ABSTRACT

Background. Oral candidiasis is a fungal infection that is generally happened to the HIV/AIDS patients. Candida tropicalis is non-Candida albicans which have the highest virulence. The extensive use of antifungal in HIV/AIDS patients led to the colonization of non-Candida albicans species because it caused by increasing drug resistance incidens among these species. Grape seed is part of grape contains the greatest phenolic and has effective antimicrobial properties.

Purpose. The aim of this study was to determine the antifungal activity of Blue Probolinggo grape seed extract (Vitis vinifera) to the growth of Candida tropicalis.

Method. This study uses dilution series consisting of 10 groups. Group 1-8 were given grape seed extract and 0.1 ml of inoculum while group 9 was being control (+) filled by media and 0.1 ml of inoculum. Furthermore, for the control (-), group 10 filled by media without inoculum. As cross check from the result, each tube being re-planted again in the solid media of Sabouraud Dextrose Agar.

Result. At a concentration of 6.25%, there was starting growth of Candida tropicalis colony and it has increasing number in a row to lower concentration.

Conclusion. Blue Probolinggo grape seed extract (Vitis vinifera) has antifungal activity to the growth of Candida tropicalis. MIC (Minimum Inhibitory Concentration) of grape seed extract was in the concentration of 6.25%, while MFC (Minimum Fungicidal Concentration) was in 12.5 % concentration.

Key words: Grape seed extract, Candida tropicalis, Oral candidiasis