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

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