

Proposed Consolidation Update

—by IR-4 Executive Director, Jerry Baron

In 2013, the IR-4 Project will mark 50 years of providing specialty crop growers with essential tools. However, IR-4 is now facing the most formidable challenge in its history. In President Obama's FY2013 budget plan (submitted to Congress in February) he proposed to zero-out funding for the IR-4 Project. He also proposed to consolidate IR-4 with various IPM funded programs (Expert Integrated Pest Management [IPM] Decision Support System, IPM & Biological Control, Pest Management Alternatives Program, Smith-Lever 3(d) Pest Management and Regional IPM Centers) into a new program called Crop Protection.

The Explanatory Notes that USDA submitted to Congress stated that the proposed Crop Protection program "will provide support for projects that respond to pest management challenges with coordinated region-wide and national research, education and extension programs, and serve as a catalyst for promoting further development and use of IPM approaches".

The IR-4 Commodity Liaison Committee, Minor Crop Farmers Alliance and other stakeholders are strongly opposed to the proposed consolidation as currently planned. Their concerns involve:

1) The five Focus Areas for the proposed Crop Protection program, as documented in the Explanatory Notes, which was submitted to Congress in the President's Budget, do not include the primary IR-4 mission of "supporting the development of appropriate data to facilitate registration of sustainable pest management technologies for specialty crops and minor uses". Thus, it appears that USDA **does not intend to continue to support the regulatory approvals of new crop protection chemicals and biopesticides for food and non-food specialty crops in the proposed Crop Protection Program.**

2) IR-4 is exempt from indirect cost recovery by the host land-grant universities. The proposed Crop Protection Program will mean that current

IR-4 funding will no longer be exempt and will be an immediate loss of up to 30% of IR-4's funding. This funding decrease is a very threatening proposition for specialty crop agriculture.

Additionally, since IR-4 research is conducted over many years its funding needs to be continual, not debated annually.

3) IR-4 does much more than crop protection chemical testing. IR-4 collaborates with:

- USDA-Foreign Agricultural Service: To reduce the impact of pesticide residues in/on specialty crops from being a barrier of trade for US grown exports.

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- Department of Defense: To prevent sickness/death within deployed U.S. military forces who are exposed to insect pests which transmit diseases to humans by facilitating the availability of public health pesticides.

- USDA-APHIS: To perform collaborative research to combat invasive pests.

- USEPA: To review IR-4 submitted data to help with their priorities to provide new technology to reduce the risk from pesticides.

- Department of Commerce/OMB: IR-4 is involved in a critical project supporting the US-Canada agreement to accomplish key objectives of the Regulatory Cooperation Council.

4) IR-4 food residue research often takes 3 to 5 years to complete, involves highly trained staff that are proficient with USEPA's Good Laboratory Practices regulations, and requires expensive analytical instruments. The IR-4 Ornamental Horticulture program also uses multi-year research data conducted by highly trained cooperative researchers. This is vastly different from NIFA's typical research grants. Restructuring or eliminating IR-4 and abandoning numerous ongoing studies would be extremely expensive and a waste of already appropriated taxpayer money.


5) Investment in IR-4 has yielded a huge return on investment. Since its inception, IR-4 has facilitated the registration of over 25,000 crop uses. The Michigan State University Center for Economic Analysis (Dec. 2011) determined that for a total budget of \$19 million (USDA-NIFA and other public/private sources), IR-4 efforts contribute over \$7.2 BILLION to annual US Gross Domestic Product and supports 104,650 US JOBS.

