Pill-millipedes (Glomerida, Diplopoda) in Taiwan

S. I. GOLOVATCH¹, E. V. MIKHALJOVA² & HSUEH-WEN CHANG³, 4

¹ Institute for Problems of Ecology and Evolution, Russian Academy of Sciences, Leninsky pr. 33. Moscow 119071, Russia. E-mail: sgolovatch@yandex.ru
² Institute of Biology and Soil Science, Far Eastern Branch, Russian Academy of Sciences, Prospekt Stoletiya Vladivostoka 159, Vladivostok 690022, Russia. E-mail: mikhaljova@biosoil.ru
³ Department of Biological Sciences, National Sun Yat-Sen University, 70 Lien-hai Rd., Kaohsiung 804, Taiwan, ROC. E-mail: hwchang@mail.nsysu.edu.tw
⁴ Correspondence author

Abstract

The order Glomerida is represented in Taiwan by five species in two genera, two subfamilies and one family. All species, as well as one genus and one subfamily, seem to be endemic to Taiwan. Among the species, Mauriesia splendida sp. nov. belongs in a new genus, Mauriesia gen. nov., which in its turn represents a new subfamily, Mauriesiinae subfam. nov., the latter differing strikingly from the remaining three subfamilies of Glomeridae both in the presence of a caudomedian lobule on the male pygidium and in telopod stoutness and conformation. Four further species belong to the large, basically Asian genus Hyleoglomeris Verhoeff, 1910: H. aurata sp. nov., H. sinuata sp. nov., H. proximata sp. nov. and H. vittata Verhoeff, 1929. A key is provided to all of the species of Glomerida in Taiwan, and their distributions are mapped and discussed.

Key words: millipede, Glomeridae, taxonomy, new species, new genus, new subfamily, Taiwan

Introduction

The millipede fauna of Taiwan is still quite poorly explored (Korsós 2004). Only slightly over 60 species currently are reported from this large, subtropical to tropical island, but at least twice as many probably occur there. This statement is easy to prove even with the small order Glomerida taken as an example. Taiwan has hitherto been known to support only a single glomeridan species: Hyleoglomeris vittata Verhoeff, 1929, taken from “Kankan, Formosa” (Verhoeff 1929), a locality questioned by Korsós (2004) in his checklist of the Diplopoda of Taiwan. At present the basically Asian genus Hyleoglomeris Verhoeff, 1910, one of the largest in the family Glomeridae, encompasses 70 species (Golovatch et al. 2006; Mikhaljova & Lim 2006; Makhan 2010), nearly all from warm temperate, subtropical and tropical Asia. A few pictures of live glomeridans observed in Taiwan, coupled with a succinct accompanying text which sheds no light whatever on their identity or distribution (Lee & Kou 2009), complete our knowledge of the Glomerida in Taiwan.

Prompted by the abundant new material collected during the last couple of decades all over the island, we offer here a revision of the Taiwanese Glomerida. Already five species appear to be involved, all in the family Glomeridae. Three new congeners of H. vittata are added, all four belonging in the stuxbergi-group (Golovatch et al. 2006), and a new genus and species representing a new subfamily is described. As a result, the Taiwanese list of Glomerida has increased by a factor of five in terms of species diversity, and two times in terms of the number of genera and subfamilies encountered.