ABSTRACT

ANTIBACTERIAL ACTIVITY OF LINGZHI MUSHROOM (Ganoderma lucidum) AGAINST THE BACTERIA Escherichia coli

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Lingzhi mushroom (Ganoderma lucidum) is an herbal plant that has potential as an antibacterial. The antibacterial activity of the lingzhi mushroom is influenced by the compounds contained in it. Triterpenoids in lingzhi mushrooms are compounds that act as antibacterials that have an external mechanism for polymer formation against porins (transmembrane proteins) on the bacterial cell wall membrane, causing damage to the porin. The purpose of this review is to determine the antibacterial activity of lingzhi mushroom (Ganoderma lucidum) against Escherichia coli bacteria. The design of this research 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.

Comparative discussion of five articles on the antibacterial activity of Ganoderma lucidum extract against Escherichia coli bacteria showed that the largest inhibition zone with very strong category was (28±3.7) mm using the well diffusion antibacterial test method. The extraction method used is soxhletation with an extract concentration of 200mg/ml with using distilled water as a solvent. The conclusion is that lingzhi mushroom extract has potential as an antibacterial.

***Keywords**: Ganoderma lucidum, Escherichia coli, soxhletasi*