IMUNOMODULATOR EFFECT OF SAMBILOTO (*Andrographis paniculata*) EXTRACT TO TOTAL AND DIFFERENTIAL COUNTING LEUCOCYTES IN MICE (*Mus musculus*) EXPOSED TO HEAT STRESS

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ABSTRACT

The aim of this research was to know the effective dose of sambiloto extract to stabilizing total and differential counting leucocytes in mice exposed to heat stress. Thirty mice divided into five experimental groups, that were K(-), P0, P1, P2, and P3. All groups, except K(-), were exposed to heat stress twice a day for thirty minutes in a temperature of 39-40 °C with fifteen minutes interval in three consecutive days. P1, P2, and P3 was given sambiloto extract for ten days in different doses, which were P1 with 3.54 mg/20 g BW/day, P2 with 5.46 mg/20 g BW/day, P3 with 7.40 mg/20 g BW/day, and followed by heat stress exposure in the last three days. Total and differential counting leucocytes in blood was performed on the day after the last treatment. Statistical analyses used in this research were one way ANOVA and continued by Tukey Test. The result of the research showed there were significant differences (p<0.05) within the number of total leucocytes and lymphocytes and no significant difference (p>0.05) within the number of eosinophiles, basophiles, neutrophiles, and monocytes.

Key words: Sambiloto (*Andrographis paniculata*), mice, heat stress, total and differential counting leucocytes.