Light and Scanning Electron Microscopy of *Dipartiella simplex* (Raabe, 1959) Stein, 1961 Infesting Common Sole (*Solea vulgaris*) and Goby Fish (*Gobius* sp.) in Lake Qarun, Egypt, with a New Character to the Genus

Mohamad Ahmad ALI
National Institute of Oceanography and Fisheries, Egypt

Summary. *Dipartiella simplex* (Raabe, 1959) Stein, 1961 was observed on the gills of *Solea vulgaris* and *Gobius* sp. from Lake Qarun, Egypt. The trichodinid prevailed on the new host *S. vulgaris* all the year with high intensity during winter. Comparison with the original description revealed that the present trichodinid morphometry coincides with the minimal ranges of the original population and might be attributed to the new host and habitat. Scanning electron observations showed firm junctions of denticles through the fairly developed central parts. A new described character of this genus was clearly visible in the ray structure. Rays were semi-squared in form and ended with vermiform thin projections that were folded at right angles underneath the semi-square parts. The study provides a possible explanation for the present new locality and host in the saline inland lake of Qarun.

Key words: *Dipartiella*, trichodinids, *Solea*, *Gobius*, protozoa, Lake Qarun, Egypt.

INTRODUCTION

Lake Qarun is an inland saline basin (29°24' and 29°33'N, 30°25' and 30°50'E) in the Fayoum Depression in the western desert of Egypt. It covers an area of about 228 km² (about 40 km in length and 5.7 km mean breadth). The lake ecosystem was transformed from freshwater to saline during the twentieth century. The new saline habitat of the lake made the ecosystem unfavourable for the freshwater forms. Hence, the authorities started to stock the lake with fry of marine forms like mullets and sole since 1928 (El-Zarka 1963). These fry are annually collected from the coasts of the Mediterranean Sea.


Further to the parasitological investigation of fishes in Lake Qarun, the present work identified *Dipartiella simplex* (Raabe, 1959) Stein, 1961 on gills of *Solea vulgaris* and *Gobius* sp. The observed trichodinid was then redescribed using light and scanning electron microscopy (SEM) to check and validate denticle morphology. A new character was added to the genus in denticle structure. This study also provides comparative descrip-