SENSITIVITY OF MELOIDOGYNE INCOGNITA TO FLUOPYRAM T. R. Faske University of Arkansas, Division of Agriculture, Cooperative Extension Service Lonoke, AR

Abstract

Fluopyram is an SDHI fungicide that is being evaluated as a seed treatment and in-furrow application on row crops for management of fungal diseases and its effect on plant-parasitic nematodes. Currently, there is no LD₅₀ value, data on nematode recovery, or effects of sub-lethal concentrations of fluopyram on nematode infection available for *Meloidogyne incognita*. Based on an assay of nematode motility, LD₅₀ values of $5.18\mu g/ml$ and $1.18\mu g/ml$ fluopyram were calculated for exposure durations of 2 hr and 24 hr, respectively. There was some recovery in nematode motility after 24 hr from a 1 hr of exposure to the LD₅₀ concentration. Sub-lethal concentrations of 3.9 and $5.2\mu g/ml$ for 1 hr of exposure resulted in less root-galling on tomato than non-treated control. These data indicate nematicidal activity by fluopyram to *M. incognita*.