

# Pengaruh Ekstrak Etanol Bawang Dayak (*Eleutherine palmifolia* (L), Merr) Terhadap Jumlah Limfosit Pada Mencit Balb/C yang Diinfeksi *Salmonella typhimurium*

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## ABSTRAK

**Latar Belakang :** *Salmonella sp.* dapat menghambat aktivasi sel limfosit. Bawang dayak (*Eleutherine palmifolia* (L.) Merr) mengandung senyawa *flavonoid* yang berpotensi menstimulus sistem imun karena dapat meningkatkan produksi IL-2 yang terlibat dalam aktivasi dan proliferasi sel limfosit. Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak etanol bawang dayak (*Eleutherine palmifolia* (L), Merr) terhadap jumlah limfosit pada mencit Balb/C yang diinfeksi *Salmonella typhimurium*.

**Metode :** Penelitian eksperimental menggunakan *Posttest Only Controlled Group Design*. Penelitian pada 4 kelompok mencit BALB/c terdiri atas (a) kontrol negatif (K-), (b) kontrol positif (K+) diinfeksi *Salmonella typhimurium* 10<sup>6</sup> CFU, (c) perlakuan (P1) terinfeksi dan diterapi Ekstrak Bawang Dayak dosis 3,03mg/20g.BB, (d) perlakuan (P2) terinfeksi dan diterapi Ekstrak Bawang Dayak dosis 6,06mg/20g.BB. Mencit BALB/c diterminasi dan diambil darahnya untuk dihitung jumlah limfositnya pada hari ke-8 perlakuan. Perbedaan jumlah limfosit mencit BALB/c antarkelompok dianalisis menggunakan uji *One-way ANOVA*.

**Hasil:** Dari 24 sampel, rerata jumlah limfosit mencit BALB/c pada K(-) = 7679,3 ± 2333,04, K(+) = 9148,5 ± 1981,66, P1 = 10418 ± 4717,80, P2 = 7528,7 ± 2938,55. Hasil uji beda jumlah limfosit antar kelompok adalah p = 0,370.

**Simpulan:** Ekstrak Bawang Dayak tidak meningkatkan jumlah limfosit Mencit BALB/c secara signifikan.

**Kata kunci:** Ekstrak Bawang Dayak, *Eleutherine palmifolia* (L.) Merr, Jumlah Limfosit

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***Effects of Dayak Onion Ethanol Extract (*Eleutherine palmifolia* (L), Merr) on Lymphocytes count BALB/c Mice Infected by *Salmonella typhimurium****

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**ABSTRACT**

**Background:** *Salmonella sp.* has ability to inhibit lymphocyte cell activation and proliferation. Dayak Onion (*Eleutherine palmifolia* (L.) Merr) contains flavonoid compounds that stimulate the immune system because it can increase the production of IL-2 involved in T cell lymphocyte activation and proliferation. This research aims to determine the effect of Onion Dayak extract (*Eleutherine palmifolia* (L), Merr) on the lymphocytes count in Balb/c mice who infected with *Salmonella typhimurium*.

**Method:** This research was a true experimental with post-test only control group design. Group was randomly divided into 4 groups (a) the negative control group (K-), (b) the positive control group (K+) group were infected with *Salmonella typhimurium* 10<sup>6</sup> CFU, (c) the treatment group (P1) were infected and were given treatment Dayak Onion Extract dose 3.03mg / 20g.BB, (d) the treatment group (P2) were infected and were given treatment Dayak Onion Extract 6.06mg / 20g.BB oral dose. BALB/c mice was terminated and was taken its blood to calculated the lymphocytes count. The lymphocytes count was calculated on the 8th day post treatment. The differences of lymphocyte count of BALB / c mice was analyzed using One-way ANOVA test.

**Results:** In 24 samples, the mean lymphocyte count of BALB / c mice are K (-) = 7679.3 ± 2333.04, K (+) = 9148,5 ± 1981,66, P1 = 10418 ± 4717,80, P2 = 7528,7 ± 2938,55. The average difference lymphocytes counts between groups was obtained p = 0.370.

**Conclusions:** Dayak Onion Extract doesn't increase lymphocytes counts of BALB / c mice significantly.

**Keywords:** Dayak Onion Extract, *Eleutherine palmifolia* (L.) Merr, Lymphocyte count

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