

**THE EFFECT COMBINATION OF GUAVA LEAF (*Psidium guajava L.*)
AND SAMBILOTO LEAF (*Andrographis paniculata*) ON THE TOTAL
AND DIFFCOUNT LEUCOCYTE OF MICE (*Mus musculus*)
EXPOSED TO HEAT STRESS**

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ABSTRACT

This research was conducted to determine the effect of combination of guava leaf (*Psidium guajava L.*) and sambiloto leaf (*Andrographis paniculata*) extract in maintaining the body immunity against heat stress exposure. Flavonoid active compound consisted in guava leaf (*Psidium guajava L.*) and andrographolide in sambiloto leaf (*Andrographis paniculata*) are substances that serve as immunomodulator. The experimental animals used are 30 male mice with 25 gram average body weight. The treatments were divided into 5 groups and each group got 6 repetitions. (K-) as control was treated with vehiculum without heat stress. P0 was treated with vehiculum, P1 was treated with combination of 75% guava and 25% sambiloto extract, P2 was treated with combination of 50% guava and 50% sambiloto extract, P3 was treated with combination of 25% guava and 75% sambiloto extract. Each treatment was given perorally with the dose of 0,5 ml/mice/day. The treatments were given for 10 days and were exposed to heat stress on 8 until 10 days. The parameters used total and leucocyte count shown in each treatment. The experimental design used in this study was completely random design (CRD). The data were analyzed using ANOVA (Analysis of variance) continued with honestly significant difference test with a significance of 5%. The result showed that there is significant effect from the therapy on the total and leucocyte count especially to neutrofil, limfosit and monosit. The treatment from P3 group showed the best result in maintaining the total of leucocyte in mice exposed to heat stress.

Keywords : Guava, Sambiloto, Leucocyte, Heat Stress