

Active grant and sponsored projects during 2009

MSU IPM Program staff names are in bold.

- Developing a carbon-positive organic system through reduced tillage and cover crop-intensive crop rotation schemes. Kathleen Delate, Iowa State; **Dale Mutch**, KBS/IPM; Pat Carr, ND State Univ.; Jeff Moyer, Rodale; Erin Silva, Univ. Wisconsin; Paul Porter, Univ. Minnesota.
- Development of apple and cherry educational websites. Amy Irish-Brown, MSUE; Nikki Rothwell, NWMHRS; **Joy Landis**, **Andrea Gooch**, MSU IPM.
- New approaches to achieve high levels of codling moth mating disruption. Larry Gut, Mike Haas, Peter McGhee, Entomology; **David Epstein**, MSU IPM/Entomology.
- Increasing adoption of reduced-risk pest management practices in Midwest blueberries to prepare for FQPA implementation. Rufus Isaacs, John Wise; Entomology; Annemiek Schilder, Plant Pathology; Carlos Garcia-Salazar, MSUE; **Paul Jenkins**, MSU IPM/ Entomology; Mark Longstroth, MSUE.
- Investigating hop varieties for Michigan production. J. Rob Serrine, MSUE; **Erin Lizotte**, NWMHRS/IPM.
- Web site and blog for CRSP IPM Central Asia Project activities. Karim Maredia, Entomology; **Joy Landis**, MSU IPM.
- Wide-scale implementation of area-wide mating disruption in the Eastern USA. Larry Gut, Entomology; **David Epstein**, MSU IPM/Entomology.
- Spanish translation of IPM Pocket Guides: delivery of extension information to Hispanic/Latino farming communities of Michigan. John Wise, Entomology; Carlos Garcia-Salazar and Anamaria Gomez-Rodas, MSUE; **Joy Landis**, **Michael Brewer**, MSU IPM.
- A new MSU Bug House web site. **Andrea Gooch**, MSU IPM and Barb Stinnett, Entomology.
- Effect of leaf wetness duration sensor canopy position on the cherry leaf spot infection. **Erin Lizotte**, NWMHRS/IPM; Nikki Rothwell, NWMHRS; George Sundin, Plant Pathology; Tracy Aichelle, Enviro-weather.
- Vineyard IPM program development and demonstration. Rufus Isaacs, Entomology; Annemiek Schilder, Plant Pathology; **Paul Jenkins**, MSU IPM/ Entomology.
- Critical development and delivery of reduced risk and OP alternative pest management to US tart cherry producers. **David Epstein**, MSU IPM/Entomology; Mark Whalon, Larry Gut, George Bird, Entomology; Jim Flore, Amy Iezzoni, Horticulture; George Sundin, Plant Pathology; Nikki Rothwell, NWMHRS.
- Redesign of web site for MSU Department of Entomology. **Joy Landis**, **Andrea Gooch**, MSU IPM; Amos Ziegler, Heather Lenartson Kluge, Linda Gallagher, Jan Eschbach, Barb Stinnett, Entomology.
- Michigan NCR-SARE State Sustainable Agriculture Professional Development Program. **Dale Mutch**, KBS/IPM.
- Forecasting risks of invasive pests and diseases that threaten Michigan's nursery/ornamental crops. **Michael Brewer**, MSU IPM/Entomology; Takuji Noma, entomology; Manuel Colunga-Garcia, MSU; **Joy Landis** and **Andrea Gooch**, IPM; Mike Philip, MDA.
- Integration of beneficial insect resource strips into North Central US specialty crops to reduce pest pressure. Rufus Isaacs, **Michael Brewer**, Carlos Garcia-Salazar, Entomology.
- Midwest Cover Crop Council: Cover Crop Matrix. **Dale Mutch**, KBS/IPM; Eileen Kladviko, Purdue; Tom Kaspar, Iowa State; Don Wyse, U. Minnesota; Alan Sundermeier, Jim Hoorman, Ohio State; Anne Verhallen, Ontario-OMAFRA; Laura Overstreet, ND State U.
- Native plant conservation strips for pollination: IPM in fruit. Rufus Isaacs, Julianna Tuell, Entomology; **David Epstein**, MSU IPM/Entomology, Nikki Rothwell, NWHRS; Carlos Garcia-Salazar, MSUE.
- *Crop Advisory Team Alert* newsletters. **Joy Landis** and **Andrea Gooch**, MSU IPM; Fruit, Field Crop, Nursery and Vegetable Area of Expertise teams; Michigan Department of Agriculture.
- No-till pumpkins using cover crops. **Dale Mutch**, KBS/IPM; Mathieu Ngouajio, Horticulture.
- Timely delivery of critical pest management information to Michigan's nursery and ornamental industry. **Joy Landis**, MSU IPM; Beth Bishop, Enviro-weather.
- A North Central Regional work group for IPM and NRCS. Thomas Green, IPM Institute; **Mike Brewer**, **Joy Landis**, **Andrea Gooch**, MSU IPM; Lynnae Jess, North Central IPM Ctr.
- New insecticides for tart cherry orchard management on-farm trials. Larry Gut, Entomology; **David Epstein**, MSU IPM/Entomology.

