

Panopeus austrobesus Williams, 1983 (Decapoda, Brachyura), a first record of the Brazilian mud crab at Uruguayan Atlantic coast

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Abstract

This is the first record of *Panopeus austrobesus* Williams, 1983 as an inhabitant of natural benthic fauna at Uruguayan Atlantic coast. The studied crabs belong to rocky littoral fauna from Cabo Polonio (34°15' - 34°20'S/53°50' - 53°70'W), Departamento de Rocha, Uruguay.

Introduction

Among the benthic macrofauna inhabitants of Uruguayan coasts it is possible to note the presence of several xanthid crabs species (other authors have suggested Panopeidae Ortmann, 1893, instead family Xanthidae MacLeay, 1838; e.g., Schubart *et al.*, 2000). Thus, *Actaea acantha* (H. Milne Edwards, 1834), *Eurypanopeus depressus* (Smith, 1869), *Hexapanopeus paulensis* Rathbun, 1930, *H. schmitti* Rathbun, 1930, *Panopeus meridionalis* Williams, 1984, *Pilumnus reticulatus* Stimpson, 1860, *Pilumnoides hassleri* A. Milne-Edwards, 1880 and *Tetraxanthus rathbunae* Chace, 1939 are the xanthid representatives in these coasts (Boschi *et al.*, 1992; Melo, 1996; Spivak, 1997a and b; Zolessi and Philippi, 1995). Despite of such very important papers on the distribution of brachyuran crabs in the region, there are no mentions about the presence of Brazilian mud crab *Panopeus austrobesus* Williams, 1983 in Uruguay. Melo (1996) has established the lower south latitudinal limit for *P. austrobesus* at Rio Grande do Sul, Brazil, approximately 130 km far away from Cabo Polonio, Uruguay.

Material and Method

There were collected and observed intertidal crabs under and among rocks in a delimited zone of rocky littoral in Cabo Polonio (34°15' - 34°20'S/53°50' - 53°70'W; Departamento de Rocha, Uruguay) locally called "La piscina de la Sur". The salinity in Cabo Polonio can vary between 23 and 32 ppt (Peluffo, 1998). The first visual record on these crabs was in February 2002. The collections were made in October and November 2004. Both sampling periods and all observations were made in extreme conditions of low tides. In laboratory, the specimens were checked concerning their identification, photographed and fixed in a formalin solution at 4%. The identification was done examining the external morphological characteristics (cephalothorax structures, chelipeds and gonopods) and comparing them with the literature (Melo, 1996). The crabs obtained in such samplings were measured according to the classic measures for brachyurans (CL= cephalothorax length; CW= cephalothorax width) using a caliper, in millimeters. Mud crabs specimens were compared with some pictures from Brazilian *P. austrobesus* specimens from São Paulo, which were obtained by Negreiros-Fransozo and Fransozo (2003).

Results and Discussion

Seventeen crabs of different lengths and from both sexes (9 males and 8 females) were obtained in the samplings. The maximum CL registered was 24 mm and the maximum CW, 33 mm (female). The minimum CL recorded was 7 mm and CW, 9 mm (female). The average LC of the total number of collected crabs was 14.6 mm and CW was 19.4 mm. According to the crab's descriptions by Melo (1996) and personal communications by Melo and Negreiros-Fransozo, the specimens found in Cabo Polonio

belong to the species *Panopeus austrobesus* Williams, 1983.

How can one explain the absence in the literature about the *P. austrobesus* at Uruguayan coasts? Two hypothesis could be given: (a) the species have been arrived at Uruguayan coasts recently (no more than two or three years ago) or (b) the natural habitat of this species is hardly to access and thus, is very difficult to see it. This last assertion is more reasonable because is not contradictory with Melo (1996), about the latitudinal distribution of the Brazilian mud crab. However, the former could not be rejected as other decapod species were already registered to occupy other latitudinal ranges than that previously recorded (Negreiros-Fransozo, 1996; Melo *et al.*, 2000 and Cobo *et al.*, 2002;).

Despite of the absence of population records, it is possible to conclude that *P. austrobesus* is a natural inhabitant of rocky shore communities in Cabo Polonio. Thus, it would be relevant to perform some population investigation of this species in that locality.

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