

## DYNAMICS OF INFECTION OF FISH BY RACACENOSIS IN SELECTED FISHERIES IN THE SAMARKAND REGION

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### ABSTRACT

White carp – 20.0%, eel – 14.6%. The three fish species were contaminated with crustaceans by an average of 19.3%. Based on the results of our surveys, it was established that in four districts of the Samarkand region, 18.0% are infected with 2 types of crustaceans: lerniosis, 1.3% are infected with arguliosis.

**Keywords.** Lerniosis, arguliosis, crustaceans, eel, carp, white amaranth ichthyopathological, organoleptic, microscopic and pathoanatomical.

### INTRODUCTION

**Relevance of the topic.** Further development of fishing and the growing demand of our people for fish and fish products. This, in turn, contributes to the accelerated development of fisheries based on new innovative technologies and the widespread introduction in the industry of innovative methods of fish farming based on intensive technologies. As an example, a number of resolutions and orders of our esteemed president are given.

In particular, this year, in accordance with the Decree of the President of the Republic of Uzbekistan dated August 29, 2020 No. PP-4816 “on measures to support and improve the efficiency of the fishing network,” work is being carried out in the republic to support the fishing network, improve the efficiency of fishing and fishing farms, rational and efficient use of land and water resources in this area, in order to ensure widespread introduction of intensive technologies:

In 2021-2022 In conditions of water scarcity, the practice of gradual widespread use of new resource-intensive intensive technologies and secondary water sources in artificial reservoirs

by fisheries that receive water from rivers and canals has been introduced. In accordance with the resolution, intensive development of the fishing industry in the republic is provided on the basis of a scientific approach, increasing efficiency through the introduction of modern and innovative methods of production of fish products into the industry.

To date, most dangerous diseases have been studied in depth, and recommendations for their prevention and treatment have been developed. However, skilled personnel are required in the field to be able to select the optimal and cost-effective measures in specific conditions that will prevent and reduce damage from disease.

Currently, practical measures are being taken in the republic to implement this resolution. However, diseases encountered in fish during the farming of fish and fish products, including infectious and non-infectious fish diseases, to some extent hinder the development of the industry.

**The degree of knowledge of the problem.** Infectious and non-infectious fish diseases are common in nature and most often affect young, one- and two-year-old fish. When treating diseases, good results are achieved by using the bath method, as well as complex treatment. It was noted that regular fishing reclamation, veterinary, sanitary and therapeutic measures help well in preventing the disease.

**Purpose of the study.** In the course of research work in intensive reservoirs of Samarkand, Pastdargam, Kattakurgan, Payarik and Agdarya districts of the Samarkand region, i.e. on fish from the carp family affected by 1-2-year-old crustocenososis, the goal was to test highly effective methods of prevention and treatment of the disease.

**Materials and methods of research.** To study the clinical signs of diseases, fish with suspected disease were first isolated, a specially prepared aquarium and small cages were prepared, where they were under constant observation.

In order to determine the pH value of water using litmus paper, as well as diagnosis, treatment and prevention of contaminated fish, scientific personnel have been created at the Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology and the Samarkand State University of Veterinary Medicine, Animal Husbandry and Biotechnology for the development of veterinary medicine, biotechnology and animal husbandry in Uzbekistan. intensive preparation of a scientific business incubator” mega project “fish” experiment in the room “birds, fish, diseases of bees and fur-bearing animals.” Mycological studies were carried out in the aro optatech laboratory, based on the detection of hyphae of the pathogen, the diagnosis was made through parasitological studies.

In addition, general, ichthyopathological, organoleptic, microscopic and pathological methods of studying fish were used.

Young carp fish grown in fish farms were selected as the object of the study. In the course of clinical and organoleptic studies, the clinical condition of the Fish, their appearance, coordination of movements, reaction to the influence of the external environment, body position in water, body weight, color of mucous membranes, color of coins, vision, and the condition of the gill covers were studied.

**The results obtained and their analysis.** A total of 155 specimens were subjected to parasitological research. (Table 1) of different fish species. Of these, 6 out of 41 specimens examined, i.e. 14.6% were infected with lerniosis, and the intensity of invasion averaged 9-18 specimens.

Of the 69 species of carp examined, 15, i.e. 18.8% were infected with lerniosis, and 2 were infected with arguliosis, which amounted to 2.9%. The intensity of invasion was 7-9 and 1 specimen, respectively.

### Infection of fish with crustaceans, level test results

Jadwal No. 1.

Types of fish	Number of fish examined	Damaged		From this				
		Number	%	Lernioz		Argulioz		
				Number	%	Number	%	AI
Acne	41	6	14, 6	6	14.6	-	-	1-3
Carp	69	15	21, 7	13	18.8	2	2.9	2-5
White carp	45	9	20, 0	9	20.0	-	-	1-4
GENERAL	155	thirty	19, 3	28	18.0	2	1.3	1.5-4

When examining 45 species of white carp, lerniosis was found in 9 of them, and the infestation with crustaceans was 20.0%. The intensity of invasion was 1-4 copies.

According to the results of the inspection, the average infestation of fish with crustaceans in farms and natural reservoirs of the Kattakurgan district of the Samarkand region was 19.3%. Of these, Lerniosis accounted for 18.0%, Arguliosis - 1.3%.

### Summary

- In natural and artificial reservoirs of our republic, the level of contamination of fish with crustaceans is on average 19.3% and its increase is observed every year.
- Among the 3 fish species examined, the infestation of carp with crustaceans was high and averaged 21.7%.
- White carp - 20.0%, eel - 14.6%. The three fish species were contaminated with crustaceans by an average of 19.3%.
- According to the results of our surveys, it was found that 18.0% are infected with 2 types of crustaceans - lerniosis, and 1.3% - arguliosis.

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