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Abstract

A complete taxonomic catalogue of the Stick and Leaf-insects (Phasmatodea) recorded or described from the mainland China (excluding Taiwan) is presented. 241 valid species are listed, which are currently attributed to 50 genera, 5 families and 7 subfamilies. Genera and species are listed alphabetically. All available type-data is provided based mainly on literary sources for species described by Chinese workers from 1986 to 2006, including documented depository of type-specimens. The catalogue therefore also provides complete lists of the type-material of Phasmatodea housed in the following Chinese institutions: Administration of Baishuijiang Natural Reserve (ABNR), Beijing Forestry University, Beijing (BFU), China Agricultural University, Beijing (CAU), Geological Museum of China, Beijing (GMC), Inca Science Ltd., Chongqing (INCA), Institute of Zoology, Chinese Academy of Sciences, Beijing (IZCAS), Department of Biology, Nankai University, Tianjin (NKU), Northwest Sci-Tech University of Agriculture and Forestry, Shaanxi (NWAU), Institute of Zoology, Shaanxi Normal University, Xi'an (SNU), Institute of Entomology, Sun Yat-sen University (ICRI), Shanghai Institute of Entomology, Academia Sinica, Shanghai (SIES), Tianjin Natural History Museum, Tianjin (TMNH), Zhejiang Museum of Natural History, Hangzhou (ZMNH). The known distribution of each species, in

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means of provinces is provided as well. 14 species are shown to have been recorded from China in error, several of these based on misidentifications. The "Phasmatodea-like" fossil taxa described from the Late Jurassic Yixian Formation of North Hebei and West Liaoning are listed in a separate section.

Two new generic synonyms are recognized: *Arthminotus* Bi, 1995 synonymised with *Lopaphus* Westwood, 1859 (**n. syn.**) and *Dianphasma* Chen & He, 1997 synonymised with *Parasosibia* Redtenbacher, 1908 (**n. syn.**). The genus *Linocerus* Gray, 1835 (Type-species: *Linocerus gracilis* Gray, 1835) was erroneously synonymised with the mediterranean *Bacillus* St. Fargeau & Audinet-Serville, 1825 and is here re-established in Phasmatidae: Pachymorphinae: Gratidiini (**rev. stat.**). Relationship to *Clonaria* Stål, 1875 (= *Gratidia* Stål, 1875, = *Paraclonaria* Brunner v. Wattenwyl, 1893), *Sceptrophasma* Brock & Seow-Choen, 2000 and *Macellina* Uvarov, 1940 is obvious.

21 species are transferred to other genera (**new combinations**): *Asceles dilatatus* Chen & He, 2004 and *Asceles quadriguttatus* Chen & He, 1996 to *Pachyscia* Redtenbacher, 1908, *Arthminotus sinensis* Bi, 1995 to *Lopaphus* Westwood, 1859, *Baculum dolichocercatum* Bi & Wang, 1998 and *Baculum politum* Chen & He, 1997 to *Medauroidea* Zompro, 1999, *Dixippus hainanensis* Chen & He, 2002, *Dixippus huapingensis* Bi & Li, 1991, *Dixippus nigroantennatus* Chen & He, 2002, *Dixippus parvus* Chen & He, 2002 and *Entoria bobaiensis* Chen, 1986 to *Lonchodes* Gray, 1835, *Sipyloidea obvius* Chen & He, 1995 to *Sinophasma* Günther, 1940, *Paramyronides biconiferus* Bi, 1993, *Paramyronides leishanensis* Bi, 1992, *Lonchodes chinensis* Brunner v. Wattenwyl, 1907, *Lonchodes confucius* Westwood, 1859 and *Phasgania glabra* Günther, 1940 to *Phraortes* Stål, 1875, *Gratidia bituberculata* Redtenbacher, 1889 and *Leptynia xinganensis* Chen & He, 1993 to *Sceptrophasma* Brock & Seow-Choen, 2002, *Prosentoria bannaensis* Chen & He, 1997 to *Paraentoria* Chen & He, 1997, and *Mantis squeleton* Olivier, 1792 to *Phanocloidea* Zompro, 2002. *Acrophylla sichuanensis* Chen & He, 2001 remains of unknown generic assignment, but is shown to be not a member of the Australian genus *Acrophylla* Gray, 1835. Furthermore, as *Baculum* Saussure, 1861 is a neotropical genus and most Old World species previously attributed to this genus are now listed in *Ramulus* Saussure, 1861, all Chinese species described in *Baculum* Saussure are consequently transferred to *Ramulus* Saussure. Other changes of specific placements are based on published literature and concern to the following three synonymies not recognized by Chinese workers: *Abrosoma* Redtenbacher, 1906 (= *Prosceles* Uvarov, 1940), *Necroscia* Audinet-Serville, 1838 (= *Aruanoidea* Redtenbacher, 1908), *Lopaphus* Westwood, 1859 (= *Paramyronides* Redtenbacher, 1908). *Megalophasma* Bi, 1995 is transferred from Necrosciinae to Lonchodinae.

Four lectotypes are designated and three new specific synonyms revealed. A lectotype is designated for *Rhamphophasma modestus* Brunner v. Wattenwyl, 1893, the type-species of *Rhamphophasma* Brunner v. Wattenwyl, 1893, in order to fix this genus and species. The male paralectotype is shown to be a male of *Parapachymorpha nigra* Brunner v. Wattenwyl, 1893, the type-species of *Parapachymorpha* Brunner v. Wattenwyl, 1893. *Clitumnus porrectus* Brunner v. Wattenwyl, 1907 is synonymised with *Bacillus ? artemis* Westwood, 1859 and a lectotype designated for the former (**n. syn.**). A lectotype is designated for *Oxyartes lamellatus* Kirby, 1904 in order to fix this taxon and confirm the synonymy established by Dohrn, 1910 (= *Oxyartes honestus* Redtenbacher, 1908, = *Oxyartes spinosissimus* Carl, 1913). *Paracentema stephanus* Redtenbacher, 1908 is shown to have been erroneously synonymised with *Neohirasea japonica* (de Haan, 1842) and here synonymised with *Neohirasea maerens* (Brunner v. Wattenwyl, 1907) (**n. syn.**). In order to fix this new synonymy a lectotype is designated for *Paracentema stephanus* Redtenbacher, 1908.

Finally, a biogeographic analysis of the Chinese phasmid fauna is presented. This includes brief background information on the topography and biogeography of China along with maps showing the seven zoogeographical subregions currently recognized as well as the 4 municipalities, 23 provinces, 5 autonomous regions and 2 special administrative regions of China. A summary of the taxonomic compilation of the fauna is provided and its relationships with neighbouring regions, of both the Palaearctic and Oriental realms, are discussed. A study is presented on the distribution of the taxa and species densities of each province / autonomous region. Recent ecological studies are summarized and list of the host plants of 42 different species attached. The pest status of certain species which have become of serious importance for agriculture in China is briefly summarized based on literary sources.

Key words: Phasmatodea, China, catalogue, type-depositories, new combinations, new synonyms, biogeography, biology, ecology, bibliography

1. INTRODUCTION

With 241 recorded valid species the phasmid fauna of mainland China, excluding Taiwan, is apparently rich. This is however not astonishing, as China is among the twelve megadiverse countries in the world and one of