ABSTRACT

Objective: Green tea extract, including catechin and caffeine, have strong anti-fungal activity. The aim of this study is to find the difference of anti-fungal effect between catechin and caffeine on green tea extract in growth of Candida albicans. Methods: This research takes place in microbiology department of biology oral laboratory, faculty of dentistry, Airlangga University Surabaya and pharmacognosy and photochemistry department, faculty of pharmacology, Airlangga University Surabaya. We determined anti-fungal effects of catechins and caffeine on Candida albicans. Results: Minimum inhibitory concentration (MIC) of catechin to the growth of Candida albicans is 50% and MIC of caffeine to the growth of Candida albicans is 80%. Conclusions: Catechin and caffeine have anti-fungal effect of Candida albicans. The growth inhibitory effects of a catechins against Candida albicans were stronger compared to the anti-fungal activity of the caffeine. Key Words: Green tea extract; Catechin and caffeine; Anti-fungal effect; Candida albicans.