

NCERA 222 annual report

The annual meeting was held March 19, 2018, in Baltimore MD just before the 9th International IPM Symposium.

8-10 am National IPM Coordinators meeting

10:15 am Chair Bob Wright called the NCERA 222 annual meeting into order

Present: Amanda Bachman (South Dakota State University); Bill Hutchison (University of Minnesota); Bob Wright (University of Nebraska-Lincoln); Bryan Jensen (University of Wisconsin); Cliff Sadoff (Purdue University); Daren Mueller (Iowa State University); Dian Plewa (University of Illinois); Frannie Miller (Kansas State University); Janet Knodel (North Dakota State University); Patrick Beauzay (North Dakota State University); Jeff Jacobsen (Michigan State University); Jim Jasinski (Ohio State University); Joy Landis (Michigan State University); Laura Iles (Iowa State University); Lee Miller (University of Missouri);

Guests: Lynnae Jess (Michigan State University/North Central IPM Center); Rubella Goswami (USDA-NIFA); John Obermeyer (Purdue University)

Chair-elect Lee Miller volunteered to take notes of the meeting.

Appointed nominating committee for next Chair-elect (Daren Mueller, Jim Jasinski)

Report from Administrative Advisor (Jeff Jacobsen)

Jeff reported on ESCOP/ECOP activities relative to the federal budget, and USDA initiatives related to IPM.

Report from NC IPM Center (Lynnae Jess)

-Lynnae reviewed the plans for North Central Pollinator survey to be conducted in 2018 with funding from the North Central IPM Center. Extension IPM Coordinators in the North Central Region will lead this effort in each state to conduct a survey of pollinator enhancement habitats to document the pollinators present. Data will be reported to iPIPE (Integrated Pest Information Platform for Extension and Education) (<http://www.ipipe.org/>) funded by USDA-NIFA.

-Lynnae will be forwarding a survey from ECOP to IPM Coordinators to gather input on the how states responded to the dicamba injury issues during 2017 in their states.

Report from National IPM Coordinating Committee (Beauzay)

-Pat reported outcomes from the Oct. 17-18, 2017 National IPM Coordinating Committee annual meeting

NCERA 222 Committee IPM priorities (Wright)

-Wright led a discussion on finalizing regional IPM priorities developed through online polling of NCERA 222 members. These will be published on the NC IPM Center website.

12-1:30 pm. Lunch

Dialogue with Rubella Goswami re USDA-NIFA IPM programs, follow-up from National IPM Coordinators meeting

1:30 p.m. Resume meeting

State reports by committee members (abbreviated summaries below)

Discussion of dicamba injury issues; Lee Miller

Report from nominating committee: Joy Landis (Michigan State University) was nominated and elected as the 2018-2019 Chair elect of the committee.

2019 meeting location: Lee Miller will host the meeting at Columbia MO; date TBA.

Adjourned at 4:30 p.m.

State accomplishments and impacts:

Missouri

Impact

University of Missouri (MU) in association with Lincoln University (LU) have developed a robust system for insect monitoring and information dissemination through the IPM website and direct mailed newsletters to a diverse audience that includes socially-disadvantaged farmers and ranchers which include minority, limited-resource, and beginning farmers as well as women and veterans in agriculture. Research efforts in trap cropping, mass trapping and other IPM practices have resulted in pesticide alternatives for both conventional and organic farmers.

Accomplishment Summaries

Missouri IPM website: The Missouri IPM website is the main conduit of information from the program to the world. The website was completely overhauled in 2016, including a new streamlined interface built to effectively view on a mobile device. Increased usage of the site has been impressive, with 307k page views in 2016 (121% increase from 2015) and 428k page

views in 2017. During the span, a nearly 200% increase in mobile phone usage and over 80% increase in tablet use occurred. The site includes three newsletters authored by MU IPM specialists, a statewide pest monitoring network, print publications, and the aforementioned Frost/ Freeze Guide and Garden Adventures web applications.

