

Reduce Risk Strategies for Cabbage Maggot Control



LEAD RESEARCHER

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Crucifers (crops in the cabbage family) provide numerous opportunities for Canadian vegetable growers but are under attack by cabbage root maggots. In this research activity, the team is working to find new management tools to allow growers to see decreased crop losses from cabbage root maggot. Researchers are taking part in their second field season for the study.

Trials this growing season are to confirm last year's successes and explore integrated pest management options. To date, the trial has tested three methods: transplant and spray; plant, spray and cover; and transplant treatment. Results last year showed effective control initially but timely sprays are important as pest pressure can overwhelm chemical control.

This year the researchers have found that regardless of what insecticide is used, based on the insecticides tested in these trials, the duration of control is about three to four weeks. It is important to identify how long any level of pest control or suppression lasts in the field in order to find the timing for follow up treatments. This is especially important for crops such as rutabaga, turnip and radish, which need season-long protection against cabbage root maggots.



A broccoli plant at Agriculture and Agri-Food Canada Agassiz Research and Development Centre. Photo: Toban Dyck

The team is beginning to collect maggots and pupae from the field to examine levels of parasitism and to start a colony for small-scale experiments over the fall/winter.

KEY TAKEAWAYS:

- Results last year showed effective control initially but timely sprays are important as pest pressure can overwhelm chemical control.
- Researchers have found that regardless of what insecticide is used, the duration of control is about three to four weeks.



Rows of cabbage plants at Agriculture and Agri-Food Canada Agassiz Research and Development Centre. Photo: Toban Dyck



The root of a cabbage plant infected with cabbage root maggots in a field near Abbotsford, B.C. Photo: Toban Dyck

