

ABSTRAK

Tesya Lonika Br Tarigan, NIM 4181210006 (2018) Pengaruh Pemberian Ekstrak Daun Beluntas (*Pluchea Indicia L*) Terhadap Kadar Albumin dan Total Protein Serum Tikus Putih (*Rattus novergicus*) Yang Diinduksi Dengan Bakteri *E.coli*

Telah dilakukan penelitian yang bertujuan untuk mengetahui apakah ada pengaruh pemberian ekstrak daun beluntas (*Pluchea indica L*) terhadap kadar albumin dan total protein serum tikus putih yang diinduksi dengan bakteri *E.coli*. Penelitian dilakukan pada bulan September-Desember 2022 di laboratorium Kimia Universitas Negeri Medan. Digunakan Rancangan Acak Lengkap (RAL) dengan 3 perlakuan dan 5 ulangan. Perlakuan yang dicobakan adalah tikus putih diinduksi dengan bakteri *E.coli* hingga mengalami diare, kemudian diberikan 0,5 ml ekstrak daun beluntas dengan dosis 0,00 mg/kgBB; 300 mg/kgBB; dan 600 mg/kgBB. Pengambilan darah dilakukan setelah tikus putih tidak diare lagi. Kadar albumin serum ditentukan dengan metode *Bromo Cesol Green* (BCG), kadar total protein dengan metode Biuret. Data dianalisis dengan analisis varians pada taraf signifikansi $\alpha = 0,01$. Dari hasil analisis kadar albumin serum diperoleh $F_{hit} = 78,66$ sedang $F_{tab} = 6,93$. maka H_0 ditolak, artinya ada pengaruh pemberian ekstrak daun beluntas (*Pluchea indica L*) terhadap kadar albumin serum tikus putih (*Rattus novergicus*) yang diinduksi dengan bakteri *E.coli*, dimana pemberian dengan dosis 600 mg/kgBB memberikan kadar albumin serum paling tinggi. Selanjutnya dari hasil analisis kadar total protein serum diperoleh $F_{hit} = 0,81$ sedang $F_{tab} = 6,93$. maka H_0 diterima, artinya tidak ada pengaruh pemberian ekstrak daun beluntas (*Pluchea indica L*) terhadap kadar total protein serum tikus putih (*Rattus novergicus*) yang diinduksi dengan bakteri *E.coli*. Dapat disimpulkan bahwa tidak ada perbedaan yang signifikan kadar total protein serum pada tikus putih yang diinduksi dengan bakteri *E.coli* lalu diberi ekstrak daun beluntas (*Pluchea indica L*) dengan dosis yang bervariasi. Dalam penelitian ini diperoleh rata-rata kadar albumin serum tikus putih yang diinduksi dengan bakteri *E.coli* lalu diberi ekstrak daun beluntas dengan dosis 0,00 mg/kgBB; 300 mg/kgBB; dan 600mg/kgBB berturut-turut sebesar 2,706 g/dL; 2,844 g/dL; 4,454 g/dL. Sedangkan rata-rata kadar total protein serum berturut-turut sebesar 8,51 g/dL; 8,86 g/dL; 8,8 g/dL.

Kata Kunci: Daun Beluntas, albumin, total protein

ABSTRACT

Tesya Lonika Br Tarigan, NIM 4181210006 (2018) The Effect of Giving Beluntas (*Pluchea Indicia L*) Leaf Extract on Albumin and Total Serum Protein Levels of White Rats (*Rattus novergicus*) Induced with *E.coli* Bacteria

Research has been carried out which aims to determine whether there is an effect of giving beluntas leaf extract (*Pluchea indicia L*) on the levels of albumin and total serum protein of white mice induced with *E.coli* bacteria. The research was conducted in September 2022 – April 2023 in the Chemistry laboratory at Medan State University. A Completely Randomized Design (CRD) with 3 treatments and 5 replications was used. The treatment tried was that white mice were induced with *E.coli* bacteria until they experienced diarrhea, then given 0.5 ml of beluntas leaf extract at a dose of 0.00 mg/kgBW; 300 mg/kgBW; and 600 mg/kgBB. Blood sampling was carried out after the white mice no longer had diarrhea. Serum albumin levels were determined using the Bromo Cesol Green (BCG) method, total protein levels using the Biuret method. Data were analyzed using analysis of variance at a significance level of $\alpha = 0.01$. From the results of the analysis of serum albumin levels, $F_{hit} = 78.66$ and $F_{tab} = 6.93$. then H_0 was rejected, meaning that there was an effect of giving beluntas leaf extract (*Pluchea indica L*) on the serum albumin levels of white rats (*Rattus novergicus*) which were induced with *E.coli* bacteria, where administration at a dose of 600 mg/kgBB gave the highest serum albumin levels. Furthermore, from the results of the analysis of total serum protein levels, it was obtained that $F_{hit} = 0.81$ while $F_{tab} = 6.93$. then H_0 is accepted, meaning that there is no effect of administration of beluntas leaf extract (*Pluchea indica L*) on the total serum protein levels of white rats (*Rattus novergicus*) induced with *E.coli* bacteria. It can be concluded that there was no significant difference in total serum protein levels in white mice that were induced with *E.coli* bacteria and then given beluntas (*Pluchea indica L*) leaf extract at varying doses. In this study, the average serum albumin levels of white mice were obtained which were induced with *E.coli* bacteria and then given beluntas leaf extract at a dose of 0.00 mg/kgBW; 300 mg/kgBW; and 600 mg/kgBW respectively 2,706 g/dL; 2.844 g/dL; 4.454 g/dL. Meanwhile, the mean total serum protein levels were 8.51 g/dL; 8.86 g/dL; 8.8 g/dL.

Keywords: Beluntas leaves, albumin, total protein