

## Crop Grouping: A Solution that Counts

The Interregional Research Project No. 4 (IR-4) is pleased to announce the proposed rules for the first group of three expanded crop groups have been posted on the Federal Register.

This is a great success resulting from the collaboration of the US EPA, IR-4, as well as the IR-4-led International Crop

Grouping Consulting Committee (ICGCC).

Crop grouping enables the establishment of residue tolerances for a group of crops based on residue data for certain key crops that are representative of the group. It increases pest control options and is a better utilization of scarce resources. Internationally the use of

crop grouping allows for better regulatory harmonization, facilitates trade and extends the seasonal availability of fruits and vegetables.

The summary of the rule can be found on EPA's website ([epa.gov/EPA-PEST/2007/May/Day-23/](http://epa.gov/EPA-PEST/2007/May/Day-23/)) and states, "EPA is



proposing revisions to its pesticide tolerance crop grouping regulations, which allow establishment of tolerances for multiple related crops, based on data from a representative set of crops. The present revision would create a new crop group for edible fungi (mushrooms), expand existing crop groups by adding new commodities, establish new crop subgroups, and revise the representative crops in some groups. Additionally, EPA is revising the generic crop group regulation to add a subsection explaining how the Agency

will implement revisions to crop groups. EPA expects

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*The present revision would create a new crop group for edible fungi (mushrooms).*

## Getting Ready for the Food Use Workshop

The 2007 IR-4 Food Use Workshop (FUW) is being held this year in Tampa, Florida from September 11-13. At this critical prioritization meeting, IR-4 stakeholders will select Priority "A" and "B" projects for herbicides, fungicides and insecticides, respectively. These A and B priority projects will form the core of the IR-4 food use research program for 2008. The FUW is the single most important gathering of IR-4 stakeholders for

establishing research priorities.

In an effort to more efficiently reach consensus about projects to move forward to the active study phase, the prioritization process was revamped in 2006. A "project nomination process" was initiated, asking stakeholders to nominate projects (by PR#), prior to and during the workshop, that would be discussed/prioritized at the FUW. Projects were

nominated either through the IR-4 website prior to the FUW, or at the beginning of daily discipline discussions at the workshop. Only projects that were nominated were discussed and prioritized. This focused the participants on projects deemed most important to meet critical pest management needs.

This revised prioritization process received rave reviews, and will be continued in 2007 with the following changes.

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# Crop Grouping

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these revisions to promote greater use of crop groupings for tolerance-setting purposes and, in particular, will assist in retaining or making available pesticides for minor crop uses. This is the first in a series of planned crop group updates expected to be proposed over the next several years."

This crop grouping expansion will benefit the US/NAFTA region and Canada's Pest Management Regulatory Agency (PMRA) has agreed to accept the EPA ruling for Canadian imports and exports.

## Taking Crop Grouping One Step further

The effort of expanding the current US Crop Grouping Scheme was formulated during the 2002 USDA/IR-4 International Crop Grouping Symposium, which was facilitated by IR-4's former Associate Director, Professor George Markle. Upon Markle's retirement, Dr. Hong Chen continued his work and took the idea of crop grouping one step further by forming the International Crop Grouping Consulting Committee (ICGCC). "With more and more US households enjoying tropical fruits, ethnic vegetables, herbs, and ornamental plants, we

needed to find a way to include these 'orphan' crops in the crop grouping system. Our vision was to provide a way to learn about these international crops from those who grow and work with them," stated Chen. "So working together with EPA's Drs Bernie Schneider and Yuen-shaung Ng, we began the process of forming the ICGCC."

The ICGCC includes crop, agrichemical and regulatory experts from around the world. The nearly 200 member committee includes participants from the US, Australia, Belgium, Brazil, Canada, China, Chile, Colombia, France, Germany, India, Israel, Japan, Kenya, Korea, Lebanon, Mexico, Netherlands, New Zealand, and UK, as well as representatives of Codex and other international organizations.

"Another goal of establishing the ICGCC was to cooperate with the CCPR (Codex Committee on Pesticide Residues) effort in revising the Codex Classification of Foods and Animal Feeds. Initially, Codex had proposed a limited revision by adding a limited number of crops. Both the US and the Codex crop grouping / classifications originated from the work of Dr. Duggan of the USDA in the 1970s. They had similar development timelines, however there was a major difference in that the US system provided guidance on residue extrapolation by selecting representative commodities, and the Codex system is not based

on representative commodities, rather establishing MRLs on a case by case basis," Chen explained.

Among ICGCC members, some also represent the European Commission and CCPR. At the first ICGCC meeting in September 2005, Erica Muller, the representative of the Codex classification revision project, met with Chen along with ICGCC Advisors Jerry Baron of IR-4 and Lois Rossi of EPA. They discussed working together to pursue a harmonized crop grouping system. Consequently at the 2006 CCPR meeting an extended revision proposal for the Codex crop classification was introduced by the Delegations of the Netherlands and the USA. An Electronic Working Group of the CCPR was also established to work on the crop classification revision proposals. Chen, who is a member of the US Delegation of CCPR and member of the Electronic Working Group stated, "In working with both the US/NAFTA Crop Grouping Expansion Project and with CCPR on the Codex classification revision, we hope to promote international harmonization of the crop classification system and facilitate a harmonized procedure for the establishment of international MRLs."

