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Full Length Research Paper

Management of chickpea wilt caused by*Fusarium oxysporium* f. sp. *ciceri*

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Abstract

Chemical seed treatment with Thiram (0.15%) + Carbendazim (0.1%) is proved to be the most effective against *Fusarium oxysporium* f. sp. *ciceri*. *In vitro* evaluation of *Trichoderma* sp. against *F. oxysporium* f. sp. *ciceri* revealed the positive cumulative effect of *Trichoderma viride* + *Trichoderma harzianum* + *Trichoderma hamatum* in respect to the percent inhibition of the test fungus. Pot culture studies revealed that the soil application of *T. viride* (@ 25 kg/ha) as the most effective in reducing the incidence of chickpea wilt. Soil amendment with groundnut cake is proved to be effective against *F. oxysporium* f. sp. *ciceri* followed by neem cake. Genetic diversity already existing in pigeon pea germplasm lines can be exploited for breeding wilt resistant chickpea varieties. Thus, chickpea wilt incited by *F. oxysporium* f. sp. *ciceri* being soil borne disease could be managed by the integration of various practices like using resistant varieties, seed treatment with chemicals, seed and soil application of bioagents and amendment of soils with oilseeds cakes.

Key words: Chickpea wilt *Fusarium oxysporium* f.sp. *ciceri*, disease management.