

Faecal Bacteria Contaminations in Untreated Drinking Water (Groundwater Well and Hill Water) from Rural Community Areas

Abstract

Most part of rural area has no treated water supply provided for their needs. The rural people has no choice and have to take from untreated water resource, such as well water, hill water, rain water, or gravity water, that we do not know how the drinkable status of it and whether it is safe and healthy for them. Due to this, an assessment to analyse the quality of the untreated drinking water quality on faecal bacteria from rural community was conducted for this study. Samples were taken from groundwater wells and hill water sources to determine the concentration of total coliform and faecal coliform with permissible standards. Identification was done through the Membrane Filtration Method from APHA standard. The results showed that the highest concentration of total coliform in hill water has reached 159 cfu/100ml and faecal coliform reached up to 66 cfu/100ml; and for the groundwater well source shows contaminations of 205 cfu/100ml total coliform and 120 cfu/100ml faecal coliform which have exceeded the standard limits. This has showed that total coliform and faecal coliform were presence in the untreated drinking water of the rural people. The research will answer the uncertainty about the cleanliness and the content of untreated drinking water resource from groundwater well and hill water especially for the rural people that received water source from uncertain water quality for their daily consumption.