

ANTIBACTERIAL AND WOUND HEALING ACTIVITY of PAPUYU (*Anabas Testudineus*) FISH MUCUS

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Abstract

Abstract. One of the local fish resources in South Kalimantan is *Anabas testudineus* fish. In Al Rasheed's research (2018), it is known that *A. testudineus* fish mucus has antibacterial activity, but this study only looked at the inhibitory of fish mucus. Until now, there has been no test for the Minimum Inhibitory Concentration (MIC) and Minimal Bactericidal Concentration (MBC) of *A. testudineus* fish mucus. One of the bacteria that infect wounds is *S. aureus*. MIC and MBC obtained will be used as a reference in determining the concentration of *A. testudineus* fish mucus gel for wound healing activity test. This study aimed to determine the MIC and MBC of *A. testudineus* fish mucus in *S. aureus* and analyze the wound healing activity of *A. testudineus* fish mucus. MIC and MBC tes using turbidity test. In this research, 3 fish mucus gel formulas will be made. Wound healing activity test on Wistar rats that were given wound initiation with a diameter of 1.5 cm, and were observed after 7 days of treatment. Observations were made covering the area of the wound using image J and histology of rat skin. The results showed that MIC and MBC of *A. testudineus* fish mucus were 21.875%. Fish mucus gel formula was made into concentrations of 10%, 20% and 40%. The results of the wound healing test showed that giving *A. testudineus* fish mucus caused a decrease in the area of the wound but based on histology of the skin, inflammation still occurred.

Keyword : Wound healing, *Anabas testudineus*, *Staphylococcus aureus*, mucus