

**Date of Issue: July 2003****Serial No: 7/03****CONTAMINATION OF NURSERY PLANTS WITH NEMATODES
THROUGH IRRIGATION WATER**

(This cancels the Circular No. N3, Serial No. 4/76 and the Circular No. N5, Serial No. 4/81)

Tea estates at altitudes above 150 m (500 ft) are prone to nematode infestation. The planting districts subject to infestation are Dimbula, Dickoya, Pussellawa, Pundaluoya, Nuwara Eliya and Udupussellawa districts in the up country, Morawakkorale, Urubokka, Rakwana and Balangoda districts in the low country, Dolosbage, Kandy, Kellebokka, Knuckles and Rangala districts in the mid country and Badulla, Madulsima and Passara in Uva.

Source of Contamination of Irrigation Water

Water courses running through infested fields wash away soil contaminated with nematodes and their eggs. When water from such sources is collected there is a high probability of this water becoming contaminated. When contaminated water is used to irrigate tea nurseries, over a period of time, it could transmit adequate numbers of nematodes to the roots of young nursery plants. Such contaminated plants not only suffer themselves, but also, transfer the infestation into the new clearings, when they are planted out.

Continued watering of nursery plants with a supply that may carry only a very few eelworms in suspension, i.e. 2 to 3 per 5 l (2 to 3 per gallon), is sufficient to bring about significant infestation levels. (Such levels, however, are inadequate for physical recovery and estimation with the available techniques).

Prevention of Contamination of Irrigation Water

- a. The potential sources of such contamination are run-off water and ravine water and these should be diverted away from tea land through well built drains.
- b. In the absence of a natural spring in the vicinity of the nursery to supply water to the nursery, it is advisable to have a special well dug out, to supply water for irrigating nursery plants in the above districts. If this is not feasible and if ravine water is the only source available, it is very important to ensure sedimentation of the water collected from ravines/run-off water for a minimum period of 48 hrs.