

**PROTECTOR POTENTIAL OF *Pinus merkusii* ETHANOL EXTRACT TO  
SGOT, SGPT, AND MDA LEVEL IN MICE (*Mus musculus*)  
EXPOSED BY PLUMBUM**

Almas Herdiansyah

**ABSTRACT**

The purpose of this research was to know potential of protector *Pinus merkusii* leaf extract to inhibit the increasing of SGOT, SGPT, and MDA level in mice (*Mus musculus*) were exposed by Plumbum. This research was done for 24 days using male mice as experimental animal. This research is laboratory experiment using complete random design (CRD) factorial. The research was using 50 male mice which were divided into five group, each group consisted of K- as negative control wich were given 2 ml CMC Na 0,5% and 1 ml of aquades, P0 was given 1 ml of CMC Na 0,5% and Plumbum 20 mg/kg bw/day, P1 was given *Pinus merkusii* leaf extract 200 mg/kg bw/day and Plumbum 20 mg/kg bw/day, P2 was given *Pinus merkusii* leaf extract 400 mg/kg bw/day and Plumbum 20 mg/kg bw/day, P3 was given *Pinus merkusii* leaf extract 800 mg/kg bw/day and Plumbum 20 mg/kg bw/day. The result of research showed that average level of SGOT on K- ( $66.30^a \pm 3.27$ ), P0 ( $92.10^b \pm 5.59$ ), P1 ( $90.00^b \pm 4.55$ ), P2 ( $85.80^c \pm 4.77$ ), P3 ( $77.80^d \pm 5.51$ ), SGPT on K- ( $27.70^a \pm 2.75$ ), P0 ( $43.40^b \pm 2.63$ ), P1 ( $45.30^b \pm 2.21$ ), P2 ( $42.20^b \pm 2.15$ ), P3 ( $39.80^c \pm 2.15$ ), MDA on K- ( $4.97^a \pm 0.86$ ), P0 ( $8.04^b \pm 0.86$ ), P1 ( $8.34^b \pm 0.80$ ), P2 ( $7.84^b \pm 0.79$ ), P3 ( $7.02^c \pm 0.72$ ). It can be concluded that the giving of *Pinus merkusii* leaf extract can inhibit the increasing of SGOT, SGPT, and MDA of mice which were exposed by Plumbum ( $p < 0,05$ ).

**Keywords** = *Pinus merkusii*, Antioxidant, Serum Glutamic Oxaloasetic Transaminase, Serum Glutamic Pyruvic Transaminase, Malondialdehyde, Plumbum