A large number of individual growers, commodity group representatives and organizations have sent letters to Congress asking them to continue to provide at least \$12 million of net dedicated funding for IR-4. Public health pesticide and biopesticide/organic agriculture stakeholders have also joined the cause. IR-4 Commodity Liaison Committee Chair, Rich Bonanno, has drafted written testimony that was submitted to both the Senate and the House of Representatives, Committees of Appropriations-Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies also urging at least \$12 million of net dedicated funding for IR-4. Nearly 90 food/ornamental commodity associations concur with the written testimony and are co-signers of the letter. Some Members of Congress have joined in the support of IR-4 with a joint letter to the Majority Leader and Ranking Member of the Committee of

Appropriations-Subcommittee on Agriculture (see featured article on pages 6 & 7). In addition, there have been a number of media campaigns by trade organizations and grower publications in support of IR-4, where several news releases and email "blasts" have been delivered to the broad community. Finally, the specialty crop community or "Friends of IR-4" has also created a website titled "Save IR-4". It is quite impressive to see all the groups that have joined forces to help send the message to Congress on why the President's planned consolidation will not necessarily help agriculture. The website is found at www.saveIR-4.org.

USDA has initiated formal "listening sessions" to gain stakeholder input on how the government should implement the new program if Congress approves the change. IR-4 was one of 20 participants at the first listening session in late March. IR-4 will provide formal written comments for the record. IR-4 has provided suggestions but maintains the public is best served by a distinct IR-4 Project with dedicated funds with either an exemption for the 30% indirect cost recovery or additional funds to cover this charge.

The most interesting development at the time of press is the establishment of a working group facilitated by American Public and Land Grant University's Board on Agriculture Assembly Budget



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GMUS-2

—by IR-4 Associate Director, Dan Kunkel

Minor uses encompass essential crop protection needs for smaller niche crops. Since these uses are for low acreage crops, the chemical industry is reluctant to develop products for minor uses due to the lack of investment return on the expenditures that are required to attain regulatory approval. On a global basis, this presents problems for producers through a lack of authorized options to control pests and diseases. This affects producers seeking market access as well as exporters and traders of those commodities. Also, trade barriers occur due to a lack of, or differences applied to, acceptable Maximum Residue Levels (MRLs) on produce.

In order to address some of these issues, the first Global Minor Use Summit was held at FAO Headquarters in Rome, Italy in December of 2007. It

and Advocacy Committee. The 43 member working group is tasked to develop recommendations to address not only continuation of programs, but how best to transition, merge, rearrange, or combine programs in ways that are effective and efficient, while meeting state and multistate needs and expectations from stake-holders. IR-4 has several participants on this workgroup and is willing to work in cooperation to develop a long term solution for the consolidation issue. 

was co-organized by FAO, USDA, USEPA and IR-4. Participants of the first Summit developed the following action items:

1. Improve international communications and information exchange



There was open debate among Summit participants, as they discussed their countries' issues and solutions. James Cranney, California Citrus Quality Council, offered a comment during the discussion.

2. Increase capacity building efforts for developing countries
3. Engage the Codex Committee on Pesticide Residues (CCPR) to better support minor use crops
4. Enhance research efforts through collaborative pilot projects and initiatives.

A strong foundation of cooperation and collaboration had been built among countries as a result of the 2007 GMUS action items and there has been a great deal of advancement in addressing minor use needs. However, there are still issues facing growers and producers throughout the world.

Information Exchange



Benoit Bouato, Permanent Secretariat Inter-States Pesticides Committee of Central Africa (CPAC), points to his country's (Cameroon) flag.

In 2011, an Organizing Committee representing both developed and developing countries was established to oversee the planning for a second Global Minor Use Summit (GMUS-2). The Organizing Committee sought input on the planning for GMUS-2 from an Advisory Committee made up of specialists nominated and selected from global regions and different affiliations. The focus of both committees was to ensure that the Summit agenda covered topics relevant to issues associated with minor uses and build upon the first Summit to elicit discussion and identification of new areas and/or existing areas that require further development and action. A key objective of the second summit was reviewing progress since the 2007 Summit with regards to international and regional progress, ongoing cooperation and collaborations, and capacity development. Participants were challenged to develop a 5-year plan to move this progress further.

GMUS-2 was held in Rome, Italy in February of 2012 and again was co-organized by FAO, USDA, USEPA and IR-4. The Summit was attended by

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GMUS-2

approximately 230 delegates representing over 50 industrialized and developing countries.

