A New Species of Maindronia Bouvier, 1897 from Iran (Zygentoma: Maindroniidae)

Graeme B. Smith1, Rafael Molero-Baltanás2, Seyed Aghil Jaberhashemi3, and Javad Rafinejad4

1 Australian Museum Research Institute, Australian Museum, 1 William Street, Sydney NSW 2010, Australia
2 Departamento de Zoología, C-1 Campus de Rabanales, University of Córdoba, 14071 Córdoba, Spain
3 Infectious and Tropical Diseases Research Center, Hormozgan Health Institute, Hormozgan University of Medical Sciences, Bandar Abbas, Iran
4 Department of Medical Entomology and Vector Control, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

Abstract. A new species of the genus Maindronia Bouvier is described from a single female specimen collected in Iran. It appears close to M. mascatensis Bouvier but displays a distinct chaetotaxy compared to that illustrated by earlier authors. The morphology of the species is described in line with current standards including information on the notal trichobothria and the specialized sensilla of the antennae and palps.

Introduction
Bouvier (1897) described an unusual silverfish Maindronia mascatensis from six specimens collected by M. Maindron, near Muscat in Oman (Fig. 1), noting that the species shared characters of both the Nicoletiidae Lubbock, 1873 (lacking scales) and the Lepismatidae Latreille, 1802 (the presence of eyes). Escherich (1905) examined one of Bouvier’s six specimens and expanded on the description, believing Maindronia represented a distinct and separate lineage to the other known families. Escherich’s written description lacked much detail but he did provide four illustrations from which additional information can be derived, assuming they are accurate. Wygodzinsky (1940) described a second species Maindronia neotropicalis from Chile and Schremmer (1964) described a third, Maindronia beieri from Sudan. Wygodzinsky (1962) recorded Maindronia mascatensis from a locality in Afghanistan and commented that he was preparing a revision on the subfamily Maindroniinae Escherich, 1905, which unfortunately was never published. Here we describe a new species from a single female specimen collected in Iran. We have been unable to locate the six type specimens of M. mascatensis. One of these had been sent to Escherich (most of whose material has been lost), while the other five were supposedly in the Museum national d’Histoire naturelle, however these have not been found there (pers. comm. Markus Koch, 2018). They may have been transferred by Wygodzinsky to Buenos Aires or eventually to New York to facilitate his planned revision. While clear differences between the current specimen and the Escherich illustrations are present we have some doubt as to the accuracy of those illustrations. We also have little understanding of the intra-specific variability of species within this seldom collected family. Nevertheless, we have decided to describe this species as new, anticipating that the types of M. mascatensis if or when eventually found, will affirm this decision.