

RESEARCH ARTICLE

In vitro evaluation of botanicals and bio control agents against *Sclerotium rolfsii* Sacc. Causing collar rot of chickpea

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SUMMARY

Collar rot of chickpea is caused by *Sclerotium rolfsii* Sacc., is a devastating polyphagous soil borne fungus infecting more than 500 plant species across the world that is causing vast losses. It is more serious at seedling stage causing plant mortality ranged from 54.7 to 95%. Treating soil borne pathogens with fungicides is not reasonable due to very high costs. Environmental hazards are also involved. Therefore, integrated management of pathogens using bioagents and botanicals agents is the paramount alternative. Extracts of higher plants have demonstrated a wide range of activity against plant pathogenic organisms. The present research work was carried out to manage the pathogen and disease *in vitro* by using plant extracts by using poison food technique in which commercially available once showed maximum inhibition followed by agave extract and NSKE, whereas under *In vitro* evaluation of bioagents by dual culture technique, *Trichoderma viride* found most effective compared to other bioagents tested.

Key Words : Chickpea, *Sclerotium rolfsii*, *Trichoderma*, Collar rot, Agave, botanicals

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