GMUS-2 focused on global agreements for pesticide regulatory policy, procedures and methodology, and other technical areas to help deal with minor use issues of providing growers with greater access to safe tools to grow their crops and to promote free and fair trade among nations. The Summit provided significant opportunities for input and discussion over three days.

Day 1 provided updates on current activities and challenges from global regions, grower and chemical industry perspectives and existing

collaborations and cooperation activities developed since 2007.

Day 2 focused delegate participation in breakout groups covering four topics dedicated to:

1. Concrete planning for dealing with minor use issues with regard to registrations and MRLs for trade;
2. Capacity Development and Data Generation;
3. Data sharing, data needs and databases; and

4. Regulatory incentives and policy considerations to promote the registration of minor uses.

Day 3 focused on key findings and recommendations from each of the four breakout groups; with input from all attendees the recommen-

dations were refined into a five year work plan identifying items into short, medium and long term timeframes (see charts below).

A final report of the Summit will be posted to the Global Minor Use Portal www.gmup.org as soon as it becomes available. 🌱

Table 1. Work plan: Themes and tasks resulting from the breakout groups and participants.

Theme 1 Coordination & Collaboration	Theme 2 Communication	Theme 3 Incentives
3.1 Global priority setting process for minor uses <ul style="list-style-type: none"> • Establish group to explore feasibility of having global priority setting process/meeting 3.2 Databases <ul style="list-style-type: none"> • Expand existing databases to capture global minor use grower needs/priorities • Expand existing databases to document available minor use data for registration • Investigate the feasibility of having a new single global needs database 3.3 Participation in joint initiatives 3.4 GMU Steering Committee <ul style="list-style-type: none"> • Establish membership • Identify experts to do feasibility study on database with TOR 	4.1 Enhancement of the GMU Portal <ul style="list-style-type: none"> • Expand GMU portal to include links to various databases currently available from various sources 4.2 Risk communication <ul style="list-style-type: none"> • Identify and review existing risk communication tools by national authorities, FAO and other organizations • Provide available material on the GMU Portal for dissemination 4.3 Benefit communication <ul style="list-style-type: none"> • Identify available materials 4.4 Establish list of (and networks of) existing working groups <ul style="list-style-type: none"> • List will be added to GMU Portal 	<ul style="list-style-type: none"> • Monitor implementation and uptake of regulatory incentives • Promote and implement new incentives as they are developed 5.1 Funding structures and programs <ul style="list-style-type: none"> • Document existing structures and programs • Develop and release guidance on the establishment of national and regional programs 5.2 Import MRLs <ul style="list-style-type: none"> • Collect and review existing import tolerance setting procedures • Develop and release guidance on the process for seeking import MRLs 5.3 Authorization procedures and requirements <ul style="list-style-type: none"> • Document existing authorization procedures and requirements • Monitor new procedures that add value to minor uses 5.4 Economic <ul style="list-style-type: none"> • Document existing economic incentives 5.5 Liability <ul style="list-style-type: none"> • Document and assess existing programs addressing liability waivers • Explore possibility of having a meeting of legal experts of government and industry to advise on issues related to liability
Red = short term items (12 months), Green medium term items (24-36 months), Blue long term items (5 years)		



Table 1. Work plan: Themes and tasks resulting from the breakout groups and participants.

