



DETECTION AND QUANTIFICATION OF *Staphylococcus aureus* IN
SMOKED FISH SAMPLES OBTAINED IN PANDAWAN,
BRGY. SAPA II, ROSARIO, CAVITE

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ABSTRACT

The study detected and quantified *Staphylococcus aureus* in smoked fish samples obtained in Pandawan, Barangay Sapa II, Rosario, Cavite. Quantification was performed via serial dilution of up to 10^{-3} . An aliquot from 10^{-1} , 10^{-2} , and 10^{-3} was spread plated into mannitol salt agar (MSA) and the plates were incubated at 37 °C for 24 hours. A total of 12 smoked fish samples were obtained. These samples were bangus (*Chanos chanos*) (3), galunggong (*Decapterus macarellus*) (3), tunsoy (*Sardinella fimbriata*) (3) and tambakol (*Thunnus albacares*) (3). Of these 12, three had a positive result on culturable *Staphylococcus aureus* based on colonial characteristics in mannitol salt agar. The positive results were from samples of tambakol (T1, T2, T3). The characteristics observed conformed to the colonial characteristics of *Staphylococcus aureus*. For identification, Gram staining and biochemical tests were performed. The biochemical tests were catalase and coagulase test. A total of 29 isolates from tambakol were subjected to biochemical tests. Out of the 29, three were identified as *Staphylococcus aureus* and the rest were *Staphylococcus epidermidis*. The isolates that were confirmed as *Staphylococcus aureus* were coagulase negative and catalase positive.



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