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Mistletoe versus pathogenic fungi

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In recent years, population increase drought stress due to global warming, environmental pollution resulting from extreme chemical use and the growth of pathogenic organisms are causing economic damage in agricultural products affecting production negatively. Especially, new environmental studies that do not disrupt the natural balance in the control of pathogenic microorganisms are important. In this study, the plant extracts obtained from leaves of semi-parasitic plant mistletoe living on the almond tree around Hacilar village in Kayseri province, exhibited antifungal activities against two plant pathogenic fungi. The first one is *Fusarium moniliforme* in maize, and the second one is *Fusarium oxysporum f. sp. melongenae* in eggplant. Dose-1 and Dose-2 extracts prepared as 10 mg/ml and 20 mg/ml respectively were applied. Two treatments were prepared for both fungal pathogens and a control group was prepared in six recurrent. In the control group, sterile distilled water was added.

Mixed doses of potato dextrose agar (PDA) containing plant extracts were prepared as chromogenic media. The effect of different doses of *Viscum album* extract on the development of *Fusarium moniliforme* and *Fusarium oxysporum f. sp. melongenae* were compared with the constructed Tukey/Kramer Test. When the results examined; the effect of Dose-1 and Dose-2 on colony development of *Fusarium moniliforme* and *Fusarium oxysporum f. sp. melongenae* are considerably higher than the control. It is examined whether there is a difference in effect between both fungi and also observed that *Viscum album* extract affected both fungi at similar ratios. The statistical results for both doses are <0001*. This result shows that the fungi developed at different rates in the petri dishes of the same dose used. This is evidence that Dose-1 and Dose-2 we use have antifungal activity.

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