It seems to be headed in that direction. At the 39th Session of the CCPR held April of '07 in Beijing, the Delegations of the Netherlands and the

US introduced another proposal, "Revision of the Codex Classification of Foods and Animal Feeds at Step 3", which proposed the idea of selecting representative commodities for the purposes of residue extrapolation, the working method and the work plan in coordination with the ICGCC. IR-4 was directly involved in the preparation of both proposals, which were presented to CCPR by Muller and Chen.

Based on extensive discussions, the 2007 CCPR meeting approved the proposal with the following decisions:

- 1) the Electronic Working Group (EWG) led by the Netherlands and the US will prepare revised commodity groups for Bulb Vegetables and Fruiting Vegetables other than Cucurbits;
- 2) the EWG will prepare proposals for other commodity groups according to the agreed time table; and
- 3) the Working Group will prepare a draft document outlining the principles of and guidance on the selection of representative crops for the purposes of extrapolation of MRLs.

The EWG has been working closely with the ICGCC; therefore the revision projects for both Codex and US/NAFTA crop grouping systems are moving toward a harmonized crop classification/grouping system. The approval of selecting representative commodities for the purposes of residue/MRL extrapolations was a great success for both groups. ▲

# Compton & Markle Award Winner

The most recent recipient of the Professors C.C. Compton & G.M. Markle Entomological Fund Award, was Jessica Ware of the Rutgers Department of Entomology. Jessica was selected from entomology graduate student applicants who provided their credentials to the Selection Committee (Drs. Ray Choban, George Hamilton, James Lashomb, William Sciarappa, and Van Starner [chair]). As part of the award, Jessica received a stipend and her name was affixed to a permanent plaque (displayed in the Rutgers entomology department) which recognizes all winners since 1978.

Jessica attended the University of British Columbia (UBC) in Vancouver, Canada, where she received her B.S. degree in Invertebrate Zoology. While at UBC, she helped Geoff Scudder and Karen Needham reorganize the Coleoptera collection at the UBC Spencer Entomological Museum. Through this work she became passionate about insects and decided to pursue a career in the field of entomology. She went on to work with Diane Srivastava on helicopter damselflies, *Mecistogaster modesta* (Odonata: Zygoptera: Pseudostigmatidae), both in Vancouver and at a field station in northeastern Costa Rica. During her

last two years at UBC, she worked with Judy Myers on *Bacillus thuringiensis* in natural tent caterpillar populations and greenhouse populations of *Trichoplusia ni*.

Jessica has been a graduate student at Rutgers University for four years working on dragonfly systematics and evolution. Her work focuses on the super family Libelluloidea, which comprises Macromiidae, Corduliidae and the most speciose family of dragonflies, Libellulidae. She is currently working on molecular and morphological analyses to determine the evolution of several morphological, behavioral, and biogeographical characters within Libelluloidea. Jessica also studies convergent evolution, particularly in dragonfly wing venation patterns, which are influenced by flight behavior. In addition to libelluloid systematics, Jessica is investigating dictyopteran phylogenetic history (termites, cockroaches and preying mantids), species level odonate systematics (*Stylogomphus*) and the effect of model selection in molecular analyses.

This Entomological Fund was originally established in 1977, by Professor George M. Markle as the charter representative, under the name of Dr. C. C. Compton, a professor

at Rutgers Univ. from 1963 until his retirement in 1977, and the first National Director of the IR-4 Project. In 2003 the name of the fund was changed to "Professors C.C. Compton & G.M. Markle Entomological Fund" to honor Professor Compton's contemporary, Professor Markle, after his 39 years of distinguished service to the IR-4 Project, Rutgers Cooperative Extension, and Rutgers Univ. Department of Entomology.



*Jessica Ware, center, receives award from l to r, Jim Lashomb, chair, RU Department of Entomology; Michael May, RU Dept. of Entomology and Jessica's major advisor; Mark Robson, NJAES director; and Van Starner IR-4 Project assistant director and chair of the award selection committee.*

The concept of the Fund is to annually recognize outstanding achievements by students in the field of Entomology in the state of NJ. The criteria by which the selection committee assesses candidate applications for the award include research accomplishments (summary and/or actual publications), academic achievement, teaching achievement, papers and seminars presented, involvement in departmental affairs, and other independent entomological activities.

Contributions to the fund continue to be accepted (payable to the Rutgers University Foundation), and may be sent to the chair of the Selection Committee, Dr. Starner, at IR-4 Project Headquarters, Princeton, NJ. ▲

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# IR-4 Tour Focuses on Pollinators

In conjunction with National Pollinators' week, (June 25-29, 2007) IR-4 hosted its annual IR-4/EPA/USDA agricultural tour dubbed,



All seats on the bus were filled for the 2007 IR-4 / EPA / USDA agricultural tour.

