DEPARTMENT OF ZOOLOGY

Bacteriological testing of Drinking water

OBJECTIVES

The present study was undertaken to,

- determine the presence of faecal coliforms in water samples by presumptive test
- confirm the faecal coliforms by EMB agar and Gram staining method
- determine presence of faecal Streptococci by KFC test.
- determine the MPN index of faecal coliforms and faecal Streptococci

METHODOLOGY & TECHNICAL ASPECT

The study was conducted on water sources to assess the extent of bacterial contamination from December 2011 to February 2012. Four different water samples were collected such as Drinking water, Ground water, House hold water, Main tank water. The water samples were subjected to faecal coliform and streptococcal analysis. Total coliforms were detected in multiple-tube technique. In this method, coliforms are detected in two stages such as presumptive test and confirmatory test. Most probable number in the water samples were analysed.

OUTCOME

- Majority of the water sources especially drinking water were found to contain unacceptable level of faecal coliforms and faecal Streptococci
- All the water samples collected during the month of December were seemed to have high MPN index/100 ml, whereas the drinking water samples collected during months of December, January, February 2012 seemed to have high MPN index/100 ml
PLANNING & IMPLEMENTATION

- Regular disinfection of water sources and periodic bacteriological appraisal of drinking water sources

- Awareness can be created among the people of Thondaimanpatti about the effects of drinking contaminated water and transmission of water borne diseases.