

ABSTRAK

Winardo fransiskus. Penelitian bertujuan untuk mengkaji pengaruh pemberian minyak safflower (*Carthamus tinctorius L*) dan inositol serta campuran minyak safflower dan inositol terhadap jumlah leukosit dan diferensial leukosit darah ayam Sentul jantan. Materi yang digunakan dalam penelitian ini adalah ayam Sentul jantan varietas kelabu dari Balai Pengembangan Pembibitan Ternak Unggas Jatiwangi yang berumur 4 minggu berjumlah 81 ekor. Ayam Sentul jantan dipelihara selama 8 minggu dan dipanen pada umur 16 minggu. Penelitian menggunakan metode eksperimen secara *in vivo* dengan Rancangan Acak Lengkap (RAL) yang terdiri dari 9 perlakuan dengan 3 kali ulangan, setiap ulangan terdiri dari 3 ekor ayam. Perbedaan antara rerata perlakuan dengan uji Beda Nyata Jujur. Perlakuan yang diuji terdiri dari R₀ = Pakan Basal/ kontrol; R₁ = Pakan Basal + Minyak safflower 0,5%; R₂ = Pakan Basal + Minyak safflower 1,0%; R₃ = Pakan Basal + Inositol 0,5%; R₄ = Pakan Basal + Inositol 1,0%; R₅ = Pakan Basal + Minyak safflower 0.5% dan inositol 0,5%; R₆ = Pakan Basal + Minyak safflower 0.5% dan inositol 1,0%; R₇ = Pakan Basal + Minyak safflower 1,0% dan inositol 0,5%, dan R₈ = Pakan Basal + Minyak safflower 1,0% dan inositol 1,0%. Hasil analisis variansi menunjukkan bahwa penggunaan minyak safflower (*Carthamus tinctorius L*) dan inositol berpengaruh tidak nyata terhadap jumlah leukosit dan diferensial leukosit ($P > 0,05$). Rataan jumlah leukosit yaitu antara 8,50 – 10,78 . 10³/mm³. Rataan persentase heterofil yaitu R₀= 35,33 ± 7,23; R₁= 33,33 ± 17,01; R₂= 33,00 ± 8,54; R₃= 31,00 ± 6,24; R₄= 41,00 ± 9,54; R₅= 25,00 ± 10,82; R₆= 36,67 ± 6,03; R₇= 26,67 ± 8,33; R₈= 31,33 ± 11,37. Rataan persentase limfosit yaitu R₀= 59,00 ± 5,29; R₁= 60,33 ± 20,50; R₂= 59,67 ± 8,41; R₃= 62,67 ± 5,03; R₄= 54,00 ± 6,56; R₅= 67,00 ± 12,12; R₆= 56,00 ± 2,65; R₇= 67,00 ± 7,94; R₈= 63,67 ± 13,80. Rataan persentase monosit R₀= 5,67 ± 2,52; R₁= 5,67 ± 3,79; R₂= 5,33 ± 2,08; R₃= 5,33 ± 1,15; R₄= 5,00 ± 3,00; R₅= 6,67 ± 3,06; R₆= 7,33 ± 3,51; R₇= 6,33 ± 3,51; R₈= 5,00 ± 2,65. Disimpulkan bahwa penggunaan minyak safflower dan inositol tidak memberikan pengaruh negatif terhadap jumlah leukosit dan diferensial leukosit darah ayam Sentul jantan karena berada pada persentase dibawah normal.

Kata Kunci : Jumlah Leukosit, Diferensial Leukosit, Minyak safflower, Inositol, Ayam Sentul jantan.

ABSTRACT

Winardo Fransiskus. The research was aimed to evaluate the effect of safflower oil (*Carthamus tinctorius* L) and inositol as well as a mixture of safflower oil and inositol to Leukocyte Number and Differential Leukocyte in Sentul roosters. The material used in this research is kelabu variety Sentul roosters from Balai Pengembangan Pembibitan Ternak Unggas Jatiwangi, 4 week old chickens, totaling 81 birds. The Sentul roosters will be maintained for 8 weeks so that they will be harvested at 16 weeks. The research used an in vivo experimental method with a Completely Randomized Design (CRD) consisting of 9 treatments with 3 replications, each replication consisted of 3 chickens. The treatments that have significant effect will be followed by the Honestly Significant Difference test. The treatments consisted of R₀ = Basal feed/ control; R₁ = Basal feed + Safflower oil 0,5%; R₂ = Basal feed + Safflower oil 1,0%; R₃ = Basal feed + Inositol 0,5%; R₄ = Basal feed + Inositol 1,0%; R₅ = Basal feed + Safflower oil 0.5% and inositol 0,5%; R₆ = Basal feed + Safflower oil 0.5% and inositol 1,0%; R₇ = Basal feed + Safflower oil 1,0% and inositol 0,5%, dan R₈ = Basal feed + Safflower oil 1,0% and inositol 1,0%. The results of analysis of variance showed that the used safflower oil and inositol non significant to Leukocyte Number and Differential Leukocyte ($P > 0,01$). The average leukocyte number is between 8,50 – 10,78 x 10³/mm³. The average percentage heterophil R₀= 35,33 ± 7,23; R₁= 33,33 ± 17,01; R₂= 33,00 ± 8,54; R₃= 31,00 ± 6,24; R₄= 41,00 ± 9,54; R₅= 25,00 ± 10,82; R₆= 36,67 ± 6,03; R₇= 26,67 ± 8,33; R₈= 31,33 ± 11,37. The average percentage limfosit R₀= 59,00 ± 5,29; R₁= 60,33 ± 20,50; R₂= 59,67 ± 8,41; R₃= 62,67 ± 5,03; R₄= 54,00 ± 6,56; R₅= 67,00 ± 12,12; R₆= 56,00 ± 2,65; R₇= 67,00 ± 7,94; R₈= 63,67 ± 13,80. The average percentage monosit R₀= 5,67 ± 2,52; R₁= 5,67 ± 3,79; R₂= 5,33 ± 2,08; R₃= 5,33 ± 1,15; R₄= 5,00 ± 3,00; R₅= 6,67 ± 3,06; R₆= 7,33 ± 3,51; R₇= 6,33 ± 3,51; R₈= 5,00 ± 2,65. The use of safflower oil and inositol had no negative effect on the number of leukocytes and differential leukocytes in Sentul roosters blood because it was at a percentage that under normal.

Key word : Leukocyte Number, Differential Leukocyte, Safflower oil, Inositol, Sentul Rooster.