"Something's A Buzz on the Eastern Shore." The day-long tour focused on pollinators and some of the crops that depend on them.

In its ninth year, the IR-4/EPA/USDA tour gives staffers an opportunity to get out of the office and see first-hand how crops are grown and maintained. Hearing from the grower's own recollection of the processes involved in producing healthy fruits, vegetables and ornamental plants is an invaluable experience. This, along with learning from tour speakers about their research, helps participants gather a clearer understanding about the decisions they make back at the office.

Sam Droege, a wildlife biologist at the US Geological Survey, whose



work focuses on native bees, brought

a sample of his insect collection onto the bus. His collection includes bees and wasps and he challenged tour participants to identify which was which. Sam described most native bees as solitary nesters, with those on the East nesting in the ground. Because they are not social, and do not defend a hive, native bees generally do not sting. Sam went on to explain that native bees are more efficient pollinators than the honey bee and about 60% of them have genes that cause them to specialize their pollination on a specific plant. Sam discussed his work in identifying native bee species, and talked about the need to catalog the over 4,000 species of native bees. Through his work, Sam has identified around 800 species and has developed an online identification list, which can be found at [discoverlife.org](http://discoverlife.org).

Maryland's Department of Agriculture Secretary, Roger Richarson, who has been a life-long farmer in Worcester County,



Maryland's Department of Agriculture Secretary, Roger Richarson



Hives lined the trees at Maryland's Wye Research and Education Center in Queenstown, MD

Maryland, where his family farms 3,500 acres of grain on Maryland's Lower Eastern Shore, joined the tour at the cucumber plot of Kenny Brothers Produce. Here participants witnessed pickling cucumbers (see related article pg 11) being harvested in a "one pass-through" (photo below)



method and learned from University of Delaware's extension agricultural program leader, Ed Kee, that cucumbers are totally dependent upon pollinators.



Participants were able to take home cucumbers too large for the harvester.

IR-4's Assistant Director, Van Starner also explained to the group about the involvement of IR-4 in cucumber registrations. He stated, "the IR-4 Food Use Program has had a long history of success in obtaining registrations for managing pests in cucumber production, both field and greenhouse

and currently the IR-4 database ([ir4.rutgers.edu](http://ir4.rutgers.edu))



Ed Kee explains the process of washing and weighing cucumbers at Kenny Brothers Produce.

shows 204 requests for cucumber pests."

From the field the tour moved along to the cleaning and sorting facility in Bridgeville, Delaware. Here participants saw the cucumbers being washed, sorted, weighed and made ready for processing.

At the next stop, IR-4's Field Research Director and tour organizer, Marylee Ross, along with her staff, gave participants a tour of the farm and an overview of the IR-4 research and application techniques being conducted at the University of Maryland's Lower Eastern Shore Research and Education Center (LESREC). Magnitude of Residue trials require extreme attention to contamination issues. Participants were shown how trials are redesigned to avoid contamination of similar chemistries and untreated plots. Additionally,

participants witnessed a crop destruct, which demonstrated the importance of keeping treated crops from entering the food supply. A large part of the job at LESREC is growing a



**A hay ride at LESREC brings participants to the fields.**

myriad of vegetable crops, simulating commercial practice. Staff member Barbara Abbott commented, "We like seeing what we can grow here at LESREC. One year we decided to see if we could grow peanuts and lo and behold, we grew peanuts and ended up conducting peanut trials here. That's what makes it



**Dewey Caron and Faith Kuehn, Extension Entomologists at the University of Delaware demonstrate methods of collecting bees for surveys.**

fun working here. We try out various crops to see what we can grow and learn a lot about the crop in the meantime." In addition to peanuts, the LESREC crew has worked on a variety of sweet potatoes and Barbara and Marylee have also produced a healthy crop of asparagus.

The third tour stop was a visit to the University of

Maryland's Wye Research and Education Center in Queenstown, MD. There presenters, Mike Embrey Supervisor and Extension Apiculturist at the University of Maryland's Wye Research and education center; Galen Dively, Professor in the Department of Entomology at the University of Maryland; Dewey Caron and Faith Kuehn, Extension Entomologists at the University of Delaware; discussed honey bees, colony collapse disorder (CCD), Bt sweet corn and its fit within the Integrated Pest Management philosophy and demonstrated methods to capture bees for surveys.

Mike talked about the various theories on CCD, which is primarily characterized as adult bees abandoning their beehive, leaving behind the queen,




honey and brood, and then dying somewhere outside the colony. He discussed his work on studying one of the theories that imadicloprid might be involved in the disorder. He posits that bees are being overexposed to the chemical when being transported from one crop to the next, and is concerned that the chronic exposure of the chemical combined with poor diet, and the stress

of moving bees from field to field causes a build up of the compound on the bees, making them mentally unable to locate and return to their colonies. Mike is also interested in looking at the repellent/avoidance affects fungicides can have on native pollinators during bloom time and their overall effects on crop production.

