



Center Update

June 14, 2006 - October 2, 2006

FROM THE DIRECTORS

This "Center Update" reports the activities and programs of the NC IPM Center, based upon the Center's objectives, to the National IPM Center Steering Committee, the other Regional IPM Center Directors and National Program staff from USDA and EPA. Our companion publication "NC IPM Center Connection" provides updates on IPM state programs and their successes. We hope you will find both of these publications useful to keep you informed of regional IPM programs accomplishments and opportunities. Both are available on our website.

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ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 1

Establish and facilitate a regionally based process for stakeholder identification and prioritization of emerging pest management issues and research, extension and outreach needs to respond to economic, human health, environmental and safety concerns related to pest management practices.

FORMATION OF NORTH CENTRAL IPM CENTER STAKEHOLDER PANEL

The new Stakeholder Panel consisting of nineteen members will meet October 25-27, 2006 in St. Louis. During the meeting the group will assist Center personnel in developing a strategic plan, a process for identifying and prioritizing regional issues and discuss ideas for the NC IPM Center Symposium that will be held in the spring of 2008.

Representation on the panel is comprised of grower group representatives, working group project directors, members of the NCERA 201 IPM Coordinating Committee, Land Grant University programs and not-for-profit organizations. Members include:

Bruce Paulsrud, Pesticide Safety Education Program
Stephen Dlugosz, Past Chair of CCA Program
Rick Foster, IPM Extension Coordinator

Carol Pilcher, Evaluation & Measurement WG
Wendy Wintersteen, NCERA 201 Adm Adv
Dave Margolies, Greenhouse & Ornamentals WG
David Epstein, Fruit WG
Michael Brewer, NCERA 201 Chair
Mary Meyer, Master Gardener Coordinator
Ed Ready, United Soybean Board
Linda Kleinschmit, Nebraska SARE rep.
Larry Kleingartner, National Sunflower Association
Peg Perreault, EPA Region 8
Jim Jasinski, Great Lakes Vegetable WG
Brad Ruden, Pulse Crop WG
Chris Boerboom, NCERA 201 research rep
Mike Carter, WI Potato & Vegetable Growers
Tom Green, IPM Institute of North America Inc
Tom Novak, WI Corn Growers

ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 2

Serve as a focal point for collaborative team building to develop, improve, maintain and expand IPM practices in the North Central Region.

WORKING GROUP UPDATES

The NC IPM Center established seven multi-disciplinary and multi-state Working Groups who will identify and prioritize IPM needs, build partnerships with key stakeholders, increase communication between team members and address the goals of the National Roadmap for IPM including evaluation of IPM successes.

The Ornamental Pest Working Group -A mini-symposia was held at the Fifth National IPM Symposium titled, "Are Alternative IPM Approaches for Greenhouse and Nursery Pests Feasible?" In essence, the symposium's goal was two-fold: First, to review the status and challenges of doing modern integrated pest management in U.S. greenhouses. Second, to compare the complex and manifold factors that are similar or differ when developing IPM programs in the United States vs. Europe. Factors that include economic incentives, proximity of greenhouse producers to insectaries where beneficial arthropods are produced, familiarity and historical use of alternative IPM approaches in Europe, consumer demands, etc., make a difference in evaluating feasibility of adopting more diverse IPM programs. By examining these factors, we hope to be able to better understand and categorize which problems can be addressed relatively easily, and which will be more difficult to overcome.

The Great Lakes Vegetable Working Group has been busy collecting and summarizing information from the online IPM surveys administered late last year through the spring of 2006. Of the 14 surveys developed, at least 8 of the surveys appear to have enough data to begin analyzing grower practices. The regional pumpkin survey recorded 82 growers from 6 states and Ontario, Canada who completed the survey. We are waiting for a few more surveys to come in from late pumpkin field days before beginning to summarize all data. Results from all the vegetable surveys will be distributed to GLVWG members and stakeholders.

Through the summer the GLVWG listserv has maintained communication between specialists on issues such as downy mildew on cucurbits and

state pest updates and newsletter dissemination. In conjunction with the recently established Midwest Corn Earworm Monitoring and Resistance Network, several GLVWG members have posted update information relative to this pest's flight activity and preliminary resistance findings on the listserv.

As we head into the fall and winter, we have a committee appointed to begin pulling together the details related to our annual meeting, which will be held February 28 - March 1, 2007 in Ontario, Canada. Details concerning registration and accommodations will be forthcoming, watch the GLVWG website (<http://glvwg.ag.ohio-state.edu/>) for the latest information.

