

The IR-4 Project



2007
Year In Review

Our Mission.

The mission of the IR-4 Project is to provide safe and effective pest management solutions for specialty crop growers.

Our Vision and Guiding Principles.

To achieve this mission, the IR-4 Project provides domestic growers of specialty crops with safe and effective crop protection tools to economically produce crops that enhance the diet and lifestyle of the public, while respecting the environment. In pursuing this mission, the IR-4 Project will be guided by the principles of transparency in decision making, partnership and teamwork in achieving objectives, and excellence in service to all stakeholders.

Our Beneficiaries.

- ◆ The primary beneficiaries of the IR-4 Project are the growers of food and non-food specialty crops as well as food processors.
- ◆ The general public also benefits from the efforts of the IR-4 Project. The public has access to a healthy and diverse food supply at a reasonable cost. Specialty food crops include fruits, vegetables, herbs and nuts that nutritionists recommend as essential for a balanced and healthy diet. The non-food ornamental crops, which IR-4 work helps to sustain, enrich the environment and improve the quality of life.

A message from IR-4's Executive Director...

Dear Friends,

On behalf of the IR-4 Project Management Committee (PMC), I want to thank you for your hard work and continued support, which allows IR-4 to carry out its mission of providing growers of specialty crops legal access to safe and effective pest management products. 2007 was another active year with a number of accomplishments and considerable challenges. I am happy to report that once again IR-4 efforts produced a significant number of "deliverables" to growers.

2007 accomplishments include:

- US EPA established **203 permanent tolerances** and **five exemptions** based on IR-4 submissions. These decisions support **628 new specialty crop use registrations** for conventional and reduced risk pest control products and **19** for **biopesticides** for a total of 647. Though this number of registrations in 2007 is sizably less than the all-time records experienced in 2006 (804 for conventional/reduced risk products, 306 for biopesticides) the impact to growers is relatively similar. In 2007, new use registrations were spread over 33 pest control products, while in 2006, successes focused on only a few active ingredients.

- IR-4 assisted Dow AgroSciences with the registration of the new reduced risk insecticide **spinetoram** on almost all of the crops where a similar product, **spinosad**, is already registered.

- EPA published the **Final Rule** for two **expanded crop groups** and one **new group**. Publications included an expanded **Bulb vegetable group 3**, an **expanded Berry and small fruit group 13** and the establishment of a **new Edible fungi group 21**. The decision for these crop groups will significantly increase the number of additional registrations for crops in these groups.

- The IR-4 Quality Assurance Unit **audited 106 final reports**; a new yearly record. These allowed submission of 157 tolerance petitions for conventional and reduced risk pest control products that will be reviewed and hopefully registered in 2008/early 2009.

- IR-4 placed in the field **644 trials** associated with **95 high priority studies** on food crops to support eventual registration of conventional/reduced risk pest control products to answer specialty crop grower pest management needs.

- 2007 was the first year the Canadian Minor Use Program served as sponsor and study director in joint residue studies.

- The Biopesticide Grant Program funded **five Early Stage**, **19 Advanced Stage** and **13 Demonstration Stage** projects. These were conducted at 21 universities and USDA research centers. The research involved 30 scientists and nearly 100 product-crop combinations. EPA co-funded and co-reviewed the demonstration stage grants. EPA also provided additional resources to support **three Technology Transfer Projects** associated with the demonstration projects to further develop the extension phase of those projects.

- Working with funding provided through an US EPA Region 2 grant, IR-4 created and posted on its website, a **Biopesticide and Organic Label Database** for Integrated Pest Management practitioners.