Theme 4 Capacity Development	Theme 5 Registration of Minor Uses and MRL setting
Tasks: 2.1 National and regional capacity <ul style="list-style-type: none"> • Disseminate information on existing pesticide and pest management tools (e.g., extrapolation methods, crop grouping, IPM) • Facilitate the strengthening or establishment of new regional expert working groups that support minor use issues • Develop and implementation new tools and guidance • Establish sustainably operating regional expert working groups for minor uses 2.2 Engage policy makers to implement regulatory initiatives <ul style="list-style-type: none"> • Include decision makers at technical meetings or workshops to demonstrate importance of implementation of technical inputs 2.3 Establish national minor use programs <ul style="list-style-type: none"> • Provide guidance to national authorities on design and implementation of minor use programs 2.4 Encourage greater participation in data generation <ul style="list-style-type: none"> • Initiate collaborative projects to better participate in Codex processes (e.g., crop grouping, data submissions, MRL setting process) • Implementation of collaborative projects • Stakeholder engagement in data generation and other areas to support minor uses 2.5 Provide guidance on Codex processes	Tasks: 1.1 Harmonized data requirement and submission documents 1.2 Crop Grouping (residue and efficacy) <ul style="list-style-type: none"> • Explore possibility of establishing a working group to develop a guidance document on efficacy data under CCPR • Hold meeting to explore efficacy crop grouping -Consult existing schemes such as EPP0 1.3 JMPR capacity building <ul style="list-style-type: none"> • JMPR capacity building as an agenda item at CCPR • Explore possible funding sources for JMPR • Expanding JMPR expert panel to include broader representation 1.4 Transparency in registration decisions 1.5 Working towards common MRLs <ul style="list-style-type: none"> • Side meeting at April 2012 CCPR to discuss barriers to harmonization • Support and involvement for Crop grouping at CCPR and representative crops • Develop questionnaire through the electronic Working Group on Minor Uses/CCPR on import MRL setting by national authorities • Urge regulatory bodies to utilize Codex standards
Red = short term items (12 months), Green medium term items (24-36 months), Blue long term items (5 years) CCPR = Codex Committee on Pesticide Residues JMPR=Joint WHO/FAO Meeting on Pesticide Residues	

Regulatory Cooperation Council: Promoting Trade and Access

Excerpts of this article were taken from the United States-Canada Regulatory Cooperation Council Joint Action Plan, December 2011.

On February 4, 2011, US President, Barak Obama and Canadian Prime Minister, Stephen Harper, directed the creation of a United States — Canadian Regulatory Cooperation Council (RCC).

The purpose of the RCC is to promote economic growth, job creation, and benefits to consumers and business through increased regulatory transparency and coordination.

The RCC was given a two-year mandate to complete this project.

The RCC designed a workplan that focuses on five areas where the countries will seek greater alignment in their regulatory approaches.

These areas include: Agriculture & Food, Transportation, Health and Personal Care Products, Workplace Chemicals, Environment, and Cross — Sectorial Issues.

IR-4, EPA, Canadian Pest Management Regulatory Agency (PMRA) and Agriculture and Agri Food

Canada's Pest Management Centre (PMC) are working together on a critical component within the Agriculture & Food Working Group Number 3, Crop Protection Products Initiative. The task team members include, Marion Law (PMRA), Lois Rossi (EPA), Manjeet Sethi (PMC), and Jerry Baron (IR-4).

This group has developed an Action Plan Initiative for Crop Protection Products that encompasses four action items: Joint Submission of Use Expansions and Fully Aligned Labels, Joint Guidelines for Residue Trials, Addressing Obstacles to Joint Registration, and Alignment of Data Collection Processes/ Procedures for Residue Trials.

The expected deliverables from this team include identifying mechanisms to encourage registrants to submit applications for joint regulatory review to Canada and the US that include increased numbers of minor uses. It is expected that this will help facilitate equal access to products and uses in both countries, as well as align maximum residue limits (MRLs)/tolerances for trade, in cases where the application is based on data generated with Canadian or US government

UNITED STATES-CANADA
REGULATORY
COOPERATION COUNCIL

Joint Action Plan

DECEMBER 2011



Joint action plan can be found at <http://www.whitehouse.gov>

support on minor uses and specialty crops.

“We are very proud to be included in the President’s and Prime Minister’s objective for regulatory transparency and cooperation in agriculture and food,” stated IR-4 Executive Director, Jerry Baron, “given the current economic conditions, we feel this cooperation will help our stakeholders, growers and commodity groups overcome trade barriers and will strengthen both countries’ economies.”

