ABSTRACT

**Introduction:** Dental plaque is an accumulation of thin film on the outer surface of tooth. This mainly consists of microorganisms, most of which are bacteria. There are many ways to prevent the plaque's formation in the tooth surface. Nowadays, herbal therapy is oftenly used as an antibacteria agent to inhibit microorganism's growth. The herb used in this study is green cincau leaf extract (Cyclea barbata Miers). Green cincau leaves contains some active agents which are potential as an antimicrobial such as phenol, flavonoid, (DL)–proto-Quercitol and Tetracontan-19-ol. Therefore the aim of the study is to find out the inhibitory concentration of the green cincau leaves extract (Cyclea barbata Miers) on the growth of supragingiva plaque bacteria. **Method:** The method used is agar diffusion with the concentration of 100%, 50%, 25%, 12.5%, 6.25%, 3.125%, 1.5625% and 0.78125%. **Result:** The results showed that ranging from the concentration of 6.25% occurred a zone of growth inhibitor for the growth of supragingiva plaque bacteria on agar plate. **Discussion:** Whereas bacterial growth in the concentration of 6.25% above have been inhibited by the green cincau leaves extract. The conclusion of this study is green cincau leaves extract can be the inhibitory factor for the growth of supragingiva plaque bacteria from the minimum concentration 6.25%

**keywords:** green cincau leaves (Cyclea barbata Miers), dental plaque, zone of growth inhibitor