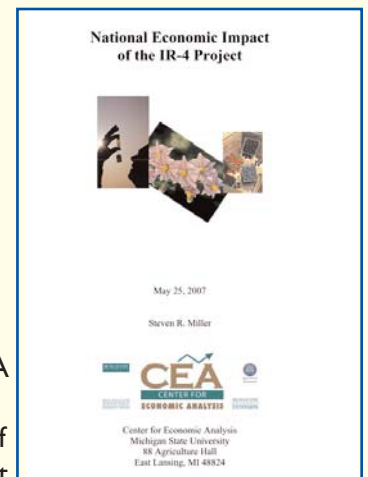
- IR-4 submitted **8 Ornamental Horticulture data packages** to registrants; **2 summaries on efficacy and 6 on crop safety**. These comprehensive data packages contained results from 1658 field trials managed by IR-4. These IR-4 summaries enabled registrants to make registration decisions on at least 15 products. In some cases, registration decisions were made 1 to 2 years earlier than otherwise possible; for other products, decisions to not register the uses were made.

- The IR-4 Ornamental Horticulture program conducted nearly **1246 trials with greenhouse and field ornamentals crops**. These will support recommendations in 2008/2009.

- The Center for Economic Analysis at Michigan State University published an economic analysis of IR-4 Project activities and concluded that **IR-4 contributes \$7.7 billion to the annual gross domestic product**.

- IR-4, working alongside the USDA- Foreign Agricultural Service, US EPA and the Food and Agricultural Organization of the United Nations, brought together nearly **250 people from 56 countries to participate in the first Global Minor Use Summit**. The Summit initiated a dialogue among countries toward the concept of working together to solve the minor use problem on a global basis.

Perhaps, the greatest achievement in 2007 came with help from our stakeholders, when IR-4 had to navigate





through one of the most challenging financial situations in the Project's 44-year history. This challenge resulted from Congressional mandates which changed how USDA funds were administered. These changes could have resulted in a 25% reduction of IR-4 funding, as well as created delays in the distribution of IR-4 allocated funds. IR-4 thanks the members of the IR-4 Commodity Liaison Committee (CLC), the Minor Crop Farmers Alliance (MCFA), the crop protection industry (including representatives from CropLife America) as well as many other IR-4 Project "Champions" who work hard to obtain resources for the program. Thanks also go the USDA Administration and staff who worked diligently to find ways to work through the new funding system to distribute IR-4 funds as quickly as possible.

In addition to the funding challenge, IR-4 along with industry, continues to work to implement the provisions of the Pesticide Registration Improvement Act of 2007 (PRIA II). The new provisions are more complicated and cumbersome when IR-4 submits data packages. However, the tradeoff is positive; IR-4 packages are reviewed by EPA within an extremely rapid time frame, where most decisions are made in less than one year.

In sharing these accomplishments, IR-4 recognizes the funding contributions from USDA-CSREES, USDA-ARS, the State Agricultural Experiment Stations (SAES) who provide off-the-top Hatch funding, and the specific SAES's that host IR-4 field centers, regional offices/analytical laboratories, national headquarters and associated personnel. Additionally, IR-4 recognizes the joint EPA/PMRA review program, the CDPR for their continuing review of IR-4 petitions for EPA, and the crop protection industry, whose grants and technical support are critically important to our work.

Looking ahead

As we look forward, 2008 is shaping up to be another remarkable year. IR-4 is planning on conducting 576 field trials that cover 84 high priority studies. While this is less than the 100 studies conducted in previous years, the cut-back was considered necessary due to rising operational expenses and six years of stagnant funding. Fortunately, in late December, Congress passed the 2008 fiscal year budget that includes an approximate \$700,000 increase in CSREES IR-4 funds over fiscal year 2007. The increase is projected to fund IR-4 at \$11.38 million, and will allow IR-4 to again target work on 100 high priority projects in 2009.

IR-4 anticipates processing (review, write, audit) and submitting approximately the same number of data packages and crop grouping proposals to EPA in 2008 as were submitted in 2007. IR-4 also anticipates there will be more than 600 new specialty crop registrations approved by EPA in 2008, allowing for a similar number of deliverables in 2009.

