

FORMULATION OF NATURAL BATH SOAP FROM MLINJO (*Gnetum gnemon*) SKIN AND ITS ACTIVITY TEST AS AN ANTIBACTERIAL

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ABSTRACT

Mlinjo skin has been known to have biological activity as an antioxidant, antibacterial and antimicrobial. The purpose of this study is to utilize the potential of melinjo skin as a high-efficient local product to be developed as an antibacterial soap in accordance with the Indonesian National Standard (SNI).

Soap making is done by reacting vegetable oils with NaOH through cold and hot process. After a perfect lathering reaction, mlinjo skin, coloring and fragrance are added. Furthermore, the soap is allowed to stand for 4 weeks for the curing process. Soap quality testing is carried out in accordance with SNI in 2016, namely the test of insoluble ingredients in ethanol, free alkali and non-soapy fat. Then the antibacterial activity test was carried out on the Mlinjo skin soap. The antibacterial activity test was carried out by the Kirby-Bauer diffusion method. The samples tested were mlinjo skin, soap with mlinjo skin and soap without mlinjo skin as a comparison.

The target of this research is to produce Indonesian biological resources development products in the health sector. From the results of this study it is hoped that it can increase the benefits of Mlinjo's skin into an antibacterial soap that is in accordance with SNI's high efficiency. It is also expected to produce publications in the form of indexed international journals and Sinta indexed national journals.

Kata Kunci: *gnetum gnemon*, soap, antibacterial