

MICROECOLOGICAL PREPARATIONS FOR SUSTAINABLE AND HEALTHY BREEDING

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Abstract: In the future, healthy breeding will become the predominant breeding method, adhering strictly to the principles of ecological breeding. A widespread practice in healthy breeding is the utilization of microecological preparations, which play a crucial role in promoting healthy breeding practices. These agents are vital in ensuring the well-being and accelerated growth of animals. In this regard, the utilization of microecological agents in healthy breeding will be delineated, encompassing their early introduction into breeding ponds, their application throughout the breeding cycle, the judicious use of drugs, and the scientific management of diseases.

Keywords: Microecological preparations; Pond; Breeding

1 EARLY APPLICATION OF MICROECOLOGICAL PREPARATIONS IN BREEDING PONDS

1.1 Preliminary Pond Substrate Treatment

In healthy breeding, pond water needs to be disinfected, which plays an important role in improving the survival rate of breeding. When the water level is about 10 cm, use bleaching powder to disinfect the water, which can effectively kill germs and adjust the pH value at the same time. Inject about 50 cm of new water after about 2 days, which can provide conditions for the application of microecological agents in healthy breeding [1].

1.2 Pond Water Quality Cultivation

In the process of healthy breeding, if you raise fish in a pond, the water quality must be treated scientifically and effectively, because water is the core of healthy pond breeding. In the process of water treatment, it is necessary to effectively clean the water bottom, introduce beneficial algae, stir the bottom mud, use micro-ecological agents to provide nutrients for algae growth, remove pond moss, and control the growth rate of zooplankton [2].

2 USE OF MICROECOLOGICAL PREPARATIONS DURING THE BREEDING PERIOD

2.1 Feed Selection and Feeding

The selection of feed is the key to healthy breeding. There are many types of feed, and you must choose the feed suitable for healthy breeding. However, in the process of selecting feed, farmers focus on factors such as the impact of feed on fish growth rate and cost performance, which lacks scientific basis.

2.2 Maintain Stable Water Quality and Improve the Purification Ability of Pool Water

Water quality is the core factor for microecological pond culture. It is necessary to maintain stable water quality and improve the purification ability of the pond water. This is the key to ensuring healthy pond culture. The water change work must be scientific to a certain extent, and the water must be changed according to the type of fish and the actual situation of the pond. Algae have strong water purification ability and are the basis of water purification [3-4]. Algae play an important role in enhancing water purification capabilities and improving the survival rate of fish [5].

2.3 Correct Use of Microbial Preparations

The use of microecological agents in pond culture is a common phenomenon, but microecological agents must be used scientifically. The use of microecological preparations is not simply to achieve high fish yields and reduce the probability of fish illness, but to correctly understand the role of microecological preparations, use microecological preparations to improve water quality and enhance fish immunity.

3 USE DRUGS CORRECTLY AND TREAT DISEASES SCIENTIFICALLY

3.1 Use "Ecological Disinfectants" Instead of "Conventional Disinfectants"

During the pond culture process, water needs to be disinfected frequently. Using "ecological disinfectants" instead of "conventional disinfectants" can achieve certain results. Ecological disinfectants can play a key role in the process of water quality cultivation and have a good effect on improving the immunity of fish. It should be noted that water disinfection is to reduce the probability of fish disease, not to completely eliminate fish diseases.

3.2 Combined Use of Oral Microecological Preparations and External Microecological Preparations

In the process of pond culture, internal microecological preparations and external microecological preparations must be used in combination, which can promote nutrient transformation, protect animal livers, improve immunity, inhibit the reproduction of microorganisms and harmful algae, balance the microecological environment of the culture water body, and inhibit The conversion of proteins to ammonia and amines both play an important role [6].

3.3 Use Quicklime with Caution and do not use Antibiotics to Prevent Disease

In the process of pond culture, be careful to use quicklime to cultivate water quality and do not use antibiotics to prevent diseases. When quicklime is used in water bodies with abundant algae and high pH values, alkalosis or mass death of algae often occurs. After using quicklime, the pH value of the water body rises rapidly, the ammonia content increases rapidly, and the toxicity is hundreds of times higher than before. Can cause ammonia poisoning in fish. Long-term oral administration of antibiotics will not only destroy the normal flora in the intestines and affect digestive function, but will also remain in the water after being excreted from the body, damaging the ecological environment.

COMPETING INTERESTS

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