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# Bacterial Contamination in River Water: A Review on Kallada, Southern Kerala

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## Abstract:

Microbial pollution of surface water poses high risk to human health. Sewer malfunctions and overflows, leakage from unscientifically constructed septic tanks and livestock farms are the major sources of microbial contamination of a water body. Kallada River is one of the major rivers of Kollam District of Southern Kerala which originate from the Kulathupuzha Hills of Western Ghat and empties in to the Ashtamudi Lake. Water samples were collected from 18 stations along upstream, midstream and downstream segments of river. Preservation and transportation of the water samples to the laboratory were as per standard methods. Total Heterotrophic Bacteria, Total coliform, Faecal coliform and Faecal *Streptococci* were determined by pour plate method. Analysis of Variance of heterotrophic bacterial count showed significant difference between seasons and total coliform showed significant difference between sites ( $p < 0.01$ ). Presence of Faecal coliform and *streptococci* in all the water samples indicates that water from the river is not fit for drinking without proper treatment.

**Keywords:** *Microbial pollution, Heterotrophic Bacteria, Total Coliform, Faecal Coliform, Streptococci*

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