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APPLICATION OF COMBINED PRODUCTION TECHNOLOGY OF THE CARP FINGERLINGS

I.O. Kozhushko

Resultats of combined technology of first and second generation of Galician and Lyubin traits carp production are represent. Total fingerlings weight addition in 235 g and 22 cm length, that exceeds conventional standards for fish breeding for the third breeding zone.

Common carp, cross, traits, fingerlings, growth, weight.

The work on approaching theexterior of carp breeding to European standards has been recently done in Ukraine as well. The main factor for high massof carp commodity is the average weight of material for fish-breeding but not less than 100 grams.To achieve these results in terms of biennial cycle it is necessary to havehighly productive breeds or carp hybrids; toconduct intensification measures;to care for fish health; to use the combined technologies. Galician and Lubin framed carps have been chosen for the researchastheir exteriormeet European requirements.

The aim of the study is to perform a comparative analysis of breeding of fingerlings of carp hybrids of the first and the second generation using combined technologies.

Materials and research methods. In 2012 an investigation was carried out in the farming of fish farms "Carp" and "Aqua" (Zhovkivsk district, Lviv region). The process of experimental breedingtook placein 4 breeding ponds.

During the growing period the environmental conditions, the features of the linear growth, weight gaining and the coefficient of fatness were studied depending on the intensification measures that took place in ponds.

We investigated the hybrids of the first and the second generation of Galician framed females and of Lubin framed males. A fingerlings of hybrids was realized by using the technology of policulture: 15 thousand of carp fry/ha and 100 white amur

young fish/ha.In June and July they were fed by granular fodder of Ukrainian production; from August to November by wheat.The daily ration was 1.5-5% of fish weight.

Results of the study. Works on carp hybrids producing were carried out at the Fish Farming “Dobrotvirsk Fisheries”. In early May 2012 the larvae of F_1GL experimental group were taken away to "Aqua" fish farm and larvae of the second F_2GL experimental group – to "Carp" fish farm.For the period of growing they were placed in ponds atstocking density of 0.5 million/ha. In early May all the grown up fingerlings was removed intobreeding ponds.

Th ehighrate of growth of hybrids have been observed through out the growing period.At the beginning of the growing period a better weight gaining showed a group of hybrids F_2GL and after a month of growing their weigh twas 75,9±3,2 g, while F_1GL had an average weight 56,2±0,72 g. But in August there was a fast weight gaining of F_1CL. This can be explained by better development of food supply in the experimental ponds. But the differences were in significant: forthe F_1GL group it was 141 ± 12,1 g, andforthe F_2GL group it was 129 ± 9,8 g. At the end of the growing period the mass of hybrids in both groups was almost the same and was about 235 g.

The linear growth parameters of fingerlings were almost identical.The fastest growth showed the group F_2GL in the first month. After one month of growing their lengthin creased from 2 cm to 15 cm. The length of F_1GL group averaged 12 cm. In November the fish stoped growing and the length of both hybrid groups was 22 ± 0,2 cm. Before feeding cessation the rates of fatness of hybrids were the same: 3,4 ± 0,1.

A general conclusion. Fish growing period increased to 180 days while using the combined technologies of growing. When comparing two groups of car phybrids, one can conclude that food search activity of F_2GL hybrid group was much higher,that contributedt othe rapid growth of carp hybrids. At the same,better results of weight gaining and growth of both groups of fingerlings hybrids were achieved; as well as and artificial feed efficiency compared to standart values for the region was improved. It is possible to have a high-quality carp of European standart for two years by using the combined technologies of production.

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