



## The millipede order *Platydesmida* (Diplopoda) in Taiwan, with descriptions of two new species

ELENA V. MIKHALJOVA<sup>1</sup>, SERGEI I. GOLOVATCH<sup>2</sup>, ZOLTÁN KORSÓS<sup>3</sup>,  
CHAO-CHUN CHEN<sup>4</sup> & HSEUH-WEN CHANG<sup>4,5</sup>

<sup>1</sup>*Institute of Biology and Soil Science, Far Eastern Branch of the Russian Academy of Sciences, prospekt Stoletiya Vladivostoka 159, Vladivostok 690022, Russia. E-mail: mikhaljova@biosoil.ru*

<sup>2</sup>*Institute for Problems of Ecology and Evolution, Russian Academy of Sciences, Leninsky prospekt 33, Moscow 119071, Russia. E-mail: sgolovatch@yandex.ru*

<sup>3</sup>*Department of Zoology, Hungarian Natural History Museum, Baross u. 13, H-1088 Budapest, Hungary. E-mail: korsos@nhmus.hu*  
*Present address: Tropical Biosphere Research Center, University of the Ryukyus, Nishihara, Okinawa 903-0213, Japan*

<sup>4</sup>*Department of Biological Sciences, National Sun Yat-Sen University, 70 Lien-Hai Road, Kaohsiung 804, Taiwan, ROC. E-mail: ccchentaiwan@gmail.com*

<sup>5</sup>*Corresponding author. E-mail: hwchang@mail.nsysu.edu.tw*

### Abstract

The diplopod order *Platydesmida* appears to be represented in Taiwan by two new species from one family, *Andrognathidae*, and two genera: *Brachycybe disticha* **sp. nov.** and *Yamasinaium latum* **sp. nov.** Descriptions of these two species are presented, also based on examination of the types of the geographically closest species of each genus: *Brachycybe nodulosa* (Verhoeff, 1935) and *Yamasinaium noduligerum* Verhoeff, 1939, both from Japan. The distributions of the Taiwanese species of *Brachycybe* and *Yamasinaium* are mapped and discussed.

**Key words:** Millipede, *Andrognathidae*, new species, taxonomy, key, Taiwan

### Introduction

The *Platydesmida* is one of the smaller diplopod orders, containing only about fifteen genera from two families: *Platydesmidae* and *Andrognathidae*. *Platydesmida* are mainly Holarctic in distribution, occurring in North and Middle America, Japan, Korea, China, Taiwan, Southeast Asia, and the Mediterranean region. The first records of *Platydesmidans* in Taiwan Island were published by Korsós (2004), who listed two unidentified species of *Andrognathidae* and provided a color picture of a specimen he referred to as "*Andrognathidae* sp. 1". Shelley *et al.* (2005) provisionally assigned this species to *Brachycybe* Wood, 1864, because of its general body shape. The second Taiwanese *Platydesmidan* was referred to as "*Andrognathidae* sp. 2", described as slender and long-bodied (Korsós 2004). Up to now, these two unidentified species were the only records of Taiwanese *Platydesmida*.

Among the diplopod samples from Taiwan kept in the collections of the National Museum of Natural Science, Taichung, Taiwan (NMNS) and Department of Biological Sciences, National Sun Yat-Sen University, Kaohsiung, Taiwan (NSYSUB), two new species of *Andrognathidae* have been found. The present paper provides their descriptions and comparisons with type material of their geographically closest congeners.

### Material and methods

Material treated here has been deposited in the collections of the National Museum of Natural Science, Taichung, Taiwan (NMNS), Department of Biological Sciences, National Sun Yat-Sen University, Kaohsiung,