

IR-4 FOOD-USE PROGRAM

IR-4 Food-Use Research - 1999 and 2000

Summary of IR-4's Proposed Year 2000 Research Program

On October 26 and 27, IR-4 held its National Research Planning Meeting at IR-4 Headquarters in New Brunswick, NJ. Here the IR-4 and USDA Field Coordinators, IR-4 and USDA Laboratory Coordinators, IR-4 Headquarters Coordinators, and Douglas Rothwell of Health Canada reviewed the potential research project list and made tentative research assignments.

The proposed research program for year 2000 will consist of approximately 120 studies. Almost all (110 of 120 or 92 %) of these are Priority A. Of these 120 studies, 114 will require the collection of residue samples. Six studies will be for collecting additional efficacy and/or crop safety data to support a specific data need.

In order to support this research plan, a total of 700 field trials are planned. Most of these (552) are being covered by regional University offices with USDA-ARS selecting 129 field trials and Canada 19 trials. The regional distribution is as follows:

**700 Trials in
2000**

Geographic Region	IR-4 Region Support	ARS Support	Canada Support	Total
Northeast	81	0	6	87
Southern	152	53	0	205
North Central	105	18	7	130
Western	214	58	6	278
Total	552	129	19	700

The number of studies is somewhat lower this year than in recent years; however, the number of field trials is higher. This is a result, in part, of IR-4's commitment to complete field research for a study in one year. Thus, many of the studies were "overbooked" by one to two field trials. We are looking forward to a productive 2000 research season.

Article by Dan Kunkel and
Jerry Baron

Industry meetings with IR-4 during the 4th Quarter 1999: IR-4 Headquarters staff had several technical meetings with cooperative chemical companies in this quarter. The Study Directors, as well as the Research and Registration Managers met with Abbott Labs to discuss their projects. Also, Novartis representatives visited Headquarters to discuss the year 2000-work plan and to work out some of the details on the protocols. Sue-Chi Shen of Gustafson also stopped by Headquarters to review the year 2000 protocols and to provide information on the many seed treatment projects that are part of the program.

IR-4 representatives met with Gary Deziel of the Cranberry Institute to discuss cranberry projects for the year 2000 and new pesticides for cranberries. The California Lettuce Board requested IR-4 attendance at their meeting in California to provide them with an update on our ongoing lettuce projects.

Article by Dan Kunkel and Jerry Baron

Research Planning Update

IR-4 has successfully completed the planning process for the first year of the new century. This included numerous meetings with cooperating registrants and commodity organizations to better understand grower needs and company objectives. These meetings provided useful information for consideration at the 1999/2000 Food Use Workshop. The product of this Workshop was a priority list of research projects for IR-4. Actual project selection for 2000 took place at the IR-4 National Research Planning Meeting in late October.

For the year 2000, IR-4 plans on conducting approximately 120 studies. Almost all of these studies are considered Priority A, IR-4's highest priority and will be ready for EPA submission in early 2002 (within 30 months of protocol approval). Seventy percent of the studies involve chemicals considered as "Reduced Risk", chemicals compatible with

IPM systems or having characteristics deemed favorable. Almost all of the studies require the collection of residue samples. There are a few studies which are intended to collect crop safety and/or product performance data to answer specific questions posed by the cooperating registrant and IR-4. Over 80% of the residue samples are being analyzed by the IR-4 Regional, Satellite and USDA-ARS analytical laboratories. The majority of the remaining residue samples are scheduled to be analyzed by registrants in-house or contract analytical facilities. A complete copy of the year 2000 research plan can be obtained at the IR-4 web site (www.cook.rutgers.edu/~ir4).

Mark your calendars now for the 2000/2001 Food Use Workshop. The Workshop is scheduled for 12-14 September 2000 in Orlando, FL. More details will follow.

