

ABSTRAK

EFEK PEMBERIAN EKSTRAK RUMPUT LAUT *Sargassum* sp. PADA GAMBARAN DARAH TIKUS BUNTING (*Rattus norvegicus*) STRAIN WISTAR

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Penelitian ini bertujuan untuk mengetahui pengaruh ekstrak rumput laut *Sargassum* sp. terhadap hematologi dan platelet pada tikus putih (*Rattus norvegicus*) galur Wistar bunting. Dalam penelitian ini digunakan 10 ekor tikus bunting *strain* Wistar umur dua bulan yang dibagi menjadi dua grup, 5 ekor grup kontrol dan 5 ekor grup perlakuan yang diberi ekstrak rumput laut *Sargassum* sp. sebanyak 1 ml dengan dosis 167 mg/kgBB secara peroral setiap harinya. Tikus-tikus tersebut dipelihara selama kebuntingan dan pengambilan sampel darah dilakukan pada hari ke-0, ke-7, dan ke-14 periode kebuntingan. Parameter dari *hematology analyzer* meliputi pemeriksaan jumlah eritrosit, kadar hemoglobin, PCV (*Packed Cell Volume*), MCV (*Mean Corpuscular Volume*), MCH (*Mean Corpuscular Hemoglobin*), MCHC (*Mean Corpuscular Hemoglobin Concentration*) dan jumlah platelet. Hasil penelitian menunjukkan bahwa penurunan jumlah eritrosit tikus kelompok kontrol lebih besar dari tikus perlakuan, kadar hemoglobin kelompok kontrol dan perlakuan mengalami penurunan, kadar PCV kelompok kontrol dan perlakuan mengalami penurunan, dan kadar platelet pada kelompok kontrol mengalami penurunan, sedangkan pada kelompok perlakuan mengalami peningkatan. Hasil analisis statistik menunjukkan adanya perbedaan yang signifikan ($P < 0,05$) pada pemberian ekstrak rumput laut terhadap gambaran pada total eritrosit, kadar Hb, PCV, dan jumlah platelet. Berdasarkan hasil penelitian, dapat disimpulkan bahwa pemberian ekstrak rumput laut *Sargassum hystrix*. dosis 167 mg/kgBB mempengaruhi jumlah eritrosit, kadar hemoglobin, PCV, dan platelet pada tikus bunting (*Rattus norvegicus*) *strain* Wistar.

Kata kunci : eritrosit, platelet, kebuntingan, anemia, tikus wistar (*Rattus norvegicus*).

ABSTRACT

THE OUTCOME OF *Sargassum* sp. SEAWEED EXTRACT ON THE HAEMATOLOGY OF PREGNANT WISTAR STRAIN RATS (*Rattus norvegicus*)

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This study aimed to determine the effect of the use of *Sargassum* sp. seaweed extract on the haematology of erythrocyte and platelets in white female Wistar strains rats (*Rattus norvegicus*). In this study, 10 pregnant female rats of the two-month-old Wistar strain were divided into two groups; 5 controlled groups and 5 treated groups. Each treated group was given 1 ml *Sargassum* sp. seaweed extract with the dose of 167 mg/kgBW per day orally. Rats that were maintained during pregnancy and the blood sample was taken on 0th, 7th, and 14th day in the period of gestation. The parameters of the haematology analyser include the examination of the number of erythrocytes, haemoglobin levels, PCV, MCV, MCH, MCHC and the platelet number. The result of the research shows the decreasing number of rat erythrocytes in the controlled group was greater than those in the treated group. The haemoglobin level of both controlled group and treated group was decreased. The PCV levels of each groups was decreased. The platelet number in the treated group was increased and in the controlled group was decreased. The results of the statistical analysis showed significant differences ($P < 0.05$) from seaweed extracts treatment on the overview of the total erythrocyte, haemoglobin levels, PCV and the platelet number. Based on the results, it can be concluded that the utilization of *Sargassum* sp. seaweed extract at the dose of 167mg/kgBW affects the number of erythrocytes, haemoglobin levels, PCV, and platelets in pregnant female Wistar strain rats (*Rattus norvegicus*).

Keywords: erythrocyte, platelet, pregnant, anemia, Wistar rats (*Rattus norvegicus*).