

SENSITIVITY OF MELOIDOGYNE INCOGNITA AND ROTYLENCHULUS RENIFORMIS TO ABAMECTIN

T. R. Faske and J. L. Starr
Texas A&M University
College Station, TX

Avermectins are macrocyclic lactones produced by *Streptomyces avermitilis*. Their antihelminthic potency is currently utilized in agriculture on endo- and ecto-parasites (Ivermectin) on domestic animals and as an insecticide and miticide (Abamectin) on plants. To date, no LD₅₀ values or recovery after exposure to Abamectin is available for the plant-parasitic nematodes *Meloidogyne incognita* or *Rotylenchulus reniformis*. Using an assay of nematode mobility, LD₅₀ values of 1.56 µg/ml and 32.9 µg/ml were calculated based on 2 hr exposure for *M. incognita* and *R. reniformis*, respectively. The pesticide carrier had no effect on mortality of either nematode. There was no recovery for either nematode after being exposed to Abamectin for 1 hr. *M. incognita* mortality rate continued to climb, whereas *R. reniformis* mortality rate remained unchanged 2 hr after the nematodes were rinsed and removed from the Abamectin solution.