In 2008, IR-4's PMC will continue its review of the overall IR-4 infrastructure to determine how the program can improve its efficiencies and relevance to growers and stakeholders. This review will be used to formulate the next IR-4 Strategic Plan for 2009 and beyond.

In closing, the IR-4 PMC again thanks our friends and partners at EPA, USDA, the crop protection industry, the SAES, the IR-4 CLC, MCFA and our many global minor use associates for their cooperation and support. Their support allows IR-4 to continue to provide its primary stakeholders, specialty crop growers, with access to pest control products. This could not happen without the considerable work achieved through IR-4 personnel at field sites, in the laboratories, in the quality assurance units, and those directing studies and managing the overall program.

I truly feel honored to work with such a group of dedicated and professional individuals.

Jerry J. Baron
IR-4 Executive Director



About IR-4.

For over forty years, the IR-4 Project has been the major resource for supplying crop protection tools for specialty crop growers. IR-4 is a highly effective, collaborative effort among the state agricultural experiment stations, CSREES, the USDA Agricultural Research Service (ARS), the U.S. Environmental Protection Agency (EPA), commodity growers, and the crop protection industry. IR-4's mission is to facilitate the availability of EPA-registered, safe, and effective pesticides for specialty crop growers.

Specialty crop growers produce high-value, small-acreage crops. In the U. S., 26 states derive more than 50 percent of their agricultural crop sales from specialty crops. These include food crops such as fruits, vegetables, nuts, and herbs and nonfood crops such as turf and ornamental landscape plants. These crops have a value of approximately \$45 billion, or about 33 percent of the total U.S. farm crop value. In many cases, the agricultural chemical industry cannot justify the time and expense required to research much-needed crop protection products on these high-value crops, therefore IR-4 stands in the gap to fulfill this research.

The success of the IR-4 Project is proven and can be measured in its development of data to support over 20,000 food use and ornamental horticulture label clearances.

Funding for IR-4 comes from CSREES, ARS, and from state agricultural experiment stations (SAES). IR-4 Headquarters is associated with the NJ Agricultural Experiment station at Rutgers University. Each state has an IR-4 state liaison at its land-grant university. Four regional IR-4 research centers and analytical laboratories are maintained at Cornell University/NY SAES at Geneva, Michigan State University, University of California-Davis, and University of Florida. There are numerous field research centers. The ARS minor use program is an integral part of IR-4, supplying data through its own field and laboratory facilities.

Since 1977, IR-4 has assisted with the registration of protection chemicals and biological pest control agents on nursery stock, flowers, and turfgrass. The ornamental industry accounts for more than 35 percent, or \$16 billion, of the total minor crop value in the United States. Additionally, biopesticides have been an important IR-4 focus since 1982. The IR-4 Biopesticide Program assists small companies, USDA, and university scientists by consulting and preparing regulatory packages to obtain registration of microbial and natural products. The primary objective of the IR-4 Biopesticide Research Program is to further the development and registration of biopesticides for use in pest management systems for specialty crops or for minor uses on major crops.

The Strategy.

IR-4's strategy in assisting specialty crop growers includes:

- Facilitating regulatory clearance of lower or reduced risk crop protection products for specialty crops.
- Assisting, when appropriate, in the development of risk mitigation measures for existing minor use registrations
- Assisting with the registration of biologically-based crop protection products for specialty crops.
- Registering and maintaining products essential to Integrated Pest Management (IPM).

The cornerstone of the IR-4 Strategic Plan has been to focus projects on lower-risk products. More than 80 percent of IR-4 efforts focus on lower-risk products.

The 4-step Approach.

