

**DAYA HAMBAT EKSTRAK KULIT MANGGIS**  
**(*Garcinia Mangostana L.*) TERHADAP PERTUMBUHAN**  
**POLIBAKTERI *RECURRENT APHTHOUS STOMATITIS***  
***INHIBITION EFFECT OF MANGOSTEEN PEEL (*Garcinia****  
***mangostana L.*) EXTRACT TOWARD THE GROWTH OF**  
***RECURRENT APHTHOUS STOMATITIS POLYBACTERIA***

**ABSTRACT**

**Background.** *Recurrent Aphthous Stomatitis (RAS)* is an oral mucosal disease in which oral epithel layer is destroyed through lamina propia. RAS is a common painful mucosal condition affecting the oral cavity which is characteristic by reccuring ulcer with no other sign of disease. RAS affect approximately 20% of the general population. Bacteria plays role in exacerbatng RAS pathogenicity by causing secondary infection which delays oral mucosa recovery. Mangosteen peel is a medicinal herbs that had been known from a long time ago. It has many benefit for health, one of them is antibacterial effects. **Purpose.** The aim of this study was to account the inhibition effect of mangosteen peel extract towards the growth of RAS polybacteria. **Method.** This research was done with the help a 31 years old woman who has mouth ulceration which occurs often. The ulceration's size accounts more than 10 mm and does not have systemic disease. The lesion was swabbed. The swabbed material was incubated in Mueller Hinton agar to let the bacteria to grow. Mangosteen peel extract is diluted in different concentrations: 100%, 50%, 25%, 12,5%, 6,25%. Sterile paper disc is dipped in mangosteen peel extract and put on the agar media which contains polybacteria. After 24 hours inhibition zone will be measured. **Result.** The mean diameter of inhibition zone on the concentration 100%, 50%, 25%, 12,5%, 6,25%, 3,125%, 1,56% is 15,55mm, 13,14mm, 11,14mm, 10,04mm, 9,05mm, 7,96mm, 6,59mm but at the concentration 0,78% there is no inhibition zone. **Conclusion.** Mangosteen peel extract can inhibit the growth of RAS polybacteria and the effective concentration to inhibit the growth of RAS polybacteria is 1,56%.

**Key words:** *Garcinia mangostana L, Recurrent Aphthous Stomatitis, Inhibition zone*