

Screening of castor (*Ricinus communis* L.) crop varieties /genotypes for resistance against root-knot nematode (*Meloidogyne incognita* race-2)

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ABSTRACT : Forty-four castor varieties/genotypes were screened in pots having 3 kg soil with initial nematode population of 150 J₂/100 g soil against root-knot nematode (*Meloidogyne incognita* race-2). Based on root-knot index and its reaction none of the varieties/genotypes showed highly resistant (0.1-1.0 RKI) or resistant (1.1-2.0 RKI) reaction, whereas two varieties/genotypes viz., EC-1037-46 and JI-35 showed moderately resistant (2.1-3.0 RKI) type of reaction. Sixteen varieties/genotypes showed susceptible type of reaction (3.1- 4.0 RKI) and remaining, twenty-six varieties/genotypes highly susceptible (4.1-5.0 RKI). Moderately resistant (2.1-3.0 RKI) varieties/genotypes viz., EC-1037-46 and JI-35, with lowest root-knot index of 3.00 were found statistically at par with VH-11, RAPAR and SKI-232. Lowest different stages of embedded females in plant root (1 g) were recorded in JI-35 and SKI-232. Whereas, minimum egg masses/plant root (1 g) was recorded in EC-1037-46 and RAPAR. Lowest soil nematode population/pot was recorded in VH-11. Whereas, maximum soil nematode population/pot was recorded in VI-9.

Key Words : Castor (*Ricinus communis* L.), Screening, varieties/genotypes, *Meloidogyne incognita* race-2, pathogenicity, inoculum level.