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ABSTRACT

Parasitological investigations, covering a period of 10 months were conducted on 600 Nile tilapia from fresh and brackishwater cultured and freshwater wild populations in the Philippines.

From these examinations, 21 different species of parasites (10 Protozoa, 6 Monogenea, 3 Digenea, 1 Copepoda and 1 Mollusca) were recovered. Among these, 13 have been assigned specific identifications: Trichodina centrostrigata Basson, Van As and Paperna, 1983; I. acuta Lom, 1970; I. heterodentata Duncan, 1977; Tripartiella clavodonta Basson and Van As, 1987; I. tilapiae (Duncan, 1977) ; Cryptobia branchialis Nie in Chen, 1955; Enterogyrus cichlidarum Paperna, 1963; Cichlidoqyrus tilapiae Paperna, 1960; C. tiberianus Paperna, 1960; C. sclerosus Paperna and Thurston, 1969; C. longicornis longicornis Paperna and Thurston, 1969; Transversotrema laruei Velasquez, 1958; and Caligus epidemicus Hewitt, 1971). One species (Trichodina n. sp.) is new to science. Four species are new geographical records for the Philippines (Trichodina n. sp., I. clavodonta and I. tilapiae, and E. cichlidarum) while three have not been previously recorded from Nile tilapia (Trichodina n. sp., I. clavodonta and I. tilapiae).



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Analyses were made on the changes in the parasite fauna of tilapia from fry to marketable size. Of all the parasite species for which age-count analyses could be conducted, five showed statistically significant changes in parasite counts with host age. These are T. laruei and C. epidemicus in brackishwater collections and Cichlidogyrus spp., E. cichlidarum and Unionidae gen sp. glochidia in fresh water.

Observations are also made on the geographical distribution of these parasites in the Philippines and a preliminary assessment of the threat they may pose to the culture of tilapia is given based on a review of the literature.

