

A Novel Screening of Oxytetracycline Residues in Indian Carp (*Catla catla*) by Microbiological Method †

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Abstract: Aquaculture is one of the fastest emerging food sectors globally. This provides high-quality food products, which helps in economic welfare and give employment to the skilled labors. Due to intensification in aquaculture, the occurrence and the spread of disease are more. To control and treat the disease in the aquaculture field, farmers started improperly using antibiotics. This prompts the aggregation of anti-toxin residues in fish, making them impervious to that specific anti-infection. Later it will be transferred to other animals and human beings. Henceforth there is a need to screen the presence of anti-microbial deposits in fish. In this study, microbiological methods have been used for screening Oxytetracycline residues in Indian carp (*Catla catla*). For microbial screening, *Bacillus subtilis* were utilized as a marker microorganism. Totally 16 samples of muscle, 44 samples of kidney, and 140 samples of liver from Indian carp (*Catla catla*) were screened for oxytetracycline residues. As a result, 5 (31.25%) samples of muscle, 12 (27.27%) samples of kidney, and 22 (15.71%) samples of liver were positive for oxytetracycline residues. This review clarifies that microbial screening can be a kind benefit of conservative and a straightforward strategy that can be utilized for screening anti-infection deposits in fish.

Keywords: antibiotic residues; Indian carp; oxytetracycline; microbial screening.

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Conflicts of Interest

The authors declare no conflict of interest.