Studies on some monogenean parasites infecting fishes in Qena province, Egypt.

SUMMARY

The present study focused on studying some of the ectoparasitic monogenean parasites infecting gills of fresh water fishes belonging to 10 species (9 families) from the River Nile at Qena Governorate, Egypt.

743 fish specimens belonging to Schilbe mystus, Lates (lates) niloticus, Chrysichthys rueppelli, Tetraodon lineatus, Chrysichthys auratus, Malapterurus electricus, Oreochromis niloticus, Mormyrus kannume, Bagrus bajad, and Labeo niloticus were collected from the River Nile at Qena Governorate, Egypt.

Examination of the investigated fish species in this study revealed infestation by parasitic monogeneans at a rate of 81.43 %. The highest percent of infection was recorded in Schilbe mystus with a percent of 100 % (130/130) while the lowest percentage was recorded in Lates (lates) niloticus 42.86 % (30/70).

For the studied monogenean parasites, the highest percent of infection was recorded in summer for all of the examined fish with a percent of 86.89% (431/496) and the lowest percentage was recorded during winter being
70.44% (174/247). During summer, the highest percentages of infection with monogenean parasites among fish were recorded in *S. mystus* 100% (90/90), *C. rueppelli* 100% (70/70) and in *T. lineatus* 100% (40/40), while the lowest percentage was recorded in *L. (lates) niloticus* 50% (25/50). The percentages of infection for the other fish species during summer were recorded as 95% (57/60) for *C. auratus*, 94.55% (52/55) for *M. electricus*, 80% (32/40) for *O. niloticus*, 76.19% (16/21) for *M. kannume*, 72.5% (29/40) for *B. bajad*, and 66.66% (20/30) for *L. niloticus*.

The highest percentage of infection with these parasites during winter was recorded in *S. mystus* with a percent of 100% (40/40) and the lowest percentage of infection was recorded in *L. (lates) niloticus* with a percent of 25% (5/20). The percentages of infection in the other examined fish species were recorded as 90% (18/20) for *T. lineatus*, 90% (18/20) for *C. rueppelli*, 86% (43/50) for *C. auratus*, 68% (17/25) for *M. electricus*, 50% (10/20) for *L. niloticus*, 47.83% (11/23) for *O. niloticus*, 44.44% (4/9) for *M. kannume*, and 40% (8/20) for *B. bajad*.

A positive correlation was found between the number of monogenean parasites infecting gills and skin of the infected fish hosts and the fish weights. It was also found during the present study that the number of
monogenean parasites counted from infected fishes increases as the weight of the fish increased.

The histopathological changes of the infected gills revealed a clear damage accompanied by gill hyperplasia due to the heavy infestation with monogenetic trematodes.