NEERA-1004 Northeast Region Technical Committee on IPM 2014 Annual Meeting, Burlington, VT

West Virginia Report

Recent Staff Changes

West Virginia University Extension Service hired an Extension Consumer Horticulturist, Dr. Mirjana (Mira) Bulatovic-Danilovich, in 2013. Mira has extensive experience in commercial fruit production and Integrated Pest Management. During her 20-yr tenure with Michigan State University, she provided technical support (which included predictions for insect and disease outbreaks) to commercial fruit growers (cherries, peaches, plums, apples, pears and small fruit) in west-central Michigan. Prior to that she worked at ChemLawn Corporation where she was in charge of landscape needs assessments and providing recommendations for insect, disease and nutritional management. In her current assignment, her interest is focused on residential/consumer horticulture, including fruit, vegetable, ornamental gardening, and other related topics. She works with homeowners, garden clubs, master gardeners, community groups, small farm enthusiasts and others to enrich lives of people through horticulture teaching, promotion of science and natural ecosystem and environment preservation. Mira is a welcome addition to the IPM team at WVU.

Funding

Unfortunately, West Virginia IPM program was not successfully funded during the current cycle of E-IPM Coordination Program. Primary concerns expressed by reviewers were research focus of the proposal (as opposed to extension programming), and lack of an evaluation component. These shortcomings were noted seriously by the IPM Coordinator and other Co-Principal Investigators of the proposal. Program manager, Marty Draper, suggested seeking guidance from Joanne Whalen, IPM Coordinator - Delaware, who graciously agreed to assist (and has already provided valuable inputs after reviewing necessary materials). We will also receive assistance from an Evaluation Specialist at WVU to improve the evaluation component. The Agriculture and Natural Resources unit director with WVU Extension Service, despite testing budget times, set aside \$5,000 to help with some programming needs.

IPM Programming Efforts

The Plant and Pest Diagnostics team received WVU Extension's Team Program Excellence Award for 2013 at the annual Extension meetings. The co-recipients were Daniel Frank, Mahfuz Rahman, and Rakesh Chandran. Daniel Frank was also presented the "2013 Key Communicator" award.

Mobile Pest ID, Management Clinic

The IPM team comprising of Daniel Frank, Mahfuz Rahman, and Rakesh Chandran set up three pest identification and management clinics in 2013. The Farmers Market in Charleston, WV was chosen for southern location, Farmers Market in Flatwoods for the Central location and the Jefferson county Extension office served as the location for the Eastern Panhandle. A collection of insect, disease and weed specimens and various resources for identification and management were displayed at each location. The county agents along with the three specialists fielded questions from clients. Each clinic lasted three hours and generated much interest. The IPM team (along with Dr. Alan Biggs, plant pathologist based at Kearneysville) also participated in twilight meetings for tree fruit growers, carried out site visits to grower locations to assist with pest management issues.

IPM Chronicle

In 2013, four issues of the quarterly newsletter IPM Chronicle were published. The newsletter covered a broad range of topics related to weed science, plant pathology, and entomology. From 2014 onwards, a column on environmental plant damage (abiotic stress) by Mira BD was included. The newsletter has received accolades from a broad range of stakeholders in the state for the quality and depth of information presented.

Other Activities

Extension Entomologist, Dr. Frank participated in twenty five outreach activities related to IPM. Topics encompassed identification, monitoring, and management of insect pests and beneficials in vegetables, tree fruits, row crops, lawn and ornamental plantings, and home gardens. He authored eight web based fact sheets for the WVU Extension Service website to provided relevant information on the management of important insect pests, and authored three articles for the WVU Kearneysville Tree Fruit Research and Education Center (KTFREC) electronic newsletter to provide timely insect management recommendations for WV tree fruit growers. He submitted necessary paperwork to request a Section-18 (special local need) use of pesticides in tree fruit for management of brown marmorated stink bug, and secured grant funding to create and distribute a pesticide recertification program video to all 55 counties in WV. Dr. Frank provided over 500 arthropod identification and control recommendations by email, telephone, or on-site visits to commercial growers, home gardeners, and county extension agents across the state. Apart from these activities, he published three peer-reviewed journal articles, and taught four courses for the College.

Extension Plant Pathologist, Dr. Rahman was involved with outreach activities promoting integrated disease management on various commodities with major focus on vegetables and small fruits. He conducted more than 30 outreach activities in teaching master gardeners, certified crop consultants, home owners and growers about disease diagnosis and management in the state and region. A major focus of Rahman's outreach activity was to educate clients about possible disease outbreak in the region through AgAlert so that growers could take enough preventative measure ahead of time. He actively participated in the cucurbit downy mildew ipmPIPE group activities and reported disease outbreak in both cucurbit downy mildew and late blight forecasting network. He provided leadership for the WVU plant and pest diagnostic clinic, diagnosed disease problems related to over 500 specimens submitted, visited more than 50 client locations in the state to determine disease problems and educate clients on disease prevention. He published three peer reviewed research articles and proceedings, one book chapter, and two abstracts. In addition, six extension articles were published as fact sheets. He worked as a resource person for the state in updating "Midwest Small Fruit and Grape Spray Guide".

Extension Weed Scientist and IPM Coordinator, Dr. Chandran participated in twenty outreach activities related to IPM, most of which were organized in the field. These included weed identification and management in vegetables, tree fruits, row crops, lawns and gardens, nurserymen, forages (pasture and hayfield), and right of way. He served as a co-author of two regional pest management guides, 'Field Crops for Pest Management Guide" and the "Spray Bulletin for Commercial Tree Fruit Growers". Over 700 weed samples sent from different parts of the state were identified and control recommendations provided. Site visits were routinely carried out to troubleshoot issues related to weed management. Provided technical assistance and resources to county agents to manage weeds in vegetables (Farm to School program in Mason county) and pasture. Submitted paperwork to obtain a Section-18 (special local need) use of a pesticide in small grains, owing to the buildup of resistant biotype of common chickweed (*Stellaria media*), to the WV State Department of Agriculture. He published two peer-reviewed journal articles, an article for the annual Garden Calendar, and taught two courses for the College of Agriculture.