

Demonstrations of Sustainable Vegetable Pest and Crop Management: Fresh Market Sweet Corn

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Objectives

Overall Goal: The overall goal of the proposed work is the education of farmers, extension specialists, extension agents, agribusiness people, and consumers about the need to adopt sustainable IPM/ICM production techniques. It will focus on fresh market sweet corn for the proposal period but it is part of an overall vegetable educational effort which is on-going.

Individual Objectives:

- 1) On growers' farms demonstrate to farmers, extension specialists, extension agents, and agribusiness people the economic and environmental benefits of adoption of various IPM/ICM techniques as part of a more sustainable approach to vegetable production.
- 2) At New York State Agricultural Experiment Station (NYSAES) at Geneva conduct one demonstration site to compare all defined pest management systems for fresh market sweet corn.
- 3) Collect and evaluate pest, pesticide use, economic, environmental impact, yield, and quality data to compare the systems at the farm sites and the university site.
- 4) Publicize the results of the comparisons through field days, presentations at grower meetings, and conventional and electronic publications.
- 5) Work with a major supermarket and its growers to implement sustainable practices for fresh market sweet corn; Identify the corn to consumers as produced using IPM/ICM practices .

Abstract: Four sweet corn pest and crop management systems (organic, IPM/Present, IPM/Future, and conventional) were defined and implemented on grower farms and on a university research farm. The first years results showed differences among the four systems in terms of economics, pest control efficacy and environmental impact. Generally the conventional and IPM systems were the most profitable while the organic system showed the least environmental impact. Information on the comparisons was disseminated to growers and other food industry personnel. In cooperation with Wegmans supermarkets consumers were informed of IPM practices on sweet corn which were documented by growers. Fifteen growers participated in documenting IPM practices and in many cases have reduced pesticide use. Five of the fifteen growers were among the nine involved in the demonstrations conducted in this project.

For a printed copy of the entire report, please contact the NYS IPM office at:

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