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RESEARCH NOTES

Control of Benomyl-Tolerant Strains of *Botrytis cinerea* Pers. exFr. from Strawberry

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Botrytis cinerea Pers. exFr., the causal organism of grey mould of strawberry, can be controlled by sprays of fungicides such as thiram or captan. More recently, benomyl has shown greater efficacy in the control of this disease.

In 1976, however, a strawberry crop at Healesville, Victoria, was severely affected by grey mould after being sprayed regularly with benomyl.

Tests were carried out to determine whether the fungus had developed tolerance to benomyl and also to study the efficacy of other fungicides. Seven isolates of *B. cinerea* were made from diseased strawberries and an additional isolate was obtained from the culture collection at the Plant Research Institute. Uniform discs of 5 mm. diameter were cut from test cultures and placed onto PDA amended with different concentrations of four different fungicides (Figure 1). Plates (2 replicates per treatment) were incubated at 25°C for 48 hours before being examined.

Results (Figure 1) show all isolates from the Healesville property tolerant of benomyl and thiophanate-methyl. Isolate 8, from the culture collection, was sensitive. Growth of the benomyl-tolerant isolates was inhibited by captan at 100 ppm. Glyphosate showed a high *in vitro* activity, inhibiting the growth of all isolates at 1 ppm.

These results indicate the potential of glyphosate to control both benomyl-tolerant and sensitive strains of *B. cinerea* on strawberry.

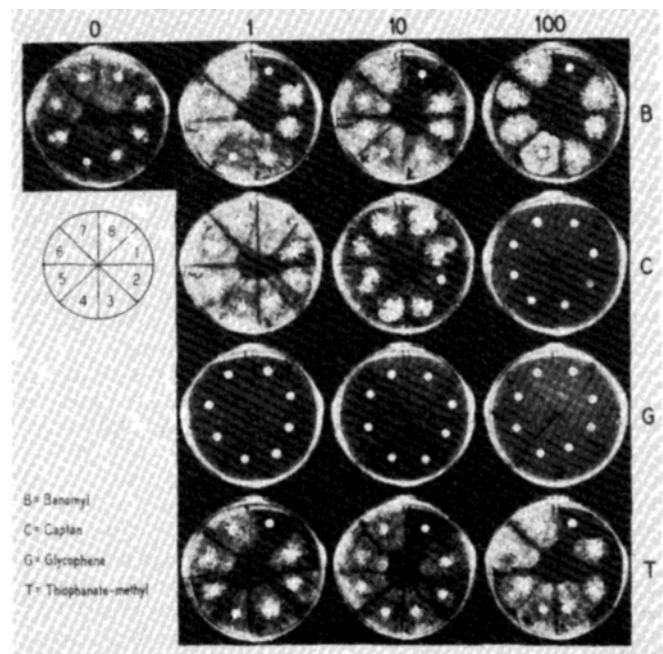


Figure 1. Effect of *unautoclaved* fungicides on Benzimidazole-tolerant (1-7) and sensitive (8) isolates of *Botrytis cinerea* from strawberry after 48 hours.

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