

BOCAGIANA

Museu Municipal do Funchal (História Natural)

Madeira

31.XII.2003

No. 212

**A NEW CRAB RECORD *PLATYPODIELLA PICTA*
(A. MILNE-EDWARDS, 1869) (CRUSTACEA: DECAPODA:
XANTHIDAE) FROM MADEIRA ISLAND WATERS***

By RICARDO ARAÚJO ^{1,2} & MAFALDA FREITAS ²

With 3 figures

ABSTRACT. The crab *Platypodiella picta* (A. Milne-Edwards, 1869) is recorded for the first time from Madeira Island waters and represents the most northerly record for this species in the eastern Atlantic.

KEY WORDS: Crustacea, Decapoda, Xanthidae, *Platypodiella picta*, new record, Madeira, NE Atlantic Ocean.

RESUMO. Neste artigo é assinalado, pela primeira vez, para a ilha da Madeira uma nova espécie de caranguejo, *Platypodiella picta* (A. Milne-Edwards, 1869). Este assinalamento aumenta a área de distribuição desta espécie, sendo o registo mais a Norte no Oceano Atlântico Oriental.

¹ Museu Municipal do Funchal (História Natural), Rua da Mouraria, 31, 9004-546 Funchal, Madeira, Portugal. E-mail: ricardo.araujo@mail.cm-funchal.pt

² Estação de Biologia Marinha do Funchal, Cais do Carvão, Promenade da Orla Marítima do Funchal, 9000-107 Funchal, Madeira, Portugal.

* Contribution n.º 6 of the Marine Biological Station of Funchal.

INTRODUCTION

The Atlantic and east Pacific species of the genus *Platypodia* Bell, 1935 were placed by GUINOT (1967) in a new genus – *Platypodiella*. This new genus includes now three species from the Atlantic [*Platypodiella spectabilis* (Herbst, 1794), *P. picta* (A. Milne Edwards, 1869) and *P. georgei* Hartog & Türkay, 1991)] and two from the east Pacific [*P. rotundata* (Stimpson, 1860) and *P. gemmata* (Rathbun, 1902)].

The most recent revision of the geographic distribution of this genus in the north eastern Atlantic (UDEKEM d'ACÓZ, 1999) only lists *P. picta* (A. Milne Edwards, 1869), occurring from Senegal to Congo and from the Canaries, Cape Verde, Islands of the Gulf of Guinea and Ascension.

MATERIAL AND METHODS

Three specimens of *P. picta* were collected in an intertidal pool at Praia dos Reis Magos, on the south coast of Madeira Island. In the same intertidal pool there was also a colony of the zoantharian *Palythoa canariense* (Haddon & Durerden, 1895) (Fig. 1).

The colour of the specimens was recorded before fixation in ethanol 70%. Photographs were taken in aquarium with daylight. Measurements were made with dial calliper to the nearest millimetre.

Abbreviations used: CL - Carapace length; MMF - Museu Municipal do Funchal (História Natural).

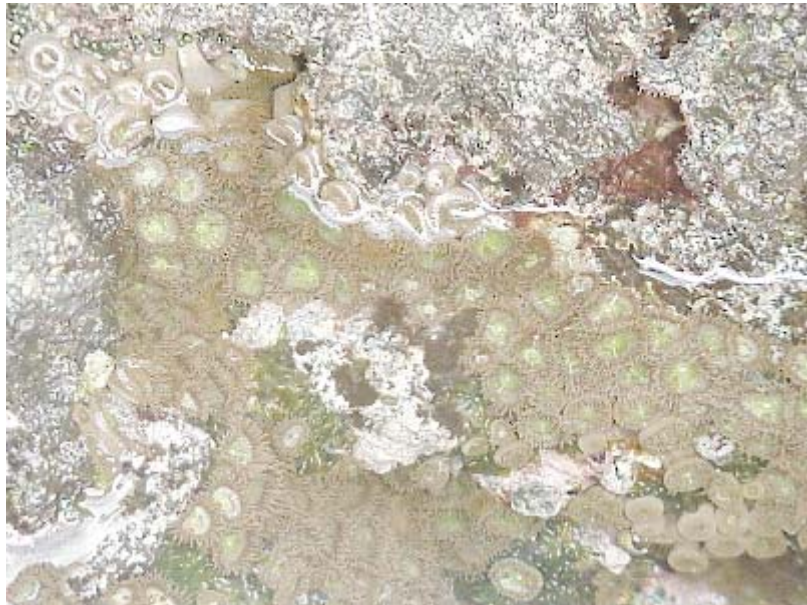


Fig. 1 - Colony of *Palythoa canariense* in an intertidal pool.

MATERIAL COLLECTED

Platypodiella picta (A. Milne-Edwards, 1869)

MMF 34776, CL = 18.3 mm, CW = 25.8 mm, Reis Magos, Madeira, 1.03.2002, intertidal pool. Colour pattern (Fig. 2): carapace and pereopods ochre with reddish-brown spots, surrounded by two concentric lines: a very regular and very conspicuous dark brown-red inner line and a white outer line with a more variable width.