“The goal of this cooperation is to facilitate equal access to effective pest control in both countries as well as to align

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Congress of the United States
Washington, DC 20515

March 20, 2012

The Honorable Jack Kingston
Chairman
House Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies
2362-A Rayburn House Office Building
Washington, DC 20515-6016

The Honorable Sam Farr
Ranking Member
House Appropriations Subcommittee on Agriculture, Rural Development, and Related Agencies
1016 Longworth House Office Building
Washington, DC 20515-6016

Dear Chairman Kingston and Ranking Member Farr:

As you begin work on the Fiscal Year 2013 Agriculture Appropriations bill, we strongly urge you to provide at least \$12 million for the United States Department of Agriculture-National Institute of Food and Agriculture Research and Education Activity program, Minor Crop Pest Management (IR-4).

The IR-4 project mission is to provide growers of fruits, vegetables, herbs, ornamentals, flowers and other specialty crops with legal access to safe and effective chemical and biological pest control products. IR-4 is needed because the companies that market pest control products typically focus their efforts on major markets that provide a rapid return on investment and avoid less profitable specialty crops and other minor use markets.

IR-4 has supported more than 25,000 registrations on specialty food and ornamental crops. A recent economic assessment report indicated that our investment yielded \$7.2 billion dollar increase in the Gross Domestic Product and supported more than 104,650 jobs.

The President's FY13 budget proposes eliminating the funding for IR-4, instead consolidating funds with other programs in a new line called Crop Protection. Many, including a significant number of our specialty crop grower constituents, believe this consolidation is not appropriate for IR-4. Consolidation will result in a loss of focus on specialty crops, which now account for approximately 50 percent of crop value in the United States but are the focus of a fraction of investment in crop protection products.

Support for IR-4

The Honorable Jack Kingston and Sam Farr
Re: FY13 funding for Minor Crop Pest Management (IR-4)
Page 2

We urge you to help Congress continue its commitment to promoting specialty crops by maintaining specific funding level for Minor Crop Pest Management (IR-4) in the FY 2013 Agriculture Appropriations bill. Thank you for your consideration of this request.

Sincerely,



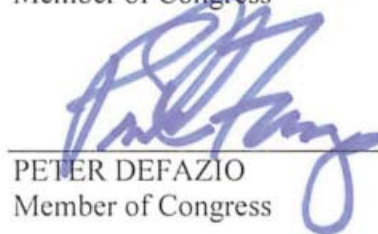
JIM COSTA
Member of Congress



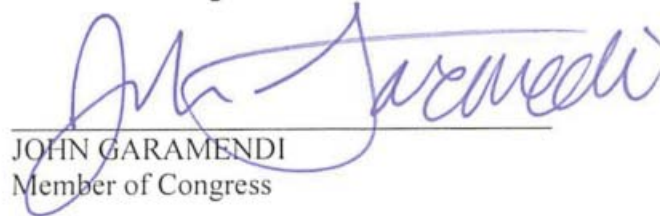
DENNIS CARDOZA
Member of Congress



RICK LARSEN
Member of Congress



PETER DEFAZIO
Member of Congress



JOHN GARAMENDI
Member of Congress



LOIS CAPPS
Member of Congress

IR-4's International Submissions Help US Food Crop Growers in a Global Market

—by IR-4 Associate Coordinator, Residue & Analytical Chemistry, Johanness Corley

The IR-4 Project has been helping US growers of specialty crops obtain solutions to their agricultural pest problems since its establishment in 1963. With the passage of the Food Quality Protection Act (1996), IR-4 has focused on newer and reduced risk chemistries to meet the needs of US farmers. Although the IR-4 Project has been very successful in obtaining registrations for many "Reduced Risk" products and safer chemistries for specialty crop growers, the use of these products has sometimes limited US grower's abilities to export their commodities treated with the newer chemistries because of a lack of Maximum Residue Limits (tolerances, MRLs) for these compounds abroad. In order to assist US growers competing in a global agricultural market, IR-4 has been working on several fronts to establish global MRLs.

