

Influence of the Vegetation of the Plankton on the Growth of the Bighead Carp While Being Bred in Autochthonous Polyculture Along with Common Carp and Grass Carp

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Abstract: It has been determined that in the terms of the experiment good conditions for the growth of the bighead carp were ensured. The biomass of the phyto- and zooplankton in the ponds has significantly influenced on the growth of the fish both in the beginning and the middle as well as during the whole vegetation period. The influence of the phytoplankton on the intensity of the growth increases significantly with the enhancement of the biomass over 0.830 mg.l⁻¹. The increase of the phyto- and zooplankton biomass at the beginning of the vegetation has a positive influence on the growth of the bighead carp. In the middle of the vegetation period the tendency is different. The worst growth was typical of the fishes in the ponds with the highest levels of residual biomass of the zooplankton. The good vegetation of the phytoplankton at the beginning of the period defines the ultimate live weight of the bighead carp and is of primary significance for the feeding of the fishes in the middle of the period.

Key words: organic aquaculture, herbivorous fish, phytoplankton, zooplankton, manure