

## ABSTRACT

**Hazani, Kholila Fitri. 2014. Effect of Ethanol Extract Leaf Moringa (*Moringa oleifera* L) Levels Against Malondialdehyde (MDA) and Epididymis Sperm Quality Mice (*Mus musculus* L) The Exposed Lead (Pb) Acetate. Biology Supervisor: Kholifah Holil, M.Sc. Supervisor Religion: Umaiatus Syarifah, M.A.**

**Keywords :** Leaf Moringa (*Moringa oleifera* L), Lead (Pb) Acetate, Malondialdehyde (MDA), and Quality of Spermatozoa, Mice (*Mus musculus* L).

Lead (Pb) is an active substances that can trigger the presence of free radicals and can cause damage to cells. The presence of free radicals can be neutralized by antioxidants. One of the plants that contain antioxidants is Moringa (*Moringa oleifera* L). This study aims to determine the effect of ethanol extract of leaves of Moringa (*Moringa oleifera* L) against MDA levels and quality of epididymal spermatozoa of mice (*Mus musculus* L) were exposed to lead (Pb) acetate.

This is an experimental study using a completely randomized design (CRD) with 7 treatments and 5 replications . The treatment used is K - (without giving Moringa and lead) , K + (only given the lead) , P1 (0.1 mg/g B), P2 (0.2 mg/g BB), P3 (0.3 mg/g BB) and P4 (0.4 mg/g BB), P5 (0.5 mg/g BB). Animals used were male mice type balb/c as many as 35 were aged 2-3 months with an average weight of 20-30 g. Research data include MDA (nmol/g), concentration (million/ml), viability (%), motility (%), and abnormalities (%) epididymal spermatozoa of mice. Data were analyzed by ANOVA single , if there is a very real difference then tested further HSD with  $\alpha$  1 %.

The results showed that the ethanol extract of leaves of Moringa (*Moringa oleifera* L) is able to reduce levels of MDA ( $11,9 \pm 0,90$ ), abnormalities ( $11,96 \pm 2,05$ ), and improve concentration ( $15,6 \pm 2,30$ ), viability ( $72,82 \pm 0,82$ ), and motility of spermatozoa ( $87 \pm 6,71$ ). This shows that the ethanol extract of leaves of Moringa (*Moringa oleifera* L) are effective in lowering the levels of MDA, abnormalities, and improve concentration, viability, and motility of spermatozoa was at P5 (0.5 mg/g BB).