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The genus *Macropodia* Leach, 1814
(Crustacea, Decapoda, Inachidae)

in the collection of the Funchal Natural History Museum.
A new record from Madeira (Northeastern Atlantic Ocean)

With 4 figures

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ABSTRACT: Four decapod species of the genus *Macropodia*, from the collections of Funchal Natural History Museum, *M. deflexa*, *M. parva*, *M. rostrata* and *M. spinulosa* are recorded from Madeira.

Keywords: littoral biodiversity, *Macropodia*, Madeira.

RESUMO: Quatro espécies de crustáceos decápodes do género *Macropodia*, existentes nas coleções do Museu de História Natural do Funchal, *M. deflexa*, *M. parva*, *M. rostrata* e *M. spinulosa*, são assinaladas para a Madeira.

Palavras-chave: biodiversidade litoral, *Macropodia*, Madeira.

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INTRODUCTION

The genus *Macropodia* Leach, 1838 contains at least 20 valid species, 17 of which occurring in the East Atlantic. Of these, four also occur in the Mediterranean Sea and one in the Indian Ocean. Two species have been found only in the Mediterranean Sea, two in the Indian Ocean and one in the Pacific Ocean, off Tasmania (FOREST, 1978; MANNING & HOLTHUIS, 1981; COSTELLO *et al.*, 2001; VAN NOORT & ADEMA, 1985; UDEKEM D'ACOZ, 1999; WoRMS, 2015; ZARIQUEY-ALVARÉZ, 1968).

Looking into the collections of the Funchal Natural History Museum, several specimens belonging to four previously unrecorded species of *Macropodia* were found and are reported herein.

MATERIAL AND METHODS

All studied specimens were collected on the coasts of the Island of Madeira. They are all preserved in 70% ethanol in the collections of the MMF. Specimens were measured according to standard carcinological procedures and sexed. The systematic arrangement of the present account follows DE GRAVE *et al.* (2009). Abbreviations used: CL – Carapace length; CW – Carapace width; MMF – Funchal Natural History Museum.

SYSTEMATICS

Superfamily MAJOIDEA Samouelle, 1819

Family INACHIDAE MacLeay, 1838

Genus *Macropodia* Leach, 1814

Macropodia deflexa Forest, 1978

Material examined: MMF 012154 (Fig. 1), 1 ovigerous female, 7.1 mm CL, 5.4 mm CW; Madeira, 17/08/1957.

Remarks: This specimen is the oldest of the genus *Macropodia* and was identified by M. Türkay in 1984. This is the first record of this species from Madeira. It has been recorded from the English Channel and Brittany to the Canary Islands (UDEKEM D'ACOZ, 1999).



Fig. 1 – Ovigerous female of *Macropodia deflexa* (MMF 012154).

Macropodia parva van Noort & Adema, 1985

Material examined: MMF 035090, 8 specimens, 1 male, 4.9 mm CL, 3.2 mm CW, 1 male, 1.8 mm CL, 1.4 mm CW, 1 male, 3.6 mm CL, 2.4 CW, 1 male, 1.8 CL, 1.3 CW, 1 male, 1.5 CL, 1.1 CW, 1 female, 2.5 CL, 1.9 CW, 1 male, 2.7 CL, 1.8 CW, 1 male (Fig. 2), 1.8 CL, 1.3 CW, Funchal Bay, 23/01/1995, Agassiz bottom trawl, 40 m of depth; MMF 035095, 1 male, 6.1 CL, 4.2 CW, Funchal Bay, 23/01/1995, Agassiz bottom trawl, 60 m of depth; MMF 044374, 1 male, 6.9 CL, 4.9 CW, Reis Magos, Caniço, 21/11/2014, scuba diving, 11 m of depth.

Remarks: The specimens of this species occur in Madeira from the rocky subtidal down to at least 60 m of depth, over sandy bottom. One of the specimens (MMF 044374) was collected on the Hydrozoan *Macrorhynchia* sp. This is the first record of this species from Madeira. It has been recorded from the North Sea, east English Channel and south of Portugal (UDEKEM D'ACOZ, 1999). Possibly also from the Canary Islands, Mauritania and Cape Verde (FRANSEN, 1991).



Fig. 2 – Male of *Macropodia parva* (MMF 035090).

Macropodia rostrata (Linnaeus, 1761)

Material examined: MMF 023872, 1 male, 9.0 mm CL, 6.1 mm CW, Funchal Bay, 03/04/1985, bottom trap, 20 m of depth; MMF 024042, 1 male, 8.3 mm CL, 6.3 mm CW, off Gorgulho, Funchal, 23/04/1986, bottom trawl, 40 – 60 m of depth; MMF 035085, 1 male, 9.7 mm CL, 6.7 mm CW, Funchal Bay, 23/01/1995, bottom trawl, 100 m of depth.

Remarks: Amongst the *Macropodia* species in MMF collections, *M. rostrata* is the one found deepest (100 m). All specimens come from sandy bottom. According to the literature available to us, this seems to be the first time this species is recorded from Madeira. This species has a broad distribution, from the south of Norway to the Canary Islands (UDEKEM D'ACOZ, 1999).



Fig. 3 – Male of *Macropodia rostrata* (MMF 035085).

Macropodia spinulosa (Miers, 1881)

Material examined: MMF 025264, 4 specimens, 1 ovigerous female, 6.1 mm CL, 4.9 mm CW, 1 male, 5.3 mm CL, 3.8 mm CW, 1 male, 5.7 mm CL, 4.3 mm CW, 1 male (Fig. 4), 4.6 mm CL, 3.3 mm CW, off Santa Cruz, 17/06/1992, bottom trawl, 40 m of depth.

Remarks: The MMF specimens came all from one location, on sandy bottom. This species has been recorded with certitude from the Cape Verde islands to Angola (see MANNING & HOLTHUIS (1981) for detailed distribution). These authors pointed out that specimens from north of Senegal, in particular a specimen caught by STIMPSON (1907) in Madeira could be either this species or *M. rostrata* proper. Our specimens confirm that *M. spinulosa* occurs in Madeira, making it the northern-most record for the species in the eastern Atlantic.



Fig. 4 – Male of *Macropodia spinulosa* (MMF 025264).

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