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## **The Mecistocephalidae of the Japanese and Taiwanese islands (Chilopoda: Geophilomorpha)**

MARCO ULIANA, LUCIO BONATO & ALESSANDRO MINELLI



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## Abstract

We present a comprehensive taxonomic revision of the Mecistocephalidae occurring in the Japanese main archipelago and in Taiwan, based on both the critical analysis of published information and the comparative morphological examination of representative specimens, including type material. A total of 34 species in 8 genera are recognised. Diagnostic characters, synonyms and geographical distribution are reviewed and discussed for all species, and a detailed redescription is provided for 12 already known species. An identification key to all species is also provided. The following species are described as new: *Arrup ishiianus*, *Arrup lilliputianus*, *Arrup longicalix*, *Arrup kyushuensis*, *Mecistocephalus changi*, *Mecistocephalus karasawai*. The following synonymies are new: *Tygarrup monoporus* Shinohara, 1961 = *Dicellophilus pulcher* (Kishida, 1928); *Mecistocephalus fenestratus* Verhoeff, 1934 = *Mecistocephalus japonicus* Meinert, 1886; *Mecistocephalus insulomontanus* Gressitt, 1941 = *Mecistocephalus marmoratus* Verhoeff, 1934; *Mecistocephalus manazurensis* Shinohara, 1961 = *Mecistocephalus nannocornis* Chamberlin, 1920; *Mecistocephalus mirandus* Pocock, 1895 = *Mecistocephalus japonicus* Meinert, 1886; *Mecistocephalus okinawaensis* Takakuwa, 1939 = *Mecistocephalus pauroporus* Takakuwa, 1936; *Mecistocephalus takakuwai* Verhoeff, 1934 = *Mecistocephalus diversisternus* (Silvestri, 1919). *Dicellophilus pulcher* (Kishida, 1928) new comb. is here recognised as the valid name for the species previously referred to as *Dicellophilus latifrons* Takakuwa, 1934.

**Key words:** Mecistocephalidae, taxonomic revision, Japan, Taiwan, new species

## Introduction

Mecistocephalids (Mecistocephalidae Bollmann, 1913) are a distinct family of geophilomorph centipedes, mainly distributed over the tropical areas of the Old World and especially diverse in the Southeast Asia. The family comprises eleven genera and almost two hundred species have been described to date (Bonato *et al.*, 2003).