He is also trying to get the word out about the time of day of spraying chemicals. Most spray treatments should be done at a time when bees are not present in the field, and that using chemicals, even considered safe for bees, such as surfactants, when sprayed during the day can leave a sticky film on the crop plant's flowers where many native bees get stuck and perish. Educating growers in proper timing of applications is a priority.

Since the disorder seems to be a compilation of factors, one of which may be in-hive pests. IR-4's Biopesticide Program Manager, Michael Braverman has been involved in EPA registration of the majority of in-hive pest control products. Many of these products are considered biopesticides. Tour participants were provided a list of the in-hive control products. (List can be found at [ir4.rutgers.edu](http://ir4.rutgers.edu)).

The final tour stop allowed participants to enjoy Maryland crabs at their finest at Harris' Crab House. This stop was back by popular demand and made for a filling ending to a full day of learning and information gathering. Plans are already in the works for next year's tenth annual IR-4/EPA/USDA tour. 

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# IR-4 Spotlight on Researcher John

When John Wise was a youngster, he never dreamed he'd be getting paid for doing something he loved, but his lifelong fascination with nature is



Association, Michigan Cherry Committee and the Michigan Grape and Wine Industry Council, John has also established a strategic insecticide-screening

program at the TNRC that evaluates promising early pipeline compounds as potential candidates for EPA registration

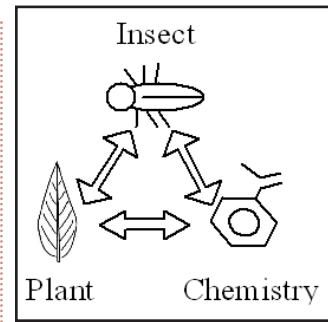


for minor-use crops. John says, "This

program has enhanced our efforts to get new reduced-risk compounds into the IR-4 process, so that MI fruit growers will have more options available as many of the conventional insecticides become further restricted as a result of the 1996 Food Quality Protection Act".

In the fruit pest incubation room, John and the "bug rearing" staff of Ryan Vander Poppen, Kevin Schoenborn and Laura Lamb concentrate on learning about bugs throughout their growth cycles. "My research is focused on understanding the performance mechanisms of new insecticide chemistries on fruit insect pests," stated John. Historically, research at TNRC was mostly field efficacy. As John

conducted more and more field efficacy trials he found they did a good job of showing what works, but didn't show how the job got done. "It became increasingly evident that performance characteristics critical for making the new reduced-risk materials work in the field were unique and more complex than the conventional broad spectrum insecticides. On the other hand, traditional lab studies are good at showing cause and effect, but are so controlled that the results often do not reflect the 'real world' of field and weather variables." This wondering of how the product worked inspired John to develop a research approach based on the idea that to fully understand insecticide performance, the interaction of three elements-plant, insect, chemical-must be considered. He calls this the PIC-Triad. John continued, "Without all of the PIC-Triad elements, we lack vital information about how a specific chemical will perform against a pest on a particular plant. So now we focus on capturing both the spatial and temporal dimensions of the PIC-Triad through the use of field-based bioassays and residue profile analysis. This simple methodology looks at how the compound is working at different intervals following a treatment."



The PIC-Triad designed by John C. Wise and Eric J. Hoffman

John and his team, which includes, Jason Seward, Ryan Vander Poppen, Kevin Schoenborn, and Eric Hoffmann spray trees and bushes in the field and pull fruit clusters at one, seven, and fourteen-day intervals. From there they make observations of the insects on the clusters and collect data on the difference at day one compared with day ten. On some of the newer compounds, they have found differences in effectiveness. They then begin the process of observing the pests' growth cycle at these intervals. The purpose of this kind of study is to learn how the compound works and in turn help growers optimize their treatment strategies. Because field results are affected by so many variables, understanding the way the compounds work in response to the variables helps growers. The goal is to link the best pest management plan with the compounds and techniques. Using bioassays, where the team tests compound effectiveness on the growth of the pest, provides a more robust form of pest management.



The facilities at include a pest incubation room, where rears Laura Lamb "feeds" sugar-water mix, the cold storage filled with apples, curculios, a GL where Jason Seward maintains standard rainfall simulation

# John Wise, Michigan State University

John and his team are currently studying the lethal and sub-lethal effects of insecticides on the plum curculio and the potential for their curative activity in cherry pest management.

A visit of the 175 acre Michigan Agricultural Experiment Station, takes you through a fruit pest incubation room, a fruit cold storage room, a GLP room and a rainfall



the TNRC incubation researcher, "eds" them a above, e room, s and plum P room ward ards, and a on chamber.



simulation chamber. Outside, researchers maintain 100 acres of fruit orchard. The acreage represents every major fruit commodity grown commercially in Michigan. As the station coordinator, John works with an advisory committee to identify the orchard and facility infrastructure investments needed to keep the station productive and competitive. The research conducted at TNRC draws an array of MSU faculty and their graduate students from several departments, including Entomology, Plant Pathology, Agriculture Engineering and Horticulture.

