## ABSTRACT

## ANTIFUNGAL ACTIVITY OF Auricularia nigricans EXTRACTED BY MACERATION WITH ETHANOL AS A SOLVENT AGAINST Candida glabrata USING THE WELL METHOD

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Candida glabrata is the second most common cause of candidiasis. Infections caused by Candida glabrata are hard to treate because it's high significance of resistance against fluconazole and other azoles derivat. Black ear fungus (Auricularia nigricans) is one of the natural ingredients that can be used as antifungal because it contains alkaloids, flavonoids and monoterpens. The purpose of this study is to determinate antifungal activity of maceration-ethanol extract from Auricularia nigricans against Candida glabrata using well method. Black ear fungus is obtained from cultivation in Poncokusumo, Malang district, East Java which determined in BRIN Bogor and Candida glabrata is obtained from BBLK Surabaya. Auricularia nigricans is extracted by maceration method with ethanol 96% as the solvent for three days. Auricularia nigricans extract then made into three concentrations 0,2g/mL; 0,3g/mL; and 0,4g/mL. Antifungal activity is determinated using well method with DMSO 10% as negative control and replicated six times. The study conducted obtained as much as 16.27g black ear fungus extract with a yield value of 8.135% and shows that Auricularia nigricans in all concentrations did not form a clear zone which indicated that there was no inhibition against Candida glabrata and this result was included in the inactive category.

Keywords : Auricularia nigricans, Candida glabrata, maceration, ethanol, well method