

THE CONNECTION

NEWSLETTER OF THE NORTH CENTRAL INTEGRATED PEST MANAGEMENT CENTER

North Central
IPM
Center



promoting environmental stewardship
and enhancing human health and safety.



december **2009**

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From the Director's Desk.....	3
School IPM Update.....	3-4
Knocking Down Barriers to IPM Adoption.....	4
EPA Proposes New Pesticide Labeling.....	4
EPA Proceeds with Revoking Regulations.....	5
North Central Extension Entomologists Working Group Update.....	5
Nebraska State Update.....	6
Doctor of Plant Health.....	6
IPM3 Targets Training at Practitioners.....	7-8
EPA Launches Improved Web Searching.....	9
New EPA Information on Insect Repellents.....	9
Illinois Specialty Crop, Agritourism, and Organic Conference.....	9
EPA Begins New Scientific Evaluation of Atrazine.....	9-10
Spidering the Web.....	10
Resource Corner.....	10-11

FROM THE DIRECTOR'S DESK

At this time of year I reflect on what has transpired during the previous twelve months and also look toward the future. I am fortunate to have many valued colleagues and am proud to be part of our regional and national IPM communities. As we work through tough economic times on many of our campuses, I still see the positive attitudes and collaborative efforts that have sustained IPM in the past. The North Central IPM Center would like to thank all of its IPM partners who have contributed so much to state, regional, national and international IPM programs and projects. A little over a year ago we experienced a major change in distribution for Smith Lever 3d funding that impacted numerous state-based IPM programs as well as many of our friends and colleagues. Hopefully, the region's IPM programs have recovered from this unexpected shift in funding and will regain stability with the new three year time period provided for in the current funding opportunity. We have seen our partner at USDA transition to become the National Institute for Food and Agriculture (NIFA). I believe our programs will interface well with all of the priority sciences areas identified by NIFA listed below. It is our hope that we will continue to see strong state-based IPM programs in all twelve of our North Central states and look forward to our continued collaboration with our IPM partners in 2010 as we work with our new USDA partners to address these important issues.

Global Food Security and Hunger

NIFA supports new science to boost U.S. agricultural production, improve global capacity to meet the growing food demand, and foster innovation in fighting hunger by addressing food security for vulnerable populations.

Climate Change

NIFA-funded projects create the scientific information needed so producers can plan and make decisions to adapt to changing environments and sustain economic vitality and can take advantage of emerging economic opportunities offered by climate change mitigation technologies.

Sustainable Energy

NIFA contributes to the President's goal of energy independence with a portfolio of grant programs to convert biomass to biofuels, design optimum biomass for bioenergy production, and produce value-added bio-based industrial products.

Childhood Obesity

NIFA-supported programs ensure that nutritious foods are affordable and available and that individuals and families are able to make informed, science-based decisions about their health and well-being.

Food Safety

NIFA food safety programs work to reduce the incidence of food-borne illness and provide a safer food supply by addressing and eliminating causes of microbial resistance and contamination, educating consumer and food safety professionals, and developing food processing technologies.

-Susan Ratcliffe

School IPM Update

This quarter, national and regional school IPM efforts have continued to grow through increased communication and media efforts as well as demonstrations and coalitions across the country. The national school IPM working group is working to revise the School IPM 2015 Strategic Plan to incorporate comments received by pest control industry organizations, companies and school IPM regional groups. A new version will be available online in winter 2010. Plans are also underway to expand the national steering committee in order to include more stakeholder groups, specifically school district officials, parents, and pest control industry representatives. The regulatory

committee held its first conference call in November, where we discussed legislative opportunities that are available for school IPM and how to increase knowledge of IPM among the voting public. The group's first task will be to create an educational article on best practices for school IPM legislation. The outreach committee has also begun to hold conference calls, with one in September and one scheduled for December. This committee will focus on creating a messaging platform for the national school IPM effort and finding ways to get more people involved. We are still recruiting members for other committees, including parents, industry, funding, metrics and research. In collaboration with the IPM Institute, the national school IPM working group also published two bi-monthly newsletters and continues to

build a national database of facility managers and school district superintendents. Please visit <http://www.schoolipm2015.com> for more information or to get involved.

In the North Central region, assessments and in-service presentations for teachers and staff continue to be held at demonstration districts in South Dakota and Illinois. A coalition meeting was held in Nebraska in October with about ten participants, and the 15 coalition members in Indiana hope to meet again before the end of the year. In Missouri, we are working with food service and facility contacts to create a coalition. Our working group has also awarded funds to Illinois and Ohio for coalition activities in the coming year. Dr. Mark Shour, a co-leader of the North Central region school IPM working group, received a 2009-2010 School IPM Recognition Award for his work with schools in Iowa and South Dakota. In the coming quarter, we plan to award coalition funds to two more states and assist with plans for a national training on coalition building in addition to supporting our existing projects. agencies to remain in or on a harvested crop in the USA.

