

BIOTECHNOLOGICAL APPLICATION OF BIOMOLECULES OBTAINED FROM AQUATIC ORGANISMS

Ranilson de Souza Bezerra
Universidade Federal de Pernambuco

There is a large diversity of organisms in aquatic environment comprising species commercially important to fishery industry and with different live and food habits. They are extremely adapted to environment conditions as for example: feed availability, temperature, oxygen level and pollutions agents. Among them are fishes, crustaceans, mollusks and seaweeds. The industrial processing of these organisms generates residues generally rich in biomolecules with potential biotechnological applications. This fact has awaked our interest in studying the characterization and application of these biomolecules. As a result of this effort the following results will be discussed: a) the compatibility of fish alkaline protease to surfactants, oxidants and detergent; b) extraction, partial characterization and neural effect of carotenoids pigments from shrimp processing waste and c) the potential use of an acetylcholinesterase from a tropical fish as a very sensitive biomarker to organophosphorous pesticides environmental monitoring.

*Correspondence: Bezerra, R.S., ransoube@uol.com.br

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