

**UJI AKTIVITAS IMUNOMODULATOR PERASAN DAGING DAN BATANG
BUAH NANAS (*Ananas comosus* L. Merr) PADA MENCIT JANTAN GALUR
BALB/c DENGAN PENGINDUKSI BAKTERI *Staphylococcus aureus***

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Imunomodulator adalah bahan atau obat yang dapat memodulasi fungsi dan aktivitas sistem imun. Penelitian ini dilakukan untuk mengetahui pengaruh pemberian Perasan daging dan batang buah nanas (*Ananas comosus* L. Merr) terhadap aktivitas imunomodulator yang dilihat dengan aktivitas fagositosis makrofag pada mencit galur Balb/c. Sebanyak empat puluh dua mencit dibagi menjadi kedalam 6 kelompok. Kelompok negatif diberikan Na-CMC 0,5%. Kelompok kontrol positif imunostimulan diberikan Stimuno Forte®. Kelompok kontrol positif immunosupresan diberikan metilprednisolon. Dan masing-masing kelompok dosis diberikan dosis perasan daging dan batang buah nanas sebanyak 125mg/kgBb, 250mg/kgBb, dan 500mg/kgBb. Pada hari kedelapan hewan uji di induksi dengan suspensi bakteri *Staphylococcus aureus* 0,5 mL secara intraperitoneal lalu dibedah dan diambil cairan peritoneum. Selanjutnya makrofag diamati menggunakan mikroskop dengan pembesaran 10x-100x. Persentase aktivitas fagositosis yang didapatkan yaitu kelompok normal 18%; kontrol negatif 41%; kontrol positif immunosupresan 38%; kelompok positif imunostimulan 56,5%; kelompok dosis 1 42% kelompok dosis 2 43,5%; dan kelompok dosis 3 50,5%. Data hasil pengujian dianalisis secara statistik dengan metode *post hoc tukey* dan menunjukkan hasil bahwa perasan daging dan batang buah nanas memiliki aktivitas imunomodulator pada mencit galur Balb/c.

Kata Kunci: Imunomodulator, perasan daging dan batang buah nanas, makrofag

IMMUNOMODULATORY ACTIVITY OF PINEAPPLE FLESH AND STEM JUICE (*Ananas comosus* L. Merr) IN MALE BALB/c STRAIN WITH *Staphylococcus aureus* BACTERIA

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*Immunomodulators are substances or drugs that can modulate the function and activity of the immune system. This study was conducted to determine the effect of the juice of pineapple (*Ananas comosus* L. Merr) on the immunomodulatory activity as seen by the phagocytic activity of macrophages in mice of the Balb/c strain. A total of forty-two mice were divided into 6 groups. The negative group was given 0.5% Na-CMC. The immunostimulant positive control group was given Stimuno Forte®. The immunosuppressant positive control group was given methylprednisolone. And each dose group was given a dose of pineapple juice and flesh as much as 125mg/kgBb, 250mg/kgBb, and 500mg/kgBb. On the eighth day, the test animals were induced with 0.5 ml *Staphylococcus aureus* bacteria suspension intraperitoneally and then dissected and peritoneal fluid was taken. Furthermore, macrophages were observed using a microscope with a magnification of 10x-100x. The percentage of phagocytic activity obtained was the normal group of 18%; negative control 41%; immunosuppressant positive control 38%; the immunostimulant positive group 56.5%; dose group 1 42% dose group 2 43.5%; and dose group 3 50.5%. The test data were analyzed statistically by the post hoc tukey method and showed that the juice of the flesh and stems of pineapples had immunomodulatory activity in mice of the Balb/c strain.*

Keywords: *Immunomodulator, pineapple pulp and fruit juice, macrophages*