Knocking Down Barriers to IPM Adoption: New IPM Assessment Tools for Conservation Planning and Cost-Share

Are we doing enough to provide producers with technical assistance to successfully adopt Integrated Pest Management (IPM) practices? Natural Resources Conservation Service (NRCS) conservation programs provide a generally underused tool to support IPM adoption. A group funded by the North Central IPM Center is working to increase awareness and involvement among IPM professionals of these programs.

To help NRCS professionals and growers interested in participating, the North Central NRCS & IPM Grower Incentives for IPM Working Group has created two new IPM assessment tools adapted from the Northeastern IPM Center's Vegetable IPM Tool. These new fruit and field crop IPM tools list IPM practices for different fruit and field crops grown in the north central region, along with references to additional IPM resources available in print and online. Combining IPM resources with IPM practices provides growers with quick access to IPM information once they have identified improvements they can make as part of the conservation planning process.

The NRCS supports IPM through the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program and Conservation Activity Plans. Voluntary conservation programs supported by NRCS provide growers with financial and technical assistance to implement conservation practices on their land. Before a grower can participate in a conservation program, they must first qualify. These two new tools identify IPM practices based on strategies of pest prevention, pest avoidance, pest monitoring and pest suppression, as outlined in NRCS's 595 IPM Standard, which describes the rationale and overall implementation of IPM in the Service's programs. By laying out these practice options, the tools help NRCS professionals and growers identify practices they might consider implementing and/or practices already in place that might qualify for additional assistance.

These new IPM tools can be downloaded from the NRCS & IPM

working group website at:
<http://www.ipm.msu.edu/work-group/resources.htm>.

More information on IPM practice lists, including elements and guidelines, uses and current sets available can be found at the National IPM Center website:
<http://www.ipmcenters.org/ipmelements/index.cfm>.

For more information, contact Peter Werts, project assistant, IPM Institute of North America, Inc., (608) 232-1410 or by email to pwerts@ipminstitute.org

EPA Proposes New Pesticide Labeling to Control Spray Drift and Protect Human Health

The U.S. Environmental Protection Agency has rolled out proposed guidance for new pesticide labeling to reduce off-target spray and dust drift. The new instructions, when implemented, will improve the clarity and consistency of pesticide labels and help prevent harm from spray drift. The agency is also requesting comment on a petition to evaluate children's exposure to pesticide drift.

"The new label statements will help reduce problems from pesticide drift," said Steve Owens, the assistant administrator for EPA's Office of Prevention, Pesticides and Toxic Substances. "The new labels will carry more uniform and specific directions on restricting spray drift while giving pesticide applicators clear and workable instructions."

The new instructions will prohibit drift that could cause adverse health or environmental effects. Also, on a pesticide-by-pesticide basis, EPA will evaluate scientific information on risk and exposure based on individual product use patterns. These assessments will help the agency determine whether no-spray buffer zones or other measures - such as restrictions on droplet or particle size, nozzle height, or weather conditions - are needed to protect people, wildlife, water resources, schools and other sensitive sites from potential harm.

In addition to the draft notice on pesticide-drift labeling, EPA is also seeking comment on a draft pesticide drift labeling interpretation document that provides guidance to state and tribal enforcement officials. A second document provides background information on pesticide drift, a description of current and planned EPA actions, a reader's guide explaining key terms and concepts, and specific questions on which EPA is seeking input. These documents and further information are available in docket EPA-HQ-OPP-2009-0628 at <http://www.regulations.gov>.

In a second Federal Register notice, EPA is also requesting comment on a petition filed recently by environmental and farm worker organizations. The petitioners ask EPA to evaluate children's exposure to pesticide drift and to adopt, on an interim basis, requirements for "no-spray" buffer zones near homes, schools, day-care centers, and parks. EPA will evaluate this new petition and take whatever action may be appropriate after the evaluation is complete. For further information and to submit comments, please see docket EPA-HQ-OPP-2009-0825 at <http://www.regulations.gov>. For more information visit: <http://www.epa.gov/pesticides/factsheets/spraydrift.htm>

EPA Proceeds with Revoking Regulations Allowing Carbofuran Pesticide Residues in Food

The U.S. Environmental Protection Agency is moving forward to implement the agency's May 2009 final rule revoking tolerances, or residue limits, for the pesticide carbofuran. EPA continues to find that dietary exposures to carbofuran from all sources combined are not safe.

