

Newsletter Vol. 48 No.2 Spring 2017

Pest Management Solutions for Specialty Crops and Specialty Uses

Paul Schwartz Inducted into the IR-4 Hall of Fame

On March 13, 2017, IR-4 Executive Director, Jerry Baron, presented Dr. Paul Schwartz with IR-4's most prestigious award, the Hall of Fame Award. Anyone who's been involved with IR-4 knows Paul Schwartz. A stalwart researcher and proud USDA entomologist, Paul joined ARS in 1961 working on duties unrelated to IR-4, and for a brief period, Paul worked with the Department of Health and Human Services, in Atlanta, GA, to eradicate the Aedes aegypti (Linnaeus) mosquito that is a vector of yellow fever.

He rejoined ARS in 1965 as a Research Entomologist working on Japanese Beetle. His research was Quite prolific, and he published 16 refereed papers, for which he was the senior author of 10. Paul also holds a joint patent for a Japanese beetle attractant.

In March 1969, Paul became the Assistant to the Branch Chief, USDA-ARS Entomology Research Division, Fruit Insects Research Branch in Beltsville, MD. In addition to his responsibilities that included coordination, planning, analyzing and review of research in the branch, Paul prepared information for various reports, reviewed scientific and popular publications for Branch approval, and published 2 home and garden bulletins on fruits and tree nuts and one on trees and shrubs.

In January 1971, Paul was asked to be the Acting Assistant to the Division Director of the Entomology Research Division under Edward Knipling, a longtime IR-4 friend. Paul's responsibilities for pesticides began in 1972 as the National Program Staff Specialist. With the help of Waldy Klassen and Warren Shaw, Paul requested funding in the Agency's budget to develop new research programs where no control methods were available for pests because of the regulatory actions being taken by the newly established agency EPA and the implementation of the 1972 amendments to the Federal Insecticide Fungicide and Rodenticide Act (FIFRA). The implementation of FIFRA led to the establishment of a Special Research Fund by Congress in 1976, and Paul was appointed coordinator of this program by the ARS Administrator. ARS was then asked to participate in the IR-4 program where Paul oversaw the research in the field and analytical laboratories.

In 1976, Paul was appointed to what is now known as the IR-4 Project Management Committee.



Photo by Cristi Palmer

He remained on the committee until his retirement this year, and served as the Chair for 11 years.

Paul was instrumental in establishing a solid foundation for the Ornamental Horticulture Program which started in 1977. In addition to ARS scientists *continued on pg 8*



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International Update

Dear Friends,

A few years back, I came across a quote from Jack Welch, former CEO of General Electric. "If the rate of change on the outside exceeds the rate of change on the inside, the end is near". I keep this quote on my desk as a constant reminder of the need for IR-4 to adapt and meet the changing needs of our stakeholders. There are many changes happening in our nation and the world. Sonny Perdue has been confirmed as our new Secretary of Agriculture. It is good to have an actual farmer who brings practical hands-on expertise to the position.

I want to bring to your attention one potential change by IR-4's parent funding agency that shows promise. USDA-NIFA Director, Sonny Ramaswamy, recently shared his vision of a potential initiative "Biosecurity to Protect America's Food and Agricultural System". He sees value in bringing together the organizations that protect our food supply into a coalition. By working together, the programs could better prepare and defend domestic food production against invasive pests or bioterrorism. A network of tactical sciences programs would help raise awareness of our current vulnerabilities, our ability (or lack thereof) to respond and the need for increased government investment in this important aspect of homeland security. As Ramaswamy points out, significant government resources are allocated to protect society against cyber-attacks while only a fraction of these resources is allocated to protecting food production and food.

To open dialogue on the tactical sciences proposal, NIFA and the University of Maryland convened a workshop in February 2017. About 70 invited stakeholders from various programs met to discuss opportunities. The IR-4 delegation, the single largest delegation of the invited programs, included IR-4 Commodity Liaison Committee (CLC) members, Mike Aerts, Mike Bledsoe, Rich Bonanno (now at North Carolina State University), Jill Calabro, Bob Simerly, and John Wilson. Doug Buhler and I represented the IR-4 Project Management Committee (PMC). IR-4 was highlighted as a model successful program that directly involves stakeholders in many operational aspects. The workshop organizers are working through the raw data and information provided at the workshop. The next step involves establishing a small committee to take the raw data and draft a roadmap for the "Biosecurity to Protect America's Food and Agricultural System" Tactical Sciences plan.

