

Elements of Beet IPM in New York State

MAJOR PESTS		
Insects	Diseases	Weeds
spinach leafminer	Cercospora leaf spot	broadleaves
	pocket rot	annual grasses
	seed rot, damping off, and root rot	perennial weeds
	sugar beet cyst nematode	

A. SITE PREPARATION AND SELECTION	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. For Cercospora leaf spot rotate 2-3 years; for pocket rot rotate with grains; for root rot rotate at least 2 years; for sugar beet cyst nematode: Do not plant a susceptible crop more than once every 4 years	100%	10
3) Soil test at least once every 3 years. Maintain records.	90%	5
Fertilize according to test results.		
B. PLANTING		
1) Use appropriate fungicide seed treatments.	100%	5
2) Root rot management. Fall subsoiling if needed	20%	3
C. PEST MONITORING and FORECASTING		
1). Avoid late nitrogen applications unless noting Cercospora infection or plant stress	20%	5
2) Update weed map/list of the field when crop small 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) Keep records of pest densities, cultural procedures, and pesticide applications for use in the future.	80%	10
2) Minimize throwing soil on crown of plant during cultivation.	100% of fields with pocket rot	5
3) Choose labeled pesticides that have the least environmental impact. Choose pesticides that preserve natural enemies.	35%	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) If field had Cercospora leaf spot or pocket rot, incorporate crop residue into the soil at the end of the season to promote breakdown of pathogens and tissues that may be carrying them.	50% of fields with C. ls.	10
3) For fields harvested before October 1, establish a cover crop for weed control, root disease suppression, and nitrogen retention.	60%	10

Total Points Available: 103

Points needed to qualify (80%): 82

TO LEARN MORE...

Specific information on how to apply and use these IPM elements can be found in the following publications:

[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.

Root Rot of Table Beets in New York. New York Food and Life Sciences Bulletin No. 115

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