

عنوان مقاله:

Investigation of γ -radiation on morphological characteristics and antagonist potential of *Trichoderma viride* against *Rhizoctonia solani*

محل انتشار:

کنفرانس علوم کشاورزی و محیط زیست (سال: 1392)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

Trichoderma viride was isolated from soil and its spore suspensions were irradiated in different dose of γ -radiation (0-400 Gy) for induced mutation. Dose of 250 Gy γ -radiation approximately results in 43.4% the inhibition of spore germination and this dose selected for optimum dose of induced mutation in *Trichoderma*. The *T. viride* mutants were selected based on potential growth on selective medium and their morphological characteristics and antagonistic activity against pathogenic fungi of *Rhizoctonia solani* have been evaluated. The results showed that γ -radiation could change the morphological characteristics like: colonies shape, color, sporulation and mycelia growth rate. *Trichoderma* mutants of *T. v* M12, *T. v* M11 and *T. v* M21 maintained higher ability to restrict *R. solani*. The study clearly showed the possibility of improving the antagonistic capability of *Trichoderma* for biological control of plant diseases through mutation with γ -radiation

کلمات کلیدی:

γ -radiation; *Trichoderma viride*; *R. solani*; bio-control; mutation

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