297 - FECUNDITY OF MENIPPE NODIFRONS STIMPSON, 1859 (CRUSTACEA, BRACHYURA, MENIPPIDAE)

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The potential fecundity of Menippe nodifrons Stimpson, 1859, was analyzed for specimens collected monthly during the low tides of September'2003 to January'2004, in the rocky shore of Paranapuā Beach (23°59'S – 46°26'W), Sāo Vīcente (SP), Brazil. A total of 40 females with eggs in initial stage, had been weighed (WW = wet weight), measured (CW = carapace width), and its eggs removed and dehydrated in ethyl alcohol. Each ovigerous mass was dried in oven and the total egg number (EN) determined by the gravimetrical method. The females' size varied from 42.2 to 78.1 mm (57.9±9.7mm) and the weight from 25.5 to 180.0 g ($83.6 \pm 37.8 \text{g}$), with individual mean fecundity of 163.856 ± 74.274 eggs (from 38.053 to 348.442 eggs). The relationships ENxCW and ENxWW showed expressive fit by power function: EN = 2.81 CW 2.69 ($r^2 = 0.83$) and EN = 2804.5 WW 2.92 ($r^2 = 0.88$). The fecundity estimated here was higher than another population studied in Rio de Janeiro, verifying existence of a latitudinal influence. The spawning was registered in high frequency during the spring, coinciding with the beginning of the thermal rise. The fecundity of \underline{M} . nodifrons could be considered average in relation to other brachyurans. Information about its reproduction would help in larval culture studies. $^2\text{PIBIC/CNPq}$ (109785/2003-7); $^3\text{CNPq}$ (2003/141078-0)

298 - REPRODUCTIVE BIOLOGY OF THE SLIPPER LOBSTER <u>SCYLLARIDES</u> <u>DECEPTOR</u> HOLTHUIS, 1963 (DECAPODA: SCYLLARIDAE) IN THE SUBTROPICAL SOUTHERN BRAZILIAN COAST

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The reproductive biology of <u>Scyllarides deceptor</u> was studied from December 2002 to December 2003 in the islands off Santa Catarina, in Brazilian southern coast. This species is gradually becoming an important demersal resource, captured as by-catch in the shrimp otter trawl fisheries. Analysis of the frequence of occurrence of ovigerous females and their size class distribution was conducted with tagged females collected monthly in Xavier Island. Fecundity was estimated from 29 ovigerous females captured in Arvoredo, Aranhas and Xavier Islands. There was a general trend to find the highest abundance of ovigerous females in summer and spring, and molt period was registered from the late winter to the early summer. The minimum size of ovigerous females was 75mm of carapace length (CL), and a female with 104,8mm of CL became ovigerous without having molted. The results suggested that the functional maturity was between 90 and 95mm. The fecundity of <u>S. deceptor</u> was strongly and significantly related to CL (R²=0,90), and estimated in 191000 eggs. The Xavier Island rocky bottom is propicious to reproduction, being a shelter and feeding ground for ovigerous females.
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