Article by Jerry Baron

IR-4 ORNAMENTALS PROGRAM

New Pesticide Registrations for Ornamentals Supported by IR-4

Since the last Newsletter, 230 new ornamental use registrations have been obtained. They include the following:

Ampelomyces quisqualis

African Violet, Azalea, Begonia, Flowering Dogwood, Japanese Dogwood, Palm-Beach-Bells, Poinsettia, Rhododendron, Rose, Snapdragon, Transvaal Daisy, Vervain, Zinnia

Azadirachtin

Ornamental Cabbage, Ornamental Kale

Bendiocarb

Bird's-Nest Fern, Cotoneaster, Fatsia, Kentucky Bluegrass, Southern Yew

Clofentezine

African Violet, Ageratum, Azalea, Balsam, Begonia, Dahlia, English Ivy, Fern, Fuchsia, Gardenia, Hibiscus, Holly, Madwort, Pansy, Periwinkle, Persian Violet, Pine (Scotch), Pine (White), Pinks, Pothos, Rose, Scarlet Sage, Shasta Daisy, Shrub Verbena, Transvaal Daisy, Vervain, Zinnia

Clopyralid

Apple (Non-Bearing)

Daminozide

Angelonia, Balloon Flower, Candytuft, Coleus, Coral Plant, Coral Porterweed, Egyptian-Star-Cluster, Mexican Petunia, Sweet Potato Vine, Yellow Shrimp Plant

Etridiazole

Bleeding Heart, Fatsia

Fenpropathrin

Carnation, Cherry (Non-Bearing), Crape Myrtle, Flowering Dogwood, Hemsley Snowbell, Maple, Persian Violet

Fludioxonil

Chrysanthemum, Elephant's Ear, False Sunflower, Fern, Shasta Daisy

Isoxaben

Maple, Pygmy Date Palm

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New Pesticide Registrations for Ornamentals Supported by IR-4

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Kaolin
Linden

Metolachlor (EC)
Elm (Winged)

Metolachlor (Herbigation)
Privet

Oryzalin
Cherry (Non-Bearing)

Oxyfluorfen
Maple

Permethrin
Cherry (Non-Bearing)

Pyridaben
Arborvitae (False), Arrowwood, Azalea, False Cypress,
Honeysuckle, Hydrangea, Wisteria

Sun Spray Ultra-Fine Spray Oil
Ornamental Cabbage, Ornamental Kale

Thiophanate Methyl

African Violet, Bromeliads, Bush Violet, Campanula, Canna, Cineraria, German Violet, Gloxinia, Lavender, Lisianthus, Lobelia, Madwort, Ornamental Cabbage, Ornamental Kale, Palm-Beach-Bells, Pansy, Periwinkle, Persian Violet, Pinks, Stonecrop, Strawflower, Swan River Daisy

Triadimefon

Lawn Leaf, Sugar Maple, White Oak, Tailflower

Trichoderma harzianum

Daffodil, Lily, Tulip

Trifloxystrobin

Azalea, Bamboo, Barberry, Bulbous Iris, Cherry (Non-Bearing), Chrysanthemum, Elephant's Ear, Geranium, Lilac, Photinia, Pinks, Shasta Daisy, Sun Rose (Helianthemum)

Trifluralin

Areca Palm, Feverfew, Gazania, Hair Grass, Hardy Mum, Matricaria, Statice, Stock

IR-4 Ornamentals Program Report Summary

- 98 Ornamental protocols have been developed for 2000. These include 31 fungicides, 34 herbicides, 23 insecticides, 3 nematicides and 7 plant growth regulators.
- Since 1977, we have received 19,795 requests. This program during this period has developed data for 7,101 national label registrations and 266 state 24c label registrations. During 1999, we obtained 532 new registrations while 640 ornamental research trials were conducted.

The 1999 Ornamentals Workshop - October 18-22, 1999, Portland, Oregon

This priority setting workshop involved over 100 people including state and federal researchers, extension agents, agricultural and biochemical company representatives, growers and three participants from Canada. They were Irene Wilkin, the Regional Pesticide Officer from Health Canada; Christine

Koch, Provincial Floriculture Industry Specialist from the British Columbia Ministry of Agriculture and Food; and Dave Woodske, the Nursery Industry Specialist from B.C.M.A.F.

