

## Elements of IPM for Asparagus in New York State

MAJOR PESTS		
Insects	Diseases	Weeds
asparagus beetle	Fusarium crown and root rot	annual grasses
white and dark sided cutworms	purple spot ( <i>Stemphyllium</i> )	annual broadleaves
asparagus aphids	rust	perennial grasses
		perennial broadleaves
Other		
slugs		

**E=Established planting; N=New planting**

A. Site Preparation	Priority	Points	Acreage Goal	Achieved
N 1) Select rust resistant and Fusarium tolerant variety (Jersey General, Jersey Giant, Jersey King, Jersey Knight)	H	10	50%	
N 2) Avoid planting on sloped ground	M	5	50%	
N 3) Select site with very well drained (sandy if possible) soil.	H	10	100%	
N 4) Avoid history of crops susceptible to Fusarium				
- no asparagus, corn or sorghum for 8 + years	H	10	50%	
- no asparagus for 8 years or corn/sorghum for 4		8		
N 5) Eliminate any perennial weeds. Identify weeds and select appropriate controls.	H	10	100%	
N 6) Soil test and fertilize according to the test results. Adjust soil pH to 6.3-6.8.	H	10	100%	
N 7) Utilize green or animal manure in year before planting to increase organic matter.	M	5	100%	
B. Planting				
N 1) Use only crowns which are certified free of Fusarium.	H	10	50%	
N 2) Plant to a depth of 8 inches on sandy soils; 4-6 inches on heavier soils.	H	10	100%	

N 3) Use 30 pounds/acre P2O5 in bottom of furrow.	M	5	50%	
N 4) Do not plant asparagus on ground needing nematicide treatment.	H	10	100%	
N 5) Irrigate in year of establishment if needed	M	5	100%	
<b>C. Nutrient Management</b>				
N,E 1) Soil test every 3 years	H	10	50%	
N,E 2) Lime and apply potassium according to soil test.	H	10	50%	
N,E 3) Maximum of 75 pounds of N per year post harvest.	H	10	50%	
<b>D. Pest Monitoring and Forecasting</b>				
N,E 1) Scout several times a week for insects and foliar diseases during spear production (asparagus beetle, cutworms, slugs). Scout weekly during fern production (asparagus beetle, purple spot, rust)	H	10	100%	
N,E 2) Use available thresholds for diseases and insects	H	10	50%	
N,E 3) If serious disease is observed chop ferns after senescence and use shallow tillage to incorporate. If no disease observed then chop brush and do not till.	H	10	50%	
N,E 4) Make a weed map/list annually and choose herbicide/tillage strategy according to weed species and populations. See the Weed Assessment List available for use in satisfying this element.	H	10	100%	
N,E 5) Split the application of herbicide between pre and post harvest.	M	5	25%	
N,E 6) For large fields(>5 acres) make use of border and hot spot sprays for asparagus beetle control.	M	5	25%	
N,E 7) Chose effective labeled pesticides with the least environmental and beneficial organism impact (EIQ)	H	10	50%	
N,E 8) Calibrate sprayer at least once per season	H	10	100%	
N,E 9) Keep complete records of soil tests, fertilizer applications, cultural practices, weed maps, scouting results. and pesticide applications.	H	10	100%	
<b>E. Harvesting</b>				
N 1) Do not harvest until the second or third year of crop depending on the vigor of the planting. (3 weeks of harvest year 2; 6 weeks year 3)	H	10	100%	
N,E 2) Do not harvest spears less than 3/8 inch diameter. Remove small spears as needed to prevent overgrowth.	H	10	50%	

Total Points:

New plantings - 230

Established plantings - 120

80%

New plantings - 184

Established plantings - 96

TO LEARN MORE...

Specific information about the use of 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.

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