Antifungal Activity of Medicinal Plants Against Chickpea Wilt Pathogen 
(Fusarium oxysporum f.sp. ciceri)

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SUMMARY
Extract of different parts of ten medicinal plants were evaluated against chickpea wilt pathogen (Fusarium oxysporum f.sp. ciceri) with three concentrations (1000, 500 and 250 µg ml⁻¹) at five different time internals. The fungitoxicity of alcohol extract of medicinal plants against wilt causing pathogen significantly varied with concentration and time intervals. All plant extracts inhibited the mycelial growth of the fungus in vitro. As concentration of extracts decreased, the effectiveness of extracts were also decreased against wilt pathogen. The maximum growth inhibition was recorded at 1000 µg ml⁻¹ concentration and the per cent inhibition was observed maximum in Bawchi at 8th DAI (45.55%) and at 7th DAI (38.17%) followed by Ashwagandha at 8th DAI (37.84%) and at 7th DAI (36.25%). At 4th, 5th and 6th DAI, the per cent inhibition in alcohol extract at 500µg ml⁻¹ concentration increased with increased in time upto 8th DAI. Maximum per cent inhibition was observed in Bawchi at 8th DAI (44.44%) and at 7th DAI (36.36%) followed by Ashwagandha at 8th DAI (33.33%) and at 7th DAI (32.38%). Bawchi treatment showed significantly highest per cent inhibition at 8th DAI over rest of the treatments. The extracts at 250 µg ml⁻¹ concentration were failed to inhibit the mycelial growth of these pathogens. At 250 µg ml⁻¹ concentration, only Ashwagandha. Bawchi and Kali Haldi were found to inhibit the mycelial growth of the pathogen to some extent.

Key words:
Fusarium, Chickpea, Medicinal plants, Wilt.

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