

## **ECOLOGICAL STUDIES ON ZOO PLANKTON COMMUNITY OF LAKE BURULLUS, EGYPT**

**Abd E!-Halim A. Saad \***, **Magdy T. Khalil<sup>1</sup>**,  
**Gamal M. El-Shabrawy<sup>2</sup>**, **Tadros Z. Bcdir<sup>1</sup>**

1- Zoology Dept., Faculty of Science, Ain Shams University

2- National Institute of Oceanography & Fisheries, Fish Research Station, El-Kanater El-Khyria, Egypt.

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### **ABSTRACT.**

**Z**ooplankton community of Lake Burullus was surveyed for four successive seasons during 2001/2002. Forty eight species of zooplankton were identified during the present study in the Lake (34 Rotifera, 7 Copepoda and 7 Cladocera). Rotifera dominated the other groups forming 73.5 % of total zooplankton.

Decreasing of salinity and dominating of drainage water in Lake Burullus during the last two decades led to change in species composition and bio-diversity of zooplankton. There was no sign of occurrence of 10 marine species which have been previously recorded in the lake during early 1980's. But, on the other hand, 18 freshwater species have been recorded for the first time in the lake.

The population density of zooplankton was obviously higher in western part of the lake, with a major peak of an average 1,764,333 org. m<sup>-3</sup>. Regarding seasonal variation, there was a gradual increase in zooplankton standing crop from a minimum of 523,300 org. m<sup>-3</sup> in autumn until reaching a maximum of 1,353,182 org.m<sup>-3</sup> in summer, with an overall average of 902,911 org.m<sup>-3</sup>.