ABSTRACT

Durian (Durio zibethinus murr) is one of the famous fruits in Indonesia. Durian rind contained antibacterial agents such as tannin, saponin, flavonoid and polygalacturonic acid. Purpose: The aim of this study was to find the inhibition of durian rind extract on the growth of supragingival bacteria. This research used agar diffusion method and 8 concentrations of Durio zibethinus murr’s rind extract, which were 0.78%, 1.56%, 3.13%, 6.25%, 12.5%, 25%, 50% and 100%. In this method the durian rind extract was a gel extract, which placed into the 5mm hole on the assay plates. The zone of inhibition is measured after the incubation. The inhibitory zones were recorded in millimeters and analyzed using Kruskal Wallis test. Result of statistical test revealed that durian rind extract had significant differences of inhibitory zone from each concentration on supragingival bacteria. The result of this research is the concentration range from 0.78% of Durio zibethinus murr’s rind was potential against the growth of bacteria plaque.

Keywords: Durio zibethinus murr, Dental plaque, Inhibitory effect