SELECTED STUDIES ON STRAINS OF

BOTRYTIS CINEREA

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ABSTRACT

Some characteristics of benzimidazole and dicarboximide resistant and susceptible strains of Botrytis cinerea and the chemicals that control them were studied.

Difference in sporulation or sclerotial production could be not be used to differentiate between fungicide resistant or susceptible strains. Generally, mycelial growth of dicarboximide low-level resistant strains was slower than that of susceptible strains on unamended malt extract agar and was considerably so on media amended with 0.68 M NaCl. No benzimidazole low-level resistance was detected in the benzimidazole susceptible strains tested.

Fourteen strains of B. cinerea were screened for the ability to sporulate in the dark to assess the feasibility of using material which filtered Ultra-violet light as a glasshouse covering. Eleven of these strains sporulated in complete darkness.

Chlozolinate showed a high degree of protectant and systemic activity against dicarboximide susceptible strains but was poor on low-level resistant strains. PP192 showed high protectant but no systemic activity on both susceptible and low-level resistant strains.

Sub-lethal doses of vinclozolin and iprodione on plant surfaces were shown to stimulate the sporulation of B. cinerea from an inoculum source such as an agar plug.

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