



126 - TROPHIC ECOLOGY OF THE CRAB MENIPPE NODIFRONS STIMPSON, 1859 (CRUSTACEA, BRACHYURA, MENIPPIDAE) IN PARANAPUÃ BEACH, SÃO VICENTE (SP), BRAZIL

Madambashi, A.M. ^{*1,3}, Christofoletti, R.A. ^{1,2} & Pinheiro, M.A.A. ¹

¹UNESP São Vicente, Research Group in Crustacean Biology (Crusta) – São Vicente (SP); ²Programa de Pós-Graduação em Zootecnia, Área de Produção Animal, FCAV, UNESP Jaboticabal; PhD candidate; crusta@csv.unesp.br

The knowledge about feeding spectrum of a species is necessary to understand its biology and relationships with other organisms. The present study describes the natural diet of the crab Menippe nodifrons by the frequency of the main preys in stomach. Diuturnal collects made in the rock shore of Paranapuã Beach, São Vicente (SP) during September/2003, revealed a higher ingestion of food during the night ($p < 0,001$), showing the night activity of this crab. For the analyses of the food items, animals were collected during the night from September/2003 to January/2004, and the analysis of stomach contents were made with a binocular microscope using the Percentage Points (Pt) and Percentage Occurrence (O) methods. The most common food items were polychaetes (Phragmatopoma caudata, Pt = 17.3%), crustaceans (Pt = 17.1%, mainly Eriphia gonagra), algae, mollusks and sponges, although echinoderms, cnidarians, bryozoans and fishes had been also ingested. High frequencies of digested organic matter (O = 93%) and empty stomachs (60.4%) were observed, showing the elevate predation rate over animal species, besides the fast digestion. The high feeding diversity allows the characterization of the omnivore habit for M. nodifrons, as well as its influence over other populations on the rock store.

³PIBIC/CNPq; ²FAPESP (PhD fellowship, 2002/11580-3)

127 - GROWTH OF TWO SPECIES OF THE GENUS BALANUS AT ANGRA DOS REIS, RJ, BRAZIL

Mayer-Pinto, M.* & Junqueira, A.O.R.

Depto. de Biologia Marinha - IB - Universidade Federal do Rio de Janeiro - Ilha do Fundão - RJ Brasil;

*marianam@biologia.ufrj.br

The aim of the present study was to evaluate the influence of space competition and of different positions of artificial panels on the growth of Balanus reticulatus and Balanus improvisus at Ilha Grande Bay, RJ, Brazil. Four wood panels of 20X20 cm were fixed in each experimental structure. Two panels were fixed vertically and two, horizontally, characterizing six treatments: Manipulated Vertical (MV); Control Vertical (CV); Manipulated Horizontal Upward (MHU); Manipulated Horizontal Downward (MHD); Control Horizontal Upward (CHU) and Control Horizontal Downward (CHD). In the manipulated treatments, 15 barnacles were chosen and had the areas adjacent to them cleared. This was done once a week, in order to remove all fouling organisms that could interfere in the barnacles growth. Each panel was photographed every week for three months. In the laboratory, barnacles were identified and had their rostro-carinal length and basal diameter measured digitally. Manipulation did not affect B. reticulatus whereas B. improvisus had its asymptotic size significantly smaller ($p < 0,05$) in CV panels than in MV panels. The presence of algae in CV treatment affected the growth of B. improvisus. The highest rate of sedimentation in the MHU panels affected the growth of both species, specially B. reticulatus. The two species presented a smaller asymptotic size in this treatment. Manipulation did not affect the maximum size of rostro-carinal length of both species. This measure is considered less variable than basal diameter, since the latter can be affected by contact with other organisms and by the topography of the substratum. B. reticulatus reached a significantly higher size than B. improvisus in most treatments. This result suggests that despite the fact that B. reticulatus is a recently introduced species in the Brazilian coast, it is well adapted to the environmental conditions of Ilha Grande Bay. Fellowship by CAPES.