

**139- Breeding cycle in the burrowing shrimp *Callichirus major* (Say, 1818)
(Decapoda: Callianassidae) in a protected and non protected area of the
Southwestern Atlantic**

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In few occasions researchers have the chance to assess a population in its natural condition. Herein we analyzed the breeding cycle of the burrowing shrimp *Callichirus major* in a protected and unprotected area of the south central coast of Brazil. For this purpose, monthly samples of *C. major* were simultaneously collected during one year from the intertidal zone at Gonzaga beach (protected area) and Itararé (non protected area). During aforementioned period, a total of 245 and 120 brooding females were collected at Gonzaga beach and Itararé, respectively. Ovigerous females were represented during the entire study period at protected area (38%), while seasonally at non protected area (22%). At Gonzaga, ovigerous females with embryos close to hatching were detected during all months, whereas at Itararé beach exclusively during December. The observed phenotypical variability might be related to local environmental conditions that provoke a differential response of each studied population. Lastly, our results confirm the existence of a high ecological plasticity among intertidal marine decapods to adapt and reproduce under different environmental settings, which in turn may explain the wide geographic distribution of the species.

Palavras-chave: decapod populations, breeding pattern, reproductive plasticity.