

**EFEKTIVITAS FLAVONOID KULIT MANGGIS (*Garcinia mangostana* L)
SEBAGAI ANTI BIOFILM BAKTERI *Enterococcus faecalis***

*EFFECTIVENESS OF FLAVONOID FROM MANGOSTEEN PERICARP
(Garcinia mangostana L) AS Enterococcus faecalis BACTERIAL ANTIBIOFILM*

ABSTRACT

Background. *Enterococcus faecalis* (*E. faecalis*) is a microorganism that is commonly found in endodontic failure treatment, this due to several characteristics of *E. faecalis* which has the capability to living in environments with high salt levels, high temperature, and pH broad spectrum. Bacteria in biofilms form is one of the adaptive process that allows bacteria to survive in an environment with low nutrients in the root canals. Bacteria in biofilms form have different characteristics from planktonic form, resistance to phagocytic cells and drugs, which can effect to persistent infection. Mangosteen (*Garcinia mangostana*) has many benefits, especially on the pericarp of the fruit contains alkaloids, tannins, phenolics, flavonoids, and triterpenoids. Flavonoids are the largest group of phenolic compounds that have a nature effectively inhibit the growth of viruses, bacteria, and fungi. **Objective.** To find out the role of the antibiofilm of the flavonoid in *Garcinia mangostana* pericarp against *E. faecalis* bacterial biofilm. **Method.** Laboratory experimental in-vitro with post test only group design. The method used is microtiter plate biofilm assay and continued with the readings use Elisa reader at a wavelength of 595 nm. **Result.** Flavonoids mangosteen pericarp effective as antibiofilm *E. faecalis* bacteria at a concentration of 12.5%. **Conclusion.** The study showed that flavonoids from mangosteen pericarp has antibiofilm activity against *E. faecalis* bacterial biofilm.

Keywords: Flavonoid of *Garcinia mangostana*, *Enterococcus faecalis*, biofilm