

ABSTRACT
(LITERATURE REVIEW)

ANTIMICROBIAL ACTIVITY OF LINGZHI FUNGUS
(*Ganoderma lucidum*) AGAINST *Candida albicans*

Lela Kumala Sari Dewi

*Lingzhi mushroom (*Ganoderma lucidum*) is a natural ingredient that is known to be effective in various kinds of medicine, health care and beauty and is widely cultivated in various countries. The compounds found in Lingzhi Mushrooms include polysaccharides and triterpenoids. Triterpenoids are compounds that have a function as an antimicrobial. The purpose of this study was to determine the antimicrobial activity of Lingzhi Mushroom (*Ganoderma lucidum*) against *Candida albicans*. The activity of *Candida albicans* can be known if the formation of a clear zone around the disc is influenced by triterpenoid compounds. *Candida albicans* infection is often an opportunistic infection called an opportunistic infection that is candidiasis of the skin, mucosa, and internal organs of humans. The research design used in this study is an analytical type based on an analytical literature review study. At this stage the literature search uses online databases in several portals. Researchers used the Google Scholar database. The data used in this study comes from the results of research that has been carried out and published in national and international online journals. The data collection process was carried out by filtering based on criteria determined by the authors of each journal taken.*

*Based on the results of the five articles, it is known that Lingzhi Mushroom (*Ganoderma lucidum*) extract can inhibit the growth of *Candida albicans*. The solvents used were ethanol, distilled water, methanol, and chloroform. Ethanol was chosen because it has the same polarity as the compound to be drawn. Ethanol can attract secondary metabolites, especially optimizing the withdrawal of some low molecular weight compounds such as saponins and flavonoids, both of which are antifungal compounds. Distilled water solvent is stable and non-toxic for Lingzhi Mushroom (*Ganoderma lucidum*), while methanol is a universal solvent which has a polar (-OH) and nonpolar (-CH₃) group so that it can attract polar and non-polar compounds.*

*Lingzhi mushroom (*Ganoderma lucidum*) has an antimicrobial effect with a zone of 19 mm, which is included in the strong category. Lingzhi Mushroom Extract has an antimicrobial effect at a concentration of 80mg/ml with an inhibition zone of 19 mm, which is included in the strong category. The conclusion that can be drawn is that Lingzhi Mushroom (*Ganoderma lucidum*) extract has potential as an antimicrobial *Candida albicans*.*

*Keywords: *Ganoderma lucidum*, *Candida albicans*, antimicrobial*