In addition to research and

administration, John facilitates training at the station which serves as a community education facility. In October 2002, the Angus J. Howitt IPM Training Room was dedicated. Dr. Howitt made numerous research and education contributions throughout his 28 year career at Michigan State, one of the most important, was the development of the TNRC. The 100 square foot training room was paid for by the Michigan Agricultural Experiment Station and through a nine-month fund raising



campaign, where industry, extension supporters and the community contributed over 100 thousand dollars for the project.

The room has been put to good use and John, along with the team of Rufus Isaacs, Annemiek Schilder, Eric Hanson, Anamaría Gómez-Rodas, Carlos García-Salazar, David Epstein, Larry Gut, George Sundin, Amy Brown, and Mark Longstroth, have developed an Integrated Pest Management (IPM) Scout Training Program. The program combines curriculum- based



The Angus J. Howitt IPM Training Room at TNRC

classroom instruction with laboratory and hands-on field training. The training is fruit crop specific and targeted toward farmers, farm workers and crop consultants. The four modules include apple and cherry, grape, small fruit and a blueberry module, which is delivered in Spanish and English. Each module culminates with an IPM certificate of completion on those fruits.



If research, administration, and teaching aren't enough, John also wears an extension outreach coordinator hat. In this role, John acts as host for annual field days; grant writer in support of the station; speaker and presenter, at numerous conferences; production coordinator for the Michigan Fruit Management Guide; reviewer for journal articles; committee

member for the IR-4 Training Committee and the Tree-fruit Technical Advisory Council, and he chairs the IR-4 Field Research Director Committee.

Last year John's efforts helped secure funding to expand the station's bilingual Blueberry Scout Training Program, which focuses on Hispanic blueberry farmers in Michigan. This USDA Risk Management Agency partnership program is receiving national attention and was offered to farmers in Ohio and Indiana in 2006.

The outreach mission of the TNRC is to provide effective fruit pest management strategies for Michigan's fruit industry and serve as an extension information hub for Michigan's fruit pest management decision-makers. Because of the dedication of those working at the station, this mission is being accomplished daily and it is evident that John is proud to have a role in this effort. To learn more about the TNRC visit their website at [www.maes.msu.edu/tnrc](http://www.maes.msu.edu/tnrc).

# 2007 FUW continued from pg. 1

Based on 2006 workshop survey responses, discussions between IR-4 headquarters and Regional Field Coordinators, and a FUW participant plea for a single project printout to guide discipline prioritization, a single printout will be used this year.

IR-4 Assistant Director, Van Starner explained, "We encourage stakeholders to work through their regional coordinators to make certain their priority projects are nominated, and to allow coordinators to be prepared to 'speak up for' pest management needs within their region. However, anyone (except employees of agricultural chemical companies) can individually nominate projects."

A PR# only needs to be nominated once to show up in the workshop printout of nominated projects.

**The following are deadlines for new requests and nominations.**

### August 6 to 17 - Project lists posted on website for nomination

The IR-4 website ([ir4.rutgers.edu](http://ir4.rutgers.edu)) nomination process will be organized with separate link for each discipline's projects. They will be organized by crop group, then chemical; PR# and "reason for need" will also be listed for each project. There will also be a link to

check specific details about project requests while going through the nomination process. Once a project request is nominated, the list will indicate this and no other nominations are needed.

**New project requests received at HQ from August 6-15** will be posted with a separate web link. Projects will be added to this list as they come into HQ, and they too, must be nominated on the website if they are to appear in the workshop project printouts for prioritization.

**August 15 - Last day new project requests will be accepted** for inclusion in the nomination process; any new PCRs received at HQ starting Aug. 16 will not be considered for discussion at the 2007 FUW.

**August 17 - End of nominations at 3:00 pm Eastern Time**

**August 20, 2007 - Nominated project lists (by discipline) will be posted on the IR-4 website;** ALL those planning to attend the FUW are encouraged to print the nominated project list from the IR-4 website.

**August 22-24, 2007 - Nominated project lists (by discipline) will be mailed** to those who indicate on their FUW registration that they would like to receive a hard copy.



### September, 11-13, 2007 - FUW in Tampa, FL

(Visit the IR-4 website for hotel and workshop registration information)  
Sept. 11 - Weed Science  
Sept. 12 - Plant Pathology  
Sept. 13 - Entomology

If you have ANY questions regarding this process, please contact any of the following:

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## Join the IR-4 Listserv to Receive Monthly Reports

Jerry is sending out his monthly reports via the IR-4 Listserv.

The monthly reports contain a detailed listing of IR-4 registration successes as well as general information about ongoing work at HQ. The report also lists information on approved tolerances and names of those involved in the research. If you have not joined the listserv and wish to be added, send an email with your request to [Sherrilynn Novack at novack@aesop.rutgers.edu](mailto:Sherrilynn.Novack@aesop.rutgers.edu).



# Marija Arsenovic Graduates Ag Leadership Program



On June 14, 2007, Marija Arsenovic stood among the 24 graduates of the New Jersey Agricultural Leadership Development Program (NJALDP).

