# عنوان مقاله:

Composition and antifungal of the Iranian thyme (Thymus carmanicus) essential oil against some soilborne fungi under Laboratory conditions

# محل انتشار:

چهارمین همایش بین المللی افق های نوین در علوم کشاورزی، منابع طبیعی و محیط زیست (سال: 1398)

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### خلاصه مقاله:

Essential oil of Thymus carmanicus was analyzed by GC and GC-MS and evaluated for antifungal activity on Fusarium solani, Fusarium oxysporum and Rhizoctonia solani. Twenty - four components have been identified in the essential oils of T. carmanicus. The major compounds identified in the oil were Carvacrol (70%), P-cymene (12.4%), Alpha- pinene (2.5%), Myrecene (2.3%) and gamma-terpinene (2.5%). The antifungal activity was determined by agar dilution method under in vitro conditions at 100, 150 and 300 '/lit, the oil was effective against these soil-borne fungi. The antifungal activities of the oil increased with an increase in the concentration. Minimum effective concentrations of the oil against fungal pathogens were also different. The fungistatic and fungicidal activity of the oil was determined. .Results of fungicidal activities showed that T. carmanicus oil in this concentrations have no fungicide activity

کلمات کلیدی: Thymus carmanicus, Carvacrol, Antifungal activity, P-cymene, essential oil

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