"The evidence is clear that carbofuran does not meet today's rigorous food-safety standards," said Steve Owens, assistant administrator for EPA's Office of Prevention, Pesticides and Toxic Substances. "EPA has carefully evaluated the scientific issues and has provided more than 500 days of public comment on this decision. It is now important to move forward with the needed public health protections, especially for children."

Short-term health effects include headache, sweating, nausea, diarrhea, chest pains, blurred vision, anxiety and general muscular weakness.

EPA encourages growers to switch from carbofuran to safer pesticides or other environmentally preferable pest control strategies. Since the tolerances are being revoked, EPA reminds growers that carbofuran should not be applied to any food crops after December 31, 2009. Use of carbofuran after this date could result in adulterated food products, which would be subject to enforcement by the U.S. Food and Drug Administration. The United States has a safe and abundant food supply, and everyone should continue to eat a variety of foods, as recommended by the federal government and nutrition experts.

During the objection period, the chemical company FMC Corporation, which manufactures carbofuran, and three grower associations submitted objections to EPA's tolerance revocations and requested an administrative hearing. EPA has concluded that the regulatory standard for holding an evidentiary hearing has not been met. EPA's explanation about why a hearing is not warranted, and the reasons for denying the objections are available on the web and will be published soon in a Federal Register notice. As part of the administrative process, FMC may appeal the revocation of the carbofuran tolerances to a federal circuit court of appeals.

EPA's May 2009 action to revoke carbofuran tolerances was the culmination of a regulatory process that began in 2006 when the agency published its risk assessments for carbofuran and determined, in August 2006, that no uses were eligible for reregistration. While FMC has voluntarily canceled 22 carbofuran uses, the elimination of these uses was not sufficient to allow the agency to make a finding that combined dietary exposures to carbofuran from food and water are safe. The process to cancel the remaining carbofuran registrations is under way and will address unacceptable risks to farmworkers during pesticide application and to birds in and around treated fields.

For more information visit:

http://www.epa.gov/pesticides/reregistration/carbofuran/carbofuran_noic.htm

North Central Extension Entomologists Working Group Update

Choosing least-hazardous pesticide options is a key component of Integrated Pest Management. This can be a daunting task given the number of products available and myriad of information sources bearing on potential risk including labels, Material Data Safety Sheets and published studies. PRiME offers an on-line resource to assess potential environmental and health risks, compare products or evaluate application history.

PRiME permits users to evaluate hazards to specific resource concerns including humans, small mammals, pollinators, earthworms, birds, aquatic invertebrates and fish. The tool weighs impacts of application methods, quantity and frequency of application, site-specific conditions such as soils data and proximity to sensitive sites to calculate a risk rating for each resource concern (see image). A novel user interface, which includes a bulk upload feature for pesticide use data, user friendly Google Earth imagery to map field boundaries and sensitive sites and automatic retrieval of NRCS soils data speeds use.



Green = low risk, Yellow = moderate risk, Red = high risk

Funded primarily by a USDA Conservation Innovation Grant, PRiME's development team was formed in 2007 and includes Oregon State University, BCS Ecologic, Pesticide Research Institute, Environment Canada, Waterborne Environmental and Natural Resources Defense Council and the IPM Institute of North America. The project's goal is to mitigate agricultural pesticide impacts on resources including soil, water and air quality, avian and aquatic life, beneficial organisms, and worker and consumer health and safety by improving selection of pest management options and access to information on mitigation impacts.

A beta version of PRiME will be available in January 2009. Please visit <http://www.ipminstitute.org/prime> for updates on the launch date and project materials. Interested in testing PRiME with a group of growers? Contact Amrita Batra at 608-232-1410 or abatra@ipminstitute.org for more information.

NEBRASKA

STATE UPDATE

Crop Production Clinics Present Timely Information

Contact: Dr. Mark Bernards, UNL Department of Agronomy-Horticulture; mbernards2@unl.edu

UNL Extension held the 1st Annual Crop Production Clinics at Hastings, North Platte, Gering, Beatrice, York, Kearney, Norfolk, and Fremont during Jan 2009. This day-long program was based on the very successful Crop Protection Clinics (1974-2008), but expanded to include topics on irrigation management, soil fertility, and cropping systems. In addition, the format of program was modified to allow attendees to choose between 2 sessions for each hour.

University of Nebraska-Lincoln Extension specialists and educators presented timely information on irrigation, soil nutrient and cropping system management, integrated pest management of crop diseases, insect pests and weed management, and best management practices for pesticide applications to protect the applicator and the environment. Information was delivered through interactive PowerPoint presentations and in corresponding articles in the 2009 Crop Production Clinic Proceedings (<http://cpc.unl.edu/pdffiles/2009CPCProceedings.pdf>). The Clinics are the primary means for commercial pesticide applicators to renew their license once every three years. Most of the presentations were recorded and are archived and available for viewing at <http://cpc.unl.edu>. Since the presentations were posted (April 1), there have been 405 unique visitors to this website.