The Potato Working Group focused its work on monitoring pesticide resistance in key insect and disease pests. In 2006, the Vegetable Entomology program at Michigan State University continued its Colorado potato beetle neonicotinoid resistance monitoring program. A total of 46 populations were assayed this summer from 7 different states (29 from Michigan, 5 from Wisconsin, 4 from Maine, 3 from Minnesota, 2 each from Delaware and Massachusetts, and 1 from Washington). Data analysis is ongoing, so specific results are not available at this time.

Investigating the resistance of early blight to strobilurin fungicides, disease samples were collected in fields throughout the region (Michigan, Wisconsin, Minnesota, and North Dakota). DNA isolates will be analyzed for the loci that lead strobilurin resistance by the North Dakota State University Plant Pathology department.

The Potato Working Group will compare results from these two studies to 2005 baseline data, discuss the economic impact, and prepare regional IPM responses. The Working Group will meet February 8, 2007 in Stevens Point following the Wisconsin Potato Education meetings. Growers and chemical industry representatives will be invited to join the discussions.

The Pulse Crops Working Group continues to work toward completing project activities. During the past year, the project funded seven participants

from the region to participate in the development of a national PMSP for pulse crop production. In that document, the primary need for education identified was the need for a single, point source website for pulse crops information. This web page framework is completed and the website URL will be <http://www.pulsecropinfo.org>. Current activities for the project are to gather information on pulse crop production and pest management to populate this website, to post this information to the website and develop a method to maintain the data in the most current form possible. Public access to the website is expected by the end of October, 2006. The project also maintains a list serve for information exchange in the pulse crop production and pest management fields. There are currently approximately 60 members on the listserve.

The Evaluation/Measurement Working Group - The purpose of the Measurement and Evaluation Working Group is to develop a consistent and coordinated effort to measure IPM outcomes on a regional level. First, this working group is collaborating with the North Central IPM Extension Coordinators to develop a regional IPM program evaluation. Second, this working group is collaborating with the regional working groups to develop survey tools to measure the adoption of IPM.

Specific activities that have been accomplished include the following:

Iowa State University developed a standardized measurement tool to examine the adoption of IPM. This survey instrument was tested on corn and soybean in Iowa and cotton in Texas. It was then used to measure the adoption of corn and soybean in Iowa. During the past two years, Kansas State University used this standardized measurement tool to examine the adoption of IPM in sorghum and sunflowers in Kansas. The data have been entered and will be analyzed in the near future.

I have also been working to coordinate a regional level evaluation to assess the environmental or economic impacts associated with adoption of IPM in the North Central Region. Efforts thus far have included analyses of current impact level evaluations on the state level. In addition, I have examined the Performance Planning and Reporting System. These sources of information are assisting

with the development of a recommendation for a future regional level evaluation.

The Great Lakes Vegetable Working Group has completed on-line surveys to measure adoption of IPM in asparagus in Michigan, carrots in Michigan, horseradish in Illinois, sweet corn in Illinois, melons in Indiana, peppers in Ohio and Kentucky, tomatoes in Indiana and Ontario, and pumpkins throughout the region. I have completed data analyses and a summary report for the regional pumpkin survey. The working group continues to gather survey data at field days throughout the region. Once these data are collected, additional analyses will be conducted.

On September 7, 2006, the North Central IPM Center sponsored a Measurement and Evaluation Teleconference. This two-hour teleconference presented information on the importance of evaluation, the use of the Logic Model for program evaluation, a "real world example of impact evaluation" and additional sources of information for program evaluation. Over 100 sites throughout the United States participated in this teleconference.

IPM/NRCS Collaboration Working Group - A new workgroup focusing on NRCS and IPM has been formed by Mike Brewer of Michigan State University and Tom Green of the IPM Institute of North America. The group aims to increase collaboration between IPM and NRCS professionals in the region to help achieve common goals. The workgroup will hold a first meeting in St. Louis November 16-17 of this year. To date the group has contacted IPM coordinators throughout the North Central Region and requested their participation and suggestions for others from their states from NRCS, crop production, crop advisory and related professions. A list of NRCS invitees has been developed and initial contacts made.

The meeting will include presentations on the missions and roles of the USDA national IPM program, the North Central Region IPM Center, state IPM coordinators and NRCS. Additional presentations will cover successful collaborations between IPM and NRCS both from within and from outside the region. A workgroup website is under construction.

