

STUDY ON THE PERFORMANCE OF MILK PRODUCTION AND GENETIC PARAMETERS IN A HERD OF ROMANIAN BLACK SPOTTED COWS

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Abstract

The present study analyzes the level of production achieved in a herd of Romanian black spotted dairy cows, the values of the genetic parameters and the estimated breeding value for the bulls with the highlighting of the influencing factors on the phenotypic performances. The statistical estimators were calculated with the S.A.V.C. computer program, the genetic parameters were estimated using the REML method and the breeding value was estimated using the BLUP methodology. In the case of normal lactations, the highest production average is 10141.75 kg reached in the third lactation, with 4.05% fat content and 3.38% protein. The heritability of milk production is 0.23 and this character is genetically correlated very strongly with the amount of fat and that of the protein, the coefficient value being 0.99. Although the average productions of the cows are very good, the maximum mean amount for productions being close of the paternal grandmothers which is of 11467 kg of milk, they do not phenotypically express their genetic potential due to the influence of external environmental factors.

Key words: phenotype, EBV, heritability, correlations