DAYA HAMBAT EKSTRAK DAUN KARI (Murraya Koenigii) TERHADAP PERTUMBUHAN BAKTERI PLAK SUPRAGINGIVA

MINIMUM INHIBITORY CONCENTRATION OF THE CURRY LEAVES (Murraya Koenigii) TOWARD SUPRAGINGIVA PLAQUE’S BACTERIA GROWTH

ABSTRACT

Background: Dental plaque may be defined as the soft deposits that form the biofilm adhering to the tooth surface or other hard surfaces in the oral cavity, including removable restorations. This mainly consist of microorganisms, most of them are bacteria. There are many ways to prevent the plaque formation in the tooth surface. Nowadays, herbal therapy is oftenly used as an antibacterial agent to inhibit the growth the bacteria. The herb used in this study is curry leaves (Murraya koenigii) extract. Curry leaves contain some active agents which is potential as an antimicrobial such as carbazole alkaloid, caumarin, flavanoid, tannin and polyphenol.

Purpose: The aim of the study is to find out the minimum inhibitory concentration of the curry leaves (Murraya koenigii) extract toward supragingiva plaque’s bacteria growth.

Method: Method used in this study is paper disk diffusion with the concentration of 100%, 50%, 25%, 12.5%, 6.25%, 3.13%, 1.56%, and 0.78%.

Result: The results showed in the concentration of 0.78%, 1.56% and 3.13% showed the bacterial growth while in concentration of 6.25%, 12.5%, 25%, 50% and 100% bacterial growth did not occur in all sample plates and has ability to inhibit the growth of the supragingiva plaque’s bacteria.

Conclusion: The conclusion of this study in this minimum inhibitory concentration of the curry leaves (Murraya koenigii) toward supragingiva plaque’s bacteria growth is in concentration of 6.25%.

Keywords: curry leaves (Murraya koenigii) extract, dental plaque, minimum inhibitory concentration.