## **Research Article**

## Fungicides for the Management of Early Blight of Tomato Caused by *Alternaria solani*

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## **Abstract**

Early blight (*Alternaria solani*) of tomato is the most destructive disease in tropical and subtropical countries. Among all recommended management practices, application of fungicides is the most efficient mode of managing this disease. In the present investigations, eleven fungicides that included six contact fungicides, two systemic fungicides and three combi products were evaluated *in vitro* against *Alternaria solani* at different concentrations using poisoned-food technique. Among them, the fungicides difenoconazole and tebuconazole were highly effective as they inhibited the growth of the pathogen completely at lowest concentration of 25 ppm. Based on the *in vitro* results, promising fungicides were further evaluated under field conditions. The fungicide difenconazole was very effective as it gave 65.44 per cent disease reduction over control followed by tebuconazole and tebuconazole + trifloxystrobin with 57.35 and 48.97 per cent reduction in disease over control. The highest yield (30.07 t/ha) was obtained in difenoconazole sprayed plot followed by tebuconazole (27.34 t/ha). The least yield (15.05 t/ha) was noticed in control plot (15.05 t/ha).

Key words: Alternaria solani, concentrations, early blight, fungicides, per cent inhibition

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