

PENGARUH JARAK PENEMPATAN AYAM BROILER DENGAN *INLET* DALAM KANDANG *CLOSED HOUSE* TERHADAP PROFIL DARAH DAN PERSENTASE ORGAN IMUN

Cahya Rahmad Fajarianto
18/424541/PT/07593

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh jarak penempatan ayam broiler dengan *inlet* dalam kandang *closed house* terhadap profil darah dan persentase imun. *Day Old Chick* (DOC) sebanyak 270 ekor dibagi secara acak menjadi 3 kelompok perlakuan. Setiap kelompok perlakuan dilakukan pengulangan masing-masing sebanyak 3 kali, setiap pengulangan terdiri dari 30 ekor ayam broiler yang dipelihara selama 28 hari di dalam kandang *closed house*. Perlakuan dalam penelitian ini adalah perlakuan jarak penempatan ayam broiler dengan *inlet*. Perlakuan satu, dua dan tiga berjarak 6, 12 dan 18 m dari *inlet* (J6, J12 dan J18). Data yang diamati dari penelitian ini adalah profil darah berupa jumlah sel darah merah, sel darah putih, diferensial sel darah putih yang meliputi limfosit, heterofil, eosinofil, monosit dan persentase *packed cell volume*, serta persentase organ imun berupa kelenjar *thymus*, *bursa fabricous* dan limfa. Seluruh data yang diperoleh dianalisis statistik menggunakan analisis variansi (ANOVA) dari Rancangan Acak Lengkap Pola Searah dan apabila terdapat perbedaan dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa pengaruh jarak penempatan ayam broiler dengan *inlet* dalam kandang *closed house* berpengaruh nyata ($P < 0,05$) menurunkan jumlah sel darah putih, limfosit, heterofil, eosinofil, monosit, namun tidak berpengaruh nyata ($P > 0,05$) terhadap jumlah sel darah merah, persentase *packed cell volume*, organ limfa, *bursa fabricius* dan *thymus*. Dari penelitian ini dapat disimpulkan jarak penempatan dengan *inlet* 6 sampai 18 m dalam kandang *closed house* menurunkan jumlah sel darah putih dan diferensial sel darah putih, tapi tidak untuk sel darah merah, persentase *packed cell volume* dan organ imun.

Kata kunci: Ayam broiler, *Inlet*, *Outlet*, *Closed house*, Profil darah, Organ imun

THE EFFECT OF PLACEMENT ZONATION OF BROILER CHICKEN IN CLOSED HOUSE'S INLET ON BLOOD PROFILE AND PERCENTAGE OF IMMUNE ORGAN

Cahya Rahmad Fajarianto
18/424541/PT/07593

ABSTRACT

The study aims to determine the effect of placement zonation of broiler chicken in closed house's inlet on blood profile and percentage of immune organ. The study was used 270 broiler chickens consisted of 3 treatments with 3 replications and 30 chickens were reared in closed house on 28 days. The treatments consisted of: zonation of broiler chicken in closed house's inlet. Treatments one, two and three were 6, 12 and 18 m from the inlet (J6, J12 and J18). The variables observed included blood profile of red blood cell (RBC) count, white blood cell (WBC) count, differential of white blood cell included lymphocytes, heterophile, eosinophile and monosite, packed cell volume and percentage of immune organ included lymph, bursa fabricius and thymus. All data obtained from this study were analyzed statically using a ANOVA (analysis of variance) with one way anova. If there is a difference, it is continued with Duncan's Multiple Range Test (DMRT). The result showed that the effect of placement zonation of broiler chicken in closed house's inlet can affected ($P < 0,05$) reduced the amount of white blood cell count (WBC), lymphocytes, heterophile, eosinophile, monosite, but not affected on red blood cell (RBC), percentage of packed cell volume, lymph, bursa fabricius and thymus. Based on the results of the study, it could be concluded that the effect of placement zonation of broiler chicken in closed house's inlet can reduced the amount of white blood cell count (WBC) and differential of white blood cell, but could not reduced the amount of red blood cell (RBC), percentage of packed cell volume and immune organ.

Keywords: Broiler chickens, Inlet, Outlet, Closed house, Blood profile, Immune organ