The 1999 Ornamentals Workshop - October 18-22, 1999, Portland, Oregon

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Each Working Group met for an entire separate day. The Entomology Group was chaired by Pete Schultz of Virginia Tech (Chesapeake, VA). The Plant Pathology Group was co-chaired by Chuck Krause of USDA-ARS, Wooster, OH and Jim Locke, USDA-ARS, Beltsville, MD. The Weed Science and Plant Growth Regulator Working Group was chaired by Clyde Elmore of the University of California, Davis, CA.

The meeting also included a nursery and floral crop tour to visit Clackmas Greenhouses (Aurora, Oregon), J. Frank Schmidt & Son (Boring, Oregon), Woodburn Nursery and Azaleas Inc. (Woodburn, Oregon) and Monrovia Nursery Company (Dayton, Oregon).

This IR-4 Ornamental Workshop was the best attended in the history of the program. The workshop would not have been possible without the financial support of the American Nursery and Landscape Association (ANLA), Horticultural Research Institute (HRI), Society of American Florists (SAF), American Floral Endowment; Florida Nursery Growers Association (FNGA) and the following agricultural chemical

and biopesticide companies: Marketing Labs Co., Inc., Source Technology Biologicals Inc. and The Scotts Company.

The groups reviewed and prioritized over 6000 requests. We now have over 6200 researchable projects which require additional work. During the workshop, we determined that 230 new label registrations have been reported and 797 new requests were received.

I would like to thank those who chaired the three working groups at the workshop. Also a special thanks to Bob Linderman (USDA-ARS), Corvallis, Oregon for setting up the tour and for making travel arrangements. We also want to thank Harvey McDaniel for his help in travel logistics. A special thanks to those at IR-4 Headquarters who provided the tools needed to make the workshop a success. Diane Infante's outstanding efforts before, during, and after the workshop kept the research data and protocols together in a most timely fashion.

Article by Ray Frank

Ornamental Uses Presentations

During the week of October 4-7, I provided a progress report to the Project Management Committee and to the Four Regional Committees.

During the week of October 17-21, I coordinated the 12th IR-4 Ornamentals Workshop in Portland, Oregon. Also took part in the IR-4 USDA-ARS Liaison Meeting.

During the week of October 25-27, I was invited by Christine Koch, the Provincial Floriculture Industry Specialist, to speak to the National Ornamentals Minor Use Label Expansion Committee (NOMULE) in Abbotsford, British Columbia, Canada. I was invited to this NOMULE Meeting to inform the province researchers, regulatory specialists and growers about how the IR-4 Ornamentals Program has been successful in providing over 7000 pest management tools for the ornamental industry. Fourteen members of the committee were present.

The Canadian Ornamentals Industry is now 1.5 billion (Canadian) annually but many tools now available to U.S. growers are not available to the ornamental growers in Canada.

I visited The United Flower Growers Association Auction at Burnaby, B.C. The auction is housed in a large state of the art facility with a wide range of flower crops.

During November 3-9, I took part in the last day of the Methyl Bromide Alternatives (MBA) Conference in San Diego. Then participated in the post MBA Tour in Carlsbad, San Jose, Watsonville, and Fresno, California. This included cooperative research with Clyde Elmore and other University of California researchers.

December 9-10, I attended the American Nursery and Landscape Association Pest Management Meeting in Washington, DC.

Article by Ray Frank

IR-4 BIOPESTICIDE PROGRAM

Proposals

Twenty-one (21) early stage biopesticide proposals and fifty-five (55) advanced stage biopesticide proposals were received at IR-4 Headquarters. Proposals are currently being reviewed by the New Technology Team reviewers, the IR-4 Field Regional Coordinators and the IR-4 external reviewers. A final selection of proposals for IR-4 funding will be made in February 2000. All persons who submitted

proposals will be notified of the status of funding recommendations for their proposals by March 2000.

We appreciate the keen interest shown by top scientists throughout the United States in IR-4's Biopesticide Program and look forward to completion of the review process.

Article by Bill Biehn

IR-4 QUALITY ASSURANCE

QA Focus

(17th in a series of QA updates)

Just think of what could happen!

