

TOKSISITAS SUBKRONIK EKSTRAK ETANOL 96% PERIKARPIUM MANGGIS  
(*Garcinia mangostana* Linn) PADA TIKUS PUTIH

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**ABSTRACT**

In this study, we examined the effects of an ethanolic extract of Mangosteen (*Garcinia mangostana* Linn.) pericarps that contained alpha-mangosten based xanthenes as a major constituent upon subchronic treatments to experimental animals. Subchronic toxicity test was done for 90 days in four groups of rat. Each group consist of 6 male and 6 female rats. The test samples was given orally with gavage in CMC Na 0.5 % suspension, with the appropriate dose in every groups. One group is negative control which was given CMC Na 0.5 % suspension without ethanolic extract of Mangosteen pericarps.

Clinical chemistry results showed that the male rats of the highest dose onward had significantly lower ALT than their control group, whereas the female receiving the lowest dose extract had significantly lower ALT when compared to their corresponding control groups. The male rats treated with 315 and 525 mg/kg body weight extract onward had significantly lower AST than their control group. The male rats treated with 315 mg/kg body weight extract had significantly higher BUN values than their control group. The male rats of the lowest and highest dose onward had significantly lower creatinine than their control group, whereas the female treated with 315 mg/kg body weight extract had significantly lower creatinine when compared to their corresponding control groups. The difference between the test and control groups on electrolyte values were statically significant but the values is still on physiological range. The difference between the test and control groups on haematological values level were statically not significant. Except on hemoglobin values of the lowest dose, which significant lower than control groups. But that values is stil on physiological range. However, our experimental rats did not show any abnormality in their gross appearances and weights as a result of the consumption of the extract. Therefore it is concluded that ethanolic extract of Mangosteen pericarps at 105, 315 and 525 mg/kg body weight didn't caused subchronic toxicity on rat. Further studies on chronic toxicity evaluation are needed to determine the long term safety of the extract.

Key words : *Garcinia mangostana* Linn, pericarps, Ethanolic Extract, Subchronic Toxicity, Rat.