**318**

# CHROMATIC PATTERN ASSOCIATED TO MOLT STAGES IN *UCIDES CORDATUS* (LINNAEUS, 1763) (BRACHYURA, UCIDIDAE), FROM A BRAZILIAN MANGROVE

MATOS, F.[1]; QUEIROGA, H.[2]; SERÔDIO, J.[2] & PINHEIRO, M.A.A.[3]

[1]Department of Biology, University of Aveiro – Campus de Santiago, 3810-193 Aveiro – Portugal; [2]CESAM - Center for Environmental and Marine Studies/Department of Biology, University of Aveiro - Campus de Santiago, 3810-193 Aveiro – Portugal; [3]Universidade Estadual Paulista (UNESP) / Campus Experimental do Litoral Paulista (CLP), Pç. Infante Dom Henrique, s/nº – 11330-900 – São Vicente (SP) – pinheiro@clp.unesp.br.

*Ucides cordatus* is a semi-terrestrial mangrove crab with variable chromatic patterns on the cephalothorax, which can be used to determine the molt stage in this animals, as determined by previous studies. Often, for pratical purposes, this molt stage is determined in specimens that have been frozen. This study aims to analyze the effect of freezing on individual color by analysis of reflectance spectra for wavelengthes discriminant of four pre-set color patterns and check if the relationship between color and the molt stage remain. This analysis was performed in same animals before and after frozen. A total of 84 individuals were captured in the mangroves of Iguape, Brazil, and grouped in four chromatic groups: brown, dark-green, light-blue and dark-blue. The data obtained by spectrometry of the carapace of live and thawed crabs showed significant differences among the four chromatic patterns ($p<0.001$). The light-blue live animals in post-molt stage A, after frozen, showed the color dark-blue (stage B). The individuals in post-molt stages B and C showed the same color after thawing, dark-blue and dark-green respectively. The live crabs in inter-molt stage D were brown and after thawed became dark-green. The change of color in of crabs in stages A and D after freezing and thawing indicates that colour cannot be used to identify stage in the molt cycle of thawed crabs.