I received a call last month from an IR-4 researcher. He called to tell me about a burglary that took place in his facility the night before. The rogues broke into their offices and storage areas and made off with balances, a computer, a generator and boxes used to house thermometers and equipment used for monitoring weather at the time of applications (they apparently liked the ammo boxes used to carry this equipment). The speculation is that someone had access to the rooms some time in the recent past and spotted "things" that they saw as useful or that had great potential for resale on the secondary market (I tried to put this nicely).

Coming into the office in the morning and finding your desk upside down, doors opened and equipment gone must have been scary, but you know what this person was most concerned about? The field data books from this year's research projects and whether a manuscript he had been working on was recoverable. He found that his equipment logs were safe and that he could account for all the missing equipment because all were individually identified and tied to their logs by ID number. The researcher informed me that he was now going to copy all of his logs and get the originals to HQ for archiving (he sent verified copies in the past). He knew then that they had been incredibly lucky and that they really didn't need the original information. Not that this

couldn't happen at the HQ archives, but from his perspective his work was better off in our hands.

In the last few years, I have heard several extreme stories about data loss due to vandalism, fire, flood, hurricanes, etc. Oh yes, we have lost data due to arson. I also know that when a testing lab in the upper Midwest burned, the data they had in fire proof cabinets made it through. Two recommendations were: 1) keep the drawers as full as possible (less oxygen, less potential for combustion); and 2) do not use plastic to wrap the data (use sometimes to keep the data dry when sprinklers deploy or the fire fighters get the hoses in use). The heat of the fire will melt the plastic, making the paper non-usable.

While mother nature can pick up a building and drop it where ever she likes, there are some things we can do to be proactive:

1) Keep raw data locked up and secure when you are not in the office. It would be a shame to lose a season's work and delay the submission of a project to the EPA due to the loss of raw data caused by vandalism or theft. If locking, fire proof filing cabinets just don't fit into your budget, then

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QA Focus

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what about a \$75.00 lock safe from Wall Mart? This could possibly fit into a filing cabinet drawer making it safe from theft and secure from fire. At a bare minimum, think about keeping the data in a locked file cabinet at night and on weekends. Some vandalism is just that and notebooks on a shelf are easy targets.

2) Make verified copies of maintenance logs and send the originals to HQ for archival at the end of each year. We would be only too happy to take care of this information. Please be sure that all equipment has a unique identifier that can be tracked through the system. If the loss of this equipment needs to be noted in the logs, the identifiers will make the task of reconciling the logs a much easier and reproducible process.

EPA consolidation of the GLPS

The proposed consolidated GLPs appeared in the Federal Register on 29 DEC 99 (<www.epa.gov/fedrgstr/EPA-PEST/1999/December/Day-29/p33831.htm>). We have been wait-

ing for this to happen for over two years. We will now have an opportunity to make comments on the content and give our opinions on any "changes" that have been proposed. This new GLP document is part of the regulatory re-invention at the EPA. They are merging the TSCA (40 CFR 792) and the FIFRA (40 CFR 160) GLPs into one document (40 CFR 806). They have also taken this opportunity to clarify some things within the document to more clearly represent the intent of the rule. With the proposed changes in the container retention requirements (although we may be able to dispose of containers before the end of the study), the documentation from the Study Director and the Field/Lab Research Directors may end up causing more of a headache.

The other proposed regulatory change that would be of benefit is the one involving having to write a final report for all canceled or terminated studies. Study Directors everywhere will be rejoicing over this one. What an incredible waste of time to write a report that meets 40 CFR 160.185 requirements when amending the protocol and archiving the data are more than sufficient!

Article by Tammy White and
Kathryn Hackett-Fields

New Technology Team Report

Significant progress has been made on several fronts in the New Technology Team (Team) programs. During 1999, Team members Bob Holm and Jerry Baron met with management from almost all of the major conventional chemical and biopesticide registrants to discuss ways the companies could partner and work better with IR-4. The outcome of these meetings has been remarkable and some companies have asked IR-4 to be a full partner in their existing minor use strategy. Other companies revisited their commitment to IR-4 and minor uses and are now willing to work very closely with IR-4 to expedite registration on minor crops with their new products. One of the products of these meetings is more direct and open communication. This will allow IR-4 to provide leadership on communication of potential new products. Included in this Newsletter as an insert is the New Pest Control Products/Transition Solutions Tables. This same information is available on the IR-4 website (www.cook.rutgers.edu/~ir4).