New Jersey's Courier News wrote about the program in their July 1, 2007 publication. The following is reprinted with permission... Within the past two years, the 24 graduates of the New Jersey Agricultural Leadership Development Program's Class VI, have embarked on an intense series of multi-day field trips and seminars designed to further groom them into

the leading farmers and agribusiness professionals of tomorrow.

The two-year program, created in 1995, is supported by a four-way partnership among the Rutgers New Jersey Agricultural Experiment Station (NJAES) Cooperative Extension, the New Jersey Farm Bureau, the New Jersey Department of Agriculture and the New Jersey Agricultural Society. Students pay \$3,000 in tuition to attend the program, though the true cost nears \$10,000, according to officials. Donations and grants, as

well as fundraisers from prior classes, offset the difference.

"Twelve years after its inception, the program now boasts nearly 130 graduates," said Mary Nikola, director of leadership and organizational development at Rutgers NJAES Cooperative Extension. This year's class was honored at a graduation ceremony last month at the New Jersey Museum of Agriculture.

"During the recruiting process," Nikola said, "program organizers search for a diverse collection of agricultural leaders who represent both sexes, different age ranges, assorted commodities or services and various areas of the state."

Selected students then collaborate for two years by addressing issues facing agriculture (governmental regulation, property taxes) while honing leadership skills (public speaking, team building). The classmates then blend the two together by touring farms and production facilities throughout the state.

Each class also travels to Washington, D.C., and ventures to another country to see how America stacks up to foreign agriculture production. Past excursions have included Spain, Costa Rica, Germany and Mexico, among others. This year

featured a trip to Italy. ...

When asked about her experience, IR-4's Marija Arsenovic talked about her experience. "During the two years, I've attended eleven seminars, which covered topics such as communication, marketing, decision-making, conflict management, marketing, aquaculture, land use, agricultural economics, and biotechnology.

Two seminars covered topics on how farm policies emerge and we had the opportunity to learn this first-hand by visiting state and federal legislators in New Jersey and Washington, D.C.

This program was an excellent opportunity for me to sharpen my business and personal leadership skills, as well as enhance interpersonal relationships. The NJALDP helped me establish an extensive agricultural network, and personally, my classmates made it easy to form relationships that I look forward to continuing.

Overall, I would highly recommend this program and encourage New Jersey farmers and agricultural professionals to participate in the future classes.

Other NJALDP graduates include IR-4's Jerry Baron, class of 2003, and Dan Kunkel, class of 2005. ▲

## Calendar of Events

**North Central Region  
IR-4 Meeting**  
August 13-15, 2007  
AmericInn Lodge &  
Suites  
Douglas, MI  
Contact: Satoru Miyazaki  
517-336-4611

**The 2007 Food Use  
Workshop**  
September 11-13, 2007  
The Embassy Suites  
Hotel  
3705 Spectrum  
Boulevard  
Tampa, FL 33612  
Contact: Cheryl Ferrazoli  
at 732.932.9575 x  
4601 or register online  
at ir4.rutgers.edu

**Ornamental Workshop**  
October 10-12, 2007  
Cherry Hill, NJ  
Contact: Cheryl Ferrazoli  
at 732.932.9575 x 4601  
or register online at  
ir4.rutgers.edu

**Combined Southern /  
Northeast and ARS**  
State Liaison Meeting  
October 16-18, 2007  
Nashville, TN  
Contact: Robin Adkins  
352-392-1978 X 424

**National Research  
Planning Meeting**  
October 30 - 31, 2007  
Princeton, NJ

# The IR-4/EPA

## Partnership — by IR-4 Associate Director, Dan Kunkel

When it comes to successful registrations, IR-4 owes a lot to those working in collaboration at the Environmental Protection Agency (EPA). IR-4 has always enjoyed a very productive relationship with the EPA, dating as far back as the early 1970's. People like Doug Campt, Mike Flood, Drew Baker, Clinton Fletcher, Hoyt Jamerson Jim Jones, Steve Johnson and countless others have taken an active role in seeing to it that IR-4 was informed and guided on registration decisions. This collaborative working model has continued today and IR-4 has people like Jeff Herndon, Debra Edwards, Lois Rossi, and the dedicated Minor Use Team of Shaja Brothers, Sidney Jackson, Susan Stanton and team leader Barbara Madden to thank for this collaboration.

In more recent history there have been two main events that have lead to an even greater collaboration between EPA and IR-4. These events were the Food Quality Protection Act (FQPA) which was passed in 1996 and the Pesticide Registration Improvement Act (PRIA) which was passed in 2004.

The FQPA of 1996 set a new standard in pesticide safety. It provided for increased safety to children and took into

consideration all areas of exposures to pesticides, and provided even greater protection to workers. FQPA also provided a continual pesticide review process. This new standard meant registrations for specialty crop growers could have been reduced, but IR-4 acted quickly to understand and lessen the impact of this on their stakeholders.

