

## Elements of IPM for Strawberries in New York State

[Download the Worksheet for Strawberry Elements in Excel format.](#)

Soil and Nutrient Management and Cultural Practices	Points
1. Land was out of strawberries for at least one year prior to planting and was without a crop in the following families: Rosaceae (strawberries, raspberries, etc.) Solanaceae (potato, tomato, peppers, eggplant). Rotations: (choose only one)	
A. Land left fallow for 1 year	2
B. Cash crop (other than Rosaceae or Solanaceae) followed by a cover crop	3
C. Cash crop (other than Rosaceae or Solanaceae) followed by a cover crop planted by October 1.	4
D. Cover crop planted prior to the cropping year.	5
2. A water use plan that minimizes disease development, optimizes water use efficiency and minimizes erosion and runoff is used	3
3. Fertilizer recommendations are based on soil and leaf analysis when appropriate.	3
4. Strawberries are mulched with weed-free rye hay, or other biodegradable mulch (e.g. straw).	3
5. To optimize air drainage and circulation, planting pattern use a narrow matted or ribbon row. Harvest canopy width does not exceed 2 ft.	3
6. In a healthy planting, beds are renovated and leaves are mowed or incorporated to reduce disease inoculum.	3
7. The bulk of nitrogen is applied after renovation to reduce Botrytis problems.	3
<b>Pesticides and Pesticide Records</b>	
<b>Only pesticides registered in the state and approved for the target pest and crop will be used. Records of pesticide applications including date, field identification, targeted pest, pesticide name and EPA number, formulation, rate and number of acres treated are maintained.</b>	
1. Insecticide/fungicide sprayer is calibrated and dated at least once a year.	2
2. Herbicide sprayer is calibrated and dated at least once a year.	2
3. Spray records are maintained and organized.	3
4. Pesticide choice is based on preserving natural enemies as well as efficacy.	2
5. No sprays are applied to fruit after it is formed.	2
<b>Disease Management</b>	
1. Where a history of red stele, Verticillium wilt, or leaf diseases warrants, cultivars which have tolerance or resistance to the appropriate disease are used.	5
2. In appropriate soils and sites, strawberry plantings are made on beds that are raised enough to provide water drainage.	5

3. Application of fungicides are based on weather and disease pressure. (Choose only one)	
A. No fungicides are used throughout the growing season.	10
B. If environmental conditions are not favorable for fruit rots, no fungicide is applied after bloom.	8
C. No more than two fungicides during bloom are used unless weather dictates.	6
<b>Arthropod Management (Insects and mites)</b>	
<b>Arthropod monitoring methods and thresholds should conform to state IPM program guidelines. Records should be kept of all monitoring information collected and thresholds used.</b>	
1. Tarnished plant bug nymph monitoring, using flower truss counts, begins at bloom and continues at least weekly until harvest.	3
2. Applications of insecticides for tarnished plant bug are applied only if thresholds are exceeded.	3
3. Strawberry bud weevil (clipper) monitoring begins when flower buds emerge and temperature above 65·F. Border rows are sampled. Sprays are applied only if thresholds are exceeded. (Choose only one)	
A. No insecticides are applied for clipper because recent research shows that this is not a serious pest.	5
B. Clipped buds are monitored, only borders are sprayed.	3
C. Clipped buds are monitored, entire field is sprayed.	1
4. Two spotted spider mite populations are monitored. Miticides are applied only if thresholds are exceeded.	2
5. Identification and monitoring of other troublesome pests (spittlebugs, root weevils, leafhopper, etc.) are conducted using extension recommendations and appropriate controls are applied.	2
6. No insecticides are applied when bees are active.	2
7. Sampling dates and thresholds used are recorded.	4
<b>Weed Management</b>	
1. A weed survey is conducted and appropriate strategies are implemented. Herbicide rate and selection are based on these results.	8
2. Cultivation and hand weeding is used as a substitute for herbicides.	5
3. Plant growth within 30 feet of field border is controlled (i.e. mowing) to reduce weed seeds, improve air drainage, reduce insect infestation.	5
<b>Education</b>	
1. Attendance at one or more regional/national strawberry workshops or conferences	4
2. Membership in NY Berry Grower Association.	3
3. Have a current year's copy of <a href="#">Pest Management Guidelines for Berry Crops</a>	3
<b>Bonus</b>	
1. Participation in an IPM extension/research project on strawberry.	3
2. Soap and water are available for U-pickers and fieldworkers.	2

80% of points needed to qualify.

TO LEARN MORE...

[Cornell Pest Management Guidelines for Berry Crops](#)

[IPM Fact Sheets for Berries](#)

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

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

[Cornell Fruit Resources, Berries](#)

[Tree Fruit and Berry Pathology, Small Fruit](#)

Natural Resources Conservation Service pesticide screening tool [WIN-PST software](#)

New York State Current Product Registrations at [PIMS](#)

[Trac Software](#)