

Article



The millipede family Metopidiotrichidae new to the fauna of Taiwan: the description of a new species; a review of and a key to the Chordeumatida occurring in Taiwan (Diplopoda)

ELENA V. MIKHALJOVA¹, SERGEI I. GOLOVATCH² & HSUEH-WEN CHANG^{3,4}

¹Institute of Biology and Soil Science, Far Eastern Branch, Russian Academy of Sciences, prospekt Stoletiya Vladivostoka 159, Vladivostok 690022, Russia. E–mail: mikhaljova@biosoil.ru

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

³Department of Biological Sciences, National Sun Yat-Sen University, 70 Lien-Hai Road, Kaohsiung 804, Taiwan, ROC. E-mail: hwchang@mail.nsysu.edu.tw

⁴Corresponding author

Abstract

The family Metopidiotrichidae and the genus *Metopidiothrix* Attems, 1907 are formally new to the fauna of Taiwan, due to the discovery of *Metopidiothrix taiwanensis* **sp. nov.** The fauna of Chordeumatida of Taiwan is reviewed and keyed, at present containing 13 unquestioned species from three genera and three families. Three further species, one genus and one family are dubious either as taxa or as elements of the Taiwanese fauna, or both. Palaearctic elements, such as Diplomaragnidae and Niponiosomatidae, appear to strongly dominate over austral/tropical ones (Metopidiotrichidae).

Key words: Millipede, chordeumatidans, new record, new species, taxonomy, key, distribution, Taiwan

Introduction

The millipede family Metopidiotrichidae (earlier sometimes misspelled as Metopidiothricidae) is one of the few in the large, mainly boreal order Chordeumatida which are entirely or nearly entirely tropical. This family is mainly confined to the Indo-Australian realm and present only marginally also in Japan. At the moment, it contains seven genera, among which *Metopidiothrix* Attems, 1907 is the largest, comprising 37 species ranging from Papua New Guinea in the southeast, through Indonesia, Malaysia and the Philippines, to Thailand and Vietnam in the north (Shear 2002).

All the more interesting is the recent discovery in Taiwan of still another new species of *Metopidiothrix*, currently the northernmost congener. Hence, both the family Metopidiotrichidae and the genus *Metopidiothrix* are new to the Taiwanese list. The opportunity is also taken to review and key the entire fauna of Chordeumatida of Taiwan.

Material and methods

Material treated here has been shared between the collections of the National Museum of Natural Sciences, Taichung, Taiwan (NMNS) and Department of Biological Sciences, National Sun Yat-Sen University, Kaohsiung, Taiwan (NSYSUB). The samples were kept in 70–75% ethanol. During the study, the gonopods and some other parts were dissected from the male and mounted in glycerin as temporary micropreparations. Specimens were studied and illustrated using standard stereomicroscopic and drawing equipment.