ABSTRACT

INHIBITORY TEST OF METHANOL EXTRACT OF Auricularia nigricans AGAINST Candida parapsilosis USING THE DISC METHOD

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Candidiasis is an infectious disease caused by a fungus caused by Candida sp. transmission that can occur through direct or indirect contact. Candidiasis can affect hair, nails, mucous membranes and other organs such as the mouth and throat. Black ear fungus is a wood fungus containing secondary metabolites of alkaloids, flavonoids and monoterpenes which function as antifungals. The purpose of this study was to determine the ability of black ear mushroom (Auricularia nigricans) methanol extract to inhibit the growth of Candida parapsilosis. Dried black ear mushrooms are cut into smaller sizes then blended until smooth and sieved. As much as 200 grams of black ear mushroom powder was extracted with 1 liter of methanol using the 10-hour soxhletation method and 4 repetitions. The results of the extract obtained were 5.45 grams which were purple-black in color, thick in shape and had a distinctive odor. The test concentration used in the study was 0,2 g/ml; 0,25 g/ml; 0,3 g/ml and 10% DMSO as a negative control with 5 replications. The results showed that there was no inhibition zone formed around the disc paper which indicated that the black ear mushroom methanol extract could not inhibit the growth of Candida parapsilosis and was included in the inactive category. Several factors could influence these results, namely the habitat of the black ear fungus (Auricularia nigricans), the extraction method, the nature of the test fungus Candida parapsilosis.

Keywords: Candidiasis, Auricularia nigricans, Candida parapsilosis, methanol, soxhletation, disc method.