

MODERN MOLECULAR GENETIC STUDIES in SHEEP BREEDING

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A review of scientific publications devoted to modern molecular genetic studies of sheep is presented. The methods of analysis the levels of structural genes, which are responsible for the manifestation of quantitative traits, have been studied. Specifically analyzed: the genes of reproductive traits that play an important role in reproduction and sexual development, they also increase ovulation rate and result in increased fecundity sheep; polymorphic genes, which associated with meat productivity, and they contributing to the accelerated growth of muscle tissue, as well as the development of the organism of animals as a whole.

In addition, the overview of the works, which considering the polymorphism of milk proteins that influence to the formation of indicators of dairy productivity of animals was done. The gene families that structure of the glycine-tyrosine proteins and form the synthesis of the wool fiber were analyzed also. Groups of genes, which affect the keratin - associated proteins of sheep, were considered.

The analysis of scientific publications demonstrates the need for the development of the marker-associated selection in the sheep breeding of Ukraine. This direction of selection will provide purposeful formation of highly productive herds, and obtaining additional profits by reducing of the generation interval.

Keywords: sheep, molecular genetic markers, polymorphism, marker-associated selection.