- Partnering to cultivate organic agriculture in Michigan and the Midwest. Sieglinde Snapp, Crop and Soil Sciences; **Michael Brewer** and **Joy Landis**, MSU IPM/Entomology, Jim Bingen, CARRS, **Dale Mutch**, Kellogg Biological Station; Matthew Ngouajio and John Biernbaum, Horticulture.
- Developing pest management guidelines for organic production of highbush blueberries in the North Central Region. Annemiek Schilder, Plant Pathology; Rufus Isaacs, Entomology; Eric Hanson, Horticulture; **Dale Mutch**, KBS/IPM, Jianjun Hao, Plant Pathology.
- Improved fruit practices. Nikki Rothwell, NWMHRS; **Erin Lizotte**, NWMHRS/IPM.
- Pest phenology, mating disruption, and leaf damage threshold strategies for tree fruit pests Jim Miller, Larry Gut, Entomology; Jim Flore, Horticulture; **Michael Brewer**, MSU IPM/Entomology.
- New insecticides for use in the tart cherry orchard management program on-farm trials. Larry Gut, Mark Whalon, Entomology; **David Epstein**, MSU IPM/Entomology.
- The *New Agriculture Network*: An organic farming forum for education and research. **Dale Mutch**, KBS/IPM, **Joy Landis**, MSU IPM; Deborah Cavanaugh-Grant, Univ. Illinois; Elizabeth Maynard, Purdue.
- Development and delivery of OP alternatives for borer control in Michigan tree fruit. **David Epstein**, MSU IPM/Entomology; Larry Gut, Mark Whalon, Entomology.
- A web and database-enabled grower guidebook for assessing environmental risk and facilitating IPM and sustainable grape production. **Michael Brewer**, MSU IPM/Entomology; **Paul Jenkins**, Entomology/MSU IPM; Allen Krizek, MSU.
- Integrating benefits of organic apple and pork production. **David Epstein**, MSU IPM/Entomology; Dale Rozeboom, Animal Science; Matt Grieshop, Entomology; Jim Koan, farmer.
- Delivering Michigan IPM Extension Programming to Support End-user Profitability and Reduce Potential Risk to Humans and Environment. **Joy Landis**, MSU IPM; **Dale Mutch**, KBS/IPM; **Erin Lizotte**, NWMHRS/IPM.
- Using cover crops to facilitate the transition to continuous no-till. **Dale Mutch**, KBS/IPM.
- Evaluating American brown rot management strategies and potential relationship with oblique-banded leafroller. **Erin Lizotte**, NWMHRS/IPM.
- Addressing bird damage to tree fruit. Catherine Lindell, Zoology; Nikki Rothwell, NWMHRS; and **Erin Lizotte** NWMHRS/IPM.
- Developing carbon positive organic systems through reduced tillage and cover crop-intensive crop rotation schemes. **Dale Mutch**, KBS/IPM; Kathleen Delate Iowa state University; Pat Carr North Dakota State Univ.; Erin Silva Wisconsin Univ.; Paul Porter Univ. of Minnesota; Jeff Moyer Rodale Institute Farm Manager.
- Integrating Applied Insect Ecology into Blueberry Pest Management. Rufus Isaacs, Entomology, **Paul Jenkins**, Entomology/MSU IPM.
- Summer cover crops for organic vegetable farms in the Great Lakes region. Thomas Bjorkman, Cornell; Dan Brainard, MSU Horticulture; **Dale Mutch**, KBS/IPM; et al.
- Development of web site and fact sheets for Gardening in Michigan. Bridget Behe, Horticulture; Mary Wilson and Gary Heilig, MSUE; **Joy Landis**, **Andrea Gooch**, MSU IPM.
- An IPM Pocket Guide for Weed Identification in Field Crops. Field Crops Area of Expertise team; **Joy Landis**, **Andrea Gooch**, MSU IPM; Wes Everman, Christy Sprague, Crop and Soil Sciences.
- Michigan SARE Plan of Work. **Dale Mutch**, KBS/IPM.
- An IPM Guide for Blueberry Growers. Rufus Isaacs, Keith Mason, Entomology; Annemiek Schilder, Plant Pathology; **Joy Landis**, MSU IPM.
- No-till soybeans using cover crops. **Dale Mutch**, KBS/IPM; Dan Hudson, MSUE.
- Development of web site to identify and protect prairie fens. Anna Fiedler, Doug Landis, Entomology, **Joy Landis**, **Andrea Gooch**, MSU IPM.
- Predicting occurrence of key insect pests of vegetables with phenology models. Beth Bishop, Enviro-weather; **Michael Brewer**, MSU IPM/Entomology.
- Rainfast characteristics of cherry leaf spot fungicides and the effect on efficacy. John Wise, Entomology; **Erin Lizotte**, Nikki Rothwell, NWMHRS/IPM.
- Slurry-seeded cover crops for organic systems. Tim Harrigan, Biosystems/Ag Engineering; **Dale Mutch**, KBS/IPM; Sieg Snapp, Horticulture.
- Delivery of effective entomopathogenic fungi and nematodes for managing plum curculio in orchards. Mark Whalon, Renee Perea, Entomology; **Michael Brewer**, MSU IPM/Entomology; Rufus Isaacs, Entomology; Diane Alston, Utah State.