

Effect of different initial population densities of *Meloidogyne incognita* on the root-knot development, nematode multiplication, plant growth and seed yield of *Plantago ovata*

Vipin Kumar and Akhtar Haseeb

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ABSTRACT: The effect of initial population densities of *Meloidogyne incognita* on the root-knot development, nematode multiplication, plant growth and seed yield of *Plantago ovata* was determined under pot conditions. *M. incognita* significantly reduced all growth parameters viz., root-shoot length, fresh and dry root-shoot weights, number of spikes/plant and seed weight/plant at all initial population densities as compared to uninoculated control. The highest reduction in shoot-root height, shoot-root fresh and dry weights, number of spikes/plant and seed weight/plant was 67.8, 72.0, 83.9, 85.9, 86.0, 88.2, 88.2 and 88.7%, respectively at the highest population density (12,500 J₂/kg soil) as compared to uninoculated control.

Key Words: *Meloidogyne incognita*, *Plantago ovata*, root-knot index.