

**PARASITOLOGICAL AND HISTOPATHOLOGICAL STUDIES
ON THE GRASS CARP *CTENOPHARYNGODONIDELLA*
INFESTED WITH *TRICHODINA ACUTA* WITH SPECIAL
EMPHASIS ON ITS CONTROL**

Mohamed Abdel-Meguid

Environment and Climate Research Institute, National Water Research Center, El
Kanater, Kalubya, Egypt

Key Words: *Ctenopharyngodon idella*, *Trichodina acuta*, treatment

ABSTRACT

An experimental study was conducted to reveal the morphological structure of the ciliate ectoparasite *Trichodina acuta* on the grass carp *Ctenopharyngodon idella*, to study the histopathological changes in these infested fish, and to assess potential therapeutic agents. It was found that in the fish fry weighing 0,001 g., the parasite was found on the skin but in the fingerling weighing 10 grams it infested on both the skin and the gill filaments. The biometrical data showed that the morphological structure of the protozoan parasite was highly dependent its location on the skin or the gill filaments and on the size of the host fish. Although, larger fish showed detrimental effects due to parasitic infestation, small fish were more susceptible. Histopathological examination of the skin and the gills of infested large fish revealed no apparent microscopic lesions. However, *T. acuta* invaded the skin of early stages of fish and caused epithelial hyperplasia and extensive mucus secretions. It was found that formalin, malachite green and potassium permanganate were therapeutic and prophylactic against this protozoan parasite.