Switching gears, IR-4's 2017 research program is running much smoother than last year where we had many last minute challenges. Unfortunately, after many years of flat funding, the number of new research projects continues to decrease. The CLC is aware of the critical funding shortfalls and has stepped up its Congressional outreach activities. During their joint meeting with the PMC in March, several CLC members arranged group visits to key Congressional offices. They also arranged group meetings with several Congressional Committee staff representatives. These visits led to a coordinated effort by the CLC to submit letters to Congress requesting increased IR-4 funding. Many thanks go to the efforts of the CLC's Congressional subcommittee for their advocacy on behalf of IR-4.

I too have been stepping up efforts to educate others about IR-4 and our fiscal challenges. I recently met with the leadership of several key partner organizations, including USDA-NIFA, USDA-ARS, Minor Crop Farmers Alliance, National Association of State Department of Agriculture and CropLife America. IR-4 also joined the National Coalition for the Funding of Agriculture Research (www.ncfar.org). These efforts have opened new doors in providing greater awareness of IR-4 and its funding shortfalls.

Additionally, PMC Chair John Wise, and I attended the first Supporters of Agriculture Research Foundation Congressional Agriculture Research Exhibition on April 5, 2017 at the Capitol Hill Visitor Center. IR-4 was one of 20 organizations competitively chosen to exhibit at this reception. Over 200 attended the reception, including Members of Congress, their staffs, USDA officials, commodity associations and the media. John and I were able to meet with and engage numerous visitors throughout the reception.

All for now, all the best — Jerry

Personalities in the News

2017 Nat. Recognition of Excellence Awards

The National Recognition of Excellence (NRE) Award is presented once every three years and is one of IR-4's most prestigious awards. Nominations are requested before the National Education Conference, where award winners receive this honor.

Nominations for the NRE award are submitted by peers, proving others really do notice work that is well done.

Nominees can be anyone associated with IR-4 except active members of the PMC. Nominees must show evidence of outstanding achievements that have resulted in a major positive impact on the IR-4 Project and go well beyond normal job responsibilities. This award is given only once to a person who cannot receive it again. The winners of this round of NRE awards are Sharon Benzen (Western Region ARS), Joe DeFrancesco (Oregon State University), and Kathryn Homa (Headquarters).



Sharon was recognized for taking on particularly difficult projects such as Prickly Pear

Cactus, where her research led to obtaining many new pest management tools for this very minor specialty crop. Sharon was also recognized for her research on other specialty crops that are valuable to her region and sharing her expertise with others through presentations and participating in IR-4 pilot programs.

Joe DeFrancesco was recognized for his tenacious support of the

growers in his region. For decades, Joe brought the needs of the growers to the Food Use



Workshops

and submitted PCRs on their behalf. Even in his semi-retirement, Joe keeps the needs of these growers at the front of IR-4 priorities. Joe has also been actively involved in IR-4 international capacity building projects and research within the Ornamental Horticulture Program.

Kathryn Homa's peers recognized her for her ability to keep them on track in



moving their studies forward. Her organizational skills and attention to details were highlighted as helping her peers bring excellent IR-4 submissions to EPA. Also noted were her frequent articles that she submits to the IR-4 Newsletter (see pg 9), all while she is pursuing a PhD. at Rutgers University.

All awardees were unable to attend the NEC but IR-4 Executive Director Jerry Baron made an announcement at the meeting where all received enthusiastic applause.

Congratulations to three deserving winners!

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Personalities in the News

Welcome

There are some new faces at IR-4. Celeste Wheeler is a new technician at the Trevor Nichols Research Center, in the North Central Region (NCR). She assists Tony VanWoerkom (FRD) in conducting field residue trials in fruit crops in the NC Region. In the last year she has been undergoing hands-on learning by contributing to test substance applications, calibrating research equipment, and completing spray calculations and GLP field data notebook documentation.



