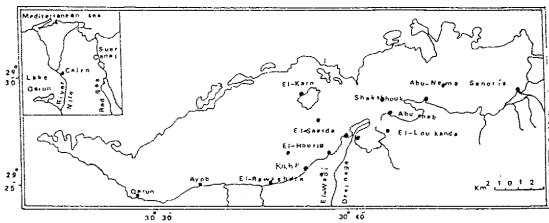


Lake Qarun is a saline land-locked lake, located in Al Fayoum depression in the western desert of Egypt (Fig. 1). It is shallow with a mean depth 4.2 m. Only 18% of its area has a depth ranging from 5 to 8 meters. The average S‰ has increased due to evaporation from 11.1‰ (in 1906) to 32.5‰ (in 1928) but is expected to remain unchangeable) until the middle of the next century (SOLIMAN, 1989). Transplantation of marine fishes started in 1928 by introduction of mugilids, then 1935 by *Solea vulgaris* and finally with shrimp postlarvae in 1977 & 1980 and later the stocking program for shrimp was stopped. Shrimp species were acclimatized well during the following period as reported by ISHAK *et al.*, 1980. Prawn production increased steadily from 2.4% in 1984 to 36.2% in 1990 of the total lake production. *M. stebbingi*, in particular, increased from 1.7% in 1979 to 30% in 1984 and then reached to 100% of total prawn landings of the lake in 1989 (ABDEL RAZEK, 1991). *M. stebbingi* has formally proved its efficiency as a shallow water species with apparently great tolerance to markedly high salinities in Suez Canal Lakes (GAB-ALLA *et al.*, 1990) and this is considered an important reason for its succession in Lake Qarun.

More than 77% of *M. stebbingi* catch was landed at El-Loukanda, Shakshouk, El-Saaida and Abu-Shanab centers, east of the lake, where S‰ 30-31‰ and bottom is sand and sandy mud. While in western part Kahk and El Rawashdia are the most productive with regards to shrimps.

The maximum size recorded of *M. stebbingi* in Lake Qarun was 12.0 cm for females and 11.0 cm for males which proves a considerably optimal environmental conditions for its growth in comparison with other habitats. The results show the estimated minimum size for mature female of *M. stebbingi* in Lake Qarun to be 8.3 cm T.L which is the minimal biological size for maturation compared with other areas of occurrence. In Lake Qarun *M. stebbingi* showed a clear breeding season over a period from June to October and the recruitments appeared from August to October.

Unfortunately, the active period of *M. stebbingi* spawning as well as the higher occurrence of its newly born groups, coincided with the intensive period of fishing in the lake (July-October). This system causes a drastic effect on the abundance of mother shrimps as well as juveniles, this seriously affecting the shrimp fishery of the lake. For this reason, much attention has to be given to the fishing periods, as well as fishing gears used, for good management of shrimp fishery in Lake Qarun.



REFERENCES

ABDEL RAZEK F.A., 1991.- Biological observations on the transplanted prawns in Lake Qarun (Egypt). *J. Egypt. Ger. Soc. Zool.* 5: 29-45.
 GAB-ALLA A.A.F.A., HARTNOLL R.G., GHOBASHY A.F. & MOHAMED S.Z., 1990.- Biology of penaeid prawns in the Suez Canal Lakes. *Marine Biology* 107: 417-426.
 ISHAK M.M. & ABDEL RAZEK F.A., 1980.- Bionomics of *Penaeus Kerathurus* transplanted into Lake Qarun (Egypt). *Aquaculture*, 21: 365-347.
 SOLIMAN G.F., 1989.- The hydrology of Lake Qarun, Fayoum, provinces, Egypt. Part II : The successive increase of salinity in Lake Qarun. *Bull. Inst. Oceanogr. & Fish. ARE.* 15: 93-105.