

IPM techniques check list for vegetable production

Acknowledgement: This checklist was developed by the MSU Vegetables AoE Team and MSU IPM Program. Follow all appropriate use instructions, labels, and MSU recommendation guides. More detailed information can be found in E-312, *2005 Insect, Disease and Nematode Control for Commercial Vegetables*, and E-433, *2005 Weed Control Guide for Vegetable Crops*. For other publications, visit: <http://www.ipm.msu.edu/vegtble.htm>

Monitoring, forecasting

Method	Crops
Monitor on recommended schedule: detect pest presence and estimate density, location, and determine if plant is at susceptible stage, use economic thresholds	As available and appropriate
Use on-farm weather monitoring devices or weather-aided pest management service	As available and appropriate
Use pest modeling computer software or weather-aided pest management service	As available and appropriate

Reduced-risk pesticides

Method	Crops
Incorporate EPA approved reduced-risk pesticides that are registered for use in Michigan and recommended for the crop per MSU recommendations. Follow all label instructions and environmental cautions.	Per MSU recommendations

Reduced-risk technology

Method	Crops
Use water flow meters at spray loading stations	all
Use shielded and wiper applicators	As available and appropriate
Use digitally controlled adjustable tool bars	As available and appropriate
Use spray monitoring equipment	As available and appropriate

Biologically based control

Method	Crops
Biological pesticides that are registered for use in Michigan and recommended for the crop per MSU recommendations. Follow all label instructions and environmental cautions. (example: Btk, Dipel, Thuricide)	Cole crops, per label MSU recommendations
Biofumigants for nematode control (example: oilseed radish, yellow mustard, brown mustard, buckwheat)	Per MSU recommendations

Cultural control

Method	Crops
Resistant cultivars (examples: virus and powdery mildew resistant vine crops; Bt sweet corn)	Vine crops, sweet corn
Use of plastic mulch	As available and appropriate
Removal of abandoned plants (pest reservoir)	Asparagus, others as appropriate