



245 - REPRODUCTIVE BIOLOGY OF ARMASES RUBRIPES RATHBUN, 1897 (CRUSTACEA, DECAPODA, GRAPSIDAE) IN PATOS LAGOON ESTUARY, RIO GRANDE DO SUL, BRAZIL

Barutot, R.A. *; Pimenta, A.M. & D'Incao, F.

Laboratório de Crustáceos Decápodes, Departamento de Oceanografia, Fundação Universidade Federal do Rio Grande, Rio Grande do Sul; *robertabarutot@ig.com.br

The crabs Armases rubripes are component of of the intertidal fauna. At Patos Lagoon they are found in the salt marsh areas. The species reproductive biology was studied. Monthly samples had been carried through the Rio Grande Channel region from April-2002 until May-2004. The animals had been captured manually by two people during 30 minutes and taken to the laboratory. The animals were sexed and measured the width of carapace - CW (millimeters). For fecundity the ovigerous females had been separate in length classes of 1mm. The eggs mass was dried and weighted and a sample was removed, weighed and the eggs number counted. The egg number for each female was estimated. A total of 2208 individuals were captured (1201 males, 898 females, 75 ovigerous females and 34 young). The ratio between males and females was of 1:0.81. The reproductive period of the specie was October to April. The ovigerous females CW ranged between 7.7 and 17.7mm. The fecundity varied between 1358 and 11616 eggs.

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246 - POPULATION BIOLOGY OF CALLINECTES DANAE SMITH, 1869 (CRUSTACEA: PORTUNIDAE) IN SHANGRI-LÁ BEACH, SOUTHERN OF BRAZIL

Baptista, C¹; Pinheiro, M.A.A.²; Blankensteyn, A.³ & Borzone, C.A.⁴

¹Zoology Graduate Program, UFPR, Curitiba, PR; ²CRUSTA, UNESP, São Vicente, SP; ³Departamento de Ecologia e Zoologia, UFSC, Florianópolis, SC; ⁴CEM, UFPR, Pontal do Paraná, PR; *cassian@ufpr.br

Callinectes danae was studied in Shangri-lá Beach (25°37'30"S - 48°25'08"W) in order to know their population structure. From April 2000 and April 2001 fortnightly visits were accomplished in Shangri-la's fish market, where all individuals of a same otter-trawl were carried out. Each specimen was sexed and measured (CW = carapace width; WW = wet weight), and the development stage was determined (juveniles= sealed abdomen, and adult= free abdomen). Adult females predominated on the total of 765 swimming crabs collected. The abundance varied from four individuals in April 2000 to 77 in March 2001 (28.8 ± 24.3ind SD). The sex ratio was 0.9:1 (M:F) with minimum value in September 2000 (0.3:1), and maximum at April 2001 (20:1). Size at sexual maturity was estimated at 52mm for males, and 47mm for females, with linear equations: $\ln[\ln(1-y)] = -12.4 + 3.12 \ln x$ (M), and $\ln[\ln(1-y)] = -22.1 + 5.5 \ln x$ (F). Males were larger and heavier than females. CW ranged, for males from 6.3 to 93.3mm (66.9 ± 16.6mm SD), and WW from 2 to 109g (43.6 ± 24.0g SD), while for females CW varied from 26.5 to 86.0mm (60.4 ± 14.1mm SD), and WW from 2 to 81g (31.2 ± 16.2g SD). However, the WW/CW relationships showed that, for the same size class, females ($WW = 0.04 * CW^{3.0572}$) were heavier than males ($WW = 0.001 * CW^{3.021}$). In males the growth was isometric, whereas in females it was allometric positive. The morphological measures suggested a sexual dimorphism as a reproductive adaptation. The population structure of C. danae observed in Shangri-lá is possibly a result of migration. Such information is important subsidies for futures plans of shrimp fishery by-catch management in that area.

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