

Mycelial growth of *Trichoderma harzianum* with different fungicides

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Trichoderma harzianum is an antagonistic fungi which can control a wide range of pathogens successfully. Therefore, it could be used in an Integrated Disease Management system. But information on the integration of *T. harzianum* with fungicides are lacking in Sri Lanka. Therefore, a study was carried out to find the suitable fungicides for integration with *T. harzianum*.

Experiment was conducted at the Plant pathology laboratory, Eastern University Sri Lanka during the period of July to December 2002. Fungicides, Captan 50% WP, Thiram 80% WP, Benlate (Benomyl 50% WP), Diconil (Chlorothanil 75% WP), Homai (Thiophanate methyl 50% WP+Thiram 30% WP) and Topsin M 70 (Thiophanate methyl 70%WP) which are commonly used for soil treatment were tested for integration of *T. harzianum* by using poisoned food technique on PDA medium at the recommended rate by the Department of Agriculture (1997). Fungicide amended plates were centrally inoculated with 5mm diameter mycelial disc of *T. harzianum* from 3 days old culture and incubated at room temperature. Observations were for colony diameter, and percent inhibition was calculated. Unamended PDA plates served as control.

All the treatments influenced the Mycelial growth of *T.harzianum* significantly ($P<0.05$). Homai and Topsin totally inhibited (100%) the mycelial growth of *T.harzianum* at the recommended level. These fungicides belongs to benzimidazoles and release Benzimidazole carbamates. Thiram, Benlate, Diconil and captan showed mycelial inhibition of 33.12%, 73.34%, 57.82% and 24.38% respectively.

This study showed that, Captan and Thiram could be selected for integration with *T. harzianum* in an IDM system.