TurningTechnology clickers were used to survey participants for demographic information and to assess what they learned and how they expect to apply that knowledge. Of the 1169 individuals who registered, approximately 800 responded to the questions. A short written questionnaire asking for feedback on the program was returned by 345 individuals.

Nearly 27% of the attendees identified themselves as commercial pesticide applicators, 25% as a pesticide or seed dealer, 20% as a pesticide or seed dealer, 13% as a crop consultant or scout, 21% as a farmer, and 21% as a university, state, federal employee or "Other." Individuals who attended the clinics influence crop management on the majority of the crop production acres in Nebraska. The crops they influenced included corn (93%), soybean (80%), wheat (55%), sorghum (31%), alfalfa (62%), pasture/range (47%), dry bean (10%), sugarbeet (6%), sunflower (15%), and other (7%).

Approximately 700 participants responded to questions about pest management:

- 74% reported they gained new knowledge about protecting crops from disease, insect and weed pests;
- 87% reported that they currently are or would soon begin using economic thresholds to apply insecticides and fungicides;
- 95% said they would apply pesticides in a more timely fashion to maximize control, minimize yield loss, and protect against pesticide resistance; and
- 80% reported that applying what they learned at the clinics would likely reduce pesticide drift or the inappropriate use of pesticides in their operations.

Nearly 800 participants responded to two general questions: 84% reported that what they learned was somewhat to very likely to increase the profitability or success of their operation; and the median value for the knowledge individuals gained at the clinics was \$2.50-\$5.00/acre influenced.



Individuals with broadly integrated knowledge and management skills are needed to deal with the complex and frequently interacting challenges in developing and implementing plant and pest management systems. These individuals must be able to incorporate new research and technological developments into integrated systems that remain economically, environmentally and socially sustainability. Individuals with these talents and training are needed worldwide in today's agriculture.

To meet these challenges a new professional program, the Doctor of Plant Health (DPH), has been created at the University of Nebraska – Lincoln. The DPH Program is a rigorous doctoral-level degree program that trains practitioners across all plant-related disciplines (entomology, plant

pathology, plant science, soil science and weed science). The DPH degree focuses on providing extensive experiential learning opportunities to enable students to integrate their multidisciplinary training to field situations in diagnosing and managing plant health problems and in developing sustainable plant management systems.

This unique new program is only the second of its kind in the United States. The primary prerequisite for entrance to the program is a B.A. or B.S. degree in a biological or related field. Those entering with a master's degree in one of the core disciplines in the program will receive credit toward graduate course work taken. Students can expect to earn the DPH degree in three to four years, depending on their background and course load.

The program was established to address needs from the seed, chemical and consulting industry, along with those of extension and regulatory agencies. These entities have been advocating for professional programs such as this for some time.

For more information on the DPH program, visit the website <http://www.dph.unl.edu> or contact the Dr. Gary Hein, Program Director at 402-472-3345 or ghein1@unl.edu.



Targets Training at Practitioners

The IPM3 Consortium launched its training platform in November with the IPM Core Concepts Training module. A major goal is to provide practical information that will help individuals, agencies and organizations utilize IPM principles in their day-to-day pest management decisions. Target audiences include federal agencies as well as state/local government officials tasked with IPM, Extension Educators, Master Gardeners, 4-H staff, Crop Consultants, Pest Management Professionals, facility managers and supervisors and a wide array of Green Industry Professionals -- in fact, anyone who has an interest in becoming proficient in IPM implementation. Students from around the U.S. representing federal agencies, local government and Extension enrolled in the inaugural core training.

What's Coming - Visit <http://www.umn.edu/ipm3> for course details, dates, and registration information. To help in our planning, please contact us at ipm3@umn.edu if you are interested in completing any of our modules as some may have limited enrollment for a particular session. Provide your contact information and approximate date range that you would like to complete the course.

The next Core Concepts Module session will be offered January 11 through February 22 and sessions will be repeated several times throughout 2010. The IPM Core Concepts Module employs multiple media learning techniques including text, videos, still photos and case studies. The text portion of each lesson is 10-15 minutes followed by an assessment. Lessons with videos and graphics are longer. A student who successfully completes the IPM Core Concepts Module will receive 1.5 CEUs and a Certificate of Completion.

