





ثبكة المعلومات الجامعية





جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



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EXPERIMENTAL STUDIES ON ZOOPLANKTONIC FEEDING OF SOME FISH FRY FROM CERTAIN FRESHWATER PONDS AT ABBASSA, SHARKI A, EGYPT.

THESIS
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ABSTRACT

ass culture of live food organisms and formulation of artificial feed have gained much importance to raise the required stocking material for fish hatcheries and aquaculture. Growing of natural food organisms and their production on commercial scale are still in the experimental stage.

Experimental trials were carried out to feed Nile tilapia (*Oreochromis niloticus*) fry on different densities of natural food (zooplankton) and artificial feed (containing 25% protein). It is concluded from the results that growth response of tilapia fry varied according to the percentage of zooplankton and artificial diet used in the experiments. The highest growth rate was observed in fry groups fed on diet containing the highest number of zooplankton (5500 org./fry).

A positive correlation was found between the number of zooplankton and the gain in weight and food conversion ratio of *O. niloticus* fry. The protein content of the reared fry

increased with the increase of the percentage of zooplankton in the diet.

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Biochemical analysis of the reared Nile tilapia fry showed that the body protein content increased with increasing protein in the diet. Thus, the fry group which fed on the highest density of zooplankton, has the highest protein content in their flesh. The dietary lipid content did not appear to have a significant effect on body lipid content. Also, the body ash content has not been affected by changing the dietary protein levels.

It is recommended to feed the fry, in fish hatcheries, on zooplankton organisms during their first ten days after hatching, in order to get maximum growth rate and best food conversion and performance.

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