Jim Jones, then Registration Division Director, and now-retired IR-4 Executive Director, Bob Holm formed the EPA/IR-4 Technical Working Group (TWG) whose purpose is to discuss and review new IR-4 proposals, as well as bring answers to questions that arise during petition review. The bottom line is to look for registration efficiencies to quickly gain new registrations for specialty crops.

This IR-4/EPA TWG has expanded over the years to include California Department of Pesticide Regulation (CDPR), Canada Pest Management Regulatory Agency (PMRA) and Agriculture and Agri-Food Canada's Pest Management Centre (PMC). It meets 3-4 times a year in a technical session between IR-4 and EPA staff in the morning and a North American Free Trade Agreement (NAFTA) session involving

the entire team in the afternoon.

Meetings have been held regularly since 1998, when the group started.

The meetings have allowed IR-4 to propose innovative specialty crop projects like reduced data sets for certain Reduced-Risk products. Successes include azoxystrobin (fungicide from Syngenta Crop Protection) and spinosad (insecticide from Dow AgroSciences) which saved IR-4 well over a \$1 million in study related costs and resulted in over 320 new specialty crop clearances. Other initiatives include the wide use of "ant bait stations" as non-food use of pesticides, as well as the ongoing Crop Group update. Working closely with the TWG is the EPA ChemSAC, a group of EPA senior scientists that makes scientific decisions on the many IR-4 proposals.

The PRIA also known as "Fees For Service", was signed into law in 2004. The provisions of this fee program include a number of incentives such as more predictability and increased accountability in registration decisions and funding stability for EPA. It includes fee waivers (provided the waiver is in the public interest) for new registration actions that are submitted solely in connection with tolerance petitions received from the IR-4 program. Through the efforts of the TWG, EPA implemented



*Working in collaboration with EPA, IR-4 is able to provide annual agricultural tours in conjunction with TWG meetings. This is a time when staffers get out of the office and have the opportunity to talk to growers and learn of their needs. (see tour article pg. 4)*

new processes for IR-4 to have a complete registration package that is ready to be worked on under PRIA. In addition to the tolerance petition, IR-4 submissions now contain a Notice of Filing (preliminary risk assessment), the application for registration (product label with new use) and supporting data and labels. This process was put into place to ensure that important actions can be completed in the PRIA mandated time frame and that the Agency, the registrants, and IR-4 are not involved addressing label issues at the end of the process.

Now that EPA and IR-4 have fully implemented PRIA processes, IR-4 is realizing significant benefits. These not only include greater number of registrations, but also a more predictable timetable for EPA decisions.

By working in collaboration, IR-4 is guided and informed as to the priorities and concerns at EPA, which allows IR-4 to work more efficiently with its own researchers, growers, and stakeholders to prioritize projects. This is truly a win-win partnership. ▲

# Commodity

## Highlight: Pickling Cucumber

*Excerpted from Vegetables and Melons Outlook/VGS-319/February 22, 2007 Economic Research Service, USDA*

Along with drying and dehydrating, pickling is one of the oldest forms of food preservation. Although many vegetables, including beets and peppers, are sold in pickled form, the cucumber is the leading vegetable pickled in the US. There are three basic classes of cucumbers marketed in the United States—field-grown slicers, greenhouse-grown slicers, and processing (pickling) cucumbers. The US produced 2.1 billion pounds of cucumbers for all uses during 2004-06—about equally split between the field-grown fresh and processing markets (a lack of data precludes an estimate of the output of greenhouse products). Average pickling cucumber output fell 4 percent during the first 7 years of the 2000s, compared with the 1990s.

Originating in India, cucumbers were brought to North America by Columbus (who carried pickled cucumbers on ocean voyages to stave off scurvy) and have been grown in the United States for several centuries. Cucumbers are members of the cucurbit family and are related to gourds, gherkins, pumpkins, squash, and watermelon. The US produces 3 percent of the world's cucumbers, ranking fifth behind China, Turkey, Iran, and Russia. The percentage of world cucumber output that is

pickled is not known.

During 2004-06, the farm value of cucumbers used to make pickles accounted for 40 percent (\$149 million) of the farm value of all cucumbers. The farm value of pickling cucumbers has risen just 8 percent from the average value in 1994-96. The reason for the small increase is likely a combination of weaker consumer demand for pickles and cost pressures from increasing imports of pickles and pickle stock from places such as India. For many commodities, increasing productivity helps defray rising costs and low contract prices. However, pickling cucumber yields during 2004-06 were 6 percent less than a decade earlier.

There is limited overlap between the US field-grown fresh and processing cucumber industries because of differences in varieties and methods of production and marketing. Fresh-market cucumbers are hand-harvested, while many pickling cucumbers are harvested by machine. Another difference is that the lion's share of pickling cucumbers is produced under contract, while most fresh-market sales occur in the open (spot) market.

While fresh-market cucumbers are produced virtually year-round, cucumbers for most types of pickles are primarily


grown during the summer and fall. However, the rising profile of perishable refrigerated pickles (with most of the growth during the late 1990s) has shifted a share of the pickling cucumber harvest to a year-round basis. As a result, during cooler months fresh pickling cucumbers are imported for processing or are sourced from less traditional pickling cucumber states such as Florida, where production is now about double that of a decade earlier.

