



XIII Congresso de ECOLOGIA

III International Symposium of Ecology and Evolution

Múltiplas ecologias: evolução e diversidade

08 a 12 de outubro de 2017 • UFV - VIÇOSA | MG

POPULATION STRUCTURE OF THE CRAB *UCIDES CORDATUS* (LINNAEUS, UCIDIDAE) IN MANGROVES FROM SOUTHEASTERN BRAZILIAN COAST

Robson Leite^{1*}, Werther Krohling²

1. Laboratório de Ecologia Animal e Vegetal, Universidade Federal Fluminense, Niterói, 24020-971, Brazil;

2. Laboratório de Ecologia Terrestre e Aquática, Universidade Vila Velha, Vila Velha, 29102-920, Brazil.

*Correspondence to robsonleite86@gmail.com

Tema/Meio de Apresentação: Ecologia de Populações/Oral

Understanding population structure is essential for the effective management and conservation of fisheries resources. *Ucides cordatus* is a species of crab that is notorious for its influence on energy flow and bioturbation in its ecosystem. However, it is highly captured and marketed throughout the Brazilian coast. In order to describe the population structure and patterns of relative growth of two populations of this species located in two different municipalities of Espírito Santo, Vitória and Anchieta, we made monthly collections during 2014. These sites were selected because of its different urban characteristics, human occupation and activities. We recorded the sex and measured carapace width (cm), carapace length (cm) and wet weight (g). The relationship of width x weight was determined by a power function known as the allometric growth equation. A total of 1,150 crabs were sampled with 600 specimens from Vitória and 550 specimens from Anchieta. The sex ratio showed a significantly greater abundance of males throughout the year, indicating that the two populations are in disequilibrium. The populations consist of adults and the specimens from Anchieta are significantly larger and heavier than those from Vitória, suggesting a greater harvest pressure on the Vitória's population. In both populations the males are significantly larger and heavier than the females, which reflects the antagonism between growth and reproduction. The relative growth pattern indicates negative allometric growth in both populations, displaying greater growth in width instead of weight. This may be related to the expansion that develops on the side of the carapace in this species. This investigation highlights the relevance of studies on the population ecology of this economically important species. Furthermore, it calls for additional studies on recruitment and population dynamics, since it may indicate the need and location for restocking actions for recovery of populations affected by mass mortalities.

The authors thank the Programa Pós-Graduação em Ecologia de Ecossistemas da Universidade Vila Velha and FAPES for the Master's scholarship.