

عنوان مقاله:

Study on *Fusarium oxysporum* as a biocontrol agent on *Papaver somniferum*

محل انتشار:

زیست فناوری گیاهان دارویی، دوره 5، شماره 1 (سال: 1398)

تعداد صفحات اصل مقاله: 18

نویسندگان:

Hossein Saremi - *Department of Plant Protection, College of Agriculture and Natural Resources, University of Tehran, Karaj, Iran*

Habibollah Bahlolzadeh - *Department of Plant Protection, College of Agriculture and Natural Resources, University of Tehran, Karaj, Iran*

خلاصه مقاله:

Opium poppy (*Papaver somniferum*) is one of the most important medicinal plants which can be cultured for use of the alkaloid morphine too. Plant poppy have been also associated with the most pests and diseases all over the world. One of the major disease is related to *Fusarium oxysporum* which can also control plant cultivation in biggest producer of opium. However, the objectives of this study were to evaluate the effect of *Fusarium oxysporum* isolates against opium poppy and verify their potential as biocontrol agent. For this, a ۲-year experiment was carried out under glasshouse (۲ trials) and field conditions (۲ trials). From infected poppy plants, a total of ۱۶ pathogenic fungal strains were identified as *F. oxysporum* and used for the experiments. The isolates Ghr۱۸, Ghr۵-۲, Mr۲۸ and Ghr۵-۴ caused the highest wilting symptoms on sample plants ($P < ۰.۰۰۱$). In addition, no significant differences were observed between field and glasshouse conditions ($P > ۰.۵$). Moreover, the results showed a clear host specificity of the selected pathogenic isolates. These results suggest that *Fusarium* isolates have the potential to be used as biological control agents against poppy plants where legal policy surrounding the growing of this plant.

کلمات کلیدی:

Medicinal plant, Papaver, *Fusarium oxysporum*, poppy

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1821318>

