

GENETIC AND NON-GENETIC PARAMETER ESTIMATES FOR GROWTH TRAITS OF SÖNMEZ LAMBS

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Abstract. This study was carried out to evaluate lamb weights and daily weight gains and to estimate genetic and phenotypic parameters to develop breeding strategies over the genetic improvement of growth traits in Sönmez lambs. Genetic and non-genetic parameters on growth traits of 574 Sönmez lambs sired by 12 rams over the years 2001-2004 were evaluated. Sex of lamb, birth type and year, age of dam and ewe weight were significant sources of variation for lamb body weight and gains. Estimates of heritability for birth weight, 2-months weight, pre-weaning, 4 months weight and post-weaning daily gains were 0.25, 0.36, 0.61, 0.50 and 0.61, respectively. Genetic and phenotypic correlations among growth traits were found significant. These findings show that there is an opportunity to improve Sönmez lambs based on the selection for the growth rate.

Keywords: Sönmez lamb, growth traits, heritability, genetic and phenotypic correlations.