

**THE EFFECT OF DAYAK ONION (*Eleutherine palmifolia*) TUBER
EXTRACT IN LIVER MALONDIALDEHYDE (MDA) LEVEL IN MALE
WISTAR RATS INDUCED BY ALLOXAN**

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ABSTRACT

This research aimed to determine the effect of Dayak onion tuber extract (*Eleutherine palmifolia*) given by per oral in lowering levels of malondialdehyde (MDA) in liver of white male rat (*Rattus norvegicus*) strain Wistar which was induced by alloxan. The 24 experimental male Wistar rats were divided into 6 groups. The negative control group K(-) were given with aquabidest and CMC-Na 1% during the therapy period, the positive control group K(+) were given with alloxan 110 mg / kg bw, the group of drug control K(O) were given with alloxan and oral therapy with metformin 9 mg / 200g bw / day, the treatment group 1 (P1) were given with alloxan and per oral therapy with extract of Dayak onion tuber 100 mg / kg bw, the treatment group 2 (P2) were given with alloxan and per oral therapy with extract of Dayak onion tuber 200 mg / kg bw, and the treatment group 3 (P3) were given with alloxan and per oral therapy with extract of Dayak onion tuber 400 mg / kg bw. The therapy was given for 14 days, all rats were sacrificed and liver MDA level were examined with thiobarbituric acid (TBA) methods. The result of the data analysis test using one-way ANOVA (Analysis of Variance) showed that there were significant differences between the group of animals that received standard feed ($\bar{x} = 929.75 \pm 222.307$ nmol / g) and the group of animals that were given with alloxan ($\bar{x} = 1456, 50 \pm 420.11$ nmol / g). Besides that, there was an insignificant difference between the groups of animals that were given food standard ($\bar{x} = 929.75 \pm 222.3$ nmol / g) with the group of animals that were given with alloxan and extract of Dayak onion tuber. It could be concluded that extract of Dayak onion tuber could lower MDA levels in liver of Wistar male rats which was induced by alloxan. However, the increased therapy dose did not affect in lowering levels of malondialdehyde in liver.

Keyword : *Eleutherine palmifolia*, malondialdehyde (MDA), liver, alloxan