

عنوان مقاله:

Growth inhibition effects of extracts of eight mosses on the phytopathogenic fungus *Fusarium solani*

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خلاصه مقاله:

Mosses have proved to have antifungal properties due to their specific chemical compounds. In this study, the different extracts of some mosses collected from Khuzestan province were tested on a phytopathogenic fungus *Fusarium solani*, an important pathogen of crops, especially wheat, and compared to the commercial fungicide Benomyl. For this purpose, the dried mosses samples of ethanol, methanol, and acetone were extracted. The antifungal activity was tested by the disc diffusion method, and the growth inhibition zone was measured. Wheat seeds of the "Chamran" cultivar were implanted into moss extract and then transferred into pots containing 1: 10 mixture of soil and soil contaminated with *F. solani*. After ۳۵ days, the root and crown of wheat plants were examined based on the Wallwork scale. Ethanolic and methanolic extracts caused an inhibitory of ۹۰% and ۸۱% relative to Benomyl, while acetonc extract had fewer effects (۷۶%) in the in vitro tests. In vivo observations had also indicated that ethanolic extracts can significantly control root and crown rot ۶۳.۸%.

کلمات کلیدی:

Benomyl, antifungal effect, Mosses, Disk–diffusion method

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