

**STATUS FISILOGI DAN PRODUKSI SUSU
KAMBING PERANAKAN ETAWAH DAN SAPERA
DI DATARAN RENDAH, GAMPING, SLEMAN**

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INTISARI

Penelitian ini bertujuan untuk mengukur status fisiologi dan produksi susu kambing Peranakan Etawah dan kambing Sapera. Lokasi penelitian yaitu peternakan kambing perah di DU Farm, Nogotirto, Gamping, Sleman pada Agustus hingga September 2023. Variabel yang diamati yaitu suhu, kelembaban, THI, frekuensi respirasi, frekuensi pulsus, temperatur rektal, dan produksi susu. Data dianalisis dengan metode independent t-test dan menggunakan aplikasi SPSS. Hasil penelitian menunjukkan bahwa temperatur lingkungan terendah $24,27 \pm 0,21^{\circ}\text{C}$, sedangkan yang tertinggi $32,43 \pm 0,05$. Rata-rata kelembaban lingkungan yang terendah $39,33 \pm 1,70^{\circ}\text{C}$, sedangkan yang tertinggi $63,00 \pm 0,82$. Rata-rata THI lingkungan kandang yang terendah $70,69 \pm 0,55$, sedangkan yang tertinggi $79,21 \pm 0,20$. Hasil pengukuran rata-rata frekuensi respirasi terendah kambing PE $33,07 \pm 5,93$ kali/menit dan Sapera $36,53 \pm 7,28$ kali/menit, sedangkan hasil pengukuran frekuensi respirasi tertinggi kambing PE $49,60 \pm 13,99$ kali/menit dan Sapera $46,93 \pm 8,45$ kali/menit. Hasil pengukuran rata-rata frekuensi pulsus terendah kambing PE $60,00 \pm 10,43$ kali/menit dan Sapera $65,20 \pm 10,53$ kali/menit, sedangkan hasil pengukuran frekuensi pulsus tertinggi kambing PE $70,93 \pm 15,56$ kali/menit dan Sapera $75,20 \pm 20,20$ kali/menit. Hasil pengukuran rata-rata temperatur rektal terendah kambing PE $37,90 \pm 2,40^{\circ}\text{C}$ dan Sapera $38,48 \pm 0,42^{\circ}\text{C}$, sedangkan hasil pengukuran temperatur rektal tertinggi pada kambing PE $38,77 \pm 0,23^{\circ}\text{C}$ dan Sapera $38,71 \pm 0,22^{\circ}\text{C}$. Hasil rata-rata produksi susu kambing PE adalah $850 \pm 159,66$ ml, sedangkan Sapera adalah $663,4 \pm 227,76$. Kesimpulan dari penelitian ini adalah status fisiologi kambing Sapera lebih tinggi dari pada kambing PE dan produksi susu kambing PE lebih tinggi dari pada kambing Sapera di dataran rendah.

Kata Kunci: Kambing Peranakan Etawah, Kambing Sapera, Status Fisiologi, Produksi Susu, Fisiologi Lingkungan

PHYSIOLOGICAL STATUS AND MILK PRODUCTION OF ETAWAH CROSSBREED AND SAPERA GOATS IN THE LOWLANDS, GAMPING, SLEMAN

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ABSTRACT

This study aims to measure the physiological status and milk production of Etawah crossbreed and Sapera goats. The research location is a dairy goat farm at DU Farm, Nogotirto, Gamping, Sleman from August to September 2023. The variables observed were temperature, humidity, THI, respiratory frequency, pulse frequency, rectal temperature, and milk production. The results showed that the lowest environmental temperature was $24.27 \pm 0.21^{\circ}\text{C}$, while the highest was 32.43 ± 0.05 . The lowest average environmental humidity was $39.33 \pm 1.70^{\circ}\text{C}$, while the highest was 63.00 ± 0.82 . The lowest average THI was 70.69 ± 0.55 , while the highest was 79.21 ± 0.20 . The results of the lowest average respiration frequency measurements for PE goats were 33.07 ± 5.93 times/minute and Sapera 36.53 ± 7.28 times/minute, while the results of the highest respiration frequency measurements for PE goats were 49.60 ± 13.99 times/minute and Sapera 46.93 ± 8.45 times/minute. The results of the lowest average pulse frequency measurements for PE goats were 60.00 ± 10.43 times/minute and Sapera 65.20 ± 10.53 times/minute, while the results of the highest pulse frequency measurements for PE goats were 70.93 ± 15.56 times/minute and Sapera 75.20 ± 20.20 times/minute. The results of the lowest average rectal temperature measurements of PE goats were $37.90 \pm 2.40^{\circ}\text{C}$ and Sapera $38.48 \pm 0.42^{\circ}\text{C}$, while the highest rectal temperature measurements were in PE goats $38.77 \pm 0.23^{\circ}\text{C}$ and Sapera $38.71 \pm 0.22^{\circ}\text{C}$. The average milk production of PE goats was 850 ± 159.66 ml, while Sapera was 663.4 ± 227.76 . The conclusion is the physiological status of Sapera goats is higher than PE goats and the milk production of PE goats is higher than Sapera goats in the lowlands.

Keywords: Etawah Crossbreed Goats, Sapera Goats, Physiological Status, Milk Production, Environmental Physiology