Also new to the North Central Region is Robin Chinnery. Robin joined the NCR in the summer of 2016 as an analyst. She brings with her a Bachelors in Chemistry and Biology from SVSU (Saginaw Valley State University). She will be finishing her masters in Environmental Sciences from U of Michigan, Dearborn, in May 2017. Robin has GLP experience working at Dow Chemical as an intern. She also worked at the Saginaw and



Ann Arbor water treatment facilities testing waste and drinking water. The new USDA-ARS National Program Leader is Joe Munyaneza. Dr. Joe joined ARS as National Program Leader for Specialty Crops



in Crop Production and Protection. He officially began his new position on November 14, 2016. Dr. Joe is nationally

and internationally recognized for his research in insect pests and insect-transmitted pathogens of potato and other vegetable crops, particularly psyllid and leafhopper-transmitted Liberibacter, phytoplasmas, spiroplasmas, and zebra chip disease of potato. He has authored over 200 scientific publications and made over 130 invited presentations at professional and commodity group conferences, symposia, workshops, and field days. Dr. Joe served as ARS IR-4 Liaison Representative for ARS Wapato location for more than 10 years and as the ARS Representative on the Administrative Council of Western Sustainable Agriculture Research and Education (WSARE) Program.

Not new to IR-4 but new to the position is Alvin Simmons who has taken on the role of Interim Coordinator for the ARS Program, where he is overseeing research in the field and laboratory. This position was filled by Paul Schwartz for over 40 years until his retirement in January 2017.

Alvin recently received the Southeastern Branch of the Entomological Society of America's Recognition Award in Entomology. He received this award at their annual meeting in Memphis, TN where he also presented a research paper on "Neem Effects on Whiteflies and Associated Natural Enemies in Vegetable Crops".



Sonny Perdue Confirmed as US Agriculture Secretary

Some good news is the April 25, 2017 appointment of the new US Secretary of Agriculture, Sonny Perdue. Sonny is a farmer himself and has a good understanding of farming issues. Zippy Duvall, President of the American Farm Bureau commented on his confirmation stating "... He is a real-world farmer himself and knows the business inside out. He understands the impact farm labor shortages, trade agreements and regulations have on a farmer's bottom line and ability to stay in business from one season to the next...But just like America's farmers and ranchers, I know Secretary Perdue isn't afraid of a hard day's work. We are confident he is the right man for the job at hand."

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Addressing Grower Needs

2017 Canadian Workshops – by Shirley Archambault, Na International Relations Officer

The Annual Canadian Biopesticides and Minor Use Pesticides Workshops were held this year from March 21 - 23, 2017 in Gatineau, Québec. Over 190 participants attended including growers from Canada and the US; registrants from Canada, US, Japan, Austria, Belgium, Brazil and Israel; provincial crop specialists and Minor Use Coordinators; Health Canada's Pest Management Regulatory Agency (PMRA) officials; as well as representatives from the US IR-4 Project, the Australian Government, the Brazilian Government, and Agriculture and Agri-Food Canada researchers and Pest Management Centre (PMC) staff. The purpose of these workshops was to select, through grower consensus, top insect pests, diseases, and weeds and the pesticide solutions for their control, and up to nine biopesticide products as candidates for registration in Canada.

Forty-three crop-pest priorities were selected by growers during the Minor Use Workshop including forty-one "A" priorities and two "A Priorities Without Solutions" (APWS) within pathology, entomology and weed science disciplines. Issues such as thrips, aphids, beetles, bugs, downy mildew, fruit and root rots and blights in various crops remain high priorities. The Minor Use Pesticides Program will now address these issues and work in partnership and collaboration with growers, registrants, researchers and federal regulators (PMRA) to improve grower access to new and effective pest management tools.

- by Shirley Archambault, National and Agriculture and Agri-Food Canada

> Furthermore, if similar priorities are selected by the US stakeholders at the Food Use Workshop, in September, some of the priority issues may be addressed as joint (US-Canada) projects.

