

China bestrides both Palaearctic and Oriental regions and has a diverse fauna of Geometrid moths. The fauna of Chinese Geometridae of the subfamily Geometrinae has been systematically studied from 2001. One genus and 16 species were described as new to science, one new generic synonym, 2 new specific synonyms, and 10 new combinations were established.

In the forthcoming volume of *Fauna Sinica*, more than 360 species in 66 genera are recognized and redescribed on the basis of examining a majority of type materials, 5 new combinations, 4 new synonyms will be reported, one genus and 24 species will be recorded as new to the fauna of China. 60 genera are assigned to 9 tribes; the main morphological characters of each tribe and the diagnosis of each genus are given. Key to genera and species are provided. The citation, description, materials examined, and distribution information were provided for each species, and where known, details of habitat preference and biology. More than 900 illustrations for venation, male and female genitalia, sternite 3 and 8 are provided. Eighteen colour plates for adults are illustrated.

A study on the Genus *Glaucorhoe* Herbulot, with descriptions of two new species from China (Lepidoptera: Geometridae: Larentiinae)

Chunguang Wu, Hongxiang Han & Dayong Xue

Wu, C. G., Han, H. X. & Xue, D. Y. (2009): A study on the Genus *Glaucorhoe* Herbulot, with descriptions of two new species from China (Lepidoptera: Geometridae: Larentiinae). Pp. 139 in: Hausmann, A. (ed.): Proceedings of the fifth Forum Herbulot 2008. Global strategies for plotting geometrid biodiversity in web-based databases (Munich, ZSM, 24-28 June 2008). – *Spixiana* 32/1: 139

Corresponding author: Dr. Dayong Xue, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101 China; e-mail: xuedy@ioz.ac.cn

The genus *Glaucorhoe* was erected by Herbulot (1951) based on the type species *Cabera unduliferaria* Motschulsky (1860), mainly according to the characters of the male genitalia, and it belongs to the tribe Xanthorhoini defined by Pierce (1914). *Glaucorhoe* was a monotype genus when it was erected, hereafter no related study of this genus has been reported. In this contribution, two undescribed species are presented from China, with morphological differential diagnosis being provided. An additional character set in the diagnosis of the new species results from analysis of mtDNA sequences. The genus *Glaucorhoe* and another known species and its subspecies are redescribed, and the generic characters are summarized. Illustrations of moths and genitalia of all species are provided. Type specimens of the new species and further vouchers are deposited in the

In the introductory section, comments on the taxonomic history of the Geometrinae are summarized. The different classifications on tribal level on the basis of different regions are introduced and compared, and the genera distributed in China are separated into different tribes. Taxonomic characters of the subfamily are listed and their taxonomic significance is discussed. Biological information, especially host-plant relationships, is listed and analysed. Zoogeographical patterns of Geometrinae are discussed and the results show that most geometrine genera are distributed in tropical areas, and African and Oriental regions are the centers of distribution and diversification. On generic level, there are mainly four distribution patterns in China, tropical and subtropical, Himalaya-Southwest mountains, northern area, and endemic genera in China. In addition, the distribution patterns of species and endemic species in China are analysed, it shows that the subfamily Geometrinae is particularly diverse in southern China.

Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS) Northwest Agriculture and Forestry University, Shaanxi, China (NWAFU) and Zoologisches Forschungsmuseum Alexander Koenig, Bonn, Germany (ZFMK). The discovery of these two new species is of great significance for the knowledge of the genus *Glaucorhoe* and represents an interesting case study for species identification between molecular strategy and traditional morphological methods.

Herbulot, C. 1951. Diagnoses de nouveaux genres de Geometridae Larentiinae. *Rev. fr. Lepid.* 13: 25-26
Pierce, F. N. 1914. The Genitalia of The Group Geometridae of the Lepidoptera of the British Islands. E. W. Classey Ltd. Faringdon, U.K. XXIX+88 pp., 48 pls.

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Spixiana, Zeitschrift für Zoologie](#)

Jahr/Year: 2009

Band/Volume: [032](#)

Autor(en)/Author(s): Wu Chunguang, Han Hongxiang, Xue Dayong

Artikel/Article: [A study on the Genus Glaucorhoe HERBULOT, with descriptions of two new species from China \(Lepidoptera: Geometridae: Larentiinae\) 138](#)