



***Mecistocephalus guildingii* Newport, 1843, a tropical centipede with amphi-Atlantic distribution (Chilopoda: Geophilomorpha)**

LUCIO BONATO¹, FABIO G. CUPUL-MAGAÑA² & ALESSANDRO MINELLI³

^{1,3}Dipartimento di Biologia, Università degli Studi di Padova, Via Ugo Bassi 58b, I-35131 Padova, Italy.

E-mail: ¹lucio.bonato@unipd.it. ³alessandro.minelli@unipd.it.

²Departamento de Ciencias Biológicas, Centro Universitario de la Costa, Universidad de Guadalajara, Av. Universidad de Guadalajara 203, Puerto Vallarta, Mexico. E-mail: fabio_cupul@yahoo.com.mx

Abstract

Mecistocephalus guildingii Newport, 1843 (Chilopoda: Geophilomorpha: Mecistocephalidae) is redescribed, and its geographical distribution revised and updated, after examination of 28 specimens from different localities together with critical assessment of published accounts and records. *Mecistocephalus guildingii* Newport, 1843 (= *Mecistocephalus punctilabrus* Newport, 1845, n. syn.; = *Lamnonyx leonensis* Cook, 1896, n. syn.; = *Mecistocephalus maxillaris guadeloupensis* Demange and Pereira, 1985, n. syn.) is distinguished from other *Mecistocephalus* species, with which it has been often confused, mainly in head elongation and some features of the clypeus. *M. guildingii* has been reported hitherto from less than two dozen sites on the eastern side of tropical Americas, however it is actually established in islands and coastal sites on both sides of the tropical part of the Atlantic ocean: on the American side from Bermuda through the Antilles to southern Brazil; on the African side in the Cape Verde archipelago and from Gambia to Liberia. It is also established in a locality on the Pacific coast of Mexico, and has been found occasionally inland in Brazil and in European hothouses and other disturbed anthropic sites.

Key words: *Mecistocephalus guildingii*, Mecistocephalidae, geographical distribution, amphi-Atlantic distribution

Introduction

Among the many dozen species in the centipede genus *Mecistocephalus* Newport, 1843, *M. guildingii* Newport, 1843 was one of the earliest species to be described, and among the few species upon which the genus *Mecistocephalus* was established (Newport 1843a, 1843b). Despite this, the true identity of *M. guildingii* was not properly understood for a long time, its validity as a distinct species was often questioned, and the species was repeatedly misidentified. Even after the accurate redescription provided by Crabill (1959), the actual geographical distribution of *M. guildingii* remained largely uncertain: up to now, the species has been reported from less than two dozen islands and coastal sites scattered on the Atlantic side of the tropical Americas.

After comparative examination of specimens of *Mecistocephalus* collected from different localities in the Americas and Africa, together with a re-interpretation of all published taxonomic accounts and geographic records of the genus from these continents, we provide here a revised diagnosis of *M. guildingii*, discuss new synonymies, and revise and update the geographical distribution of the species.

Material and methods

Specimens examined. Bermuda Islands: North Shore, ♂ (15 mm), 6-II-1976, J.G.E. Lewis lg, NHML; Smith's, ♂ (25 mm), 2-IV-1976, J.G.E. Lewis lg, NHML; Spittal Pond Nature Reserve, ♀ (25 mm), 3-IV-