Abstract

In Lake Naivasha, the common carp Cyprinus carpio L. 1758 was accidentally introduced from fish farms adjacent to River Malewa in 1999 and now forms the bulk of the total fish caught. Since its introduction, no study has been made on its parasitic community nor are there any reports on ectoparasites from other fish species in this lake to the best of our knowledge. Therefore, the aim of this study was to describe the parasitic community of C. carpio and two other commercially important fish species: Oreochromis leucostictus and Tilapia zillii. Additionally, the abundant Barbus paludinosus was included in the study. A total of 286 fish (145C. carpio, 56 O. leucostictus, 18 T. zillii, and 67 B. paludinosus) were collected during the year 2011 and examined. Ten taxa of parasites were recovered from C. carpio dominated by the monogenean Dactylogyrus minutus, occurring with a prevalence (p) of 99.3 %. Thirteen taxa of parasites were identified from O. leucostictus dominated by monogeneans Cichlidogyrus spp. (p = 91.1 %). T. zillii harbored nine taxa of parasites with the digenean Tylodelphys sp. (p = 83.3 %)being dominant and B. paludinosus harbored 11 taxa of parasites dominated by an unidentified monogenean of the genus Dactylogyrus (p = 83.6 %). C. carpio had the lowest helminth species diversity and richness while monogenetic trematodes, which have never been reported from fish in Lake Naivasha, were the most prevalent parasites recovered.