IR-4 receives requests for assistance from growers, commodity groups, and research and extension personnel. In responding to these grass-roots needs, IR-4 leads the coordination and focus of generating data to support the regulatory clearances of crop protection chemical and biological products for food crops through the EPA. IR-4 also coordinates efforts to generate efficacy and crop safety data to support chemical and biological crop protection products for ornamental horticulture crops. To accomplish this, IR-4 has developed a **4-step approach**: **1.** Research prioritization **2.** Research planning **3.** Research implementation and **4.** Data submission and approval

Step 1. ARS and University research is prioritized through annual workshops involving growers, commodity organizations, university research and extension specialists and EPA staff who collectively determine the project priorities based on the importance of the pest and the ability of the control tactic to manage the pest. Prior to and during the workshops, IR-4 industry partner representatives are consulted to confirm their support for adding new specialty crop uses to their product labels.

Step 2. research planning is accomplished when research protocols are drafted, sent out for review by stakeholders and Field Research directors, revised to integrate comments received, and issued as a final research protocol.

Step 3. for food crops, research is implemented in two phases — field and laboratory research. During the field phase, researchers apply the crop protection agent to the target crop according to the specified protocol. Samples of the crop are harvested and transferred to the laboratories, where crop matrices are analyzed for potential residues. All field and laboratory research is conducted under EPA Good Laboratory Practices. For non-food specialty crops (i.e. ornamental plants), Step 3 is accomplished with field and/or greenhouse research on the targeted crop or for a specific disease, insect, or weed.

Step 4. for food crops, IR-4 critically reviews the field and laboratory data, drafts formal regulatory packages, and submits reports for the research study to EPA for review. EPA will review the reports and, if appropriate, approve the registration of a particular chemical on a specialty crop by establishing a maximum residue limit, or tolerance. For ornamental horticulture crops, IR-4 prepares summaries of the research conducted. These summaries are sent to each manufacturer who in turn uses them to register new products or expand existing labels. These summaries, along with the researcher's reports are posted on the IR-4 website.

Fieldwork for food use and ornamental horticulture is coordinated by State Field Coordinators at CA, FL, MI and NY and by ARS at MD for various sites throughout the U.S.. For food crops, these sites meet specific EPA requirements for geographic distribution of data. Most field research on food crops is conducted at field research centers in AZ, CA, CO, FL, GA, HI, ID, IL, ME, MD, MI, NJ, NM, NY, NC, ND, OH, OR, SC, SD, TN, TX, WA, and WI. All sites are subject to EPA inspection. For ornamental crops, IR-4 generates data with researchers in 31 states.

IR-4 laboratory analysis are conducted primarily at the CA, FL, MI, and NY agricultural experiment stations and ARS laboratories in GA, MD, and WA. Protocol development, data assimilation, petition writing, and registration processing are coordinated through IR-4 Headquarters, the crop protection industry, food processors, and state and federal regulators.

2007 Regional Highlights.

The Northeast Region (NER) successfully completed another year of work in support of the registration of pest management tools. Among the trials conducted in the northeast were two for chlorantraniliprole/cranberry, a pilot study for US/Canadian joint projects. In the past, Canadian researchers have conducted numerous trials under the direction of IR-4. This year it was our turn to conduct studies under Canadian Study Directors, using their protocols and data books. Although there are some differences, Marty Sylvia, the NER Field Research Director, had no problems adapting to them differences. Sheryl Lonsbury, the Canadian Study Director visited the UMass Cranberry Station to observe the harvest first-hand and discuss the project with Marty, Edith Lurvey, Regional Field Coordinator, and Barb Anderson, Regional QA Coordinator.

Another IR-4 success of note was 2007 being the first year in many in which there were no Section 18 Emergency Use Exemptions issued on fruits or vegetables grown in MD. This is a direct result of IR-4 obtaining registrations for needed products. Marylee Ross IR-4 Field Research Director at the Lower Eastern Shore Research & Extension Center, University of Maryland, hosted the IR-4/EPA/USDA Field Tour. This year, the theme was "Something's A Buzz on the Eastern Shore" to tie in with the USDA "National Pollinators Week". The focus was the vital role pollinators play in agriculture and the impact of Colony Collapse Disorder (CCD) in honeybees. Maryland's Secretary of Agriculture, Roger Richardson joined the tour and addressed participants during lunch. Several bee and minor crop experts from the Delmarva spoke of their work on specialty crops and CCD, including: Sam Droege, native bee expert of USGS; Galen Dively, UMD; Michael Embrey, UMD Apiculturist; and Dewey Caron, bee expert at University of Delaware.



