EPIDEMIOLOGICAL STUDIES ON SOME FISH-BORNE PARASITES

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Abstract

The following fish species were studied from the helminthological point of view: 255 Oreochromis niloticus, 129 Clarias lazera, 91 Bagrus bayad, 15 Schilbe mystus, 26 Synodontis schall, 67 Mugil cephalus, 15 Mormyrus niloticus, 24 Common carp, 40 Sardinella jussieu, and 7 Lates niloticus. Samples were collected from different markets in Tanta, Kafr El-Zayat and Tala provinces, Egypt. The infected fish species and their respective infection percentages were the following: 128 Oreochromis niloticus collected from the River Nile, with 50.19% infection, while those of cultured farms were free from parasites; 80 Clarias lazera with a percentage of 62.01%, 32 Bagrus bayad with a percentage of 35.16%, 15 Schilbe mystus with a percentage of 100 %, 13 Synodontis schall with a percentage of 50 %, 8 Mugil cephalus with a percentage of 11.94%, and 15 Mormyrus niloticus with a percentage of 100% infection. The study identified five types of encysted metacercariae: heterophyid metacercariae recorded from Oreochromis niloticus and Mugil cephalus; haplorchid metacercariae recorded from Oreochromis niloticus; Prohemistomum metacercariae recorded from Clarias lazera, Oreochromis niloticus, Bagrus bayad, Schilbe mystus, Synodontis schall and Mormyrus niloticus, and Mesostephanus metacercariae and Cyanodiplostomum metacercariae recorded from Clarias lazera. The infected fish species (Oreochromis niloticus and Clarias lazera) were fed to experimental animals (rats and mice) and the adult worms obtained were: Heterophyes heterophyes, Heterophyes aequalis, Centrocestus sp., Haplorchis pumilio, Metagonimus yokogawai, Prohemistomum vivax, Mesostephanus appendiculatus, and Mesostephanus burmanicus.