

## VEGETABLE DISEASE AND PEST

Session Chair: Ann Hazelrigg, UVM; Co-moderator: Anna Wallingford, UNH Approved CEUs: 2 IPM | Pesticide Credits: 2 for New England states; 2 for New York (1A, 10, 23)

## Thrips in Onions and other Vegetable Crops-Scouting, Management and Disease Implications - Ashley Leach

Ashley will discuss results from 5 years of pest management trials in onion, which showcase the importance of using threshold-based insecticide programs to manage onion thrips populations. A key finding from these trials is that threshold-based insecticide programs yielded similar results to standard insecticide programs, but required 40% fewer insecticide applications.

**About Ashley:** Ashley Leach is an applied entomologist primarily working on specialty crops. She is currently a postdoctoral researcher at Purdue University. She received her PhD at Cornell university while studying onion thrips pest management. Prior to graduate school, she worked as an agricultural scout and consultant in Michigan.

## Allium Leafminer: A New Invasive Pest of Allium Crops in the Northeast - Ethan Grundberg

Ethan will cover the current known distribution and biology of allium leafminer (*Phytomyza gymnostoma*) before reviewing field research on effective chemical controls (both organic and conventional), cultural controls, and integrated management programs combining reflective plastic mulch, row covers, and carefully timed applications of insecticides.

**About Ethan:** Ethan has been an Regional Vegetable Crops Specialist with Cornell Cooperative Extension's Eastern NY Commercial Horticulture Program for 5 years and managed a 40 acre vegetable farm in Eastern Massachusetts for 5 years prior. He works with a wide variety of conventional and organic fresh market produce farms in the Hudson Valley in addition to supporting the growers of 4,000 acres of onions in the "Black Dirt" muck soils region of Orange County, NY.

# Using biocontrol strategies for control of pests in alliums and sweet potatoes <u>PLUS</u> Updates on a swede midge kale variety trial - Vic Izzo & Scott Lewins

Our presentation will detail recent work exploring different biologically-based pest control strategies for alliums and sweet potatoes. Results of a kale variety trial for managing Swede midge will also be discussed. Lastly, we will touch upon our participatory methods for developing projects directly with growers.

**About Vic:** Vic Izzo is a Lecturer in Plant and Soil Science Dept and Education Coordinator of the Agroecology and Livelihoods Collaborative at UVM. He is trained as an evolutionary ecologist and agricultural entomologist. He focuses much of his research on developing sustainable pest management strategies.



About Scott: Scott Lewins is an Entomology Extension Educator with UVM Extension and is a Lecturer in the Plant and Soil Science Dept. He also serves as the staff Entomologist for the UVM Extension Northwest Crops & Soils Program (NWCS) and Extension Coordinator for the Agroecology and Livelihoods Collaborative. Scott is a entomological biocontrol specialist with extensive field experience working in organic systems, particularly in the Northeast.

### Research Guides Management Recommendations for Cucurbit Mildews - Margaret (Meg) Tuttle McGrath

Results from research conducted recently will be presented with focus on how the information can be used to more effectively manage cucurbit powdery and downy mildews in both organic and conventionally produced crops. Research topics include evaluating new resistant varieties, biopesticides, and conventional fungicides. Fungicide resistance in these pathogens is an important determinant for conventional fungicide programs.

**About Meg:** Meg is an Associate Professor with Cornell University located at the Long Island Horticultural Research and Extension Center since 1988. She conducts research and extension activities on optimizing management of diseases affecting vegetable crops and herbs for organic as well as conventional production systems. Activities include investigating fungicide resistance primarily in the cucurbit powdery mildew pathogen, monitoring occurrence of diseases, and evaluating management practices: resistant varieties, cultural practices including reduced tillage and mustard biofumigation, fungicides, biopesticides and other organic fungicides. Web pages include: <u>http://blogs.cornell.edu/livegpath/</u> and <u>http://vegetablemdonline.ppath.cornell.edu</u>.

### Bacterial blight and other diseases on arugula - diagnosis and management - Carollee Bull and Shaheen Bibi

The speakers formed the Northeast Arugula Team (NEAT) in response to grower inquiries about bacterial diseases of arugula plaguing their high tunnel and field grown arugula and other brassica salad crops. The speakers will discuss the pathogens, how to recognize bacterial blight and other diseases of arugula, and data from a grower survey of priorities for brassica salad crops.

**About Carollee and Shaheen:** Bull and Bibi are Professor/Department Head and Postdoctoral Scholar, respectively, in Plant Pathology and Environmental Microbiology at Penn State. Between them they have 35 years of experience diagnosing bacterial diseases and developing management strategies for bacterial diseases of vegetable crops.