

ABSTRACT

Septiyaningtyas, Retno Ayu. 2014. **The Influence of Granting of Moringa Leaves Ethanol Extract (*Moringa oleifera* Lamk.) Against The MDA (*Malondialdehyde*) Concentration and Histopathology of Male Mice Liver (*Mus musculus*) Balb/C that is exposed by Acetate Lead (Pb).** Thesis. Major of Biology of Science and Technology Faculty of State Moslem University of Maulana Malik Ibrahim Malang. Biology Advisor: Kholifah Holil, M. Si. Religion Advisor: Umayyatus Syarifah, M. A.

Keywords: Moringa Leaves (*Moringa oleifera* Lamk.), MDA concentration, and Histopathology of Liver, Acetate Lead (Pb)

Moringa plant (*Moringa oleifera* Lamk.), is one of plants that has a potential as the antioxidant. The chemical contents of Moringa plant which are potential as the antioxidant namely vitamin A (β -carotene), vitamin C and vitamin E. This compounds are known that have an ability to reduce the excess free radicals in the human body by binding the unpaired electrons that are affected by the excess free radicals. This research aims to get to know about the influence of granting of Moringa leaves (*Moringa oleifera* Lamk.), ethanol extract against the MDA concentration and liver histopathology to male mice (*Mus musculus*) Balb/C that is exposed by acetate lead (Pb).

This research is an experimental research that use the Complete Random Design with 7 treatments and 5 repetition. The treatments that are used are K- (negative control), K+ (positive control), P1 (0,1 mg/gr BB), P2 (0,2 mg/gr BB), P3 (0,3 mg/gr BB), P4 (0,4 mg/gr BB), and P5 (0,5 mg/gr BB). The experimental animals are 35 male mice balb/c of 2-3 month-old and 20-30 grams of weight. Research result data consists of MDA concentration amount and the description of mice liver histopathology. The obtained data is analyzed with ANOVA one way, if there is such a real difference of analyzed data, then it is continued to the BNJ α 1% test.

The research result shows that Moringa leaves ethanol extract (*Moringa oleifera* Lamk.) take effect in reducing MDA concentration of mice liver and also repairing the liver histopathology description that broken by the free radicals. This research shows that Moringa leaves (*Moringa oleifera* Lamk.) ethanol extract has effect to reduce the MDA concentration by 33,382 nmol/g with the best dose of P5 (0,5 mg/gr BB) and repair the damage of liver histopathology percentage namely necrosis by 3,2%; dilation of sinusoid by 1,6%; and centralist vein bleeding by 0% with the best dose of P5 (0,5 mg/gr BB).