

ABSTRACT

Carolina, Hana., 2015. Acute Toxicity of extract mangosteen pericarp (***Garcinia mangostana* L.) in mice (LD50)**. Final Assignment, Medical Program, Medical Faculty of Brawijaya University. Supervisors: (1). Dr. dr. Setyawati Soeharto, M.Kes. (2). dr. Dian Nugrahenny, M. Biomed.

Mangosteen, especially the pericarp, is a traditional medicine that is known to cure various diseases. Many Indonesian people use mangosteen pericarp in traditional medicine because they believe that mangosteen pericarp has no side effects. Mangosteen pericarp is beneficial to health because it contains phenol/polyphenol. Phenol/polyphenol includes various compounds such as xanthone, flavonoids, tannins, and anthocyanins. Xanthone is very useful for the body primarily as an antioxidant, antiinflammatory, antibacterial, antifungal, antiviral, antidiabetic and anticancer. The purpose of this study was to determine the acute toxicity effects of mangosteen pericarp extract on male white mice with the determination of the LD50. There were 4 groups administered with mangosteen pericarp extract with the doses of 625 mg/kgBW, 1250 mg/kgBW, 2500 mg/kgBW and 5000 mg/kgBW. In each group consists of 7 male Balb/c mice aged 10 weeks. The extract was administered orally as much as 1/2 cc of each mouse. The study was conducted during the first 24 hours and continued until seven days. The results showed that the LD50 value of mangosteen pericarp extract was 6174.147 mg/kgBW. This indicates that the acute toxicity value of mangosteen pericarp extract was included in the category of "Practical Not Toxic".

Keywords: mangosteen, acute toxicity, xanthone, LD50, mangosteen pericarp extract

