ABSTRAK

PENGARUH SUBSTITUSI BATANG SINGKONG TERFERMENTASI DALAM RANSUM TERHADAP SEL DARAH PUTIH DAN DIFERENSIAL SEL DARAH PUTIH DOMBA LOKAL

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Penelitian ini bertujuan untuk mengevaluasi pengaruh substitusi batang singkong terfermentasi dalam ransum terhadap jumlah total sel darah putih (leukosit) dan diferensial leukosit pada domba lokal jantan. Penelitian ini dilaksanakan pada Maret-April 2025 di kandang Ruminansia Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung. Sebanyak 12 ekor domba lokal jantan digunakan dalam penelitian ini dengan rancangan acak kelompok (RAK), terdiri atas empat perlakuan dan tiga ulangan: P0 (ransum basal 100%), P1 (ransum basal 90% + batang singkong terfermentasi 10%), P2 (ransum basal 80% + batang singkong terfermentasi 20%), dan P3 (ransum basal 70% + batang singkong terfermentasi 30%). Pemeriksaan sampel darah dilakukan di Laboratorium Pro Lab Veterinary, Yogyakarta. Data darah yang diperoleh dikumpulkan dan dianalisis secara deskriptif untuk melihat perubahan profil leukosit, termasuk neutrofil, eosinofil, basofil, limfosit, dan monosit. Hasil menunjukkan bahwa seluruh parameter hematologi berada dalam kisaran normal fisiologis domba, dengan peningkatan signifikan pada neutrofil dan eosinofil dan penurunan jumlah monosit pada P3 mengindikasikan respons imun yang lebih terkontrol. Kesimpulan dari penelitian ini adalah jumlah sel darah putih dan diferensial sel darah putih (neutrofil, basofil, eosinofil, limfosit, monosit) domba lokal yang diberi perlakuan batang singkong terfermentasi semuanya berada dalam kisaran normal.

Kata kunci: Domba Lokal Jantan, Total Leukosit, Diferensial Leukosit, Batang Singkong Terfermentasi

ABSTRACT

THE EFFECT OF FERMENTED CASSAVA STEM SUBSTITUTION IN RATIONS ON WHITE BLOOD CELLS AND DIFFERENTIAL WHITE BLOOD CELLS OF LOCAL SHEEP

by

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This study aims to evaluate the effect of fermented cassava stem substitution in rations on the total number of white blood cells (leukocytes) and differential leukocytes in male local sheep. This research was conducted in March-April 2025 in the Ruminant House of the Department of Animal Husbandry, Faculty of Agriculture, University of Lampung. A total of 12 male local sheep were used in this study with a randomized group design (RAK), consisting of four treatments and three replications: P0 (100% basal ration), P1 (90% basal ration + 10% fermented cassava stem), P2 (80% basal ration + 20% fermented cassava stem), and P3 (70% basal ration + 30% fermented cassava stem). Blood sample examination was conducted at Pro Lab Veterinary Laboratory, Yogyakarta. Blood data obtained were collected and analyzed descriptively to see changes in leukocyte profiles, including neutrophils, eosinophils, basophils, lymphocytes, and monocytes. Results showed that all hematological parameters were within the normal range of sheep physiology, with a significant increase in neutrophils and eosinophils and a decrease in monocyte counts at P3 indicating a more controlled immune response. The conclusion of this study is that the white blood cell count and white blood cell differential (neutrophils, basophils, eosinophils, lymphocytes, monocytes) of local sheep treated with fermented cassava stems are all within the normal range.

Keywords: Male Local Sheep, Total Leukocytes, Leukocyte Differential, Fermented Cassava Stems