Course content includes the following:

- Unit 1. Introduction to IPM: pests and pest impacts; pest management; history of pesticide use; IPM developed in response to pesticide problems.
- Unit 2. IPM Economic Concepts: pest populations; natural control and general equilibrium position (GEP); economic thresholds (ET); economic injury level (EIL).
- Unit 3. Host Plant Resistance: coevolution and selection pressure; resistance mechanisms: antixenosis, antibiosis, and tolerance; constitutive and induced resistance and their fitness costs; resistance genetics.
- Unit 4. IPM Tactics—Biological Control: biological control organisms; arthropod parasites and parasitoids; arthropod predators; behavior modification.
- Unit 5. IPM Tactics—Chemical Control: pesticide regulation; pesticide classification; pesticide mode of action (MOA); pesticide resistance; insecticide, fungicide, and herbicide resistance; pesticide safety, pesticide residues, and tolerances; environmental fate of pesticides.
- Unit 6. IPM Tactics—Physical Control: physical barriers; manual weeding; mulches; pneumatic control; thermal techniques.
- Unit 7. IPM Tactics—Cultural Control: sanitation; soil tillage; crop rotations; interplanting; trap crops; cover crops elimination of alternate hosts.

- Unit 8. IPM Tactics—Regulatory Control: USDA Animal Plant Health Inspection Service (APHIS) Plant Protection and Quarantine Program; Department of Homeland Security (DHS) Customs and Border Protection; Agricultural Inspections.
- Unit 9. Introduction to Invasive Species: definition of an invasive species; Executive Order 13112. National Invasive Species Council (NISC); impact of invasive species; APHIS prevention, monitoring, control and emergency program costs. Balancing multiple priorities.
- Unit 10. Introduction to Restoration Ecology: definition of ecological restoration; multiple disturbances to ecosystems; the importance of setting goals for restoration; ecosystem restoration.

Completion of the IPM Core Module will facilitate success in other IPM3 training modules, as each additional training module assumes a basic understanding of the principles of IPM.

An Invasive Species Specialty Module will be offered the first time from January 15 through February 26, 2010. Enrollment is limited to 15 students so please register early at <http://www.umn.edu/ipm3>. This Specialty Module provides an understanding of the mechanisms that account for invasion success, reviews their role in several invasion examples, and describes their significance when selecting management options. The lessons cover: Mechanisms of Biological Invasions; Pest Risk Assessments; Emerging Invasive Threats to Plants; and Invasive Species Impacts. Post-secondary knowledge of biology and ecology is assumed. This level of knowledge can also be attained by successful completion of the IPM3 Core Concepts Module. A student who successfully completes the Invasive Species module will receive 1.0 CEUs and a Certificate of Completion. This information will be added to your personal portfolio so you will always know what you have completed.

Arthropod Pest Management will be the first of two Pest Biology Modules available in early 2010. This module provides basic biological information about insects, ticks, mites, spiders, and crustaceans; how these organisms reproduce, function, and can be identified; how they can cause damage or harm plants, buildings, food, animals, and humans; and how to mitigate damage using various integrated pest management tactics. It is strongly recommended for students who do not have a background in entomology and who expect to encounter insects and insect relatives as part of their integrated pest management responsibilities. A number of IPM3 courses expect students to have a firm grasp of the arthropod biology, structure, and function. A student who successfully completes the Pest Biology-Arthropods module will receive 1.0 CEUs and a Certificate of Completion.

Plant Pathology will be the second Pest Biology Module available in early 2010. This module provides basic biological information about bacteria, viruses, nematodes and fungi; how these organisms can harm plants; and how to mitigate damage using various integrated pest management tactics. It is strongly recommended for students who do not have a background in plant pathology and who work with or are responsible for plants of all types including landscapes, turf, vegetables, trees, shrubs and green foliage plants. A number of IPM3 courses expect students to have a firm grasp of the biology of plant diseases. A student who successfully completes the Pest Biology-Plant Diseases module will receive 0.6 CEUs and a Certificate of Completion.

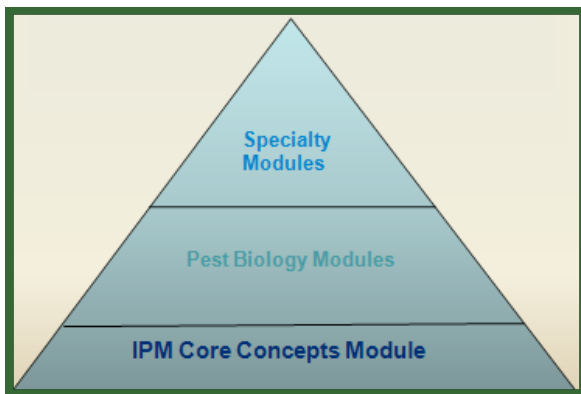
Facility Managers and Supervisors Course will be

offered from January 18 through March 26, 2010. Enrollment is limited to 15 students so please register early at <http://www.umn.edu/ipm3>. This exciting stand-alone course is specifically designed for facility managers and supervisors who are tasked with supervising the day-to-day operations of a building or set of buildings and who often assign or contract pest management activities to technicians or specialists. Managers and supervisors completing this course will gain a practical understanding of how the best IPM programs should function. This knowledge will enable students to effectively execute IPM responsibilities whether through internal staff assignments or via external contracts with professional pest management specialists. Insect, mite, rodent and bird pests are covered. A student who successfully completes the IPM for Facility Managers and Supervisors Course will receive 1.5 CEUs and a Certificate of Completion.

