

**PROFIL DARAH DAN BOBOT ORGAN IMUN AYAM BROILER YANG  
DIBERI EKSTRAK DAUN SIRSAK (*Annona muricata* L.)  
MELALUI AIR MINUM**

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**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian ekstrak daun sirsak sebagai fitobiotik yang ditambahkan dalam air minum terhadap penampilan profil darah dan bobot organ imun ayam broiler. Penelitian dilakukan dengan cara uji *in vivo* pada ayam broiler jantan dan betina sebanyak 200 ekor yang dipelihara pada kandang jenis baterai. Pengujian secara *in vivo* terdiri dari 4 perlakuan dengan 5 kali ulangan dan 10 ekor ayam di setiap kandang. Perlakuan terdiri dari: air minum tanpa penambahan aditif pakan (kontrol negatif; P0), antibiotik *Tetracycline* (kontrol positif; P1), 1,5% ekstrak daun sirsak (P2), 3% ekstrak daun sirsak (P3). Variabel data yang akan diamati meliputi profil darah berupa hemoglobin (Hb), jumlah sel darah merah (SDM), jumlah sel darah putih (SDP), rasio H/L dan bobot organ imun. Seluruh data yang diperoleh dari penelitian ini akan dianalisis statistik menggunakan Rancangan Acak Lengkap (RAL) pola searah dan apabila terdapat perbedaan perlakuan maka dilanjutkan uji Duncan dengan bantuan software personal komputer *Statistical Package for Social Science* (SPSS). Hasil penelitian menunjukkan bahwa penambahan ekstrak daun sirsak dapat meningkatkan ( $P < 0,05$ ) sel darah putih (SDP) (P2), heterofil (P2) dan menurunkan ( $P < 0,05$ ) ratio H/L (P2), namun pemberian ekstrak daun sirsak tidak berpengaruh nyata ( $P > 0,05$ ) terhadap jumlah sel darah merah, hemoglobin, basofil, eosinofil, limfosit, monosit, dan bobot organ imun. Kesimpulan dari penelitian ini adalah penambahan ekstrak daun sirsak dalam air minum sebagai *feed additive* ayam broiler belum memberikan efek positif terhadap kesehatan ayam broiler yang dilihat dari gambaran profil darah dan bobot relatif organ imun ayam broiler.

Kata kunci : Ayam broiler, Daun sirsak, Profil darah, Organ imun

**BLOOD PROFILE AND IMMUNE ORGAN WEIGHT OF BROILER  
CHICKEN SUPPLEMENTED BY *Annona muricata* L. LEAF EXTRACT  
THROUGH DRINKING WATER**

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**ABSTRACT**

The study aims to determine the effect of soursop leaf extract as phytobiotics added to drinking water of the blood profile and the weight of the immune organ of broiler chickens. The study was conducted by in vivo testing on 200 broiler chickens kept in battery cages. In vivo testing consisted of 4 treatments with 5 replications and 10 chickens in each cage. The treatments consisted of: drinking water without feed additives (negative control; P0), Tetracycline antibiotics (positive control; P1), 1,5% *Annona muricata* L. leaf extract (P2), 3% *Annona muricata* L. leaf extract (P3). Data to be observed include blood profile in the form of hemoglobin (Hb), red blood cell count (RBC), white blood cell count (WBC), H/L ratio and immune organ weight. All data obtained from this study were analyzed statistically using a Completely Randomized Design (CRD) in parallel pattern and if there are found differences in treatment then Duncan's test were continued with the help of personal computer software Statistical Package for Social Science (SPSS). The result showed that the addition of soursop leaf extract can increase ( $P < 0,05$ ) on white blood cells (WBC) (P2), heterophyl (P2) and decrease H/L ratio (P2), but the addition of soursop leaf extract had no significant effect ( $P > 0,05$ ) on the number of red blood cells, haemoglobin, basophils, eosinophils, lymphocytes, monocytes, and immune organ weights. The conclusion of this study is the addition of soursop leaf extract in drinking water as feed additive of broiler chickens has not had a positive affect on the health of broiler chickens as seen from the description of the blood profile and relative weight of the immune organ of broiler chickens.

Keywords: Broiler chickens, *Annona muricata* L., Blood profiles, Immune organs