

## ***ABSTRACT***

Anisatul Mahfudzoh, 24020122130072. Antibacterial Potential Test of Bacterial Isolates from Bekasam Sepat Fish (*Trichopodus trichopterus*) Against *Staphylococcus aureus* and *Escherichia coli*. Under the guidance of Arina Tri Lunggani and Endang Kusdiyantini.

Antibiotic resistance remains a global health threat that continues to increase every year. Pathogens causing antibiotic resistance that are frequently reported include *Staphylococcus spp.* and *Escherichia coli*. Based on this problem, it is necessary to explore sources of antibacterial compounds and test their inhibitory power against *Staphylococcus spp.* and *Escherichia coli*. One of the traditional foods that has the potential to contain bacteria that produce antibacterial compounds is bekasam. Bekasam sepat fish is a fermented food made from sepat fish with a mixture of rice and salt. This study aims to isolate and characterize the morphology and biochemistry of bacteria from bekasam sepat fish and test its antibacterial activity against *Staphylococcus aureus* and *Escherichia coli*. Isolation was carried out in nutrient agar and NaCl media using the spread plate method, then observation of colony morphology, microscopic observation using Gram staining techniques, catalase tests, carbohydrate fermentation tests, creation of growth curves, and testing of antibacterial activity using the disc diffusion method against *Staphylococcus aureus* and *Escherichia coli*. A total of 8 isolates were successfully obtained with dominant characteristics of Gram-positive bacilli. Two isolates showed antibacterial activity against *Staphylococcus aureus* with inhibition zones of 7.8 mm and 7.1 mm, so the resulting inhibition power was classified as very weak.

Kata kunci: Antibakteri, Bekasam, *Staphylococcus aureus*, *Escherichia coli*.