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Formation of heterogenic populations of silver and bighead carps of fish farm «Galitski»

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It has been investigated the allelic and genotypic structure of proteins and enzymes of different age groups of silver and bighead carps with using of electrophoretic analysis. The high level of average heterozygosity of three-year silver carps (77.2%), two-year silver carps (71.9%) and three-year bighead carp (70.3%) has been observed. It has been find out the low values of genetic distances between groups of three-year silver and bighead carps (D_N = 0,003).

Silver carp, bighead carp, genetic-biochemical markers, genetic structure, alleles, genotype, heterozygosity.

Efficiency of plant-breeding work, first of all, is determined by the level of genetic changeability of object of selection. Forming of pure breed tribal herds of white and pied товстолобиків needs permanent them genetic control on the different age-old stages.

In the conditions of fish-farming "Galychina" the Ivano-Frankivsk region for research of genetic structure of white (*Hypophthalmichthys of molitrix*) and pied (*Aristichthys of nobilis*) carps selected standards of blood at their of various age groups: for Silver carp - one-year (n=30), two-year (n=30), three-year (n=37), and also in pied bighead carp are one-year (n=30), two-year (n=29), three-year (n=31). The standards of blood of *Hypophthalmichthys of molitrix* and *Aristichthys of nobilis* were taken away alive from a tail vein in plastic test tubes with a heparin. Thus, undertaken studies of genetic structure, genetic distances are expected, the level of heterogeneity of various age groups it is allowed to assert, that most payment on the stage of forming of genetic structure of tribal herds of populations both white and pied Silver carp and bighead carp, do the groups of fishes of three-year age. Further researches and analysis of level of heterozygosity of populations of carp, bighead carp will allow to nose after the dynamics of indexes them genetic.