Pathogenicity of root-knot nematode (*Meloidogyne incognita* race-2) in castor (*Ricinus communis* L.) crop cv. GCH-7

Ravi Kamaniya, Poonam V. Tapre, D.B. Patel and N.K. Singh

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ABSTRACT : Pot studies were undertaken to prove the pathogenicity of root-knot nematode (*Meloidogyne incognita* race-2) in castor (*Ricinus communis* L.) cv. GCH-7 to determine threshold level. After 45 days of inoculation, recorded observation revealed that initial inoculum level of 100 J₂/plant/pot (3 kg soil) significantly reduced plant growth parameters *viz.*, plant height (cm), fresh shoot and root weights (g) and dry shoot and root weights (g) and pathogenic to castor cv. GCH-7. The root galls/plant root (RKI) increased with increase in inoculum levels. The population parameters *viz.*, different stages of embedded females and egg masses/plant root (1 g), soil nematode population/pot and total nematode population build up increased with increase in inoculum levels. It was maximum (159.62) at the inoculum level of 10 J₂/plant/pot and minimum (5.55) at the inoculum level of 10,000 J₂/plant/pot.

Key Words : Pathogenicity, Meloidogyne incognita race-2, Ricinus communis.