

Study of growth traits for local Awassi sheep for the genotype of β - lactoglobulin gene

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This research was done at the first research station of the Animal Production Department, College of Agriculture, Al-Muthanna University, Muthanna Governorate, Iraq on a sample of 50 local Awassi sheep concerning practical part while genetic analysis part was done at AL-Takdom Laboratory in Baghdad, Iraq, to identify the genetic structures of β -lacto globulin gene and the relationship of those structures to a number of productive characters of local Awassi sheep. The genotype of β -lacto globulin differed according to the difference of the enzyme bundles resulting from enzymatic digestion, which had two structures, AA and AB, with a distribution rate of 30 and 70% respectively and their distribution ratios were 65 and 45 for A and B alleles respectively. The results of the present study showed that the effect of the gene on birth weight was not significant for pure ewes (AA) and hybrids (AB), for AA it was (4.98 ± 0.29) kg and for AB (4.56 ± 0.17) kg, while it was significant ($P < 0.05$) on weaning weight, reaching in ewes with genetic genotype AA (16.81 ± 0.53) kg and (15.68 ± 0.25) kg for AB.

Keywords:

Awassi sheep, β -lactoglobulin, Production traits.