POLYMORPHISM ALLELES OF GENE OF BOLA-DRB3 ON EXAMPLE UKRAINIAN BLACK-PIED AND RED-PIED DAIRY BREEDS.

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Ukrainian black-pied dairy breed, Ukrainian red-pied dairy breed, gene of BoLA-DRB3, polymorphism, alleles, genotype, polymerase chain reaction, molecular-genetic marker.

Polymorphism of gene of BoLA-DRB3.2 is studied two domestic breeds (Ukrainian black-pied and red-pied) by comparison to other world breeds of cattle. At a black-pied cattle 28 is educed, and at red-pied – 22 alleles. Frequency spectrum of alleles in both populations uniform. In black-and- white cattle with a frequency of more than 5% identified alleles * 03, * 08, * 10 , * 13, * 22 , * 24 and * 28 , and the red and white - * 01, * 03 , * 07, * 11 , * 16, * 22 and * 24. Estimates of excess heterozygotes for Selender's factor and quantitative allelic diversity index Shannon-Wiener show high levels of allelic polymorphism of the gene BoLA-DRB3.2. Shannon index for both populations belong to species with complicated organization. The presence of high levels of polymorphism and genetic diversity of populations allows using allele BoLA-DRB3.2 locus as informative molecular-genetic markers.

The aim of research –the identification and analysis of polymorphism gene BoLA-DRB3 in black and white and red and white cattle breeds Ukrainian selection.

Materials and methods. The survey was conducted on samples of animal Ukrainian black and white (n = 162) and red and white (n = 117) dairy breeds due identify the genotype of animals in exon 2 alleles of the gene BoLA-DRB3.