> In addition to conventional tools, nine biopesticide products (three per discipline) were identified as priorities. The PMC, in collaboration with key stakeholders, then selected four products to receive regulatory support toward first time registration or major new use site registration through the Pesticide Risk Reduction Program (PRRP). This selection is made based on an analysis of potential impact for growers, needs within the industry as a whole, and other considerations. The PRRP facilitates improved grower access to reduced risk pest control products through its work with registrants, growers, and the PMRA, on first time registration of new biopesticides and major new use site category expansions of those already registered, and in its support for IPM projects which incorporate priority biopesticides into production systems for growers.

Pesticide Resistance Management Session

A special session on Pesticides Resistance Management was held in the afternoon of March 21st at the request of the grower community, with over 180 people in attendance. The purpose of the session was to provide a forum for information exchange and stakeholder discussions on resistance management issues and activities in Canada, and to identify

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key existing gaps (knowledge / technology) within the sector.

Each sector including growers, industry, regulators, and researchers presented a brief outline of their views on resistance management, highlighting some of the activities underway in each discipline: weed science, entomology and pathology. IR-4, represented by Dr. Dan Kunkel, provided an overview of the EPA Guidance for Pesticide Resistance Labeling and IR-4's efforts to provide tools to manage resistance in specialty crops.

Through questions and discussions, it became clear that there is a need for more resistance management tools such as resistance testing, interactive communication tools, simple label wording and establishment of monitoring thresholds. Manage- ment of tank-mixes and pre-mixes and integrating resistance management into IPM programs were identified as particularly challenging problems.



During the CropLife Reception, a farewell gift was presented to Dr. Manjeet Sethi who left the Pest Management Centre for a senior level position with Correction Services Canada. Pictured I-r Manjeet Sethi, Ian Gardiner (Minor Use Program Manager), and Jennifer Ballantine (Research Sites Manager).

If you wish to receive the lists of selected priorities, please contact Shirley Archambault at: Shirley.archambault@agr.gc.ca 🌿

Feature

The IR-4 National Education Conference (NEC) was held February 28-March 1, 2017 in Orlando, Florida. This conference is held every three years and provides unique opportunities for training and networking and insight for those working with Good Laboratory Practices (GLPs).



Matt Hengel (pictured) and Martin Beran from the Western Region opened the conference with their own brand of humor. As members of the Education and Training Committee, they have historically

provided some sort of comedic theater game show theme at the close of past conferences. This year, however, they were also tasked to provide some levity at the opening of the two-day event with a satirical glimpse into the inner workings of the conference.

Martin walked on stage to console a worried, frantic Matt, explaining that the planned pyrotechnics and music had been cut due to budgetary constraints. So without the bombastic opener they had initially planned, Martin began by bringing to light the hard work and concerted efforts of the Training Committee. Not wanting to miss an opportunity to poke fun at the official sounding agenda title, he offered up his own versions. Trying to keep the Florida locale in mind, he suggested draft agenda titles such as "Orlandon't Use Pencil" and "Orange You Glad You Have QA". Despite the sporadic laughter, they continued...

In keeping with the comedic tone of the agenda, Matt, who would also oversee the lab session, jokingly let fellow analysts know that there would be an uplifting mixer at nearby Sea World to counteract the "Difficult Projects" discussion, which many greeted with a little trepidation. Matt alerted lab personnel that they would have hands on "Sample Processing" of tomatoes, onions, avocado and lime to make salsa and guacamole. Finally, the GLP refresher in store for the lab folks the next day would not be the EPA regulations that they know and love; rather, it would be centered on everyone's favorite subject: desserts. Putting a new spin on the regulations, Matt announced that the GLPs he is talking about are "Good Looking Pies" and "Grease Laden Pastries".

Matt and Martin concluded the opening ceremonies by highlighting the newly opened "Compliance



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Ray Leonard, Leona Horst and Julie Coughlin discuss field-specific topics during the first afternoon roundtable session.

The IR-4 2017 Nationa

 Land" at nearby Disney World.
Fictional attractions such as the "Pirates of the Calibration",
"Equipment Loggers Run" and "Mission to Method Validation" awaited

conference attendees, rides that anyone who regularly adheres to the GLPs would no doubt enjoy.

Presentations following the

light-hearted opening ceremonies included topics on the "State of IR-4", "A look at IR-4 Process

Improvement", "International Activities", an "Update on eQA and the Master Schedule." In the afternoon, participants sorted themselves into breakout sessions for Lab, Field and QA/QC roles.