The Team has been significantly involved in administering, reviewing and awarding IR-4 Biopesticide grants and New Technology Grants. In 1999, a total of 12 Early Stage and 25 Advanced Stage Biopesticide grants and 20 New Technology grants were approved totaling over \$400,000. The majority of the grants were relatively small (less than \$10,000) and designed to develop efficacy data on new conventional and/or biopesticide products that have the potential to provide pest management solutions and replace products which are vulnerable to cancellation from FQPA or the phase out of methyl bromide.

Other Team activities include Methyl Bromide replacement research. Details, including a progress report of this program area can be found on Page 18 of this Newsletter. Briefly, this IR-4 initiative is coordinated by Team member Jack Norton. Jack has done an excellent job of raising

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New Technology Team Report

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outside funds, developing a research plan and implementing field trials to investigate a “system” approach to providing pest management solutions for strawberry and tomato growers that currently utilize methyl bromide.

New Technology Team plans for year 2000 include continuation of partnering meetings with cooperating company’s management. R. Holm and J. Baron plan to continue these partnership meetings and keep the momentum moving forward. The Call for Proposals for year 2000 biopesticide

programs has already been issued. The review schedule has been moved up in order to give participants adequate time to finish study planning once grant awards are finalized. It is highly likely that the New Technology Grants will take a different format in year 2000. Plans include very specific efficacy trials with new products following a standard protocol utilizing the expertise at IR-4 Field Centers. Finally, plans for methyl bromide alternative research include replication and refinement of this year’s research and the expansion of the research into other minor crops such as ornamentals.

Article by Jerry Baron

IR-4 National Outreach Specialist/Communications Report

It was a pleasure to meet so many of the people who make IR-4 a success at the Symposium in Washington D.C. in October. I appreciate the e-mails and phone calls that have resulted from those contacts. I’m already seeing results from the sharing of information and resources.

A Fact Sheet on IR-4 was prepared in time for the Symposium for Commodity Liaisons and other friends of IR-4. As I write this in December, the Fact Sheet will soon be updated to reflect the strategic planning that has been actively in progress.

One of my jobs after the Symposium was to collate and condense all of the comments that were written down by the Scribes during each breakout session. If we do this again next year, Scribes will be selected primarily on the quality of their handwriting! The Project Management Committee appreciated having the comments to work with in the strategic planning process.

News briefs about IR-4 were sent electronically to State Liaisons and others in early November. My goal is to do similar mailings bimonthly. If you would like to be on the receiving list, send me an e-mail <perrys@msue.msu.edu>.

An article entitled “IR-4 and Pest Control on Minor Crops: How it Works” will appear in the January 2000 issue of the

Certified Crop Advisor Newsletter. Other articles on IR-4 have recently appeared in the USDA-ANR electronic newsletter and the USDA-OPMP electronic newsletter, and the Michigan State University Pesticide Notes Newsletter.

The “Introduction to IR-4” PowerPoint presentation for growers that I previewed in Washington is now completed. Its first outing was by Dave McCommas in Texas as a color poster presentation.

More PowerPoint presentations will be available shortly. The IR-4 poster (“IR-4 Helps Minor Crops Survive FQPA”) that will be displayed at the American Farm Bureau Federation meeting in January 2000 will only need a little tweaking to become another grower-audience presentation. A one-page, four panel single fold brochure has been prepared to go with the Farm Bureau Poster, but I think it may be generic enough to fit grower audiences for the “Intro. to IR-4” presentation also. The brochure is two PowerPoint pages that can be printed in black and white, double-sided on a copy machine and run off by the dozens or hundreds. On the drawing board is a formal presentation that follows the format of the 8-page IR-4 brochure that was prepared by IR-4 Headquarters for the Symposium. By the time you read this, hopefully, all of the presentations will be available on the IR-4 website.

Article by Sandy Perry