ANALYSIS OF PHYSICO-CHEMICAL PARAMETERS OF RAMGANGA RIVER-WATER IN EXPLORING ITS NEMATICIDAL EFFECT ON ROOT-KNOT NEMATODE, MELOIDOGYNE INCOGNITA

Ranjana Saxena and Monika Saxena

Received April 2, 2009 and Accepted September 12, 2009

ABSTRACT: Many devices have been used for the control of root-knot nematodes such as use of natural plant parts and their extracts, intercropping as well as use of nematicides and many other methods. Recent trends also showed the use of sewage, municipal waste, effluents and river-water as nematicide. Present studies have been carried out to investigate the possibilities of using Ramganga river-water against root-knot nematodes, *Meloidogyne incognita*. In vitro experiments were set by taking $J_2(s)$ from pure culture of M. incognita and screened as suggested by Cobb's sieving and decanting method. For observing mortality of J_2s of M. incognita at regular interval of 24hrs. upto three days, in the present study, riverwater was used as a stock solution (100%). Later on three concentrations (75%, 50% and 25%) were prepared by mixing distilled water in stock solution (100%).

Thus, it is interesting to observe that Ramganga river-water (polluted) carried nematicidal property and also that stock solution of river water was most effective against J_2 s of M. incognita in comparison to its other dilutions.

Key Words: Ramganga river-water, Physico-chemical parameters, Mortality, *Meloidogyne incognita*.