

EVALUATION OF SOME FUNGAL SPECIES AS BIOCONTROL AGENTS OF *MELOIDOGYNE JAVANICA*

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Abstract

Two fungal species, *Acremonium persicinum* and *Aspergillus ochraceus*, were isolated from infected second-stage juveniles (J₂) of *Meloidogyne javanica*. Four other species, *Aspergillus petrakii*, *Mucor hiemalis*, *Paecilomyces variotii* and *Penicillium simplicissimum* were also isolated from treated sewage water used for irrigation. All six species were tested for parasitism of eggs and J₂ and *M. javanica* on agar plates. The first two species were further evaluated for control of *M. javanica* on cucumber under greenhouse conditions. On agar plates, whereas all species infected eggs and J₂, *A. persicinum* and *A. ochraceus* caused 25-80% infections. When applied to soil one week prior to nematode inoculation, *A. persicinum* or *A. ochraceus* provided biological protection of cucumber roots from invasion by juveniles and the number of galls and egg masses were significantly reduced. However, when applied one week after nematode inoculation the galls and egg masses increased. J₂ were recovered from soil after 45 days only from pots inoculated with the nematode alone.