Indiana

2017 Pest and Crop Management Workshops (CMWs), winter IPM and agronomic meetings, continued to be held in different locations of the state and had 886 in attendance in 2017. Nearly 40% of the participants indicated in 2017 that they make or influence pest management decisions on 10,000 or more acres and 68% of the attendees monitored customer fields at least once per month. 93% indicated they would use the information presented for the upcoming growing season while 81% have already implemented crop production/IPM strategies into their operation from ideas that originated at past CMWs. Some of the practices and information discussed at the meetings included the proper identification of pests and their damage, eliminating needless chemical treatments, using the proper timing, most efficacious products, and rates when pesticides are justified, pest trends and anticipated problems for the upcoming season, pest resistance management tactics, and proper selection and use of pesticides. Participants rated the educational value of the meetings as the following evaluation values indicate: As in previous years, the vast majority (95% in 2017) of those attending said they would apply the information on pest identification and treatment decisions to next season's crops and 91% of the participants indicated they would share what they learned with co-workers and/or customers. Concerning their "bottom line", 94% said that it was worth both their time and money to attend the workshop.

Wisconsin

Accomplishment

The University of Wisconsin IPM Program staff were part of a team of UW Extension Specialists and County Extension Agents who developed a series of grower meetings designed to assist with the crop and pest management decision making process during a time when grain margins are exceeding low. County Agents hosted 12 local meetings attended by 196 producers, 33 lenders and 57 people who identified themselves as either Ag Chem/Seed Dealers, government agency employees, crop consultants, technical college instructors and additional non-hosting County Agents. Acreage represented by producers was 197,364 acres and an additional 309,658 acres were reported by other attendees for a total of 507,022 acres.

Impact

Participants stated that the topics covered were relevant (66%) or moderately relevant (33%) to their needs.

As a result of attending today's meeting participants agreed with the following:

I intend to make on or more changes in my crop inputs (79%)

This is altering the way I think about input decisions (80%)

This will alter my marketing plans (57%)

It will help increase my profitability (94%)

It helped alleviate my stress level about my farm operation (56%)

Minnesota

Overview: Several accomplishments were documented in the 5 priority areas of the MN IPM Program, including numerous educational contacts with clientele in Agronomic crops (>2400 Ag Professionals; >500 farmers), Horticultural crops (>350 farmers), and focus areas of Areawide IPM, Pollinator Protection and Urban Housing/Public Health (bed bugs). For this report, we emphasize key accomplishments and impacts for the "Let's Beat the Bed Bug" program, which also addresses the IPM concerns of a culturally diverse audience.

General Accomplishments – "Let's Beat the Bed Bug"

- Six workshops held on bed bug prevention and control, with audiences made up of landlords, public health and social service personnel, facility managers, firefighters and EMS, general public, Native American community leaders. Average workshop attendance was 40 individuals, with an average shift of 25-50% in gained knowledge (based on workshop survey results).
- Redesigned and distributed wallet card for BB identification and reference to LBTB web site.
- Re-drafted six new English-language fact sheets for the web site—translations to 11 additional languages pending

Impact statement

- MN and the NC Region continue to struggle with bed bugs—even though effective treatments and control measures are available through professional pest control companies.
- The *Let's Beat the Bug!* (LBTB) campaign, website www.bedbugs.umn.edu, together with the *Information-Line* remains a vital source of information for all stakeholders.
- 1.4 million unique web visits March 2017-March 2018
- 2,700 visitors/day maximum (despite 67 % loss due to server change at UMN)
- 68% from US; pattern reflected high density of traffic from OH, NY, IL, MI, CA, TX – high population centers (NC Region and beyond)
- Requested information (page views) shows change to indicate that most are NOT looking for information on hiring a pro, but rather are trying to control BBs on their own

Information-Line, at: bedbugs@umn.edu

-810 calls or email contacts (67 % from MN) from Jan-Dec. 2017 (phone support ended Jan 2018)

Top 3 requests: How do I get rid of BBs on my own? How do I prevent bed bugs?
How do I find assistance for low income?

