ABSTRACT

ANTIBACTERIAL ACTIVITY OF Ganoderma lucidum AGAINST THE BACTERIA Salmonella typhi

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Indonesia is a country with very high biodiversity. The country of Indonesia has fertile soil because of its geographical location in the tropics, so it has a lot of agricultural products, one of which is mushroom plants. Ganoderma lucidum is a fungus that is widely used for research both in terms of biological activity and pharmacological effects. Ganoderma lucidum is a very valuable source of biologically active substances that can be used as antibacterial or antimicrobial agents. This study aims to determine the antibacterial activity of Ganoderma lucidum against Salmonella typhi bacteria with various solvents in the disc diffusion method. The design of this study is a literature review. Researchers searched for manuscripts through official databases and library sources relevant to the research topic. The number of articles that were resumed were 3 national articles and 2 international articles.

Based on the results of the five articles, it is known that the extract of lingzhi mushroom (ganoderma lucidum) can inhibit the growth of Salmonella sp. The largest inhibition zone with a strong category of 20.60 mm was obtained using the paper disc diffusion antibacterial test method. The extraction method used is soxhletation with an extract concentration of 40μg/ml and using acetone as a solvent. The smallest inhibition zone in the very weak category of 0 mm was obtained with an extract concentration of 50mg/ml using the paper disc diffusion method and ethylacetate solvent. It is necessary to retest to compare the antibacterial activity of Ganoderma lucidum extract against Salmonella typhi bacteria with different types of solvents and concentrations.

Keywords: Ganoderma lucidum, Salmonella typhi, paper disc diffusion, soxhletasi, acetone.