The **Great Lakes Fruit IPM Working Group** (GLFW-IPM WG) was created in May 2006, with the goal

ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 2 (CONTINUED)

of expanding a previously informal group of research and extension workers from Michigan, Ontario, and New York to now include others from Wisconsin, Illinois, Indiana, Ohio, and Pennsylvania, as appropriate to fruit IPM issues in the Great Lakes region. The group has a current list serve of about 150 members and is developing a website to serve as both an internal organizational info exchange (including a member directory) as well as a venue for public dissemination of pertinent IPM information concerning fruit production. Such information is envisioned to include an IPM calendar; regional IPM guidelines, projects and collaborations; a bulletin board of IPM issues/alerts/strategies; and links to IPM resources and newsletters. The Working Group is organizing a meeting of representatives from member states, to be held 8-10 Nov 2006 at Ithaca (NY) to share IPM technologies, report recent research results and extension efforts, and identify and prioritize IPM needs and collaborative opportunities. A compendium of research and extension reports presented at the annual meeting will be compiled and distributed to members. David Epstein (MSU) has agreed to represent the group on the NC-IPM Center Stakeholder Panel.

NORTH CENTRAL REGION EXTENSION ENTOMOLOGY TELECONFERENCES

The North Central Region IPM Center is providing funds to cover teleconference charges for field crop extension entomologists to share entomological observations and discuss pest management recommendations. Thus far, six teleconferences have been conducted: May 16, May 23, June 6, June 20, July 18 and July 25, 2006. The 1-hour long teleconferences serve to strengthen this network of extension entomologists and improve communication among this group of potentially important pest infestations across the region. Ultimately, producers benefit from this enhanced level of communication. Mike Gray serves as the organizer of these teleconferences.

ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 3

Enhance the ability of the land-grant system and USDA to provide IPM users, researchers, governmental agencies, and the public with the information and knowledge they need to increase IPM adoption and reduce unreasonable adverse environmental effects from pests and the use of pest management practices.

NC IPM CENTER ENHANCEMENT RFA/ GRANTS

The 2007 NC IPM Center Enhancement RFA was released on September 29, 2006. This year, \$440,000 is available for IPM Implementation Grants (\$200,000), Working Groups (\$210,000) and IPM Documents (\$30,000). Letters of Intent are due October 27 and full applications are due November 27, 2006. All proposals will be submitted electronically at <http://www.ncipmc.org/enhancement>. Each of the Working Groups currently funded has the opportunity to apply for an additional year of funding if their group is making significant progress in coordinating regional and national efforts to improve IPM implementation. Funds are also available for IPM related documents including pest management strategic plans, crop profiles, pest alerts and IPM management guides.

NC RIPM RFA

The North Central Region IPM Competitive Grants Program for FY 2007 formally begins when the Request for Applications (RFA) is formally released from USDA-CSREES (late September 2006). Letters of Intent to submit a proposal are due on October 31, 2006. Fully-developed proposals are due on November 30, 2006. In FY 2007, CSREES anticipates that approximately \$755,000 will be available for support of this program. Of this amount, \$500,000 is expected to be available for research projects, \$78,000 for extension projects, and \$177,000 for joint research-extension projects. A peer panel from outside the North Central Region will meet in St. Louis, February 7-9, 2007, to evaluate the merits of each proposal.

ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 3 (CONTINUED)

NORTH CENTRAL SOYBEAN APHID SUCTION TRAP MONITORING NETWORK

The Soybean Aphid Suction Trap Network continues to expand thanks to the efforts of Extension entomologists located at the following land-grant institutions: University of Illinois, Iowa State University, Kansas State University, University of Kentucky, Michigan State University, University of Minnesota, University of Missouri, Purdue University, South Dakota State University, and University of Wisconsin. What started as a small project led by David Voegtlin of the Illinois Natural History Survey has now expanded to include ten states and over 40 traps. By keeping track of aphid species and their numbers, clientele in the various North Central states are able to monitor the dispersal of aphids throughout the growing season. To learn more about the Soybean Aphid Suction Trap Network, please visit <http://www.ncipmc.org/traps/index.cfm>. This project continues to receive support from the North Central IPM Center IPM Implementation Grants Program and the North Central Region IPM Grants Program. In addition to federal support, state-supported scientists contribute their time to this important monitoring effort.

INFORMATION REQUESTS AND RESPONSES

In the past three months, the NC IPM Center has received 5 requests for information on copper compounds, aldicarb, malathion, MCPB and mineral oil. Requests are sent to the IPM Coordinators and they in turn, ask their specialists to respond. If needed, the Center calls specialists directly to get information needed to complete the response. The Center consolidates these responses into one regional response and sends these to OPMP and the EPA.

