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An updated checklist of Thyatirinae (Lepidoptera, Drepanidae) from China, with descriptions of one new species

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Abstract

A total of three tribes, 38 genera and 148 species of Thyatirinae from China are listed together with one dubious record. Of these, one new species, *Stenopsestis bruna* sp. nov., is described. *Macrothyatira danieli* Werny, 1966, **stat. rev.**, is restored to specific rank. *Cymatophora subampliata* Houlbert, 1921, is downgraded to subspecific rank as *Tethea (Tethea) albicostata subampliata* (Houlbert, 1921), **stat. nov.** Two genera, four species and three subspecies are recorded for the first time from China (*Chiropsestis* Laszlo, Ronkay & Ronkay, 2001, *Hiroshia* Laszlo, Ronkay & Ronkay, 2001, *Chiropsestis rubrocineria* Laszlo, Ronkay & Ronkay, 2001, *Hiroshia albinigra* Laszlo, Ronkay & Ronkay, 2001, *Parapsestis hausmanni* Laszlo, Ronkay, Ronkay & Witt, 2007, *Spica luteola* Swinhoe, 1889, *Parapsestis cinerea pacifica* Laszlo, Ronkay, Ronkay & Witt, 2007, *Tethea (Saronaga) consimilis aurisigna* Bryk, 1943, *Nothoploca nigripunctata fansipana* Laszlo, Ronkay & Ronkay, 2001). Ten misidentifications in Zhao (2004) are corrected. Illustrations of external features and genitalia of the new taxa and new records are presented.

Key words: fauna, taxonomy, morphology, distribution

Introduction

The Thyatiridae was established by Smith (1893). They were known as Cymatophoridae Herrich-Schäffer, 1847 for a long time. However, the type-genus *Cymatophora* Treitschke, 1825, is a junior homonym of *Cymatophora* Hübner, 1812 (Geometridae, Ennominae, type-species: *Cymatophora approximaria* Hübner, 1812, from North-America), so Cymatophoridae was invalid and replaced by Thyatiridae under the Code (1999, 4th Edition, Article 39). Later, Thyatiridae were downgraded to a subfamily of the Drepanidae by Minet & Scoble (1999) and Kristensen *et al.* (2007), according to the synapomorphy in the adult, viz. the possession of abdominal tympanal organs associated with the tergo-sternal sclerites, which connect tergum 1 with sternum 2. The taxonomic position of the Thyatirinae was also supported by molecular data (Wu *et al.* 2010).

Species of Thyatirinae are mainly distributed in Eurasia, especially in the East Asian and Himalayan region (Laszlo *et al.* 2007). Up to the present, more than 50 genera and 300 species have been recognized in the Thyatirinae, and approximately half of all species recorded in China. Most species of Thyatirinae were identified by different authors during the late nineteenth century and early twentieth century. Warren (1912), Houlbert (1921) and Gaede (1930) summarised previous works on Thyatirinae. The most important and basic work on Thyatirinae was finished by Werny (1966) in the mid-twentieth century. He reviewed 180 species globally, belonging to 43 genera in 10 tribes of 2 subfamilies. However, his tribal classification is confusing, and many subspecies were described. Yoshimoto (1982–1996) widely studied the East Asian Thyatirinae, described many new species, and summarised the Taiwanese species in “Lepidoptera of Taiwan” (Yoshimoto 1992). Laszlo with co-authors (1999, 2000, 2001) studied the Eurasian Thyatirinae. After long-term study and examining much material from different sources, Laszlo *et al.* (2007) published a book titled “The Thyatiridae of Eurasia including the Sundaland and New Guinea (Lepidoptera)”. The book comprehensively summarised the Thyatirinae fauna of Eurasia and south-eastern Asian to Papua New Guinea; 46 genera and 212 species were covered, including more than 40 new species or

Distribution. China (Tibet), India, Nepal.

Remarks. This species is recorded from China for the first time.

***Spica parallelangula* Alphéraky, 1893**

Spica parallelangula Alphéraky, 1893: 346. Type-locality: Central Asia.

Plusinia aurea Gaede, 1930: 662, pl. 85d. Type-locality: Burma, Hpimaw. Holotype ♀ (BMNH).

Distribution. China (Shaanxi, Ningxia, Gansu, Hubei, Hunan, Guangxi, Sichuan, Chongqing, Yunnan), Myanmar.

Dubious record

Genus *Euthyatira* Smith, 1891

Euthyatira Smith, 1891: 34. Type-species: *Thyatira pudens* Guenée, 1852, by subsequent designation by Grote, 1895.

Monothyatira Werny, 1966: 26 (key), 232. Type-species: *Thyatira pryeri* Butler, 1881, by original designation.

***Euthyatira pryeri* (Butler, 1881)**

Thyatira pryeri Butler, 1881a: 172. Type-locality: Japan, Yokohama. Holotype ♂ (BMNH).

Distribution. Japan; ? China (Shaanxi).

Remarks. Zhao (2004) recorded “Taibaishan, 1♂1♀”, but we have not found these two specimens. Laszlo *et al.* (2007) considered that this species is endemic to Japan. The record from China is doubtful.

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