

ABSTRACT

INFLUENCE OF GIVING ETHANOL EXTRACT OF MANGOSTEEN RIND (*Garcinia mangostana* Linn.) TO ALANIN AMINOTRANSFERASE (ALT) ENZYME ACTIVITY IN WHITE MALE RAT (*Rattus norvegicus*) STRAIN *SPRAGUE DAWLEY* INDUCED RIFAMPICIN

By

Inez Saraswati

Tuberculosis (TB) is an important issue for the health and Indonesia was ranked 4th in the world. According to the WHO Global TB Report 2012, recorded some 294 732 cases of TB have been found and treated (preliminary data in May 2010). Rifampicin is one of the drugs used in tuberculosis treatment. However, the side effects of this drug is hepatotoxicity. Mangosteen rind contains a fairly high antioxidant compounds such as xanthones and anthocyanins. To prove this, it will be conducted to influence of giving ethanol extract of mangosteen rind to ALT enzyme activity on white male rats strain *Sprague Dawley* induced rifampicin.

This research is an experimental by *post only control group design* with sample of 25 male rats (*Rattus norvegicus*) strain *Sprague Dawley* aged 10-16 weeks for 14 days.

The result obtained that activity of ALT enzyme on normal control group was average 27,60 U/L, while in the group given rifampicin that ALT enzyme activity is increase to 102,80 U/L. The average of ALT enzyme activity on others group which given ethanol extract of mangosteen rind with dose 20 mg/100gBB, 40 mg/100gBB and 80 mg/100gBB are 80,40 U/L, 64,20 U/L and 31,00 U/L. The results showed significant yield differences ($p < 0.05$), this suggests that the ethanol extract of mangosteen rind has benefits in preventing an increase in ALT enzyme activity of white rats *Sprague Dawley* strain.

Keywords : hepatotoxic, mangosteen rind, rifampicin