

AQUACULTURE POTENTIAL OF EUROPEAN EEL (*ANGWILLA ANGUILLA*) IN EARTHEN PONDS AT LAKE MANZALA FISH FARMS, EGYPT.

Abdalla A. El-Shebly

National Institute of Oceanography and Fisheries, Egypt.

Key words: Aquaculture, European eel, Earthen ponds, Lake Manzala.

ABSTRACT

A preliminary experiment was conducted to assess the aquaculture potential of eels under pond conditions. Seeds of the European eel (*Anguilla anguilla*) were used for growth trials in an earthen pond at Lake Manzala. The pond had an area of 3 feddan with a depth of about 1-meter. Juvenile eels (11.66 cm in length and 2.42 g. in weight / fish) were stocked during May 2003 at a rate of 5000 fish / feddan in a polyculture system including tilapia and mullets and fed mainly on natural prey (natural spawned tilapia) and small shrimps. Growth, survival, and net pond production were evaluated for 2 years (from May 2003—May 2005). Eels attained a weight range of 43.8—210 g. / fish with an average of 121.38 g. / fish at the end of the first year and a weight range of 152.5—430 g. / fish with an average of 280.36 g. / fish at the end of the second year. Survival ranged from 91% during the first year to 100% during the second year. Net eel production was 540.18 kg / feddan at the end of the first year (May 2004) and 723.36 kg / feddan at the end of the second year (May 2005). This experiment demonstrated the possibility of cultivation of eels, that grow better and profitable, in earthen ponds.