

ABSTRAK

PENGARUH SUBSTITUSI TEPUNG DAUN KELOR (*Moringa oleifera*) PADA RANSUM TERHADAP RESPONS FISIOLOGIS KAMBING PERANAKAN BOER

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Penelitian ini bertujuan untuk mengetahui pengaruh dan level terbaik dari substitusi tepung daun kelor (*Moringa oleifera*) pada ransum terhadap respons fisiologis Kambing Peranakan Boer. Penelitian ini dilaksanakan pada Desember 2023 sampai dengan Januari 2024 di Peternakan Perkasa, Desa Simpang Agung, Kecamatan Seputih Agung, Kabupaten Lampung Tengah, Provinsi Lampung. Rancangan percobaan yang digunakan adalah Rancangan Acak Kelompok dengan 3 perlakuan dan 5 ulangan menggunakan 15 ekor Kambing Peranakan Boer yang dikelompokkan berdasarkan bobot badan. Perlakuan yang digunakan yaitu P0: 100% ransum basal (60% silase daun singkong + 40% konsentrat), P1 : 95% ransum basal + 5% tepung daun kelor, dan P2 : 90% ransum basal 90% + 10% tepung daun kelor. Data yang diperoleh dianalisis dengan *Analysis of Variance* pada taraf nyata 5% dan jika berbeda nyata dilanjutkan dengan uji *Least Significant Difference* dengan menggunakan perangkat lunak *microsoft excel for windows*. Peubah yang diamati adalah frekuensi napas, frekuensi denyut jantung, dan suhu rektal Kambing Peranakan Boer. Rata-rata hasil penelitian frekuensi denyut jantung pada P0 sebesar 74,80±3,94 kali/menit; P1 sebesar 82,49±5,37 kali/menit; P2 sebesar 77,57±2,96 kali/menit, rata-rata frekuensi napas pada P0 sebesar 47,12±1,91 kali/menit; P1 sebesar 45,94±3,66 kali/menit; P2 sebesar 47,81±2,03 kali/menit, dan rata-rata suhu rektal pada P0 sebesar 38,81±0,11^oC; P1 sebesar 38,87±0,14^oC; P2 sebesar 38,89±0,12^oC. Berdasarkan penelitian yang telah dilakukan dapat disimpulkan bahwa Substitusi tepung daun kelor (*Moringa oleifera*) tidak berpengaruh nyata ($P>0,05$) terhadap frekuensi denyut jantung, frekuensi napas, dan suhu rektal Kambing Peranakan Boer, namun cenderung meningkat dalam kisaran normal.

Kata kunci: Kambing Peranakan Boer, Ransum, Respons fisiologis, Tepung daun kelor

ABSTRACT

EFFECT OF SUBSTITUTION OF MORINGA LEAF FLOUR (*Moringa oleifera*) IN RATIONALS ON PHYSIOLOGICAL RESPONSES OF CROSS BOER GOATS

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This research aims to determine the effect and best level of Moringa leaf flour (*Moringa oleifera*) substitution in the ration on the physiological response of Cross Boer Goats. This research was carried out from December 2023 to January 2024 at Perkasa Farms, Simpang Agung Village, Seputih Agung District, Central Lampung Regency, Lampung Province. The experimental design used was a Randomized Block Design with 3 treatments and 5 replications using 15 Boer Cross-Breed goats grouped based on body weight. The treatments used were P0: 100% basal ration (60% cassava leaf silage + 40% concentrate), P1: 95% basal ration+5% Moringa leaf flour, P2: 90% basal ration + 10% Moringa leaf flour. The data obtained were analyzed using Analysis of Variance at a significance level of 5% and if they are significantly different by using software microsoft excel for windows, proceed with the least significant difference test. The variables observed were respiratory frequency, heart rate and rectal temperature of Cross Boer Goats. The average heart rate frequency research results at P0 were 74.80 ± 3.94 times/minute; P1 was 82.49 ± 5.37 times/minute; P2 was 77.57 ± 2.96 times/minute, the average respiratory frequency at P0 was 47.12 ± 1.91 times/minute; P1 was 45.94 ± 3.66 times/minute; P2 was 47.81 ± 2.03 times/minute, and the average rectal temperature at P0 was $38.81 \pm 0.11^{\circ}\text{C}$; P1 was $38.87 \pm 0.14^{\circ}\text{C}$; P2 is $38.89 \pm 0.12^{\circ}\text{C}$. Based on the research that has been carried out, it can be concluded that the substitution of moringa leaf flour has no significant effect ($P > 0.05$) on the heart rate, respiratory frequency and rectal temperature of Cross Boer Goats, but tends to increase within the normal range.

Keywords: Cross Boer Goats, Ration, Physiological response, Moringa leaf flour