Title: ANTIMICROBIAL SUSCEPTIBILITY PROFILE OF *Staphylococcus* ISOLATED FROM FROZEN SHRIMP

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Abstract:

Incidence of *Staphylococcus* genus in fishery products are commonly associated to inadequate handling practices and is related to intoxication outbreaks. In addition, an increased number of antimicrobial-resistant staphylococci originated from food. This work aimed to analyse the susceptibility profile to antimicrobials of 60 *Staphylococcus* strains. isolated from frozen shrimp. All strains were subjected to antimicrobial susceptibility testing by disk-diffusion technique in Agar Mueller-Hinton. The colonies were suspended in a 0.85% saline solution until reaching a 0.5 McFarland scale similar turbidty. Subsequently, this suspension was homogenized and, with a swab, the colonies were plated on Mueller-Hinton agar, followed by the application of the following antimicrobial discs: Imipenem 10 µg (IMP); cefepime 30 µg (CPM); chloramphenicol 30 µg (CLO); streptomycin 10 µg (EST); cefritriaxona 30 µg (CTX); oxacillin 1 µg (OXA); tetracycline 30 µg (TCY); gentamicin 10 µg (GEN); penicillin 10 UI (PEN); ciprofloxacin 30 µg (CRO); vancomicin 30 µg (VAN); ampicillin 10 µg (AMP). From the 60 *Staphylococcus* strains, 4 (6.6%) presented monoresistance to OXA and 1 (1,6%) to TET. Cross-resistance to beta-lactams OXA+CPM) was observed in 2 (3,3%) *Staphylococcus* isolates. 1 strain (1.6%) presented multiresistance to the following antimicrobials: oxacillin, tetracycline, penicillin, chloramphenicol and vancomicin. The isolation of antimicrobial-resistant staphylococci serves as an alert to the prophylactic use of antibiotics when cultivating these crustaceans. Besides, reinforces the need of employing good handling practices.

Keywords: resistance, *Staphylococcus*, shrimp, antimicrobials.

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