The morning session of day two included round table discussions, which consisted of each pre-assigned table having a mix of people who perform various roles at IR-4, such as lab analysis, field research, Study Directing and QA/QC duties. These discussions helped everyone understand the challenges others face within studies and the importance of good training for new folks and good communication. For example, one field researcher remarked that he had trouble with the sample size of avocados in one study because the avocados grown at his center in Puerto Rico are twice the size of those grown in other parts of the

— by Martin E QA Coordinate Hengel, WSR I Director and V HQ Assistant I



The Northeast Regionsession was held on hotel.



Peter Sturman, Martin Marylee Ross recap re discussions on the first conference.



Researchers I-r Alfre Torres and Jose Arc

Feature

I Education Conference

Beran, WSR or, Matt Lab Research Yan Starner, Director



on break-out the patio of the

country. The discussion helped him understand that variations like this are a normal part of the research process and that, by communicating with the Study Director, a solution may be found that resolves

the problem and preserves the integrity of the study. Day two continued with regional sessions for field researchers and separate sessions for laboratory and QA/QC personnel. These

sessions were followed by a general session where everyone came together to talk about what they learned.



n Beran and oundtable st day of the

Before the closing ceremonies, an unofficial survey was conducted to see how many years of "IR-4 experience" were represented at the meeting. The survey said: 1,257 years.

Winners of the National Recognition of Excellence Award were then announced.

This award is presented to those who are nominated by their peers and is given in conjunction with the NEC. Jerry Baron announced the winners, who are Sharon Benzen, Joe DeFrancesco and Kathryn Homa. Once again testing the intelligence of the participants, Matt and Martin presented a "bar trivia guiz show" at the close of the conference. Audience members tried their luck at answering questions on diverse topics such as 80's rock bands, "Croppy Photos", and "Metal Thingees". They also asked IR-4 related questions thinly disguised as Star Wars trivia, a subject near and dear to their hearts. "The Force" was with anyone who was selected, as they received a prize for simply attempting the question. Many were delighted to be quizzed on the finer points of the IR-4 program in such a roundabout, entertaining fashion. All told, Matt and Martin seemed to enjoy themselves while engaging their fellow IR-4 folks in such an unconventional way.

Most of those who participated in the end of conference survey stated they liked the roundtable and networking sessions best and were very satisfied or satisfied with the overall conference. Other "likes", "dislikes", and suggestions will be considered by the Education and Training Committee (E&TC) when they start organizing plans for the next NEC (early 2020).

IR-4's Education & Training Committee



Van Starner, Chair John Wise Roger Batts Martin Beran Sharon Benzen Robin Federline Tom Freiberger Dan Heider Matt Hengel Will Meeks Sherri Novack Marylee Ross Ken Samoil Peter Sturman

View more conference photos on pg 11



Survey responders liked the networking opportunities the most and the weather in Orlando was perfect for outside conversations between Roger Batts (I) and Ray Leonard.



edo Rodriquez, Wilfredo Robles, Luis Almodovar, Salvador Chava cho joined together for a quick photo opportunity.

Spring Forward for Fall

– by Cristi Palmer, IR-4 Ornamental Horticulture Manager

It is currently late spring, so it seems a little unusual to be talking about fall color but growers are already producing plants for fall color. Autumn in most parts of the US brings spectacular color to foliage as temperatures drop and chlorophyll breaks down to reveal yellow, orange and red foliage. But leaves are not the only showy plant feature in autumn. Flower color during fall is often associated with chrysanthemum, but several other perennial plants bloom during this time. Two other fall-flowering composites are aster and sneezeweed.

Asters

Aster flowers range in color from white to shades of pink and purple. For many years, the Latin genus *Aster* had close to 600 species in Eurasia and North America, but now almost all of the native asters in North America have been reclassified to new genera by plant taxonomists, based on the genetic similarities and differences among these species. The well-known New England aster is now named *Symphyotrichum novae-angliae*.

