

## De La Salle University - Dasmariñas BIOLOGY PROGRAM

## **ABSTRACT**

The study detected and quantified Staphyloccus 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 Staphyloccus aureus and the rest were Staphylococcus epidermidis. The isolates that were confirmed as Staphyloccus aureus were coagulase negative and catalase positive.