

ABSTRAK

PENGARUH PENAMBAHAN SUPLEMENTASI EKSTRAK MIMBA (*Azadirachta indica A. Juss*) DALAM AIR MINUM TERHADAP GAMBARAN DARAH LEUKOSIT DAN DIFERENSIAL LEUKOSIT PADA AYAM KAMPUNG JANTAN

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Penelitian ini bertujuan untuk mengetahui profil leukosit serta diferensial leukosit pada ayam kampung jantan yang diberikan ekstrak daun mimba melalui air minum dengan variasi dosis berbeda. Penelitian ini dilaksanakan pada November 2025 sampai Desember 2025 di Kandang Laboratorium Lapang Terpadu, Fakultas Pertanian, Universitas Lampung. Analisis sampel darah dilaksanakan di Laboratorium Diagnostik Veteriner, Jl. Griya Taman Asri, Sleman, Daerah Istimewa Yogyakarta. Penelitian ini menggunakan metode eksperimental yang terdiri atas 5 perlakuan dan 3 ulangan. Perlakuan yang diberikan meliputi P0: air minum tanpa ekstrak mimba; P1: 2,5 mg ekstrak mimba/kg berat badan (BB)/hari; P2: 5 mg ekstrak mimba/kg BB/hari; P3: 10 mg ekstrak mimba/kg BB/hari; dan P4: 20 mg ekstrak mimba/kg BB/hari. Peubah yang diamati meliputi total leukosit serta diferensial leukosit (neutrofil, eosinofil, basofil, monosit, dan limfosit). Data yang diperoleh dianalisis secara deskriptif. Hasil penelitian menunjukkan bahwa pemberian ekstrak daun mimba dalam air minum mampu mempertahankan nilai total leukosit dan diferensial leukosit ayam kampung jantan dalam kisaran normal. Peningkatan dosis ekstrak mimba cenderung memengaruhi respons leukosit, namun tidak menimbulkan gangguan fisiologis. Kesimpulannya, nilai gambaran darah pada total leukosit berada dalam batas-batas normal pada semua perlakuan, pada differensial leukosit neurofil pada perlakuan P0, P1, P2, P4 di atas batas normal, eosinofil menunjukkan pada P2 di atas batas normal, basofil berada dalam batas normal, limfosit pada P0, P1, P2, P3 di atas batas normal dan monosit P0, P2, P3 berada di bawah batas-batas normal.

Kata kunci: ayam kampung jantan, diferensial leukosit, ekstrak daun mimba, leukosit.

ABSTRACT

THE EFFECT OF NEEM EXTRACT SUPPLEMENTATION IN DRINKING WATER ON LEUKOCYTE PROFILE AND LEUKOCYTE DIFFERENTIAL OF NATIVE MALE CHICKENS

By

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This study aims to determine the leukocyte profile and leukocyte differential in male native chickens given neem leaf extract through drinking water with different dosage variations. The research was conducted from November to December 2025 at the Integrated Field Laboratory Farm, Faculty of Agriculture, University of Lampung. Blood sample analysis was carried out at the Veterinary Diagnostic Laboratory, Griya Taman Asri Street, Sleman, Special Region of Yogyakarta. This study used an experimental method consisting of five treatments and three replications. The treatments were P0: drinking water without neem extract; P1: 2.5 mg neem extract/kg body weight (BW)/day; P2: 5 mg neem extract/kg BW/day; P3: 10 mg neem extract/kg BW/day; and P4: 20 mg neem extract/kg BW/day. The observed variables included total leukocytes and leukocyte differential (neutrophils, eosinophils, basophils, monocytes, and lymphocytes). The obtained data were analyzed descriptively. The results showed that supplementation of neem leaf extract in drinking water was able to maintain total leukocyte and leukocyte differential values of native male chickens within normal ranges. In conclusion, the blood picture values for total leukocytes were within normal limits in all treatments, in the neutrophil leukocyte differential in treatments P0, P1, P2, P4 were above normal limits, eosinophils showed in P2 above normal limits, basophils were within normal limits, lymphocytes in P0, P1, P2, P3 were above normal limits and monocytes P0, P2, P3 were below normal limits.

Keywords: native male chicken, neem leaf extract, leukocytes, leukocyte differential.