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**SCIENCE, EDUCATION, INNOVATION:
TOPICAL ISSUES AND MODERN ASPECTS**



TALLINN, ESTONIA

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8. Prilipko L.I. The plant cover of Azerbaijan, Baki science 1970, 170 c.
9. Flora of Azerbaijan. Baku, tt. I-VIII, Volume IV. Izd. AN Azerbaijan. SSR, 1953, c 141-322
10. Flora of the USSR. In the 30s. T. 13, M.-L. : Ed. AN USSR, 1934-1967
11. Raunker C. The life forms of plants and statistical plant geography.
12. Clarendon Press, Oxford, 1934, p. 48-150

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**TECHNOLOGICAL ASPECTS OF THE INTRODUCTION
OF NANOTECHNOLOGY IN AQUACULTURE FOR
STOCKING OF RESERVOIRS**

***Abstract.** The results of the experimental use of biologically active nanoparticles for feeding juvenile carp are presented. The obtained positive results: juvenile carp in the experimental group were more resilient, had a higher growth rate and survival. The results represent active metabolic processes, better blood oxygen capacity, histological indices of the intestines of juvenile carp from the experimental group.*

***Keywords:** aquaculture, hydrobionts, technological aspects, nanotechnology, organism resistance*

In the context of modern ideas and opportunities of biotechnologies that are integrated into each of the branches of the agricultural sector, first of all, the constant development and improvement of technologies is envisaged. In today's world, one of the leading issues that remains open in all areas related to "living objects" of cultivation is the maximum control of the entire technological chain of production. In our country programs are developed to replenish the ichthyofauna of reservoirs, providing the population with high-protein food through aquaculture products. The reservoirs have a characteristic that shows the importance of the issue of improving

the hydrobiological regime, as well as stocking with viable juvenile fish [1, 4]. One of the urgent issues that will ensure the effective cultivation of aquatic organisms, the quality of biological products and social demand can be the development of improvements in the production of ecological products. Development in the direction of nanotechnology, creation of preparations based on ultrafine particles of metals.

Today, the use of recirculation systems is relevant and promising, which provides an opportunity to cultivate the aquatic organism annually. By the way, pond fish farming also remains a form of management, but even the use of recirculation systems can be included in the technological scheme of the preparatory stage of growing hydrobionts for further stocking of reservoirs. In the field of aquaculture, the technology of reproduction and cultivation of various objects is developing rapidly. The technological map of each of the industrial fisheries is based and adapted to the biological characteristics of hydrobionts [1, 2, 3, 5]. Thus, the development of new or improvement of existing technological conditions of feeding provides an opportunity to improve productivity, reproductive capacity, which acquires not only scientific but also practical value. the relevance of the use of nanotechnology in aquaculture explains the basis of physiological and biochemical processes in the body of hydrobionts, based on natural nanotransformation.

In accordance with the research topic, the goal was defined: improve technology, the resistance of hydrobionts, increase the body's resistance, growth rate, product quality. The part of the analyses was processed in the laboratory of the “Kherson Production and Experimental Plant for Breeding of the Ordinary Fish” State Institution and “Aquaculture Perspectives” Scientific Research Laboratory, “Scientific Research Laboratory of Physiological and Biochemical Research named in honor of S. Pentelyuk”, Scientific Research Laboratory on ecological and chemical analysis and water monitoring of Public higher education institution Kherson State Agrarian and Economic University. Research object – carp (*Cyprinus carpio* L.) first body weight $29,3 \pm 0.21$ g. Fish were reared in tanks (300m³). The blood from heart and tail vein was obtained using Pasteur needle and heparinized syringe. For biochemical studies, apart from blood plasma, the muscle part was also

collected. They were also frozen in ThermoMix and stored for further research. Cytological studies of the leukocyte formula were performed on blood smears stained by the method of Romanovsky-Giemsa and using a digital camera and Micromed microscope. Hydrochemical monitoring in the module system was performed systematically by express methods and in the laboratory according to the leading commonly accepted indicators in fish breeding (Alyokyn, 1970). A microtome was used to make tissue sections, and histological samples were stained with hematoxylin-eosin. Photographs of the drugs were taken using a digital camera and a microscope. The description of histological structures was performed using atlases of histology of fish.

