



Abstract

Fungal infections of fresh water fishes are known to be a serious problem for the fishermen. This research work was aimed to investigate the prevalence of fungal infections in different fresh water fishes. The prevalence of fungus was studied in relation to different months, different species of fish, infected organs, species of fungus itself and different sampling sites. A total 400 fishes from five fresh water farms were randomly selected from Lahore and its surroundings; 80 fishes were sampled from each farm. These fishes were carefully examined externally with the help of a magnifying glass. The fungal infected scales and other parts were removed with the help of a scalpel and inoculated on Saubroud Dextrose Agar (SAD). The fungus were identified on the basis of colonies, shapes, colors, growing way, septae, structure of sexual organs, size and the arrangement of spores etc. The identified species of fungus were; *Aspergillus spp.* (49.25%), *Alternaria spp.* (31.3%) *Fusarium spp.*(28.3%), *Penicillium spp.*(23.8%), *Rhizopus spp.* (11.9%) and *Mucorr spp.*(8.9%). The prevalence of fungal infections in different species of fish was *Hypophaimichthys molitrix* (21%), *Labeo rohita* (19%), *Cirrhinus mirrigala* (16%) and *Channa marulius* (11%). The most infected site was caudal fin (25%) and eyes (3.125%) were least infected. Month wise prevalence of fungal infection had also been seen where July 2012 (25.67%) showed the highest infection. The prevalence percentage was in an order of June (20.6%), May (17.3%), April (14.27%), March (12.89%) and February 2012 (9.72%). The fungal infection in different sampling sites was also estimated. Farm A was proved to be highly infested with a percentage of 25 where as Farm C appeared to have least number of infected fishes (8.75%). This study showed that the isolated fungi were responsible for the production of aflatoxins that causes morbidity and mortality of fishes. The difference of fungal infections might be linked to with environmental factors (Temp, pH, and Organic matter), maintenance and cleanliness of fresh water bodies.