Maryland's Secretary of Agriculture, Roger Richardson.

Marylee also hosted a visit from Australian researchers who are developing a program in their country modeled after the IR-4 Project. Daniel Quinn and John Macdonald, Australian Minor Use Liaison Officers, accompanied by Jerry Baron, toured the Salisbury facility as an example of an excellent IR-4 center. Along with visiting the facility, research procedures and GLP compliance were discussed. Ed Beste, Maryland IR-4 Liaison, arranged a tour of Chesapeake Nurseries for an overview of their ornamental production business.



NYSAES event participants enjoyed an up close view of butterflies and the plants that attract them. Photos by Joe Ogradnick, NYSAES

NER actively participated in the 125th Anniversary of the New York State Ag. Experiment Station (NYSAES) .

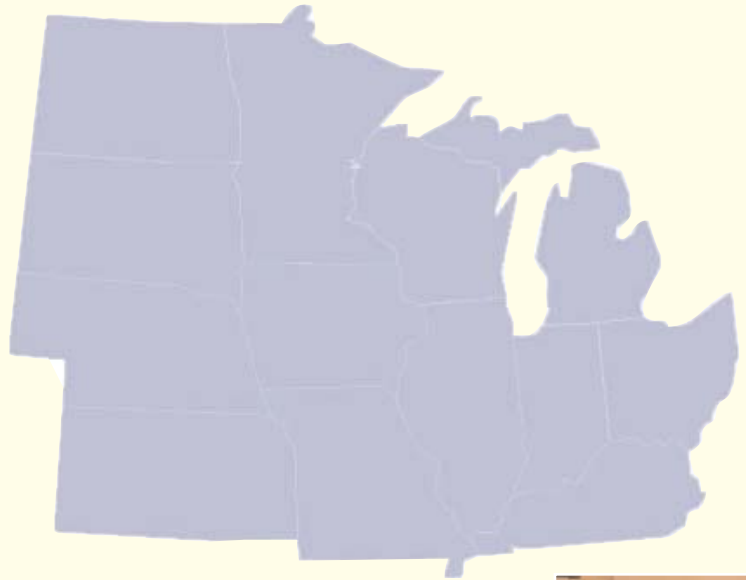
Todd Mervosh joined NER as State Liaison for Connecticut. Todd has been associated with IR-4 for several years,

conducting ornamental horticultural weed science work with John Ahrens at the Connecticut State Ag. Experiment Station, Windsor, CT. Jennifer D'Appollonio has joined Dave Yarborough as technician, and will be picking up some responsibility for the IR-4 trials conducted by Dave. Chris Lam joined NER as Regional Laboratory Coordinator in April, replacing Pim Kovach who retired in January. Melissa Bonham resigned as Field Research Director for the IR-4 Field Center at Rutgers Agricultural Research and Extension Center (RAREC), Upper Deerfield, NJ. Larry Rossell, another cornerstone of the IR-4 program at RAREC retired in December.



North-east Region.

North Central Region.



2007 Michigan IR-4 Conference

A Michigan IR-4 Conference was held on March 20, 2007 at Michigan State University. The meeting focused on Michigan agriculture, where 50% of farm gate receipts come from specialty crops, like apples, blueberries, cherries and zucchini, to name a few. Michigan is second only to California in crop diversity and is a major processing state. The purpose of the meeting, which was targeted to Michigan policy-makers and stakeholders, was to increase awareness of the state's rich variety of agricultural crops, examine projections for economic opportunities, learn about pests that stress these crops and discuss IR-4's importance as it relates to pest management in Michigan agriculture.