Ohio

General Accomplishments

During this reporting cycle, members of the IPM team conducted the following programming: a Spotted Wing Drosophila identification and management workshop for 15 small fruit growers; held a pumpkin field day focused on disease management for 22 growers; trained 32 Extension educators on current insect, weed, and disease management in vegetable crops at two summer inservices; held a herbicide drift workshop for 10 participants; introduced 25 people to IPM basics of Urban Agriculture in Dayton; conducted a full day workshop on conifer diseases for 35 Extension educators and program assistants; held two soybean production workshops for 53 farmers on soybean cyst nematode, insect identification, and seed treatment; held a small grains workshop and field day for 85 people; co-sponsored and resourced the Central Ohio Bed Bug Task Force Summit and several bed bug workshops for 70 people; and processed 718 samples for businesses and homeowners in the C.Wayne Ellett plant and pest diagnostic clinic.

Impact Statement

Ohio continues to be one of the most bed bug infested states in the country, and as such, the IPM program and Dept. of Entomology have teamed up to both support ongoing bed bug conferences and workshops that are beneficial and educational to pest control operators, governmental officials, healthcare professionals, homeowners, and business owners. To help support these efforts, two bed bug webinars were conducted in March 2018 to specifically train Extension educators to dispense the most current bed bug information relating to biology, identification, infestation, treatment options and efficacy, how to select a pest control operator, and current laws and policies for both tenants and owners. Twenty-seven educators attended these webinars. Post survey evaluations for webinar 1 (n=9) showed 44% fairly confident and 56% very confident to dispense information about bed bugs to help their clientele. When asked the same question in webinar 2 (n=11), 55% were fairly confident and 45% were very confident in their ability to dispense information about bed bugs to help their clientele.

Iowa

The Crop Protection Network (CPN) is a multi-state and international partnership of university and provincial Extension specialists, and public and private professionals that provides

unbiased, research-based information. Our goal is to communicate relevant information to farmers and agricultural personnel to help with decisions related to protecting field crops. The CPN has already helped streamline collaborative outputs, and generated strong resources that take advantage of the expertise present throughout the North Central United States and Canada. The Soybean Disease Management publication series, which won the 2015 American Society of Agronomy Extension Education Community Education Materials Award, is one example of the strength of publications that have come out of the CPN.

In 2016, CPN activities included:

- Creation of 15 publications on corn and soybean disease management
- Printing 96,000 copies of CPN publications
- 19,000 PDFs downloaded from the CPN website
- Input from 60 specialists representing 28 different institutions in the U.S. and Canada

Nebraska

Accomplishments:

Nebraska Extension has organized 18 statewide Extension Issue teams after soliciting input from 2000 stakeholders in Nebraska. Two teams directly related to IPM are 'Resistant and Invasive Pests' and 'Promoting Beneficial Arthropod Ecosystems'.

The Resistant and Invasive Pest Issue Team administered over 185 educational programs across the state, consisting primarily of face-to-face delivery and on-line classes. Through these presentations the team had over 240,000 connections with state constituents. Three of the largest clinics (Crop Management Conference, Crop Production Clinics, and Crop Management Diagnostic Clinics) show participants influence over 10 million acres, or approximately 22 percent Nebraska's utilized farm and ranch acres.

Impacts:

As a result of previously attending Pesticide Safety Education Program training workshops, 70% of participants frequently/very frequently use regular monitoring to correctly identify pest problems.

For the second year in a row Eastern Nebraska saw a large influx of Japanese beetles. Members of the Resistant and Invasive Pests Issue Team created infographics and videos to help with management of this insect (Dealing with Japanese Beetles, Japanese Beetle Defense Plan for 2018, and Japanese Beetle 2017). Over 200,000 people were able to benefit from these infographics through printed distribution pieces and social media.

