Use of Zizphus Leaves Extract as a Safe Alternative Against Some Isolated Fungi From Soil

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Many plant diseases produced by microorganisms affect agricultural crops seasonally, resulting in a severe scarcity of production and a large loss of economic returns for farmers. The soil in Qatar is home to a variety of pathogenic fungi, including Fusarium, Aspergillus, and Alternaria. The goal of this study is to find safe alternatives to eliminating fungi using extracts from local plants, such as the Sidr plant (Ziziphus spina-christi), whose leaf extract contains a variety of active ingredients, which are responsible for anti-microbiology effectiveness, as well as flavonoids of various types, such as antioxidants, phenols, Saponins, fat, tannic acid, Zizyphic acid, tannins Fungi were isolated from four soil samples including different crops of wheat, tomatoes, palms, and Sidr tree soil in this experiment, where the fungi were isolated using the method (Davet et Rouxel, 1997). Five fungus species, Aspergillus flavous, Aspergillus nigar, Helminthosporium spp, Alternaria alternata, Fusarium spp, and Penicillium spp, were isolated from tomato. The results showed that all doses of Sidr (Ziziphus spina-christi) extract inhibited the growth of the three fungus examined, with 2.0 millimeter of extract providing full suppression. The presence of potent antifungal compounds such as tannins, alkaloids, phenols, and glycosides contributed to the extract's good effect.

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