Aster are prone to several foliage diseases including leaf spots (*Septoria, Alternaria, Cercospora*), rust (*Coleosporium asterum*), and powdery mildew (*Erysiphe*



cichoracearum). The flowers are susceptible to Botrytis blight, and the stems and roots can be infected by various pathogens including *Fusarium*,

Photo by Cristi Palmer

Verticillium, Sclerotinia, Pythium and *Phytophthora.* Common pests include aphids, lace bugs, leaf miners, scales, spider mites, thrips, and whiteflies.

Asters attract butterflies, and the larvae feed on aster foliage.

Sneezeweed

The story of how this flower native to the Americas received its common name is not particularly clear. Some sources indicate this common name is based on Native Americans drying the leaves for snuff to rid the body of evil spirits. Other sources indicate Native Americans used dried flower petals and used them to prevent hay fever. Native Helenium autumnale typically blooms from late summer until frost, but many modern cultivars are hybrids with other Helenium species and may bloom earlier in midsummer. Helenium flowers can be shades of gold, yellow, orange and red-orange.

Helenium tends to be pest free with occasional issues caused by aphids, leafhoppers and spider mites. Similar to asters, the common disease problems include fungal leaf spots, powdery mildew, root rots, and rust. Slugs, snails and nematodes can also feed on Helenium.

Fun Fact

In the early 20th century after World War I, Hungary's monarchy was overthrown in the 'Aster Revolution'; it garnered this name because the dissident soldiers wore asters.



Photo Credit: Downloaded from J. Parkers Dutch Bulbs Ltd. Website on 4/27/2017.

Paul continued from first page

developing crop safety and efficacy data, funding for the initial research activities at the state universities was provided by Paul via ARS cooperative agreements.

Through the years, Paul has always found ways to reinvent himself and embrace new technology. Alvin Simmons shared this anecdote about Paul. "After a field tour in conjunction with an ARS IR-4 Liaison Meeting, we drove towards a restaurant where Paul had made a dinner reservation. Because we were a little behind schedule, Paul called to update the restaurant on our status. Based on the GPS details on his cell phone (a feature newly available to mobile phones at that time), Paul told the restaurant that we will arrive in 13 minutes. We arrived exactly as Paul had declared. I was impressed, and I respected both how Paul embraced the new technology and how he used it to precision."

Paul retired in January 2017. He is anxiously awaiting the 2017 growing season for his home garden and has a few wood working projects lined up. He plans on enjoying his family in retirement, too.

Congratulations, Paul! 🏓

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DelVal Gets Schooled By

IR-4 — by Kathryn Homa, HQ Associate Coordinator and Van Starner, HQ Assistant Director

In April, IR-4 Project's Kathryn Homa and Van Starner took a quick break from Rutgers University to visit another important agricultural college in the Northeast: Delaware Valley University (DelVal). Why leave Scarlet Knight territory to spend a day with the Aggies? Well, as a ten year alumna of DelVal, Kathryn enjoys returning back every spring to teach students enrolled in the Integrated Pest Management (IPM) class about the value of the IR-4 Project and how it helps to promote IPM strategies.

Founded in 1896 in Doylestown, PA as The National Farm School, DelVal focuses on a combination of academics, real-world experience and hands-on learning in the laboratory, field and greenhouse. Today, the 1,100 acre campus is home to over 2,000 undergraduate and graduate students. There are a number of agriculture degree programs offered including Agribusiness, Crop Science, Horticulture, Turf Management and Sustainable Agriculture Systems.

Dr. Jacqueline Ricotta, Professor of Plant Science, serves as an integral part at DelVal by teaching many important agricultural courses including Integrated Pest Management, Sustainable Agriculture, Organic Food and Fiber, Commercial Vegetable Production and Horticultural Marketing. Her classes are unique and include both field trips and guest lecturers from industries, universities and businesses. She also invites graduates of DelVal to lecture about their careers. This provides students with opportunities to learn more about the vast array of agricultural careers.

Since there are different aspects of the IR-4 Project, Van and Kathryn split the lecture into two parts. Van provided a summary of IR-4 history, its purpose, its relationship to IPM, how it is funded and organized, and a short description of the food, ornamental horticulture, biopesticide and public health programs. This was no small feat since there is a lot of information to cover in a short period of time. Students learned that IR-4 is the only publicly funded program that conducts research and submits petitions to the Environmental Protection Agency requesting approval of new tolerances and registration of new uses that can be used as pest management "tools" by growers.

