SITOTOKSISITAS EKSTRAK KULIT *GARCINIA MANGOSTANA LINN* TERHADAP SEL FIBROBLAS GINGIVA MANUSIA

(Penelitian Semi Eksperimental Laboratoris)

CYTOTOXICITY *GARCINIA MANGOSTANA LINN* PERICARP EXTRACT TOWARD HUMAN GINGIVAL FIBROBLAST CELL

(*Semi Experimental Laboratory Research*)

ABSTRACT

Background.*Southeast Asian countries, known as "mangosteen" or "manggis". Indonesian people use its pericarp for medicinal purpose because of its antibacterial, antifungal and anti-inflammatory activity. Before fabricated as legal medicine, medicinal herbs must be studied from every aspect, to make sure they meet the criteria of non-toxic, non-irritant and non-carcinogenic.* ***Purpose****. This study aimed to explore the cytotoxicity of Garcinia mangostana Linn pericarp extract against human gingival fibroblast culture.* ***Method.*** *This study was designed as post only control group laboratory experiment. Garcinia mangostana Linn pericarp was extracted using ethanol dilution into 200, 300, 400, 500, 600, 700, 800 ug/ml concentration. Cytotoxicity was observed after 24 hours using MTT assay technique. Viable cells were measured by optical density of their MTT absorbency, and observed by ELISA reader on 620nm.* ***Result.*** *Percentage of viable gingival fibroblast exposed to concentration 200, 300, 400, 500, 600, 700, 800 ug/ml of Garcinia mangostana Linn pericarp extract were 113, 133, 114, 117, 137, 134, 128%, respectively. There is no significant difference between each concentration group.* ***Conclusion.*** *Crude Garcinia mangostana Linn pericarp extracted by ethanol from 200 to 800 ug/ml concentration is non-toxic against human gingival fibroblast.*

Keywords: *Garcinia mangostana Linn, Cytotoxicity, Human gingival fibroblast, MTT assay*

DAFTAR ISI

Halaman