

The Effect of Manggong Bamboo Leaves Extract (*Gigantochloa manggong*) on Rat (*Rattus novergicus*) Blood Profile

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Abstract : One of the consequences of excess physical activity is the oxidative stress which resulted in damage to blood cells. Oxidative stress condition can be reduced by an exogenous antioxidant. The natural exogenous antioxidant can be extracted from Manggong bamboo (*Gigantochloa manggong*). This research was aim to evaluate the effect of physical exercise and Manggong bamboo (*Gigantochloa manggong*) leaf extract on blood profile of rats. This research was conducted in July 2013 to May 2014 using experimental method with completely randomized design (CRD) with two factors, physical exercise and Manggong bamboo leaf extract. The rats blood profile to be measured were the level of erythrocyte cells, leucocyte cells and hemoglobin. Data were analyzed with parametric statistical 2-way ANOVA test ($\alpha = 0.05$). Manggong bamboo leaf extract was non toxic and contained flavonoid, triterpenoid, saponin and alkaloid. There was an effect of physical exercise and manggong bamboo leaf extract on blood profile of rats. Data obtained on physical activity, giving erythrocyte cells (2.5 million/ μ l) and hemoglobin (12,42g/dL) declined compared to the number of leucocyte cells increases (6,500cells/L). Extract treatment was increased the erythrocytes (5,13 million/ μ l) and hemoglobin level (14,72 g/dL.) while the leukocytes level were decreased (1.591,67 cells/L). The extract and physical activity treatment showed an increase in erythrocytes (2,96 million/ μ l) and hemoglobin (14,3 g/dL) but decrease the number of leukocytes (1.291,67 cells/L). The conclusion was that physical activity and Manggong bamboo leaves extract gaves effect on the blood profile of white rat.

Keywords : antioxidant, blood profile of rats, Manggong bamboo leaf extract, leukocytes

Conference Title : ICEB 2015 : International Conference on Ecosystems and Biodiversity

Conference Location : Penang, Malaysia

Conference Dates : December 03-04, 2015