NC IR-4 Field Research
Director, John Wise

Presenters varied from MSU researchers, IR-4 representatives, specialty crop growers and representatives of the agrochemical industry. Over 50 people registered for the meeting and five participants received Michigan Department of Agriculture pesticide recertification credits to renew their applicator credential.

2007 Ginseng Research Field Day

The 2007 Ginseng Research Field Day was held on August 16 in Marathon County, Wisconsin a location uniquely situated in specialty crop culture, because it produces 90% of the cultivated American ginseng grown in the United States. IR-4 plays an important role in ginseng pest control. Over 50 growers, industry representatives, policy makers, and researchers were in attendance on what turned out to be a beautiful day. Dr. Mary Hausbeck and staff from the Department of Plant Pathology, Michigan State University, highlighted the ongoing research trials in the various ginseng gardens of the cooperating growers. At the first stop, growers observed results of a trial testing registered and nonregistered fungicides for control of *Alternaria* leaf blight; the importance of having effective control methods were reviewed. Growers viewed the on-going IR-4 fenamidone and pyrimethanil residue plots, and fungicides currently in the IR-4 pipeline were discussed. At the other stops, growers observed the efficacy and phytotoxic results of candidate herbicides in various test plots. The final stops highlighted the effects of various foliar fertilizers on ginseng development and included a look at a garden infested with the economically important root rot pathogen, *Cylindrocarpon*. The Wisconsin and Michigan ginseng industries have struggled with disease issues and growers appreciate the assistance of IR-4 in helping them find solutions.

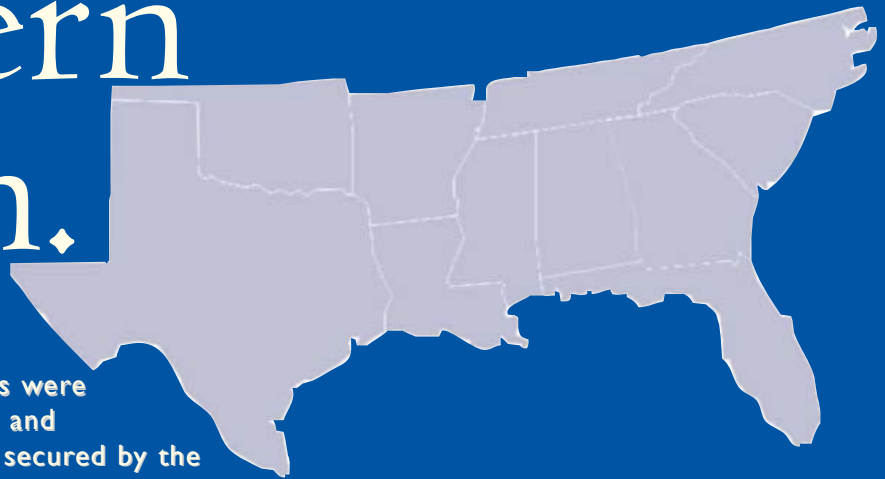


Ginseng seed

2007 IR-4 North Central Region Meeting

2007 IR-4 North Central Region Meeting was held at MSU Trevor Nichols Research Center, Fennville, Michigan on August 13-14, 2007. IR-4 state liaisons, NCR field research center directors, NCR Regional Center personnel, NCR Administrative Advisor (Doug Buhler) and Dan Kunkel, IR-4 HQ were present. Sylvia Morse, MSU was presented with IR-4 Award for Outstanding Technical Service.

Southern Region.



In 2007, five IR-4 Field Research Centers and two private consultants were assigned 114 residue research trials and completed 107. The EPA tolerances secured by the National Project will lead to 474 new and expanded pest control product labels for the Southern Region.

Funding delays made 2007 a difficult year, and funding uncertainties together with weather extremes made this a very challenging year for the Southern Region.

