

# **THE COEFFICIENTS of SIGNIFICANCE of the SIGNS in INTEGRATED ASSESSMENT of BREEDING VALUE SHEEP**

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*For the improving of the breeding qualities of sheep, it is necessary to assess of animals on a range signs, as these signs are interrelated and inappropriate to consider them separately. At present, the evaluation of breeding value of the animals is carried out by the methods of index selection. Method of BLUP is the most widely used, which includes models of varying degrees of complexity, combined for the determination of the breeding value of animals in a single comprehensive selection index by a significant coefficient (weighting coefficient).*

*Taking into account that the definition of the weighting factors is carried out in different ways, the question of the method of their calculation remains relevant. The results of research conducted on ewe lambs Taurian type of Askanian fine-fleeced breed of sheep experimental farm "Askania Nova", are given in this article. To determine the significance coefficients, it is proposed the algorithm, which allows to calculate of these coefficients as the product of the coefficients of variation of traits evaluated the group of animals on the multi-layered of a linear model of dependence the signs of the descendants from the traits of their ancestors. It has been defined the complex indices of animals, they were ranked, and the correlation analysis has been worked out for identify the relationship of the complex breeding value with the signs of estimated animals. The correlation coefficients of the complex index showed quite a close relationship with breeding characteristics and have the following meanings: 0.8584 - by clip of pure wool, 0.4467 - the length of wool, animal weight - 0.5593.*

**Keywords:** sheep, breeding value, significance coefficient, multiple determination, BLUP, systems of equations, the correlation matrixes.