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INTERACTIONS OF *FUSARIUM OXYSPORUM* F. SP. *VASINFECTUM* AND *MELOIDOGYNE INCOGNITA* ON SELECTED COTTON GENOTYPES

F.F. ABD-EL-ALIM, K.R. BARKER*, I.K. IBRAHIM, A.K. DARWISH** AND S.H. MICHAIL****

Plant Pathology Institute,
Agriculture Research Centre, Giza, Egypt.
**Department of Plant Pathology,*
North Carolina State University, Raleigh, NC 27695-7616.
***Department of Plant Pathology,*
Alexandria University, Alexandria, Egypt.

Abstract

Cotton cultivar DP-50 showed a susceptible reaction to *Fusarium oxysporium* f.sp. *vasinfectum* (fo) in the presence of *Meloidogyne incognita* race 3 (Mi3) and race 4 (Mi4) as compared with other genotypes viz., RNR-120, RNR-249 and RNR-311. Plants inoculated with *F. oxysporium* 3 weeks after soil infestation with *M. incognita* race 3 or race 4 produced greater number of eggs, more root necrosis, galling and stem discoloration with reduced shoot growth as compared to plants inoculated at the beginning of the experiment.*M. incognita* race 4 was more pathogenic than Mi3 on all genotypes. Based on stem discoloration, the nematode-resistant, cotton cultivars RNR-120, RNR-249 and RNR-315 were found resistant of Fusarium wilt and the root-knot Fusarium complex with slight differences among the fungal isolates tested. Time of inoculation with *F. oxysporium* had no effect on wilt development.