How IPM3 Works - IPM3 training is designed to reflect practical, real world content -- theoretical and academic content are only included to the extent that they are needed to understand the practical training. Modules, the fundamental element of IPM3 training, are the blocks on which courses are built with each course being made up of a specific set of modules. Continuing Education Units (CEUs) will be awarded for each module at the rate of 1.0 CEU for each 10 hours of module content. While modules can be taken alone, many people will be interested in a prescribed combination of modules that will lead to a Course Certificate. Certificates of Completion will be awarded for successful completion of modules and courses. Once taken, modules do not need to be repeated.

Modules - IPM3 training modules are arranged in a 3-tiered hierarchy. The lessons use multiple media learning techniques that variously include text, videos, still photo, and case studies. Assessments are provided at the conclusion of each lesson – a grade of 80 percent is required for a student to progress to the next lesson in the Module. Since our goal is to increase student knowledge and understanding, there are no limitations to the number of times a student may retake an assessment.

3-Tiered Training Program



IPM Core Concepts Module - Basic concepts about IPM and IPM Implementation, 15 hours of instruction, 1.5 CEUs, prerequisite for any pest management course certificate.

Pest Biology Modules - Introductions to: entomology, plant pathology, weed science, vertebrates. Each pest biology module has a minimum of 5 hours instruction per topic. CEUs are variable. At least one pest biology module is required for a Course Certificate. Some Course Certificates may require more pest biology modules.

Specialty Modules - Current Specialty modules include:

Invasive Species (stand alone), IPM3 for Facility Supervisors and Managers (stand alone). We are also in the process of developing a Landscape and Turf Specialty Module. Additional specialty modules will be developed as interest and demand dictate. Course Certificates in specialty modules typically require 10-25 hours of instruction.

Stand Alone Specialty Courses - Some Specialty Modules are self-contained and will result in a Course Completion Certificate without taking additional modules. One such Specialty Course, IPM3 for Facility Supervisors and Managers, focuses on facility evaluation, pest prevention, and construction of contracts for facility pest management. This course does not require the IPM Core Concepts Module as a prerequisite. The course includes a managerial overview of IPM that meets the needs of managers, supervisors, and contract management officers.

Benefits of IPM3 Training

- Current, expert content.
- Electable topics to address agency and individual needs. Modules and courses can be added based on demand and available expertise.
- Cost effective: no travel and per diem cost to receive training.
- Consistent IPM message within an organization. This can provide the baseline for advanced training within an industry or agency.
- Asynchronous, on-line delivery allows students to access material on their own schedules anytime during a 6-week instructional period.

IPM3 Steering Committee

Co-chairs:

- Mark Ascerno, University of Minnesota, Department of Entomology
- Bob Nowierski, USDA National Institute of Food and Agriculture (NIFA)

Federal agency members:

- Carol DiSalvo, National Park Service (NPS)
- Al Greene, General Services Administration (GSA)
- Doug Holy, Natural Resource Conservation Service (NRCS)
- Tiffany Parson, Fish and Wildlife Service (FWS)
- Roger Sheley, Agricultural Research Service (ARS)

Land Grant members:

- Doug Jardine, Kansas State University, Department of Plant Pathology
- Mike McDonough, University of Minnesota, Department of Entomology
- Rob Wiedenmann, University of Arkansas, Department of Entomology
- Steve Yaninek, Purdue University, Department of Entomology

The IPM3 Steering Committee also serves as the initial Curricula Committee.

EPA Launches New and Improved Tolerance Search Capability on the Web

EPA has launched a new Web page that enhances and replaces the Agency's current search feature for finding tolerance information. Available at <http://www.epa.gov/opp00001/regulating/part-180.html>, the Tolerance Information for Pesticide Chemicals in Food and Feed Commodities explains how to find specific tolerance information by commodity, crop group, crop subgroup, pesticide common name, and pesticide types and families. This new Web page will allow stakeholders and EPA staff to access detailed tolerance information published in the Code of Federal Regulations (40 CFR Part 180). Tolerances are the maximum amount of pesticide residue allowed by regulatory agencies to remain in or on a harvested crop in the USA.