Although the number of processors has been shrinking (largely through consolidation), many firms of varying sizes produce cucumber pickles and relish across the country. According to the 2002 Census of Manufacturers, manufacturer shipments of cucumber pickles and relishes totaled just over \$1 billion—largely unchanged from 1997. As they did in the 1990s, dill pickles represented about half of this value, followed by sweet pickles (20 percent) and refrigerated pickles (14 percent).

### **Pickling Cucumbers Are Widely Grown**

The US pickling cucumber industry is widespread, with commercial acreage reported in 31 States. According to the 2002 Census of Agriculture, cucumbers are produced for pickling on 104,179 acres by 725 farms. Area

for pickling cucumbers accounts for 63 percent of all the acreage devoted to cucumber production. However, freshmarket yields are greater than those for pickling, which resulted in pickling production accounting for just 40 percent of all cucumber production during 2004-06. Fresh-market yields tend to be greater because the machine harvest of pickling cucumbers limits yield potential by precluding multiple passes on a field (as can be done with hand-harvested crops). Also, fresh varieties are generally grown to a larger size, while pickling varieties are necessarily harvested at a smaller size to satisfy the needs of processors.

US production of pickling cucumbers reached a record high in 1985 and has since drifted lower reflecting waning demand and surrender of market share to imports. Production declined in 2006 for the third consecutive year and stood 27 percent below the 1985 peak. The leading states in pickling cucumber production during 2004-06 were Michigan, North Carolina, Florida, Missouri, Texas, California, and Ohio. To learn more visit [ers.usda.gov/Publications/VGS/2007/02Feb/VGS319.pdf?documentID=1401](http://ers.usda.gov/Publications/VGS/2007/02Feb/VGS319.pdf?documentID=1401) 

# Clearances Mar. '07- May. '07

The trade names listed below are provided as a means to identify the chemical for which a tolerance has been established. A trade name listed here may not be the name of the product on which the new food use(s) will be registered. Only labeled products may be used on a food crop. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical.

## Tribenuron-methyl

**Trade Name:** Express  
**Crop:** Sunflower  
**PR#:** 08138  
**Federal Register:** 3/14/07

## Spinosad

**Trade Names:** SpinTor, Success, Tracer  
**Crops:** Hop, Amaranth  
**PR#:** 09064  
**Federal Register:** 3/21/07

## Diphenylamine

**Trade Names:** Big Dipper, No-Scald DPA  
**Crop:** Pear  
**PR#:** 06879  
**Federal Register:** 4/4/07

## Clethodim

**Trade Names:** Prism, Select  
**Crops:** Leafy greens subgroup 4A, Legume vegetables group 6 (except soybean), Herb subgroup 19A, Asparagus,

Flax, Hop, Safflower, Sesame  
**PR#:** 05221, 05223, 06136, 06772, 07694, 05202, 05204, 05205, 05206, 07449, 05399, 05759, 06246, 07693, 05427, 07558, 08086, 08591, 07756  
**Federal Register:** 5/9/07

## Flufenacet

**Trade Name:** Define  
**Crop:** Sweet corn  
**PR#:** 07682  
**Federal Register:** 5/9/07

## Famoxadone

**Trade Name:** Famoxate  
**Crops:** Caneberry subgroup 13A, Grape, Hop  
**PR#:** 08766, 08774, 07796  
**Federal Register:** 5/23/07

## Phenmedipham

**Trade Names:** Betenal, Kemifam, Rubenal, SpinAid  
**Crops:** Spinach, Sugar Beet  
**PR#:** 05693  
**Federal Register:** 5/23/07

## Coumaphos

**Trade Names:** AgriDip, Co-Ral  
**Crop:** Honey  
**PR#:** 07371  
**Federal Register:** 5/23/07

## Correction on Clearances

In the April Issue, the trade names for Fenbuconazole, Propiconazole and Pendimethalin were incorrect, the following information contains the correct trade names:

## Fenbuconazole

**Trade Name:** Enable, Govern, Indar  
**Crops:** Bushberry subgroup 13B, grape  
**PR#:** 06368  
**Federal Register:** 9/22/06

## Propiconazole

**Trade Name:** Alamo, Banner, Break, Orbit, Tilt, PropiMax  
**Crops:** cranberry, mint, Leafy petioles subgroup 4B  
**PR#:** 06320, 07359, 09419, 06350  
**Federal Register:** 9/22/06

## Pendimethalin

**Trade Name:** Herbadox, Pendulum, Prowl, Stomp, Way Up  
**Crops:** Fruit, stone, group, Fruit, pome, group 11, juneberry, leek, pomegranate, onion-green, onion-welsh; shallot, strawberry, Vegetable, fruiting, group 8  
**PR#:** 05097, 04578, 02739, 06669, 06609, 06610, 06611, 06674, 06608, 06760, 02219, 02740, 02741  
**Federal Registry:** 9/27/06 ▲



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