Illinois

IPM Support for Pest Diagnostic Facilities

The University of Illinois Plant Clinic provides unbiased diagnoses of routine, unusual, and exotic plant problems. The services provided by the University of Illinois Plant Clinic are a result of the combination of support from Extension Smith Lever funds, National Plant Diagnostic Network (NPDN) allocation, university building and equipment, and sample fees and technical service agreements with researchers and private industry. The University of Illinois Plant Clinic serves as the National Plant Diagnostic Network laboratory for Illinois housed in the North Central Region and provides thousands of unbiased diagnostic recommendations each year that are based on sound IPM practices to reduce both risk to human health and the environment. Through both diagnostics and outreach (including workshops, seminars, lectures tours, electronic outreach, demonstrations, social media, newsletters, factsheets, and refereed publications) the University of Illinois Plant Clinic addresses pest concerns, including invasive species in production agriculture, natural resources, and residential and public areas.

Impacts

-In 2017 the University of Illinois Plant Clinic processed 3,662 plant and soil samples for disease diagnosis, phytosanitary certification, herbicide resistance, or plant, insect, or nematode ID. Final reports including management recommendations are provided for all diagnostic samples.

-Contributed to newsletters and Extension education and outreach programs.

-Locations and cooperators for the Plant For Success IPM conferences have been identified and dates are being finalized. Presentations and resources for the Plant For Success IPM conferences are almost entirely completed.

Michigan

Accomplishment:

The IPM Program collaborated with MSU Extension Consumer Horticulture educators, researchers and specialists to provide science-based gardening advice that protects the environment while producing successful gardens and yards. Through our Smart Gardening program, we repetitively delivered concise messages about how to support pollinators, and how to setup and maintain a productive garden to avoid and resist insect pest and wildlife damage. Through the Master Gardener program, we trained volunteers on Smart Gardening information. These volunteers elevated their knowledge on IPM and other topics and shared the information with thousands of interested gardeners.

Impact:

We distributed 200,000 tip sheets on our Smart Gardening topics and thousands of bookmarks promoting our website and lawn/garden hotline. We made 2 new videos and made them available on YouTube: one about gardening to support pollinators (2,864 views) and another about deterring deer (845 pageviews). These videos were also looped on a large monitor at events. The Consumer Horticulture team organized Smart Gardening events for a diverse cross-section of rural and urban audiences. Approximately 70,000 people attended home and garden shows where Master Gardener volunteers worked at exhibits on Smart Gardening. They documented one-on-one conversations about Smart Gardening with nearly 6,900 people. Extension educators presented 49 short seminars during these shows. We extended the audience receiving our information by preparing "outreach kits," plastic tubs equipped with tip sheets each, promotional bookmarks and signage/display materials. We required on-line training of the nearly 170 individuals responsible for these kits in 15 lesser-served counties of Michigan. Most will use the outreach kits at farmer markets, community events and fairs. Smart gardening resources are online at: <http://bit.ly/SmartGardening2>

North Dakota

Accomplishments

Soybean cyst nematode (SCN) has been moving north and west through North Dakota since its initial detection in Richland County (extreme southeast ND) in 2003. Management tools are available and effective, but early SCN detection is critical to management success. NDSU Extension specialists and county agents have been working jointly with the North Dakota Soybean Council to increase SCN sampling by soybean producers by distributing soil sample bags, SCN sampling instructions, and by covering the cost of SCN tests. Since the sampling program began in 2013, approximately 3,000 SCN samples have been submitted through the program.

Impacts

-Since 2013, seven new counties have been documented as having SCN

-Negative fields, positive fields and SCN density has been mapped

-Using a 40 bu/acre average yield, a market price of \$10/bushel, and average field size of 160 acres, the value of early detection and subsequent SCN management practices could be \$25,600 per field and is likely in the tens of millions of dollars statewide