New EPA Information on Insect Repellents

The U.S. Environmental Protection Agency (EPA) has launched a new Web page containing product information on certain skin-applied insect repellents. EPA's goal is to provide the public with information on registered insect repellents and their effectiveness claims in a clear, consistent, and user-friendly format.

"EPA's release of information on the effectiveness of insect repellents will help American consumers select the right product for their needs and protect themselves and their children from potentially devastating diseases spread by mosquitoes and ticks, such as West Nile virus and Lyme disease," said Steve Owens, assistant administrator for EPA's Office of Prevention, Pesticides and Toxic Substances. "This Web-based dissemination of information supports Administrator Jackson's goals of transparency and public access and protecting children's health."

The new Web page contains two tables listing insect repellent products that are registered by the agency: those that control mosquitoes and ticks, and those that only control mosquitoes. The Web page compiles publicly available information on protection times based on product effectiveness data reviewed by EPA, and presents it in a format that makes it easy for consumers to make informed risk management decisions to protect their health and that of their families and children. The Web page also contains information on vector-borne diseases such as West Nile virus and Lyme disease, and the importance of personal protection measures.

The Web page can be accessed at <http://www.epa.gov/pesticides/health/mosquitoes/insectrp.htm>.

Illinois Specialty Crop, Agritourism, and Organic Conference - Jan. 6 - 9

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URBANA – The Illinois Specialty Crop, Agritourism, and Organic Conference will be held at the Crowne Plaza Hotel in Springfield January 6 through 9.

The conference will include special interest tracks of presentations on fruits, vegetables, herbs, agritourism/marketing, irrigation/business management, and two new tracks devoted to

information on organics.

"The organic tracks will feature speakers who have blazed the trail for organic vegetable production, marketing, and season extension," said University of Illinois soil scientist Michelle Wander, who is director of the U of I Agroecology/Sustainable Agriculture Program and one of the conference presenters.

Pete Johnson of Pete's Greens and Steve Pincus of Tipi Produce open the organic session on Thursday. "Pete is a leader in the 'locavore' movement and a serious innovator in winter production and the use of moveable greenhouses on his Vermont farm," Wander said. "Steve Pincus has developed creative marketing channels in Madison and Chicago including Homegrown Wisconsin and a fabulous CSA."

Johnson and Pincus will also speak in a session on integrated production along with Matt Kleinhenz from Ohio State University. Kleinhenz will discuss organic greenhouse production, composting, grafting and irrigation.

"One of Friday's sessions will feature a farmer panel and a presentation by USDA scientist Gene Lester on organic production and food quality, and by Val Beasley of the U of I on why agriculture needs to keep it clean," Wander said.

The afternoon will include an "Organic Research Roundup" with presentations on resources, weeds, transition, disease management, and soils by Deborah Cavanaugh-Grant, John Masiunas, Dan Anderson, Ed Zaborski, Darin Eastburn, and Michelle Wander, all from the U of I.

Visit <http://www.specialtygrowers.org> for a complete agenda and information about how to register.

EPA Begins New Scientific Evaluation of Atrazine

The U.S. Environmental Protection Agency is launching this year a comprehensive new evaluation of the pesticide atrazine to determine its effects on humans. At the end of this process, the agency will decide whether to revise its current risk assessment of the pesticide and whether new restrictions are necessary to better protect public health. One of the most widely used agricultural pesticides in the U.S., atrazine can be applied before and after planting to control broadleaf and grassy weeds. EPA will evaluate the pesticide's potential cancer and non-cancer effects on humans. Included in this new evaluation will be the most recent studies on atrazine and its potential association with birth defects, low birth weight, and premature births.

"One of Administrator Jackson's top priorities is to improve the way EPA manages and assesses the risk of chemicals, including pesticides, and as part of that effort, we are taking a hard look at the decision made by the previous administration on atrazine," said Steve Owens, assistant administrator for EPA's Office of Prevention, Pesticides and Toxic Substances. "Our examination of atrazine will be based on transparency and sound science, including independent scientific peer review, and will help determine whether a change in EPA's regulatory position on this pesticide is appropriate."

During the new evaluation, EPA will consider the potential for atrazine cancer and non-cancer effects, and will include data generated since 2003 from laboratory and

population studies. To be certain that the best science possible is used in its atrazine human health risk assessment and ensure transparency, EPA will seek advice from the independent Scientific Advisory Panel (SAP) established under the Federal Insecticide, Fungicide and Rodenticide Act.

