

**TITLE: ANTIMICROBIAL EVALUATION OF MICROORGANISMS FOUND IN THE CARAPACE OF AMAZON TURTLES (*Podocnemis exapansa*)**

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**ABSTRACT:**

Illegal trade in chelonians along with natural and human predation began to interfere with the abundance of natural populations. One of the alternatives to discourage and minimize the impact of these actions was the incentive to create with commercial purpose in legalized breeding grounds. The creation of chelonians in captivity also makes it possible to carry out scientific research and exhibitions in zoos and visitation centers. However, this type of activity can cause or originate pathogenesis due to several factors that compromise the sanity of captive animals. The objective of this work was to isolate, purify, identify and conserve the microorganisms present in the carapace of Amazon turtle (*Podocnemis expansa*) grown in captivity and to verify possible antagonistic activities of the microorganisms by performing antimicrobial susceptibility tests. The collected microorganisms were inoculated in BDA culture medium, being these, 83 fungi and 65 isolated bacteria. The micro morphological identification of the microorganisms was done by means of Gram staining and micro cultures, already the macro morphology was analyzed with the naked eye observing the presented aspects by the colonies. Antimicrobial susceptibility tests were performed on 24 bacteria, and the antibiotic with the best action spectrum was Tetracycline. Towards the presented results and the scarce literature on this subject, it is necessary to develop research for the well-being of these animals, as well as to establish measures of pathological control and adequate prophylactic measures.

**Keywords:** Chelonium, antagonist activity, antimicrobials.

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