

*EFEKTIVITAS EKSTRAK KULIT MANGGIS DAN CHLORHEXIDINE
GLUCONATE 0,2% TERHADAP KEBERSIHAN SALURAN AKAR*

*THE EFFECTIVITY OF GARCINIA MANGOSTANA LINN PERICARP EXTRACT
AND CHLORHEXIDINE GLUCONATE 0.2% TOWARD
CLEANLINESS OF ROOT CANAL*

ABSTRACT

Background. *The use of irrigation fluid is an important step in the process of cleaning the root canal due to the formation of mechanically alone can not clean the smear layer consisting of the residue of the pulp tissue, microorganisms, and debris from the root canal. Root canal irrigation fluid used today still has shortcomings, one of which is the lack of ability to clean the root canal of the smear layer.* **Purpose.** *The purpose of this study is to prove the Garcinia mangostana Linn pericarp extract is more effective in cleaning the root canal of a smear layer than 0.2% chlorhexidine gluconate.* **Method.** *Twenty-eight premolars were divided into four groups, each group consisting of 7 teeth. Root canal preparation with conventional techniques performed on each tooth, then group 1, 2, 3, and 4 respectively irrigated with Garcinia mangostana Linn pericarp extract concentration of 600µg/ml, 700µg/ml, 800µg/ml and chlorhexidine gluconate 0.2%. Rating cleanliness of the root canal using a scale of cleanliness conducted under Scanning Electron Microscope.* **Results.** *There is a significant difference ($p < 0.05$) in the Control Median test and Kruskal-Wallis test between Garcinia mangostana Linn pericarp extract and 0.2% chlorhexidine gluconate to the cleanliness of the root canal.* **Conclusion.** *Garcinia mangostana Linn pericarp extract is more effective in cleaning the root canal of a smear layer than 0.2% chlorhexidine gluconate.*

Keywords: Garcinia mangostana Linn, chlorhexidine gluconate, smear layer