EPA will engage the SAP to evaluate the human health effects of atrazine over the coming year. Below is the timeline:

- November 2009: EPA will present SAP its plan for the new atrazine evaluation.
- February 2010: EPA will present and seek scientific peer review of its proposed plan for incorporating population studies into the atrazine risk assessment.
- April 2010: EPA will present and seek peer review of its evaluation of atrazine non-cancer effects based on animal laboratory toxicology studies, selection of safety factors in the risk assessment, and the sampling design currently used to monitor drinking water in community water systems.
- September 2010: EPA will present and seek peer review of its evaluation of atrazine cancer and non-cancer effects based on animal toxicology studies and epidemiology studies. This review is intended to include the most recent results from the National Cancer Institute's Agricultural Health Study, anticipated for publication in 2010.

At the conclusion of this process, EPA will ask the SAP to review atrazine's potential effects on amphibians and aquatic ecosystems. The SAP meetings will be open to the public.

In addition to the scientific review of the effects of atrazine, EPA plans to meet with interested groups to explore better ways to inform the public more quickly about results of atrazine drinking water monitoring.

More information on atrazine:

http://www.epa.gov/pesticides/reregistration/atrazine/atrazine_update.htm

More information on the SAP meetings:

<http://www.epa.gov/scipoly/sap/index.htm>



New CropWatch Web Site Brings Depth of Information to One Place

LINCOLN, Neb. — An expanded Web site developed by University of Nebraska-Lincoln Extension is making it easier for farmers to find comprehensive crop production information. The site, <http://cropwatch.unl.edu>, is a central resource for crop producers looking for a vast array of information, said Gary Zoubek, extension educator in York. The new site, unveiled during Husker Harvest Days in September, is a “one-stop shop” for everything crops related, he said. “Anyone interested in crop production should find the information they’re looking for on

CropWatch,” said Zoubek, who has been working since January on the site with extension educator Jennifer Reese in Clay Center and other extension personnel. CropWatch editor Lisa Jasa said the new site expanded UNL's CropWatch newsletter to provide more in-depth crop production information as well as online tools to assist with pest identification and treatment, soil nutrition questions, crop budgets and farm management decisions. “The expanded site brings together a number of UNL crop production Web sites into a single, searchable location,” Jasa said. Information is organized into two key areas: the CropWatch newsletter, which contains ag and rural news stories, a calendar of ag events and programs, and extension resources; and crop-specific production and pest management information. Viewers will find the new Web page organized by crop – corn, dry beans, forages, organic, potatoes, sorghum, soybeans, sugar beats, wheat and bioenergy. Under each crop category, information is organized by topics, such as crop variety, soil management, tillage, marketing and weed, insect and disease management. Previously people searching for such information had to gather it from various sites. “Our clientele were asking for one place to go rather than have so many sites,” Rees said. The new site is making life easier for extension personnel as well, Rees said. When people call looking for crop information, they can now be referred to just one site rather than many. “It’s so much easier for all of us,” she said. UNL Extension is a division of the university’s Institute of Agriculture and Natural Resources.

RESOURCE CORNER

Outstanding Youth/Uncommon Wisdom: Youth Renewing the Countryside

Beltsville, MD – Down a winding country road in Garnett, Kansas stands the Bauman farm, where agriculture is a family affair. Upon purchasing the farm in 2001, the family’s first farm venture was to raise pastured chickens and livestock. Today, the Baumans sell about 7,000 broiler chickens each year and an average 350 dozen eggs a week.

With the help of a grant from the Sustainable Agriculture Research and Education (SARE) program, the Baumans experimented with pasturing different species of animals in the same area. With the “pasture stacking” project, the family increased their broiler chickens’ average weight by 50 percent.

Rosanna, the eldest of the Bauman girls, explains that the weight increase was due in part to the addition of a new water system. “The project had a positive social impact on us kids,” explains Rosanna. “It has led each of us to take steps towards farming sustainably.”

Rosanna is just one of dozens of young people returning to the roots of American agriculture who are featured in a new book—*Youth Renewing the Countryside*. Produced by *Renewing the Countryside* in partnership with young writers and photographers across the country and with support from SARE and the Center for Rural Strategies, *Youth Renewing the Countryside* shares remarkable stories of young people in each

state changing the world through rural renewal.

Download *Youth Renewing the Countryside* for free at <http://www.sare.org/publications/youth.htm>. To order print copies (\$24.95 plus \$5.95 s/h) visit <http://www.sare.org/WebStore>, call 301/374-9696 or send check or money order to SARE Outreach, PO Box 753, Waldorf, Maryland 20604-0753. (Please specify title requested when ordering by mail.) Discounts are available on orders of 10 or more. Allow 3-4 weeks for delivery. Call 301/374-9696 for more information on bulk, rush or international shipments.

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