

Epidemiological studies of parasitic and bacterial infection of the cultured warm water fish in khouzesan

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Abstract:

In this study which was carried out in khouzesan province, 1914 Pieces (1160 Pieces silver carp, *Hypophthalmichthys molitrix*; 498 Pieces common carp, *Cyprinus carpio*; 172 Pieces Grass carp, *Ctenophryngodon idella* and 84 Pieces Big head, *Aristichthys nobilis*) from different parts of the province were examined. In three year period, 1378 to 1381, fish samples from four stations were transferred a live to the lab. Water samples also were taken and tested for some of the physicochemical factors. From a total of 1914 fish examined, 1190 showed parasitic infestation and bacterial infections (62.2%). Infestation study, infestation with these parasites has been found: *Ichthyophthirius*, *Cryptobia*, *Trichodina*, *Costia*, *Hexamita*, *Dactylogyrus*, *Gyrodactylus*, *Lernea*, *Bothriocephalus*, *Diplostomum* and *Capillaria*. Also some species of *Aeromonas*, *Staphylococcus*, *Moraxella*, *Pectobacterium*, *Flavobacterium*, *Citrobacteria*, *Pasteurella*, *Pseudomonas* and *Alcaligenese* were identified in the samples, which normally occur in Water, but in some conditions (High pH, temperature and ammonia) could cause disease and lesions specially in gills. Infestation with *Dactylogyrus* and *Gyrodactylus* was found in all four kinds of fishes with different infestation rate. But the highest infestation rate with *Dactylogyrus* was in silver carp (55.2%) and lowest in common carp (14.6%). The highest infestation rate with *Gyrodactylus* was in grass carp (42.4%) and lowest in common carp (10.6%). *Ich*, *Bothriocephalus* and *Capillaria* were found only in common carp and grass carp. Infestation with adult *Lernea* and copepodid stage of *Lernea* had greater percentage in the gills and derm of grass carp. The data showed infestation with this parasites (especially protozoans and *Lernea*) and bacterial infection had occurred in all seasons especially in C area.