

## Studies on enzyme activity in the tissues of *Labeo rohita* (Ham) exposed to distillery effluent

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The high rate of population growth and rapid increase of industrialization have resulted in the problems of disposal of wastewater materials. Untreated industrial effluents enter either by direct disposal or via run-off of rainwater, where they adversely affect fish and other living organisms at morphological and physiological levels. The present study envisages the variations in the enzyme activities in two major tissues liver and gill of *Labeo rohita* exposed to sub lethal concentrations of distillery effluent. The fish were exposed to 0.049% and 0.098% sub lethal concentrations of distillery effluent for 10 and 30 days respectively. Both the sub lethal concentrations alters the activity of Aspartate Transaminase (AST), Alanine Transaminase (ALT), Alkaline Phosphatase (ALP), Acid Phosphatase (ACP) and Lactate Dehydrogenase (LDH). Elevated levels of AST, ALT were observed in the liver and gill tissues of *Labeo rohita*. Whereas LDH, ACP and ALP levels were found to be decreased in the Liver and gill tissues. These results suggest that the evaluation of phosphatases, transaminases and LDH activity in the tissues can be used as an important biomarker for the assessment of distillery effluent toxicity and environmental pollution.

### Biography

J. Helan Chandra has completed her Ph.D., from Madras University and working as an Associate Professor for the past 10 years in the Dept. of Biotechnology, Jeppiaar Engineering College, Chennai. She has also guided more than 25 B.Tech. and M.Tech. students in various field. She has attended more than 15 national and international conferences and presented various papers. She was one of the members of organizing committee for various workshops, conference, seminar and symposium both in national and international level.

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