EFFICACY OF DIFFERENT FUNGICIDES ON PURPLE BLOTCH DISEASE (ALTERNARIA PORRI) OF RED ONION (ALLIUM ASCOLONICUM)

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The efficacy of two systemic (Benlate & Topsin) and five no systemic fungicides (Dithane M45, Antracol, Captan, Morut Trimiltox) and three compatible mixtures of selected fungicide [(Topsin + Dithane M45 (T+D), Topsin + Antracol (T+A) & Dithan M45 + Antracol (D+A)] were studied separately on the conidia germination mycelial development of purple blotch diseas (Alternaria porri) Eills: Neerg: in the laboratory and th findings were further tested in the field to recommend a suitabl fungicide to control this disease.

Laboratory studies reveal that Topsin, Dithane M45 and th mixture of Topsin + Dithane M45 were very effective i suppressing the mycelial growth of A porri. Moreover T+D mixtur was the best among the fungicides tested, and about 65% of growt reduction was observed in this treatment compared to control.

All the fungicides except Captan, Morut, Trimiltox and Antraco have significantly inhibited the germination of conidia at 100 pp Benlate completely suppressed the germination at 1000ppm, wherea the other fungicides permitted a certain number of conidia t germinate at this concentration.

The laboratory findings were further tested on onions grown i pots under field conditions. The percentage disease reductio was varied from 61.77 to 97.06 percent in all treatments compare to control. Fungicide treatments increase bulb size & bulb yiel 3 to 6 times by reducing diseased plants in the field.

Findings from the laboratory and the field indicated that th application of T+D mixture was the most effective mixture o fungicides against this disease followed by Dithane M45 an Topsin.