



RESEARCH PAPER

Bioefficacy of fungicides and bioagents against *Macrophomina phaseolina* causing charcoal rot in maize

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Abstract : In recent years *Macrophomina phaseolina* causing charcoal rot of maize is more problematic in maize growing parts of Maharashtra. Present investigation was taken on evaluation of fungicides and bio-agents against *M. phaseolina* under laboratory condition and pot culture. Under laboratory condition, nine fungicides and six bio- agents were evaluated against *M. phaseolina* by poison food technique and dual culture method, respectively. Among fungicides Carbendazim 63 % + Mancozeb 12% and Carbendazim alone recorded maximum inhibition of (100 %) mycelial growth. Among the bio-agents tested *Trichoderma harzianum* was found more effective as compared to other bio-control agents and inhibited maximum fungal growth (63.33 %) of *M. phaseolina*. Under pot culture study, as soil application and seed treatment, among the fungicides, carbendazim + Mancozeb was found most effective. However, among bioagents *Trichoderma harzianum* was remarkably manage the charcoal rot.

Key Words : Maize, Bio agent, Fungicide, Charcoal rot, *Macrophomina phaseolina*

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