

ABSTRACT

THE COMPARISON OF GIVING EFFECT BETWEEN FRUIT EXTRACT OF PHALERIA MACROCARPA WITH LEAF EXTRACT OF PHYSALIS ANGULATA L. TO THE HISTOPATHOLOGICAL PICTURE OF THE LIVER IN WHITE MALE RAT (*Rattus norvegicus*) STRAIN *Sprague dawley* INDUCED RIFAMPICIN

By

ARIF YUDHO PRABOWO

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, prevalence of TB in Indonesia in 2011 was 318,949 cases. Rifampicin is one of the drugs used in tuberculosis treatment. However, the side effects of this drug is quite a lot, one of them is hepatotoxicity.

Phaleria macrocarpa and *Physalis angulata* L. are medicinal plant that contains flavonoids which the substance is believed to be an antioxidant. To prove this, it will be conducted to compare the effect between the fruit extract of *Phaleria macrocarpa* with leaf extract of *Physalis angulata* L. on hepatic histopathological image on white male rats strain *Sprague dawley* induced rifampicin.

This research is an experimental by *post only control group design* with sample of 50 rats. The results obtained in *Phaleria* extract showed significant yield differences ($p < 0.05$) in KI-KII, KI-KIII, KIV-KI, KI-KV, KIV-KII, KIII-KIV, KIV-KV, whereas the extract leaf of *Physalis* showed significant differences in the results of KI-KII, KI-KIII, KIV-KI, KI-KV,

KIII-KII, KIII-KIV, KIII-KV. This suggests that there is an influence of extract Phaleria with Physalis extract [7.56 mg/100gBB dose] on rat liver histopathological picture. Increasing doses on the group of Phaleria extract showed an influence on hepatic histopathology, whereas the increasing doses on the group of Physalis extract showed no effect.

Keywords : liver, physalis angulata L, phaleria macrocarpa, rifampicin.