UJI TOKSISITAS EKSTRAK KULIT MANGGIS TERHADAP KULTUR SEL FIBROBLAS BHK-21

TOXICITY ASSAY OF MANGOSTEEN PERICARP EXTRACT ON BHK-21 FIBROBLAST CELL CULTURE
(Experimental Laboratory Research)

ABSTRACT

Background. *Mangosteen (Gracinia mangostana) is tropical fruit which known as "Queen of fruit" in Indonesia and Southeast Asian countries. It's pericarp is reported to have antibacterial, antifungal, antioxidant and anti-inflammatory activity. Before used in medical purpose, herbal material must be studied from every aspect to make sure that they meet the criteria of non-toxic, non-irritant, and non carcinogenic.* ***Purpose.*** *This study aimed to explore the toxicity of Garcinia mangostana pericarp extract against BHK-21 fibroblast cell culture.* ***Method.*** *This study was designed as post test only control group laboratory experiment. Garcinia mangostana was extracted using maceration method and diluted into 700 µg/ml, 800 µg/ml, and 900 µg/ml dose. Toxicity 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 620 nm.****Result.*** *Percentage of viable BHK-21 fibroblast cell culture exposed to700 µg/ml, 800 µg/ml, and 900 µg/ml dose were 86,83%, 107,05 %, and 110,58% respectively.* ***Conclusion.****Crude Garcinia mangostana pericarp extract from 700 µg/ml to 900 µg/ml show non-toxic activity against BHK-21 fibroblast cell culture.*

Keywords: *Garcinia mangostana, toxicity, BHK-21 cell culture, MTT Assay*