special notes on some known species. Thirteen new species are described: *S. distincta* **sp. n.** (Ningxia, Henan), *S. erichiodes* **sp. n.** (Gansu, Hebei, Heilongjiang, Inner Mongolia, Ningxia, Shaanxi, Xinjiang), *S. flavidinigra* **sp. n.** (Ningxia, Inner Mongolia), *S. flavimaculata* **sp. n.** (Qinghai), *S. flavinerva* **sp. n.** (Inner Mongolia: Mongolia: East Aimak), *Scrobipalpa fusca* **sp. n.** (Inner Mongolia, Xinjiang; Uzbekistan, Turkmenistan, SE Kazakhstan), *S. hoenei* **sp. n.** (Yunnan), *S. latiuncella* **sp. n.** (Ningxia), *S. nigrigrisea* **sp. n.** (Tibet), *S. nigripuncta* **sp. n.** (Henan), *S. ochrostigma* **sp. n.** (Gansu), *S. sinica* **sp. n.** (Inner Mongolia) and *S. strictella* **sp. n.** (Hebei). 32 species are recorded for China for the first time. Hitherto unknown males of *S. sattleri* Lvovsky & Piskunov, 1989 and *S. caryocoloides* Povolný, 1977 are described. The lack of signum in the female genitalia of *S. ochrostigma* is recorded for the first time for the genus *Scrobipalpa*. Images of the adults and illustration of the genital structures of the new species and some known species are provided.

Key words: Gelechiidae, Scrobipalpa, new species, new records, check-list, China

Introduction

The genus *Scrobipalpa* Janse, 1951 comprises more than 300 described Palaearctic species. It is considered the richest genus in the tribe Gnorimoschemini and one of the most diverse genera in the family Gelechiidae. The number of undescribed Palaearctic species is estimated to be about 80–100 (Povolný 2002: 27). Povolný (2002) treated *Scrobipalpa* (type-species *Gelechia heliopa* Lower, 1900) as an Australian genus with two species, whereas he placed the Palaearctic members of "*Scrobipalpa*" in a separate genus, *Euscrobipalpa* Povolný, 1967 (type species *Bryotropha indignella* Staudinger, 1879). This opinion is not generally accepted given the high variability of genitalia of both sexes in the genus *Euscrobipalpa* and overlapping of the diagnoses of both genera. Recently *Euscrobipalpa* was synonymized with *Scrobipalpa* (Park and Ponomarenko 2007: 59).

The genus *Scrobipalpa*, as well as Gnorimoschemini in general, has never been specially studied in China. One species was described by Meyrick (1931) and three species were described later from China by Povolný (1969, 1984, 2002) based on the material collected by H. Höne in the north of Yunnan Province, V. Zouhar and W. Mey in the north and west of China. Some additional species were recorded by Piskunov (1980), Park *et al.* (2000), Li (2002), and Ponomarenko *et al.* (2006). Most of these records were included in the monographs on the Palaearctic Gnorimoschemini by Povolný (2002). Thus 11 species were recorded for China prior to our study.

Our study is based mainly on the material deposited in the Insect Collection of Nankai University (NKUM), collected in different parts of China during past 30 years. We also studied some additional