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Effect of inoculum density of root knot nematode (*Meloidogyne incognita*) on okra (*Abelmoschus esculentus* L.)

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ABSTRACT

A pot culture experiment was conducted to find out the effect of different inoculum levels of nematode on the plant growth and nematode multiplication on okra plant. Findings revealed that significant reduction occurred in plant growth parameters *viz.*, shoot length, root length, fresh shoot and root weight, dry shoot and root weight of plant inoculated with 1000 juveniles and above per pot. The highest gall index and egg masses were also recorded at inoculums levels of 1000 and 10000, respectively. Nematode population in soil increased progressively with an increase in nematode inoculum level from 10 to 10000 J_2/ kg of soil. Maximum population was recorded at inoculum level of 10000 J_2/ kg of soil followed by 1000 J_2/ kg of soil which were statistically at par. The reductions in growth parameters and nematode infestations were found to be directly proportional to the inoculums level. Considering the spectacular decline in plant growth parameters and steep rise in number of galls and eggmasses in infected roots caused by *Meloidogyne incognita* at the inoculum level of 1000 J_2 /kg soil and above, so it is considered that 1000 J_2 *M. incognita* /kg soil happened to be damaging the thresh hold in okra.

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