

ABSTRACT

AKTIFITAS ANTIBAKTERI JAMUR *LINGZHI* (*Ganoderma lucidum*)TERHADAP *Bacillus subtilis*

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Lingzhi mushroom (*Ganoderma lucidum*) is a natural medicine or better known as traditional medicine which has potential as an antibacterial. Antibacterial activity of lingzhi mushroom which has compounds containing tannins, phenolic polysaccharides, flavonoids, saponins and triterpenoid compounds that specifically have an important role in antibacterial activity can inhibit *Bacillus subtilis* bacteria, namely triterpenoid compounds, polysaccharides. The mechanism of action of triterpenoid compounds is by damaging cell membranes due to reactions from the cell membrane side, and increased permeability, while the mechanism of action of polysaccharide compounds is to strengthen the immune system with little or no side effects. 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 to be resumed is 3 national articles and 2 international articles

Based on the results of a literature review of five articles on the antibacterial activity of *Ganoderma lucidum* extract against *Bacillus subtilis* bacteria the results of the inhibition zone were obtained at a concentration of 2% of 5.9 mm, 4% concentration of 6.34 mm, 6% concentration of 6.68 mm, the concentration of 8% is 7.88 mm, and the concentration of 10% is 8.6 mm and is in the medium category. using the bioautography TLC antibacterial test method and the extraction method used is soxhletation using 96% ethanol solvent. So it can be concluded that lingzhi mushroom extract has potential as an antibacterial.

Keywords: *Ganoderma lucidum*, *Bacillus subtilis*, antibacterial