

Abstract

An eggplant with an annual production of about 49/4 tons is one of the popular and most consumable products. Many diseases cause or eliminate eggplant crops. One of the most important of the products is the wilt of eggplant which is created by *Fusarium oxysporum*. In this project, firstly unhealthy and contaminated eggplants are collected from fields in Poldokhtar area, then the disease factors were isolated from the rhizosphere of eggplant bushes. In the next step the effects of fungal antagonists isolated on fungus in the laboratory by using of cross culture method were investigated. Antagonistic effects of two fungal isolates *Trichoderma harzianum* and *Trichoderma viride* were investigated in greenhouse. In the greenhouse, the inoculum fluid was injected to a ratio of about 10% the upper third of the pots aer used and two thirds of the pots filled with sterile soil. The pots were kept under greenhouse conditions for several days. Evaluation of biocontrol efficacy of antagonists in control of wilting disease *Fusarium* using soil tillage method simultaneously with eggplant plant culture. This test is based on a completely randomized design with the analysis of variance of obtained data and by using SPSS software. Comparison of mean traits by Duncan test at 1% probability level. The results of greenhouse experiments showed that antagonist *Trichoderma harzianum* 39/38% of the disease was better controlled.

Keywords: Eggplant, Biocontrol, Vascular wilt.



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rhizosphere in Poldokhtar area

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