ABSTRACT

Background. Oral candidiasis is a fungal infection disease mainly caused by Candida. Until now, among the Candida species, Candida albicans is the most commonly isolated and responsible for the majority of candidiasis. Candida tropicalis is the second most commensal and opportunistic oral pathogenic fungi after Candida albicans. Propolis consist of many chemical ingredients that have rich biological activity, such as flavonoid (pinocembrin, galangin), phenol (caffeic aci and ferulic acid), glycol propylene, phenolic ester (caffeic acid phenethyl ester or CAPE), and ester. Those ingredients have many biological activity, especially antifungal effect. Purpose. To give evidence the difference of antifungal effect of propolis 12.86% with Candida albicans and Candida tropicalis. Material and method. 6 samples of Candida albicans and 6 samples of Candida tropicalis is tested with propolis 12.86% using agar diffusion method. Control using 6 media Saboraud’s Dextrose Agar (SDA) with Candida albicans on it and 6 SDA with Candida tropicalis. After incubated (24 hours, 37°C), the inhibitory zone that appears on each of it is being evaluated. Kolmogorov-Smirnov Test is used to analyze the data, and Mann-Whitney Test is used to further analysis. Result. There is significant difference between each group, p=0.001 (p<0.05). Conclusion. Propolis 12.86% shows more effective to Candida tropicalis rather than Candida albicans.

Keyword: Propolis 12.86%, Candida albicans, Candida tropicalis