IDENTIFICATION OF NITROGEN AND PHOSPHATE SOURCES FROM KATTANKUDY TO THE BATTICALOA LAGOON.

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ABSTRACT

This paper details an investigation that was conducted to find out the sources of nitrogen and phosphate from different origins in the Kattankudy area in the Batticaloa district for their contribution to the pollution of the Batticaloa lagoon.

Analysis of waste water samples collected from waste water channels C1 to C5, and lagoon water collected from locations L1 to L5 (in the study area) twice a month from April 2001 to July 2001 reveal that: ***a)*** *a considerable amount of nitrogen and phosphate being contributed by channels* C_1, C_4 *and* C_5 ***b)*** *high amounts of nitrogen is contributed from channels* C_4 *and* C_5 *and* ***c)*** *that phosphorous is contributed through channels* C_1 *and* C_5. *The sources of phosphates have been identified as animal and human excreta. Furthermore, it is also found that sewage decomposition and excreta from both human and animals are the major sources for the nitrogen found in the Kattankudy area. It is noted that eutrophication by these elements has lead to the development of algal patches in the Batticaloa lagoon along the Kathankudy area.*

Key words; algal bloom, drainage channels, eutrophication, wastewater.