

## **ABSTRAK**

### **PENGARUH SUPLEMENTASI MINERAL MIKRO ORGANIK TERHADAP JUMLAH ERITROSIT, HEMOGLOBIN, DAN HEMATOKRIT KAMBING PERAH JAWARANDU**

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Tujuan penelitian ini adalah untuk mengetahui jumlah eritrosit, kadar hemoglobin, dan nilai hematokrit kambing perah Jawarandu yang diberi suplementasi mineral mikro organik dalam ransum di Mulia Farm, Negrisakti, Kabupaten Pesawaran Lampung. Penelitian ini merupakan penelitian eksperimental dengan menggunakan Rancangan Acak Kelompok (RAK) yang terdiri dari 4 perlakuan yaitu R0 : Ransum Basal, R1 : Ransum Basal + (Zn-Lysin 20 ppm, Cu-Lysin 5 ppm), R2: Ransum Basal + (Zn-Lysin 40 ppm, Cu-Lysin 10 ppm), R3 : Ransum Basal + (Zn-Lysin 60 ppm, Cu-Lysin 15 ppm) setiap kelompok berisi 4 ekor kambing perah Jawarandu dengan 3 ulangan. Pemeriksaan sampel darah dilakukan di Laboratorium, Balai Besar Laboratorium Kesehatan, Palembang (BBLK Palembang) menggunakan metode *B.Cell Counter* dan Manual. Data yang diperoleh ditabulasikan dan kemudian dianalisis dengan *analysis of varian* (ANOVA) dengan taraf 5%. Hasil analisis menunjukkan bahwa suplementasi mineral mikro organik dalam pakan tidak memberikan pengaruh yang nyata ( $P>0,05$ ) terhadap jumlah eritrosit, hemoglobin dan hematokrit kambing perah Jawarandu. Dari hasil analisis statistik sampel darah kambing perah Jawarandu didapatkan rata-rata jumlah eritrosit pada perlakuan  $2,41 \pm 0,52 \times 10^6/\mu\text{L}$  (R0) ;  $1,63 \pm 0,19 \times 10^6/\mu\text{L}$  (R1) ;  $2,19 \pm 0,31 \times 10^6/\mu\text{L}$  (R2) ;  $1,92 \pm 0,28 \times 10^6/\mu\text{L}$  (R3). Rata—rata kadar hemoglobin pada perlakuan  $9,37 \pm 0,05$  g/dL (R0) ;  $8,23 \pm 0,58$  g/dL (R1) ;  $8,5 \pm 0,87$  g/dL (R2) ;  $7,63 \pm 2,11$  g/dL (R3). kemudian rata-rata nilai hematokrit ( $\pm$ SD) pada perlakuan R0  $9,00 \pm 2\%$  Vol ; R1  $5,67 \pm 0,58\%$  Vol ; R2  $8,33 \pm 0,58\%$  Vol; R3  $6,67 \pm 1,15\%$  Vol. Dari hasil penelitian disimpulkan bahwa jumlah eritrosit, hemoglobin dan hematokrit pada kambing perah Jawarandu yang diberi suplementasi mineral mikro organik dalam ransum masih berada pada kisaran normal meskipun mendekati batas minimal.

*Kata Kunci : Eritrosit, Hematokrit, Hemoglobin, , Kambing Jawarandu*

## **ABSTRACT**

### **EFFECT OF ORGANIC MICRO MINERAL SUPPLEMENTATION ON THE AMOUNT OF ERYTHROCYTES, HEMOGLOBIN, AND HEMATOCRIT OF JAWARANDU DAIRY GOATS**

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This study aims to determine the total number of erythrocytes, hemoglobin levels, and the hematocrit value of Jawarandu dairy goats with the supplementation of organic micro minerals in rations in Mulia Farm, Negrisakti, Lampung Rice District. This study is an experimental study using a Randomized Group Design (RGD) consisting of 4 treatments, namely R0: Basal Ration, R1: Basal Ration + (Zn-Lysinat 20 ppm, Cu-Lysinat 5 ppm), R2: Basal Ration + (Zn-Lysinat 40 ppm, Cu-Lysinat 10 ppm), R3: Basal Ration + (Zn-Lysinat 60 ppm, Cu-Lysinat 15 ppm) each group contained 4 Jawarandu dairy goats with 3 tests. The examination of blood samples was carried out in the Laboratory, Health Laboratory Center, Palembang (BBLK Palembang) using the B.Cell Counter and Manual methods. The data obtained are tabulated and then analyzed by analysis of variance (ANOVA) with a rate of 5%. The results of the analysis showed that the supplementation of organic micro minerals in the feed did not have a significant effect ( $P > 0,05$ ) on the amount of erythrocytes, hemoglobin and hematocrit of the Jawarandu dairy goats. From the results of statistical analysis of the blood samples of Jawarandu dairy goats, the average number of erythrocytes was obtained at the treatment  $2,41 \pm 0,52 \times 10^6 / \mu\text{L}$  (R0) ;  $1,63 \pm 0,19 \times 10^6 / \mu\text{L}$  (R1) ;  $2,19 \pm 0,31 \times 10^6 / \mu\text{L}$  (R2) ;  $1,92 \pm 0,28 \times 10^6 / \mu\text{L}$  (R3). The average hemoglobin level at the treatment  $9,37 \pm 0,05 \text{ g/dL}$  (R0) ;  $8,23 \pm 0,58 \text{ g/dL}$  (R1) ;  $8,5 \pm 0,87 \text{ g/dL}$  (R2) ;  $7,63 \pm 2,11 \text{ g/dL}$  (R3). then the average hematocrit value at the treatment R0  $9,00 \pm 2\% \text{ Vol}$  ; R1  $5,67 \pm 0,58\% \text{ Vol}$  ; R2  $8,33 \pm 0,58\% \text{ Vol}$  ; R3  $6,67 \pm 1,15\% \text{ Vol}$ . From the results of the study, it was concluded that the amount of erythrocytes, hemoglobin and hematocrit in Jawarandu dairy goats who were supplemented with organic micro minerals in the ration was still in the normal range even though it was close to the minimum limit.

*Keywords: Erythrocytes, Hematocrit, Hemoglobin, , Jawarandu Goat*