

ABSTRACT

GENETIC AND PHENOTYPIC CORRELATION BETWEEN WEANING WEIGHT AND YEARLING WEIGHT OF SABURAI MALE GOATS IN SUMBEREJO SUBDISTRICT TANGGAMUS DISTRICT

By

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This research aims to determine the value of the genetic and phenotypic correlation between weaning weight and yearling weight of Saburai male goats in Sumberejo subdistrict, Tanggamus district. Ninety male Saburai goat aged one year were used in this study. This research was conducted from May 11th—July 28th, 2019. The research used primary and secondary data with direct observation in the field and the recording of livestock from Sumberejo subdistrict. The method used was survey method, the sample was determined by purposive sampling. Genetic and phenotypic correlation were estimated using halfsib data. The parameters observed were weaning weight and yearling weight. The results showed that the average were weaning weight of Saburai goats in Sumberejo subdistrict was 17.2 ± 2.7 kg, and the average of yearling weight was 40.8 ± 6.1 kg. Genetic correlation between weaning weight and yearling weight was 0.22 which is categorized as medium positive value, while phenotype correlations between the two traits was low positive of 0.13, and environmental correlations was medium positive of 0.33. These results indicated that environmental factors have a big impact on the performance of goats. It can be concluded that to improve yearling weight of male Saburai goat could be done by selecting their weaning weight.

Keywords: Goat Saburai, Weaning weights, Yearling weight, Genetic correlation, Phenotypic correlation

ABSTRAK

KORELASI GENETIK DAN FENOTIP BOBOT SAPIH DAN BOBOT SATU TAHUN KAMBING SABURAI JANTAN DI KECAMATAN SUMBEREJO KABUPATEN TANGGAMUS

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Penelitian ini bertujuan untuk mengetahui nilai korelasi genetik dan fenotip antara bobot sapih dan bobot satu tahun kambing Saburai jantan di kecamatan Sumberejo, kabupaten Tanggamus. Sebanyak 90 ekor kambing Saburai jantan yang berumur 1 tahun digunakan dalam penelitian ini. Penelitian dilakukan mulai 11 Mei sampai 28 Juli 2019. Data penelitian ini menggunakan data primer dan sekunder yang diambil dari pengamatan secara langsung di lapangan dan rekording ternak dari Kecamatan Sumberejo. Metode yang digunakan adalah metode survei, sampel penelitian ditentukan secara *purposive sampling*. Data dianalisis menggunakan metode korelasi saudara tiri seapak. Peubah yang diamati meliputi bobot sapih dan bobot satu tahun. Hasil penelitian menunjukkan bahwa rata-rata bobot sapih kambing Saburai di Kecamatan Sumberejo sebesar $17,2 \pm 2,7$ kg, dan rata-rata bobot satu tahun sebesar $40,8 \pm 6,1$ kg. Kambing Saburai jantan memiliki nilai korelasi genetik 0,22 yang dikategorikan bernilai positif sedang, korelasi fenotip 0,13 yang bernilai positif rendah, dan korelasi lingkungan 0,33 yang bernilai positif sedang. Hasil penelitian ini menunjukkan bahwa faktor lingkungan berpengaruh besar terhadap performa kambing. Kesimpulan yang didapatkan yaitu untuk meningkatkan bobot badan satu tahun kambing Saburai jantan dapat dilakukan melalui seleksi bobot sapih.

Kata kunci : Kambing Saburai, Bobot sapih, Bobot satu tahun, Korelasi genetik,
Korelasi fenotip