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Integrated management of *Meloidogyne incognita* and *Rhizoctonia solani* disease complex of *Ocimum basilicum*

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ABSTRACT: An experiment was conducted under pot conditions to determine the effect of biocontrol agent (*Trichoderma harzianum* @ 0.05ml/kg soil), botanical (Neem seed powder @ 50mg/kg soil) and pesticides (Carbofuran @1 mg a.i/kg soil and Topsin-M @ 3 mg/kg soil) in separate as well as combined treatments against *Meloidogyne incoginta* (5000J_2/kg soil) and *Rhizoctonia solani* (5 g mycelium/kg soil) disease complex on the disease development and plant growth of *Ocimum basilicum*. Results revealed that the combined treatments proved to be best to increase the plant growth and decrease disease severity significantly ($P<0.05$) as compared to all the treatments alone. The highest suppression of root colonization by the fungus (1.3%) and the maximum reduction in nematode reproduction and root-knot index (0.3) was achieved in combined treatment with *T. harzianum* + Neem seed powder + Carbofuran + Topsin- M.

Key Words: *Ocimum basilicum*, *Meloidogyne incognita*, *Rhizoctonia solani*, Integrated management, bioinoculant, botanical, pesticides.