

Management of *Alternaria* Leaf Spot Fungi of Cauliflower and Radish by Bioagents, Botanicals and Fungicides

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Abstract

Alternaria brassicicola and *Alternaria raphani* causing leaf spot disease is a major problem for stable production of Cauliflower and Radish. The present study aims to evaluate the effectiveness of some bioagents, botanicals and fungicides by dual culture and poisoned food technique. In dual culture technique bioagents viz. *Trichoderma viride*, *Chaetomium globosum*, *Pseudomonas fluorescens* and *Bacillus subtilis* were evaluated, maximum growth inhibition of *Alternaria brassicicola* and *Alternaria raphani* was recorded with *Pseudomonas fluorescens* 80.47% and *Trichoderma viride* 79.46%, respectively over control *in vitro*. Four botanicals viz. *Azadirachta indica*, *Mentha piperita*, *Pongamia pinnata* and *Canna indica* @ 10 per cent crude extract were tested, maximum inhibition of *Alternaria brassicicola* was observed with Neem (36.95%), whereas, maximum inhibition of *Alternaria raphani* was recorded with *Mentha piperita* (50.53%). Among the six fungicides tested, Thiram (0.3%), Thiram + Carbendazim (0.3%), Mancozeb (0.3%), Propineb (0.3%) and Propiconazole (0.1%) have showed 100 per cent mycelium inhibition.

Keywords : *Alternaria brassicicola*, *Alternaria raphani*, fungicides, bioagents and botanicals