

RESEARCH ARTICLE

Evaluation of fungicides and bioagents against *Fusarium solani* incitant of wilt disease of gladiolus

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SUMMARY

Fusarium solani is an important soil borne pathogen that can reduce corm and flower production of gladiolus in the world. Wilt disease of gladiolus caused by *F. solani* leading to symptoms yellowing, corm rot, browning of foliage and wilting. It reduces the quality, yield and market value of gladiolus which causes yield losses upto 60-70 per cent. In the present study, seven fungitoxicants and six bioagents were evaluated in *in vitro* and *in vivo* against *F. solani*. Among fungicides, Benomyl (0.1%) and Carebendazim (0.1%) showed complete inhibition of mycelial growth followed by Captan (0.15%) while *Trichoderma viride* and *Trichoderma virens* followed by *Bacillus subtilis* found most significant bio-agent to control growth of *Fusarium* in *in vitro*. Whereas, dipping of gladiolus corms in Captan and Benomyl at the 0.3 per cent and 0.2 per cent resp. found most effective in controlling the wilt of gladiolus in *in vivo* experimental trail.

Key Words : *Fusarium* wilt, Gladiolus, Management

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