POTATO WART RECOVERY PLAN

USDA is providing funds to develop recovery plans for a series of serious plant diseases of national importance. NC IPMC staff members at Michigan State University are developing the recovery plan for potato wart (*Synchytrium endobioticum*). The goal of a recovery plan is to review the current status and develop a plan to manage the disease in the event that it enters the United States. Several drafts of the Potato Recovery Plan have been reviewed and updated. The final version is due to be completed within the next month.

LEGUME PEST INFORMATION PLATFORM FOR EXTENSION AND EDUCATION (PIPE)

A folder containing educational and outreach materials developed in cooperation with USDA CSREES, Risk Management Agency, Agricultural Research Service, Animal and Plant Health Inspection Service, the Regional IPM Centers, the National Plant Diagnostic Network, the 1862 Land-Grant University System, the NC504 Soybean Rust Technical Committee, the United Soybean Board and the North Central Soybean Board to address soybean rust and soybean aphid management issues in the United States, Mexico and Canada will be sent to each of the researchers and specialists involved in the (PIPE) sentinel plot project for evaluation and modification suggestions. In addition, the folder will be distributed to governmental agency and congressional members to illustrate the collaborative outreach efforts resulting from the funding.

Items contained in the folder include:

- Using the PIPE to address on-farm management issues video on CD
- Soybean Rust: Scout before your spray video on CD
- Soybean Aphid: Scout before you spray video on CD
- Soybean Rust/Soybean Aphid magnetic ruler (50,000 distributed)
- Soybean Rust/Soybean Aphid post card (25,000 distributed)
- Soybean Rust Identification card, English version (775,000 distributed)
- Soybean Rust Identification card, Spanish version (3,000 distributed)
- Soybean Rust Pest Alert, English version (475,000 distributed)
- Soybean Rust Pest Alert, Spanish version (25,000 distributed)
- Soybean Aphid Pest Alert, English version 105,000 distributed)
- Using Foliar Fungicides to Manage Soybean Rust (175,000 distributed)

PIPE and the associated outreach efforts will expand in 2007 to include more soybean and other legume pests and diseases. The North Central IPM Center is currently working with members of NCERA 200, ARS and Virginia Tech to develop additional educational materials and training.

ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 3 (CONTINUED)

UPDATE ON PEST ALERT AND TRAINING CDs

The development of regional and national pest alerts, in addition to training CDs has continued to address numerous IPM related issues. To date, over 1.5 million copies of eleven national and five regional pest alerts have been distributed by the regional IPM Centers with the assistance of the Land-Grant Universities, the National Plant Diagnostic Network, APHIS, ARS, U.S. Forest Service, the National Plant Health Board, and CSREES. New pest alerts are under development

for Whitefly Q Biotype (national requested by Lance Osborne), Citrus Greening (regional requested by Southern Plant Diagnostic Network), Chili Thrips (regional requested by Southern Plant Diagnostic Network), Plum Pox (National requested by North Central region, Lynnae Jess coordinating and authoring), Rocky Mountain Spotted Fever (National requested by EPA), Bedbugs (National requested by Northeastern region), Giant Hogweed (National requested by North Central CAPS program).

ACCOMPLISHMENTS TOWARDS NORTH CENTRAL IPM CENTER OBJECTIVE 4

Ensure accountability and leadership for proper management and distribution of Center resources

NORTH CENTRAL IPM CENTER PERSONNEL CHANGES

Effective August 16, 2006, Mike Greifenkamp has resigned as the Center's webmaster to accept a position as the University of Illinois IPM webmaster. Mike's contact information remains the same and he will continue to assist with Center related activities as part of a transition process including the on-line grant submission system. We wish Mike well in his new position.

Plans are underway to hire a part-time communications and marketing specialist to assist with NC IPM Center activities related to these areas. We hope to have an individual hired by December, 2006.

PROJECT ACCOMPLISHMENTS

Abstracts and final reports for all projects awarded through the North Central IPM Center from 2001 to the present have been added to the national Integrated Pest Management web site at <http://www.ipmcenters.org/research/pmcprojects/pmcprojects1.cfm?USDARegion=National%20Site>.

RECOVERY PLANS GRANT

The North Central IPM Center was awarded a \$70,000 grant for a two year period to involve grower groups, researchers, extension specialists and other interested parties in the development of recovery plans for the National Plant Disease Recovery System. The grant will be administered by Michigan State University.

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