

# **FEATURES of THE DYNAMICS of GENETIC INFORMATION in the POPULATION of ASKANIAN MERINO SHEEP**

**V. M. Iovenko, K. V. Skrepets, H. I. Rukavnikova,  
H. O. Iarovchur, D. S. Kharichev**  
ascitsr\_zavviddilgenetic@ukr.net

Ascania Nova Institute of Animal Breeding in the Steppe Regions  
named after M. F. Ivanov – National Scientific Selection-Genetics  
Center for Sheep Breeding  
1, Soborna Street, Askania Nova, Chaplynka district,  
Kherson region, 75230, Ukraine

*The population of Ascanian fine-fleeced breed sheep breeding farm "Askania Nova" Kherson region was studied in terms of features of the genetic structure of the distribution of genetic markers polymorphic loci transport proteins of transferrin and hemoglobin. The studied features have appeared in the course of microevolution over the past 34 years of breeding these animals.*

*As a result of long-term monitoring the genetic structure study population the significant changes in the concentrations of individual genotypes and alleles of both polymorphic systems were established. These changes are associated primarily with the process of crossing Askanian and Australian sheep breeds. In addition, the dynamics of the herd structure is explained by stochastic processes, that are caused by the error which exists in the limited sample and this error changes the probability of transmission the concentration of alleles from generation to generation. That is the genetic - automatic process.*

**Keywords:** sheep, genetic structure, polymorphism, hemoglobin, transferrin.