At the North Carolina State University IR-4 Center, the "Easter Freeze of 07" practically wiped out all fruit production in the state and forced the researchers to find creative solutions for their trials. Blueberries were borrowed from a researcher at Castle Hayne, apple trials at Clayton were relocated to a different variety, and all four peach trials were lost (three of these were moved to 2008). Even after moving trials, and borrowing crops, there was concern about the amount of fruit that would be produced in the relocated plots. Fortunately, the researchers were able to collect the required samples.

Drought also played a significant role in IR-4 activities at Clinton, NC. Irrigation sprinklers were almost always running on some portion of the station all season. This required much coordination with GLP protocol intervals and the station's irrigation schedule.

Nevertheless, the IR-4 Southern Region Pilot Program expanded research activities by encouraging and supporting over eighty scientists in every Southern Region state to evaluate pest control products. Forty of the 90 projects being researched in year 2008 were identified in requests submitted through the Southern Region. Every state in the southern region participated in the Ornamental Survey to provide a majority of responses reviewed at the workshop to set priorities for future research. Over 250 ornamental trials were planned or completed in 2007. Seventeen of 39 Biopesticide research projects for 2007 are being carried out in the southern region. Twenty nine of the 63 Biopesticide research proposals submitted to IR-4 for year 2008 research funding came from the southern region.



NCSU IR-4 Field Research Director, Roger Batts is rating onions in his fields.

Two centers experienced a personnel change. Mr. David Studstill replaced Berry Tanner, at the University of Florida, and visited Roger Batts for hands-on experience. Both indicated interaction during on-site visits is extremely valuable and more visits should be encouraged. In Homestead, FL, Jonathan Crane's field assistant has retired and a replacement is being sought.

Kathleen Knight was appointed Quality Assurance Officer. All required on-site visits and reports for 2006 and 2007 were completed by the end of the year.

The facilities at North Carolina and Tennessee were audited by EPA and passed inspection.

Western Region.

Each year is a cycle of unique events that characterizes a revolution around the sun. For those involved with specialty crops, this progress around the sun runs in tandem with managing the multifaceted IR-4 program. In 2007, the Western Region was occupied with planning, training and implementing the IR-4 Project's lab, field and GLP activities.

The year's cycle started in the far west locale of Hawaii where lab, quality assurance and field personnel attended a GLP training session. With the capable and generous help of IR-4 colleagues in Hawaii, the training session addressed crop residue trials, residue analysis, and GLP compliance. The training culminated with an agricultural tour that highlighted Hawaii's unique agricultural crops and pest control issues.

One challenging aspect of the 2007 IR-4 cycle was the transition of three Field Research Director (FRD) positions. The UC Davis, Kearney and Washington State University, Prosser field research centers all have new and eager field research directors working diligently to master GLP study conduct.

Along with the cyclical changes of ongoing field research, the field program conducted its annual State Liaison Representative (SLR) meeting. This meeting, hosted in 2007 by IR-4's Colorado State Liaison, Sandra McDonald, has come to characterize the Western Region's forward looking aspects where stakeholders provide us with key insights about their individual state's pest control needs. The SLR meeting is the first step in preparing for the annual IR-4 Food Use Workshop (FUW). The Western Region's Priority Setting Tool (wrir4.ucdavis.edu/pst/default.html) was utilized to synthesize a prioritized list of projects. The relationships fostered with key extension and industry personnel have sharpened the West's focus during the FUW.

The food use program absorbs most work days in the IR-4 yearly cycle. The laboratory and quality assurance programs are solely involved in food use activities surrounding GLP studies and analysis, while the field program balances food use activities with biopesticide and ornamental research efforts. This year the ornamental workshop held in Cherry Hill, New Jersey was well attended by western region experts in weed science, plant pathology, entomology and ornamental commercial production. This group brought forward the needs and priorities for Western ornamental production. Along with ornamental work, the Western Region participated in the biopesticide grant process and managed projects granted to Western Region researchers.

