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Seasonal variation in prevalence of trematodes in freshwater fish: Associated food safety issues and control strategies

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Prevalence of zoonotic trematodes in fish, being the second intermediate host, is a cause of concern from public health point of view. In this study, screening of fish samples (387) from local market (205) and wastewater fed-ponds (182) revealed an overall incidence of 9.3 % infection of encysted metacercarial stages of trematodes. Fish from wastewater fed ponds (12.08 %) harboured more trematodes as compared to market places (6.83 %). Prevalence of trematode infection (16.3 %) in fish was highest was during post-rainy (Oct-Jan) season as compared to other which could be attributed to seasonal variation in physico-chemical parameters of water (temperature, alkalinity, nitrate content) and biotic factor (snail availability).

Prevalence of such encysted metacercarial stage of trematodes in fish, widely consumed by people, is a cause of concern from public health point, as its chances of transmission through consumption of raw, semi/undercooked fish /fish product/ byproduct is very high. Therefore, adoption of good aquaculture practice (GAP) by farmers coupled with an awareness of public through Information, Education and Communication (IEC) campaigns regarding food safety issues is required as a part of control strategies to minimize the risk of trematode infection.

Biography

P K Nanda is working as Senior Scientist in the field of Fish and Fishery Science and posted at Eastern Regional Station of Indian Veterinary Research Institute, Kolkata. He is having more than 15 years of research experience and presently working on fishborne pathogens and their public health significance. He has to his credit twenty five research papers published in peer reviewed national and international journals, two research reviews, three book chapters and has authored more than fifty popular and technical articles. He is a life member of Indian Science Congress and Association of Aquaculturists.

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