

## USE OF OKRA AS A TRAP CROP FOR MANAGING THE ROOT-KNOT NEMATODE, *MELOIDOGYNE INCOGNITA* AND CELLULAR ALTERATIONS IN NEMATODE INFECTED ROOT

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### Abstract

Under greenhouse conditions, okra (*Abelmoschus esculentus* (L.) Moench) cv. Baladi, highly susceptible to *Meloidogyne incognita* root-knot nematode, was tested as trap crop for managing this pest. Plants were uprooted from the infected soil 4, 8, 16, 24, 32 and 48 days after nematode inoculation. *M. incognita* began to develop to mature females after the 8<sup>th</sup> day from nematode inoculation. Then, it started to lay eggs in gelatinous matrices after the 16<sup>th</sup> day. Hence, it is advised to pull out okra susceptible cultivar within the period after the 16<sup>th</sup> day from nematode inoculation. Cellular alternations in the root of okra resulting from infection with the root-knot nematode, *M. incognita* were studied. The feeding site (giant cells) of the nematode was mainly confined in the stele region. Cells of the feeding site showed thickening of cell walls with granular cytoplasm and enlarged nuclei and the giant cells were surrounded by hyperplasia cells. Giant cells in cluster had distinct, thickened boundary walls and occupied the stele region.