

## **SURVEY FOR THE PREVALENCE OF HOOK WORM EGGS IN SOIL IN JAFFNA DISTRICT**

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Hookworm infection is a major disease of man where ever open yard defaecation is practised. Individuals who walk barefoot on defaecation grounds, are liable to get the infection. The relative risk caused to a community could be studied by examining soil samples for contamination with hookworm eggs.

Soil samples from selected locations in Jaffna District, were examined for the presence of hookworm eggs. Prevalence of hookworm eggs in soil was studied. Locations were selected from defaecation yards suspected to be having a high degree of contamination with hookworm eggs. Surface layer sample of 1cm deep, from the soil, was collected for examination and brought to the laboratory. Centrifugal flotation technique described by Dada 1977 was employed to isolate hookworm eggs from soil samples. This technique was found to work well under local condition.

The highest percentage of locations (27-37%) which are positive for the eggs, were observed during wet season (January to March). Low percentage of locations, positive for hookworm eggs were noted in September 1998, could be the result of destruction of eggs by direct sunlight.

The eggs hatch in one to two days under favorable condition in soil during rains or get buried by dung beetles. As such less or nil hookworm positive locations were noted in May and July. The increase in the percentage of positive locations during wet season, suggests that it is an adaptation to natural condition and coincides with the high transmission period.

With the knowledge of exact locations of soil contamination it is possible to advise on remedial measures in the affected locations.