

Article



A taxonomic revision of *Tridrepana* Swinhoe, 1895 in China, with descriptions of three new species (Lepidoptera, Drepanidae)

WENHUI SONG¹, DAYONG XUE² & HONGXIANG HAN^{2,3}

¹Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101 China & Graduate University of Chinese Academy of Sciences, Beijing 100049 China. E-mail: songwh@ioz.ac.cn

²Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101 E-mail: xuedy@ioz.ac.cn

³Corresponding author. E-mail:hanhx@ioz.ac.cn

Abstract

The genus *Tridrepana* Swinhoe in China is reviewed, nineteen species are recognized, of which, three new species *T. sub-adelpha* **sp. nov.**, *T. bicuspidata* **sp. nov.** and *T. subunispina* **sp. nov.** from Yunnan and Hainan are described; two new synonyms are introduced: *T. leva* Chu & Wang, 1988. syn. n. (= *T. crocea* (Leech, 1888)) and *T. flava sinica* Chu & Wang, 1988. syn. n. (= *T. flava flava* (Moore, 1879)); *T. emina* is sunk to be a subspecies of *T. arikana*; *T. argentistriga* Warren, 1896 and *T. rubromarginata indica* Watson, 1957 are recorded in China for the first time. Descriptions for the genus and new species, a key and diagnoses for the Chinese species are provided. Illustrations of the external features and the genitalia are presented.

Key words: Drepanidae, *Tridrepana*, taxonomy, revision, new species, new synonymy, China

Introduction

The genus *Tridrepana* includes brightly coloured typical tropical moths, distributed mainly in the tropics and subtropics of the Oriental region, with highest diversity in Southeast Asia; a few species are known from the northeast of the Australian region.

Tridrepana was erected by Swinhoe (1895) for part of Hampson's (1893) section III of *Drepana* Schrank, and originally included only four species: *T. albonotata*, *T. sadana*, *T. xanthoptera* and *T. vira*, with no designated type species. Warren (1922) cited the generic name *Tridrepana* as *Iridrepana* which was regarded as an erroneous subsequent spelling, and designated *Drepana albonotata* Moore as the type species of the genus. Nagano (1917) published a monotypic genus *Konjikia* based on *Drepana crocea* Leech, which was synonymized with *Tridrepana* by Watson (1957).

Many species were placed in *Drepana*, *Agnidra*, *Callidrepana* and *Konjikia* by Warren (1903, 1922), Kirby (1892), Swinhoe (1895) and Nagano (1917). Watson (1957) made a thorough revision of *Tridrepana*, in which thirty four species with twenty four subspecies were listed, including eleven new species and eleven new subspecies. He divided the genus into seven species groups based on the external features and the male genitalia. Inoue (1962) listed two species from Japan. Watson (1968) listed seven species from China. Wilkinson (1972) added two new species *T. astralaina* and *T. clinala* from Nepal. Holloway (1976) recorded three species and one subspecies in Borneo. Later he (Holloway, 1998) revised Bornean *Tridrepana* again and recorded seven species with nine subspecies, including one new species *T. brunneilinea*. Chen (1985) described one new species *T. bifurcata* from China. Chu & Wang (1988) listed thirteen species with three subspecies, including five new taxa in their systematic study of *Tridrepana* in China. Up to now, there are forty three species with twenty six valid subspecies known in the world, and fifteen species with six valid subspecies in China.

In recent years, new materials have been collected or discovered in collections, and new taxa need to be described. The purposes of this paper are: to review the Chinese fauna of *Tridrepana*; to describe three new spe-