The ultrafine powder with nanoparticles was diluted according to a special scheme. The resulting solution was used to treat food for hydrobionts. Each group of juvenile carp was placed in reservoirs, where the hydrochemical regime corresponded to the standards. In each group, the fish were of the same type, age, and at the beginning of the experiment of the same weight.

The addition of active substances of nanoparticles for feeding young carp contributed to an increase in mass by 12.5% after two weeks of use. Also, the survival rate of juvenile carp in the experimental group increased, which was higher than the control values by 3.1%.

The study of the peculiarities of the histology of the carp intestine in the experimental group showed that the height of the villi (4.1 ± 0.062), the width of the microvilli (2.9 ± 0.078) were significantly greater than in the control two times ($P < 0.05$) (Fig.1).

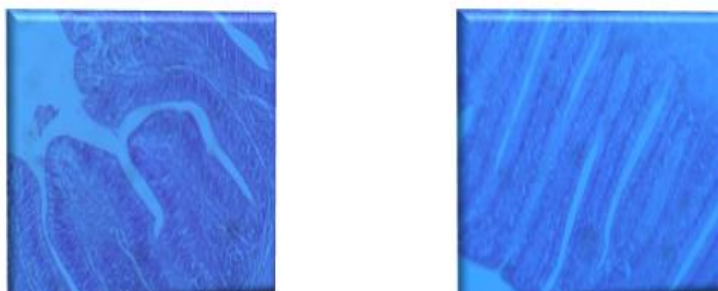


Fig. 1. Investigation of histological structures of carp *Cyprinus carpio* L.: control and experiment ($M \pm m, n=15$)

Comparative analysis of the intestinal histology of juvenile carp showed the best performance in the experimental group.

Development processes in the body always correlate with physiological, biochemical changes. The obtained positive results of improving the functional status of the carp organisms, which additionally received active nanoparticles during feeding (Table 1).

Table 1

Analysis of the morpho-functional state of carp blood under the conditions of the influence of the metabolism corrector ($M \pm m, n=15$)

Parameters	Control	Experiment
Erythrocytes (RBC) ($\times 10^6/\text{ml}$)	1,34 \pm 0,08	1,47 \pm 0,04*
Hemoglobin, g/100ml	114,74 \pm 1,37	122,1 \pm 1,41*
Hematocrits (Packed cell volume), %	25,77 \pm 0,98	27,08 \pm 0,74
MCH, pk	92,24 \pm 3,46	93,45 \pm 2,71
MCHC, %	40,05 \pm 1,99	42,58 \pm 2,00
MCV, mkm ³	201,34 \pm 11,22	223,43 \pm 12,63

*Correlationis Significant at the 0.05 level ($P < 0.05$)

In the blood of carp, which received biologically active nanoparticles with the element together with food, erythrocytes were 9.7 % higher than the values in the control group. This can be an indicator of better oxygen saturation processes, improved functioning of the bone marrow, respiratory, and transport functions of blood in the body of the experimental fish. A positive effect was also obtained in the experimental group in terms of hemoglobin concentration: in the blood of carp, this parameter was higher by 6.4 %. At the structural level of carp red blood cells, changes with positive dynamics also occurred: all parameters were higher than in the control. Physiologically, these processes are explainable, since the total number of erythrocytes and the content of hemoglobin exceeded the control group.

The use of biologically active nano-substances in the cultivation of juvenile carp before stocking natural reservoirs, the Dnieper-Bug estuarine system of the lower Dnieper river, helps to improve the metabolism in the fish body. Metabolic processes are activated, as a result, the growth rate increases, the body's resistance to adverse factors of influence improves. Young carp are becoming more resilient,