Van also emphasized how IR-4 promotes IPM activities. One of these strategies includes focusing on the registration of new chemistries and biologically-based products that are classified by EPA as reduced risk. Reduced risk products are important to IPM since they impose less risk to human health and the environment by targeting specific pests and are applied at lower application rates with fewer applications. By conducting residue studies on reduced risk compounds, IR-4 is aiding in providing replacements of older chemistries such as organophosphates. In fact, since 2000, approximately 80 percent of IR-4 research has involved reduced risk products and chemistries that are compatible with pollinators.

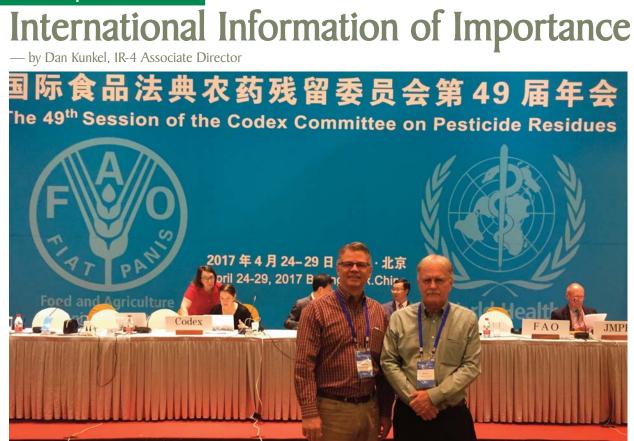
Kathryn then provided a brief overview of the benefits of pesticides, how they're regulated, and how tolerances are determined

and approved. Since IR-4's focus is on specialty crops and minor uses, Kathryn brought various crops and played the game "Specialty or Not". The game involved guessing the identity and the US acreage of the crop. Students were fascinated to learn that more than 25 states derive more than 50% of agricultural crop sales from specialty crops. There was also a discussion regarding how pesticide residues relate to a crop's surface area to mass ratio. The concept of crop grouping was also discussed. The final part of the lecture took a closer look into the IR-4 food use process and the detailed work that is completed and submitted in order to help secure a pesticide tolerance.

This lecture was important for various reasons. It taught students about the importance of pest management tools in specialty crops and specialty uses and the scientific process behind obtaining those tools. By the end of the lecture, students realized the importance IR-4 has on agriculture. In fact, the IR-4 lecture is so important that students are tested on the IR-4 material during their final exam!

IR-4 graduates of "DelVal" include Tom Freiberger, a Field Research Director and Ornamental Horticulture Program researcher located in Cream Ridge, New Jersey and Megan James, a Field Research Assistant to Marylee Ross, a Field Research Director at the University of Maryland.

If you would like additional information about Delaware Valley University, please visit the following website http://www.delval.edu or contact Dr. Ricotta at jacqueline.ricotta@delval.edu.



As the deadline for this article approaches, I am in China attending the 49th Session of the Codex Committee on Pesticide Residues (CCPR); the Global Minor Use Summit-3 has been announced with planning well underway, and Agriculture Secretary, Sonny Perdue, has just been confirmed and took office. All these events and activities are important for domestic growers in protecting their crops and having healthy markets for their crops, which in turn supports their own local rural economies.

The 49th Session of CCPR has given domestic growers more trading opportunities as the committee approved more than 488 MRLs on 26 different pest control products. Currently more than 30 countries use Codex pesticide standards for trade. Another great success at this year's CCPR meeting was the final adoption of updates to all Vegetable Types and Cereal Grains classification. This includes the identification and implementation of representative crops that can be used to support all of the related crops within a crop group. IR-4 has been coordinating Codex efforts to update the classification and incorporation of crop grouping for more than 10 years. This latest installment on vegetable types and cereal grains, along with the fruit types approved in 2012, account for a majority of the crops considered by IR-4 and US growers. The remaining crops include unique crops such as cacao, coffee, sap from trees (such as maple), herbs, and spices. Hopefully these remaining crops will be covered in the next few years and the project will come to a conclusion.

