
mol phological and haematological studies on the mirror cyprinus carpio v specularis lac in egypt

mohamed nagy mosad.

1 - In the present work, some morphological and haematological studies were carried out on the mirror carp, *Cyprinus carpio* . V. *specularis* Lac. The fish samples were collected from Barrage Experimental Fish Farm, near Cairo.2 - The fish samples used in morphological investigations were at the first year of life and ranged in total length from 2 - 31 cm .3 - The total length/standard length index (T.L/ S.L.) ranged from 1.20 to 1.32 with a mean of 1.26. The value of this index tends to decrease with increase of total length.4 - The standard length/head length index (S.L./ H.L.) varied from 2.62 to 3.35 with a mean of 3.04. The value of this index shows a trend towards increase with increase in standard length.5 - The standard length/body depth index (S.L./B.D.) ranged from 2.09 to 2.80 with a mean of 2.45. This index showed higher values in smaller fish samples relative to that of larger ones.6 - The regression equation for the standard length was found to be :Standard length = - 0.4345 + 0.8288 total length.7 - The regression equation for the body depth was found to be :Body depth = -0.2112 + 0.3450 total length .8 - The regression equation for the head length was found to be :Head length = 0.7675 + 0.2190 total length.9 - The observed and calculated values for the morphometric measurements showed close fitness.10-The regression equations for morphometric measurements in relation to the total length indicate that isometric growth occurs.11-The length-weight relationship : $W = cL^n$ was found to be $W = 0.01276 L^{1.05762}$ The weight increases at a rate equal to the cube of length.12 - Close agreement is shown between empirical and calculated weights.13 - The condition factor "K" ranged between 1.1481 to 1.6348 with an average of 1.4906. The larger fish samples showed higher values of " K "14 - The mode of lengths from 5 cm. to 30 cm. lied at 21 cm.15 - The mirror carp showed average total length of 178 mm. and average weight of 135 gm. at the first year of life.16 - The mean values of the erythrocyte counts ranged from 1.035 million/cmm. to 1.2545 million/cmm. in fish samples ranging from 18 to 28 cm. in length.17 - Leucocyte counts ranged from 3.430 thousand /cmm. to 4.058 thousand/ cmm. in fish samples ranging from 18 - 28 cm. in length.18 - The number of erythrocyte and leucocyte increase gradually with the increase of length and weight of the fish.19 - The mean value of erythrocyte sedimentation rate is 0.557 mm/h for fish samples of average length 22.98 cm. and average weight 164.52 gm.20 - The average normal time of coagulation of blood of mirror carp is 21.77 seconds for fish samples of average length 22.98 cm. and average weight 164.52 gm.21 - The average value of the

specific gravity of the blood of mirror carp was found to be 1.0823. for fish samples of average length 22.98 cm. and average weight 164.52 gm. 22- The average level of total protein in serum of mirror carp is 2.57 gm/100 ml for fish samples of average length 21.26 cm. and average weight 130.83 gm.