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Coliforms in the ground water system of the University of Jaffna premises and surroundings after the cyclone; Nisha, 2008

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The coliforms are commonly found in nature in various habitats. After the recent cyclone (Nisha), there is a chance for the contamination of faecal matters to the deeper levels of the ground water system. The current study includes an analysis for the total and faecal coliforms in the University of Jaffna and the surrounding areas to forecast the possible level of mammalian and possibly human faecal matter contamination in ground water system of this area.

Twenty nine water samples from dug as well as tube wells were collected randomly in and around the university premises, analyzed for total and faecal coliforms and the numbers were determined by MPN method.

The results indicated the presence of total and faecal coliforms in the entire water sample. All the eight samples from the University premises, all five samples from the Jaffna Technical College and all the sixteen samples from randomly selected houses around the university premises showed a significantly higher density of total and faecal coliforms bacteria than that of the control ($p=0.05$).

The density of faecal coliforms was high in most of the water samples in the University premises and the surrounding areas compare to the records before the cyclone. The results suggested the possible contamination of mammalian and possibly human faecal matter in the ground water system of the University of Jaffna premises and the surroundings due to the Nisha cyclone and flooding.

Key words: Coliforms, faecal coliforms, University of Jaffna, ground water