

# STUDY ON PRODUCTIVITY LEVEL AND DEGREE OF GENETIC IMPROVEMENT IN A PRIVATE SECTOR DAIRY COW HERDS

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## Abstract

*The aim of present paper is to estimate the improvement value by the BLUP methodology - the repeatable animal model of Fleckvieh breeders whose semen was used by AI in females of the same breed. The following statistical estimators were determined: the arithmetic mean ( $\bar{X}$ ), the error of the arithmetic mean ( $\pm s_x$ ), the standard deviation (s), the coefficient of variability (V%), the genetic parameters. The graphical representation of the regression line was drawn up, the Pearson correlation, Chi-Square Tests, ANOVA Test, p Significance Test, confidence interval (CI) and breeder improvement value were estimated. After comparing the main productive characters between ancestry (M- 8155.45 kg milk) and descendance (6735.27 kg milk) it was observed that the latter have lower productions even if their genetic potential is high. It can be concluded that the influence of environmental factors related to growth technology, feeding and climate has an important role in the phenotypic manifestation of production characters influencing the productive level. If it is desired to improve the milk production in the herd analyzed, the bull with registration number 73869 should be used for reproduction, for which the best improvement value of 129.8073 kg was estimated for the character milk quantity milk. The bull is also a breeder for other traits of milk production.*

**Keywords:** BLUP, Fleckvieh, milk, descendance, bull