

EFFECT OF DIFFERENT TEMPERATURE ON THE ANTAGONISTIC ACTIVITY OF FUNGAL AND BACTERIAL BIO AGENTS

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Abstract: Antagonistic potential of fungal (*Trichoderma harzianum*, *Trichoderma viride*, *Aspergillus niger* & *Penicillium oxalicum*) and bacterial bioagents (*Pseudomonas aeruginosa*, *Pseudomonas putida* & *Pseudomonas fluorescens*) was studied against three pathogens i.e. *Fusarium oxysporum*, *Rhizoctonia solani* and *Pythium ultimum* at four different temperature (20°C, 25°C, 30°C and 35°C). Antagonistic potential of all fungal and bacterial bioagents was found to be significantly influenced by different temperature. With regards to effect of different temperature, among all fungal bioagents, *Trichoderma harzianum* resulted maximum percent inhibition of the pathogens followed by *Trichoderma viride*, *Aspergillus niger* and *Penicillium oxalicum* at 25°C to 30°C. While as bacterial bioagents, *Pseudomonas fluorescens* exhibited their higher antagonistic potential followed by *Pseudomonas putida* and *Pseudomonas aeruginosa* against all three pathogens at highest temperature i.e. 35°C.

Keywords: Biological control, Temperature, Fungal & Bacterial bioagents

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