Fig. 2 - Male specimen of *Platypodiella picta* (MMF 34776).

MMF 34777, CL = 12.6 mm, CW = 17.2 mm, Reis Magos, Madeira, 1.03.2002, intertidal pool. Colour pattern: carapace and pereopods yellowish, with dark orange-red spots, surrounded by two concentric lines: a very regular and very conspicuous dark brown-red inner line and a white outer line with a more variable width.

MMF 34778, CL = 13.2 mm, CW = 19 mm, Reis Magos, Madeira, 1.03.2002, intertidal pool. Colour pattern (Fig. 3): carapace and pereopods light greenish-yellow carapace, with olive-green spots, surrounded by two concentric lines: a very regular and very conspicuous dark brown-red inner line and a white outer line with a more variable width.



Fig. 3 - Male specimen of *Platypodiella picta* (MMF 34778).

DISCUSSION

The colour pattern of the three specimens is essentially similar, but the basic colour of carapace is subtly different in each. It should be noted that HARTOG & HOLTHUIS (1984) separated the Canary Island specimens from those of the Cape Verde Islands and Senegal on the basis of colour.

The colour pattern of the specimen MMF 34776 seems similar to the specimens described by HARTOG & HOLTHUIS (1984) collected in the Cape Verde Islands and Senegal and from the specimens in the colour photo in HARTOG & TÜRKAY (1991). The pattern of the specimen MMF 34777 seems more similar to the specimens described by HARTOG & HOLTHUIS (1984) collected in Canary Islands. The pattern of the specimen MMF 34778 seems to be different from the specimens described by HARTOG & HOLTHUIS (1984) and from the specimen in the colour photo in GONZÁLEZ PÉREZ, 1995.

Thus, Madeiran specimens correspond to the Cape Verde / Senegal and to the Canary Island colour pattern and, in addition, show a slightly different colour pattern. The species apparently is quite variable in colour and to detect geographic patterns in colour would need a large sample size.

The association of the zoantharian, *Palythoa canariense*, with *P. picta* has already been reported from the Canary Islands by MONOD (1956), HARTOG & HOLTHUIS (1984), MANNING & CHACE (1990), HARTOG & TÜRKAY (1991), FRANSEN (1991) and GONZÁLEZ PÉREZ (1995).

ACKNOWLEDGEMENTS

We would like to thank Manuel Biscoito, Cédric d'Udekem d'Acoz and Peter Wirtz for their help in this report, Graham Quinn for the English revision and Oscar Ocaña for the confirmation of the identification of the *P. canariense*.

REFERENCES

FRANSEN, C. H. J. M.:

1991. *Crustacea of the CANCAP and MAURITANIA expeditions*. Nationaal Natuurhistorisch Museum, Leiden. 200 pp.

GONZÁLEZ PÉREZ, J. A.:

1995. *Catálogo dos Crustáceos Decápodos de las Islas Canarias. Gambas. Lagostas. Cangrejos*. Publicaciones Turquesa S. L., Santa Cruz de Tenerife. 282 pp.

GUINOT, D.:

1967. Recherches préliminaires sur les groupements naturels chez les Crustacés Décapods Brachyours. III. A propos des affinités des Genres Dairoides Stebbing et Daira de Haan. *Bulletin du Muséum National d'Histoire Naturelle*, Paris, sér. 2, **39** (3): 540-563.

HARTOG, J. G. Den & L. B. HOLTHUIS:

1984. A note on an interesting association of the crab *Platypodiella picta* (A. Milne-Edwards, 1869) and species of Zoantharia. *Courier Forschungsinstitut. Senckenberg*, **68**: 21-29.

HARTOG, J. G. Den & M. TÜRKEY:

1991. *Platypodiella georgei* spec. nov. (Brachyura: Xanthidae), a new crab from the island of St. Helena, South Atlantic Ocean, with notes on the genus *Platypodiella* Guinot, 1967. *Zoologische Mededelingen*, **65**: 210-220.

MANINNG, R. B. & F. A. CHACE:

1990. Decapod and Stomatopod Crustacea from Ascension Island, South Atlantic Ocean. *Smithsonian Contributions to Zoology*, **503**: 1-91.

MONOD, T.:

1956. Hippidea et Brachyura ouest-africains. *Mémoires de l'Institut Français d'Afrique Noire*, n.º 45, 674 pp.

UDEKEM d'ACQZ, C. d' :

1999. Inventaire et distribution des crustacés décapodes de l'Atlantique nord-oriental, de la Méditerranée et des eaux continentales adjacentes au nord de 25° N. *Patrimoines naturels* (M. N. H. N. / S. P. N.), **40**: 383.

ERRATA

Bocagiana n.º 212 – 31.XII.2003

Page 2, line 21, (Abbreviations used) add “CW - Carapace width”.

Page 3, (Material Collected) MMF 34776 - ♂; MMF 34777 - ♀; MMF 34778 - ♂.