

Elements of IPM for Processing Sweet Corn in New York State

MAJOR PESTS		
Insects	Diseases	Weeds
European corn borer	common rust	broadleaves
corn earworm	smut	annual grasses
fall armyworm	northern corn leaf blight	perennials
corn flea beetle	Stewart's wilt	
corn leaf aphid	anthracnose	
western corn rootworm	maize dwarf mosaic	
seed corn maggot	seed rots	
cutworms	barley yellow dwarf virus	
common armyworm		
sap beetles		

A. Site Preparation	Acreage Goal	Points
1) Review weed map/list of fields to choose appropriate weed control strategies. See the Weed Assessment List available for use in satisfying this element.	50%	10
2 Crop Rotation.	75%	5
a) Plant sweet corn only in fields where sweet or field corn have not been grown in the previous year to avoid anthracnose, smut, northern corn leaf blight.		
b) Plant sweet corn only in fields where sweet or field corn have not been grown in the previous year to avoid corn root worm	75%	5
OR if rotation is not possible, scout late season fields (previous year) for presence of CRW adults and only apply soil insecticides if over threshold.		
3) Soil test at least once every 3 years. Maintain records. Fertilize according to test results. Consider fertility contribution from cover crop, manure and other inputs.	100%	5
4) Test soil using PSNT for Nitrogen sidedress decisions	1%	5
5) Apply supplemental N based on PSNT	1%	5
B. Planting		
1) Use tolerant or resistant varieties whenever possible for controlling maize dwarf mosaic, common rust, smut, barley yellow dwarf, and Stewart's wilt.	50%	10

2) Seed treatments. Use fungicide and insecticide seed treatments for control of root, seed rots, and Stewart's wilt on susceptible varieties.	100%	10
3) Test the use of banded herbicide applications and cultivation in order to reduce herbicide use.	1%	3
C. Pest Monitoring and Forecasting		
1) Scout as recommended for European corn borer, fall armyworm, corn earworm, flea beetles, and common rust.	100%	10
2) Update weed map/list of the field when crop is no taller than 6 inches for use in evaluating the current year's weed control and for use in determining if a post emergent treatment is needed. See the Weed Assessment List available for use in satisfying this element.	50%	10
D. Pest Management		
1) Use recommended action thresholds for making decisions about applying pesticides for insects and diseases of importance.	90%	10
2) Choose labeled pesticides that have the least environmental impact. Choose pesticides that preserve natural enemies.	35%	10
3) Cultivate or use a post emergent treatment based on information obtained in the weed map/list update. See the Weed Assessment List available for use in satisfying this element.	90%	10
4) Keep records of pest densities, biological control techniques used, cultural procedures, and pesticide applications.	100%	10
E. POST HARVEST		
1) Make (or update if one has been made for this field previously) a weed map/list of the field for use in planning for next year. See the Weed Assessment List available for use in satisfying this element.	50%	10
2) Establish cover crop for weed control and nitrogen retention	25%	5

Total Points Available: 133

Points needed to qualify (80%): 107

TO LEARN MORE...

Specific information about the use of these IPM elements can be found in the following publications:

2000 Processing Sweet Corn IPM Scouting Procedures, IPM Bulletin 111FM

[2003 Integrated Crop and Pest Management Guidelines for Commercial Vegetable Production.](#)

[A Method to Measure the Environmental Impact of Pesticides.](#) 1992. New York Food and Life Sciences Bulletin Number 139.

Pheromone Traps - Effective Tools for Monitoring Lepidopterous Insect Pests of Sweet Corn. Sweet Corn Insect Pest Fact Sheet 102GFS795.00.

The above reference material can be obtained from county Cornell Cooperative Extension offices.

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