

THE EFFECT OF AGATI LEAF (*Sesbania grandiflora*) EXTRACT ON HISTOPATHOLOGIC OF HEPATIC OF WHITE RAT (*Rattus norvegicus*) BY EXPOSED PHYSICAL STRESS

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ABSTRACT

Physical stress is the stress conditions on the body characterized by increased levels of free radicals and progressive changes in the structure of the hepatic tissue. Agati leaves are a tropical plant that is believed to have antioxidant and can be used as a hepatoprotective. The purpose of the study to determine the effect of extract agati leaf (*Sesbania grandiflora*) against hepatic histopathology of white rat (*Rattus norvegicus*) exposed by physical stress. Agati leaf extract which has an element of bioactive flavonoids is believed to decrease the damage to this hepatic. This study using 20 male rats and treated agati leaf extract are orally for 28 days. Research using completely randomized design (CRD) with 5 groups: normal (K-), only stressors (K +), stressors + 6.25% leaf extract turi (P1), stressors + 12.5% turi leaf extract (P2), and the stressors of + 25% leaf extract turi (P3). Based on the examination using a microscope with a magnification 400x. Data from histopathological examination of the hepatic and then analyzed with statistical test *Kruskall Wallis*, followed by *Mann Whitney* test. Statistical test results obtained by the treatment group P3 is more effective in reducing the level of damage to the hepatic.

Key words: *Sesbania grandiflora*, *Rattus norvegicus*, histopathologic, hepatic, physical stress