Meanwhile, the Organizing Committee for the 3rd Global

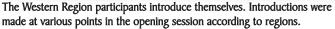
Minor Use Summit is preparing the program for the meeting. GMUS-3 will be held October 1 through 4 in Montreal, Quebec, Canada with a theme of Filling the Grower Tool Box: Developing Strategies for Specialty Crops and Minor Use Programs and Harmonization. This Summit will delve further into Global Minor Use issues. The two previous summits highlighted the need for greater global cooperation to solve minor use priorities and noted that specialty crop growers around the world seek harmonization of pesticide standards and regulations. This summit will continue to reinforce these relationships and the cooperative work, but will provide a greater focus on policy issues that can support minor uses and specially crop grower needs. For example, greater acceptance by regulators of data sharing that can make the best use of limited resources.

continued on next page

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National Education **Conference** Photos







NER break-out session. The day was too nice to hold this indoors.

The summit program will focus on three themes: Policies that Support Minor Uses, Capacity Building, and Minor Use Challenges for Growers and Industry. Presentations will include perspectives from the point of view of regional regulatory experts, growers, Crop Life members, the biocontrol industry and other minor use stakeholders. The program will look to attendees, through several break-out groups, to discuss and identify key actions that can be used to develop a new Work Plan to guide future cooperation and work.

The last day of the summit will be devoted to the Second Global Minor Use Priority Setting Workshop with the goal of

discussing progress with the current priorities identified at the 2015 workshop and establishing new Minor Use priorities for future work. A survey will be sent to stakeholders in the coming weeks and used for the basis of setting the priorities at the meeting.

Registration and more information regarding the summit can be found at: gmup.org/GMUS3.html. By the time you read this article, I will be back in New Jersey and we will be putting the final touches on the Summit program. With only four months to the summit, I do hope you consider joining us and contributing to this important meeting and participating in the effort. 💋



Christophe Deckers, from Agilent Technologies Presents What You Don't See CAN hurt you



Table discussions included IR-4 personnel from different job tasks sharing things they have found worked, haven't worked, and together, discussed solutions that could be applied.



PMC Chair, John Wise, reported on the "Quest for Improved Process Efficiencies".

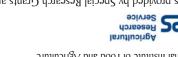
Princeton, NJ 08540 W 102 stiu2 500 College Road East of New Jersey Rutgers, The State University IR-4 Headquarters,



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institution is prohibited from discriminating on the basis of race, with Federal Law and U.S. Department of Agriculture policy, this Agricultural Experiment Stations, and USDA-ARS. In accordance Hatch Act Funds from USDA-NIFA, in cooperation with the State Major funding for IR-4 is provided by Special Research Grants and





color, national origin, sex, age or disability.

2017 Ornamental Horticulture Workshop October 17 (tour) October 18-19, 2017 priority setting, San Diego, CA

Montreal, Quebec, Canada

GMUS-3 October 1-4, 2017

September 20-21, 2017 Denver, CO

East Lansing, MI 2017 Food Use Workshop

Contact: Michelle Smuel-Foo with questions at mfoo@ufl.edu NCR Priority Setting Meeting August 21-22, 2017

10am ET, the second TBD.

SOR will have 2 conference calls

for priority setting. The first will be held Tuesday, June 13, 2017 at

Calendar of Events

Federal Register: January 18, 2017 Acequinocyl Trade Name: Kanemite Crop: Avocado, Dry bean, Tea, Fruiting vegetable group 8-10, Cucurbit vegetable group 9, Citrus fruit group 10-10, Pome fruit group 11-10, Cherry subgroup 12-12A, Tree nut group 14-12 P**R#:** 09218, 08675, 11706, 11804, 08608, 11801, 11802, 11800, 11803

Tolerance Successes

First Quarter 2017

Federal Register: March 22, 2017

PR#: 10364, 10641, 10731

Trade Name: Pyroxasulfone

Crop: Sunflower subgroup 20B

Federal Register: April 18, 2017

Crop: Root vegetable except sugar beet subgroup IB

Cyantraniliprole

Pyroxasulfone

PR#: 10932

Trade Name: Exirel