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***GNATHOPHYLLUM AMERICANUM* GUÉRIN-MÉNEVILLE, 1855
(CRUSTACEA, DECAPODA, GNATHOPHYLLIDAE):
A NEW RECORD FROM THE ARCHIPELAGO OF MADEIRA
(NE ATLANTIC OCEAN)***

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ABSTRACT. This paper reports the first records of the shrimp, *Gnathophyllum americanum* Guérin-Méneville, 1855 (Gnathophyllidae) in Madeiran waters. Only one species of this family had previously been recorded from Madeira, *G. elegans* (Risso, 1816).

RESUMO. Neste artigo é assinalada pela primeira vez uma nova espécie de camarão para as ilhas da Madeira e Porto Santo, *Gnathophyllum americanum* Guérin-Méneville, 1855 (Gnathophyllidae). Apenas uma espécie desta família tinha sido anteriormente assinalada para a Madeira, *G. elegans* (Risso, 1816).

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INTRODUCTION

Until recently the family Gnathophyllidae Dana, 1852 was represented in the crustacean fauna of the archipelago of Madeira by a single known species, *Gnathophyllum elegans* (Risso, 1816) (PÉREZ SÁNCHEZ & MORENO BATET, 1991). This species is well represented in the collections of the Museu Municipal do Funchal (História Natural) and several specimens have been kept alive in the Funchal Aquarium.

Frequent collecting is done in the tide pools of Praia dos Reis Magos on the south coast of Madeira Island, east of Funchal, in order to restock the aquarium of the Museu Municipal do Funchal (História Natural). During one such exercise, two specimens of *Gnathophyllum americanum* Guérin-Méneville, 1855 were found. However, this was not the first time this species was caught in the island. Funchal museum records show that in March 1957, A. J. Figueira collected one specimen of *G. americanum* and more recently, in July 2000, another specimen was retrieved by J. Barquín in the island of Porto Santo, during the Macaronesia 2000 Expedition.

MATERIAL AND METHODS

MMF15451: (female - cl. 2.7 mm) collected by A. J. Figueira from a tide pool at Ilha do Amor on the south coast off Funchal on 31/I/1959.

MMF26854: (female - cl. 1.3 mm; female - cl. 2.5 mm) collected by João Silva and Ricardo Araújo from separate tide pools at Reis Magos on the south coast of Madeira Island on 25/I/1996. The background colour of the body of these specimens was dark brown marked by numerous narrow white transverse bands.

MMF35012: (ovigerous female - cl. 3.6 mm) collected by J. Barquín from a tide pool at Porto dos Frades on Porto Santo Island, during the Macaronesia 2000 Expedition on 3/VII/2000.

A hand held dip net was used to collect the 1996 live specimens, from separate tidal pools, one within a rock cleft and the other under a rock. No information is available regarding the collecting conditions of the other material examined.

The colour and markings of the 1996 specimens was noted before preservation in 70% ethanol.

Abbreviations used: MMF – Museu Municipal do Funchal (História Natural); cl.: carapace length.

REMARKS

The live specimens of *G. americanum* collected in Madeira, as well as the preserved specimens examined, were well in agreement with the descriptions and illustrations given by HOLTHUIS (1949), MANNING (1963) and TITGEN (1989). The presence of alternating light and dark transverse bands in the body is quite distinct and can in no way be confused

with the spotted appearance of *G. elegans* which has a dark body covered with yellow spots (ZARIQUEY ÁLVAREZ, 1968). Good colour photographs of both species are also given by WIRTZ (1995) and GONZÁLEZ PÉREZ (1995).

Both species are found in Madeira in the same habitat – under rocks or within rock cracks in tide pools covered with algae. *G. elegans*, being occasional, is far more numerous than *G. americanum*. The rareness of *G. americanum* can also be due to its smaller size, therefore making it more difficult to detect.

G. americanum has been previously recorded from both sides of the Atlantic Ocean: Canary Islands in the eastern Atlantic and warm waters of the western Atlantic (d'UDEKEM d'ACÓZ, 1999). The present contribution not only records this species for the first time from the archipelago of Madeira, but also establishes a new northern limit for its distribution in the eastern Atlantic Ocean.

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