JAMAICAN CHERRY LEAF EXTRACT (Muntingia calabura L.) INHIBITS THE GROWTH OF MICROORGANISM ON THE POLYVINYL SILOXANE IMPRESSION

ABSTRACT

Background: Polyvinyl siloxane (PVS) is the impression material that is often used by dentists. The susceptible while impressed is microbial contamination between dentists, patients, and laborats. One of prevention by spraying method of desinfectan from Muntingia calabura L. extract. Muntingia calabura L. contains flavonoid, saponin, tannin and steroid as antimicroorganism. Porpuse: To determine effectivity of Muntingia calabura L. extract on PVS to inhibit the growth of microorganism. Methods: 5%, 10%, and 20% concentrations of Muntingia calabura L. extract sprayed to 21 samples of PVS and aquadest steril sprayed to control group. Colony Forming Unit was counted after the 24-hours incubation on Blood Agar Media. Results: One-way ANOVA analysis showed a decrease colony of microorganism significantly in the treatment group compared to the negative control (p<0,05). Conclusion: From the limited result of this experiment, it suggest that Muntingia calabura L. extract inhibited the growth of microorganisms on PVS impression material.

Key words: Polyvinyl siloxane, Muntingia calabura L. extract, Spray Method, Antimicroorganism Activity