

1998 PROGRESS REPORT TO THE NEW YORK STATE INTEGRATED PEST MANAGEMENT PROGRAM

Title: Biorationals for management of Lepidopteran pests of fresh market sweet corn

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Abstract: Much of the sweet corn in the Hudson Valley is treated by aircraft, which is sometimes problematic to those living in proximity to treated fields. If biorational insecticides were being sprayed instead of 'hard' insecticides, such as pyrethroids, aerial application might be more readily accepted. Relative efficacies of present and near-future biorationals have to be determined before they will be seriously considered for NY management programs. I used three separate large-plot chronological plantings during 1998 to evaluate six biorational insecticides, compared to a standard pyrethroid treatment and an untreated. Compared to the standard treatment (Warrior®), all biorationals allowed very high infestations by corn leaf aphid. Under the application parameters used and the extremely high infestation levels of 1998, results showed that only one of the biorationals (Spintor®) had sufficient efficacy against European corn borer, corn earworm and fall armyworm. Further study is necessary to determine if more frequent applications or perhaps less severe insect pressure would render the biorationals adequate for pest management in fresh market sweet corn.

Objectives:

- Evaluate biorational insecticides for efficacy and compare to conventional insecticides.

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