Introduction

INTRODUCTION

The common carp, Cyprinus carpio L. is considered as the most important fish used for extinsive fish culture allover the world of all species of the fish utilized by man, the common carp has the longest history of culture.

Hickling, (1962) reported that the common carp has been cultivated for 3000 to 4000 years in the far east.

In Euroup, it is likely that both the Greeks and Romans fattened carp in ponds (Bardch, 1974). Carp production in ponds, flourished in Europe during the middle ages, In the sexteenth century, carp cultivation was most important almost every monastry was provided with carp ponds. At the present time, carp cultivation have undergone a new boom through progressive pond owners.

The carp was introduced into North America in the mid nineteenth century and it is now more abundant than any other fresh water fish (Sigler, 1958).. MeCrimmon, (1968) stated that the carp Cyprinus Carpio L., is one of the most locally abundant and widely distributed of those fish species introduced by man into North American waters.

The countries of Southeast Asia have many native cyprinids, but common carp was introduced recently to those countries, and is now cultured throughout the region (Bardch, 1974).

The common carp was also introduced recently to Africa and Latin America for agricultural purposes .

In Egypt, the common carp Cyprinus carpio L. was first introduced into fresh water ponds from Indonesia in 1934, later in 1949, the common carp was replaced by the famous and widespread race of carp, the mirror carp Cyprinus carpio V. specularis Lac. as this race has a higher rate of growth and fewer spines in the flesh than the common carp. A batch of the mirror carp was received from Glosio Farm, Cher Department, France, these fishes were kept at the Barrage Experimental Fish Farm, near Cairo.

Later on, the mirror carp was introduced into other fish farms in Egypt, In the following years the mirror carp established itself well in the various fish farms in Egypt, especially when successful spawning has taken place.

Several studies have been carriedout on the carp since its introduction in Egypt, Koura and El-Bolock, (1960) made some studies on the acclimatization and growth of carp. Imam and Hashem, (1960) worked on the spawning cycle of carp. Astudy on the carp culture in Egypt was undertaken by El-Bolock and Labib, (1968) . Bishai and Labib, (1970) made some studies on the biology of carp. Imam and Habashy, (1972) studied the

artificial feeding of carp fry. Bishai et al , (1972) made experimental studies on the feeding of the common carp Cyprinus carpio L. Bishai and Labib, (1973) gave an account on the food, feeding habits and growth of the carp.

Studies on the morphometric characteristics of the carp had been carried out by sevaral authers in different parts of the world. Of these are :

Eichler, (1940) ; Schaeperclaus, (1951) ; Luhmann and Mann , (1957) , In Germany ; English , (1952) ; Sigler , (1955) ; Schaffman , (1957) ; Sigler , (1958) ; Walburg and Nelson, (1966) ; In United states ; Kuronuma , (1954) ; Tamura (1961) , In Japan ; Vaas and Sachlan , (1956) ; Vass, (1957) , In Indonssia ; Butcher , (1962) , In Australia ; Wlodek, (1967) , In Poland ; Mc Crimmon , (1968) , In Canda ; Pruginin, (1968) , In Uganda and Tanyolac, (1977) , In Turkia ,

Haematological studies have been carried out on carps by many authors.

Sorvacev , (1957) studied the changes in proteins of carp blood serum during hibernation ; Lysak, (1965) have an account of the erythrocyte number, haemoglobin content and hematocrite value of carp blood ; Molnar , (1970) gave a haematological picuture of the spotted silver carp Hypophthalmichthys nobilis Richardson, white silver-carp, Hypopnthalmichthys molitrix val , and grass carp Ctenopharyngoden idella val; Syrov , (1970) studied the morphological composition of the blood in reproducing grass carp and silver carp ; El-Domiaty, (1972) worked on the serum proteins of carp Cyprinus carpio ; Pilarczyk, (1978) made a haematological and histological investigation on carp from Experimental Fish Culture Station at Golysz (Poland).

The present study was carried out on the mirror carp Cyprinus Carpio V. specularis Lac. collected from Barrage Experimental Fish Farm, near Cairo, Egypt. This work presents a study on the morphometric characteristics of the mirror carp. In addition, haematological studies were carried out on the mirror carp.

The aim of this study is to add to our knowledge on the morphology and haematology of the mirror carp

which proved to be successfully acclimatized in our ponds .

It is hoped that this study will be of some value for carp culture in Egypt.