Training activities for current and new researchers, field visits, cooperator and stakeholder relationships, budgeting, data reviews, quality assurance audits, residue analysis, reports, communications, national meetings, all these activities spread across the western region... twelve months of activity encompassing crops as diverse as oysters, coffee, cilantro, potatoes and pomegranates. A cycle of professional work, a cycle of activity balancing this season's work with future season's preparation, a cycle of meeting the needs of specialty crop growers in the Western Region, another year around the sun.



Western Region training participants, Julie Coughlin, Gladys Leong, and Joan Yanagihara.



Papaya



David Sumida demonstrating watercress harvesting at Sumida Farms in Aiea, Hawaii

USDA- ARS.

The USDA/ARS IR-4 Minor Use Pesticide Program undertook analysis from samples of 175 residue trials in the three ARS analytical laboratories located at Beltsville, MD; Tifton, GA and Wapato, WA. This work was an increase of 21% over 2006. ARS also completed 142 trials representing 19 Analytical Summary Reports that were sent to IR-4 headquarters. The ARS field program was conducted at Charleston, SC; Maricopa, AZ; Salinas, CA; Tifton, GA; Wapato, WA; Weslaco, TX; and Wooster, OH where 100 GLP residue trials were initiated and 90 field data books were submitted to IR-4 headquarters.

In the ornamentals program, ARS cooperators at Charleston, SC; Corvallis, OR; Prosser, WA; Salisbury, MD; Tifton, GA; Wapato, WA and Wooster, OH initiated 275 research trials. During 2007, ARS submitted 154 ornamental reports to IR-4 Headquarters. ARS also funded the Northeast Region's field research center at Cream Ridge, NJ to conduct about 50 ornamental trials. Additionally, ARS developed a cooperative agreement with the University of Maryland to conduct ornamental trials at their Salisbury facility under the direction of Edward Beste. In order to assist EPA's Dr. Bernie Schneider with his IR-4 crop grouping activities, ARS has provided office space in Building 007, Room 203B at Beltsville, MD.

In 2007, ARS welcomed new personnel to the program: Paul Wade replaced Kristina Fenn and Leona Horst replaced Michele Giovannini, as Field Research Directors at Charleston, SC and Wooster, OH, respectively. Niklaus Grunwald replaced Robert Linderman at Corvallis, OR and has taken Bob's position as the ARS Plant Pathology Liaison Representative for the Western Region. Theodore Webster at Tifton, GA is the new Liaison Representative for the Southern region representing weed science. He replaces Howard Harrison who held the position for 15 years.

An article entitled "Specialty Crops: More Vulnerable Than You Think" concerning the ARS minor use pesticide program was published in the October 2007 issue of Agricultural Research, USDA, ARS.

Going above and beyond.

The USDA IR-4 program at Weslaco, Texas was able to complete the assigned trials this past year in spite of Mother Nature and an unexpected emergency. During a QA audit, being performed by the Southern Region's IR-4 Quality Assurance Coordinator, Kathleen Knight, a water line under the sink of the ladies' room burst and flooded halls and offices. Soon shop vac's began humming, doors were flung open, and fans were oscillating. Electrical hazards were averted as computers and electrical cords were swiftly lifted from the floor. Even through this, the staff at Weslaco planted and performed a pre-emerge treatment on southern peas, a spray application to cantaloupes, and a rare hand rope wick application to carrots. KUDOS go out to the entire team for their quick action!



ARS appreciates the opportunity to work with the IR-4 program's state counterparts in efforts to provide growers with new pest control technologies.

David McCommas is the USDA-ARS IR-4 Field Research Director, at Weslaco, TX.



IR-4 Research Technician, Eleazar Moreno, sprang into action to mop up water from a broken water line.

The IR-4 Project
is a model
Federal, State,
Private industry
program
with proven
success in helping
specialty crop
growers.

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More
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