

Biological control of plant diseases using insect pathogenic fungi

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Background

- Growers are under pressure to reduce their use of synthetic chemical fungicides as a result of new legislation, but alternative control agents are in short supply.
- The aim of this project is to investigate commercial biocontrol agents based on insect pathogenic fungi against plant pathogens.
- Evidence from abroad has suggested that some insect pathogenic fungi can also have activity against plant diseases.



Evaluating insect pathogenic fungi

- Laboratory experiments were done to evaluate commercial “bio-insecticides” against tomato powdery mildew (PM).
- High levels of control were observed, comparable with that obtained using other bio-control agents of PM.
- Work is underway to investigate control of soil-borne plant pathogens (*Pythium* and *Rhizoctonia*), including use of an endophytic strain of the insect pathogenic fungus *Beauveria bassiana*.
- The results may lead to new methods to reduce reliance on synthetic chemical fungicides.

