

Genotypic response of different potato cultivars against *Meloidogyne incognita*

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Abstract

The use of resistant genotypes is an attractive alternative for managing yield losses caused by plant parasitic nematodes. Experiments were designed to identify resistant potato germplasm against root-knot nematode, *Meloidogyne incognita*, at Faisalabad, Pakistan. Ten potato cultivars, replicated five times in RCBD layout, were sown in a sick plot infested with *M. incognita*. Root-knot nematode reproduction and host damage were assessed by recording root galls, egg-mass indices, root weight, shoot weight, number of leaves, fruit weight, rate of reproduction and final population of nematodes. The data revealed considerable variation in response against *M. incognita* among the genotypes tested but none of the cultivars was immune. The cultivar FD-8-1 was highly susceptible. Other nine cultivars had lesser galling index, with low fecundity =indicating their ability to restrain the adult female reproduction. The cultivar FD-61-3 scored least number of root galls and egg-mass indices.