Over the last few years, IR-4 has submitted magnitude of residue data to the Joint FAO/WHO Meetings on Pesticide Residues (JMPR), an independent group of scientific advisors from around the world and under the auspices of the WHO and FAO. The JMPR provides independent scientific expert advice to the Codex Committee on Pesticide Residues (CCPR) recommending the establishment of Codex MRLs (accepted by many countries around the world). Since 2006, IR-4 data and submissions to JMPR have resulted in the establishment of more than 30 MRLs on several crop (or crop group)/pesticide combinations. In 2011 alone IR-4 submitted approximately 24 magnitude of residue studies to the 2012 JMPR with the intention of establishing 30 or more Codex MRLs.

In addition, since 2010, at the direction of a number of commodity stakeholders, IR-4 has been conducting a number of magnitude of residue studies on crops solely for the purposes of establishing MRLs in other countries. This enables our growers to export crops legally treated with newer/safer pesticides to these countries/blocks. Some of the crops for which IR-4 submissions have been made to JMPR, Europe, Japan, etc. include: hops, cranberries, blueberries, beans, peas, lentils, pome fruit, stone fruit, citrus fruit, tropical fruits, avocado, pomegranate, fruiting vegetables, cucurbit vegetables, etc. These submissions have enabled U.S. growers to export their crops treated with these newer / safer chemistries to markets around the world. 🌱

IR-4 Successes Jan. to Mar. 2012

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

Federal Register: January 25, 2012
Rimsulfuron Trade Name: Matrix
Crop: Caneberry subgroup 13-07A,
Bushberry subgroup 13-07B
PR#: 09661, 09691

Federal Register: March 9, 2012
Aspergillus flavus AF36
(permanent exemption from the
requirement of a tolerance)
Trade Name: AF36
Crop: Pistachio PR#: 0327b

Clarification:

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In the side bar article on page 5 titled: Role of Biopesticides in Greenhouse Tomato Production, it stated that IR-4 first became aware of the problem of clavibacter during a tour in Virginia of a greenhouse that was part of Village Farms at the time. Village Farms no longer owns any greenhouses in Virginia. 🌱

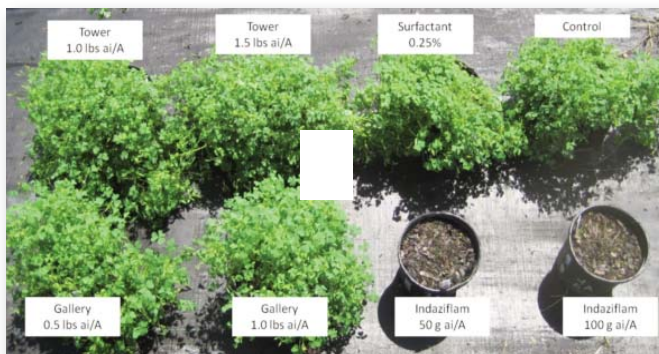
Early Postemergence Control of Weeds in Container Grown Nursery Crops

—by Chris Marble, Graduate Research Assistant
Department of Horticulture, Auburn University

Weed control in container grown nursery crops is becoming one of the most difficult problems that growers have to deal with today. Nursery growers primarily rely on preemergence active herbicides for weed control; however, for these herbicides to be effective, pots must be weed-free at the time of application. Small weeds are

difficult to see and are often missed when hand-weeding, and as a result are not effectively controlled by most preemergence herbicides. These weeds must be removed or they will produce seed, thereby increasing weed populations. As a result, growers need additional hand labor to remove these weeds. Labor is a major production

immigration legislation in many states has also caused many growers to lose a large amount of their labor force. Therefore, if research could identify preemergent applied herbicides which also have some degree of postemergence activity to help control immature weeds in container plant production, this would be a huge economical benefit to nursery growers by reducing labor costs.



cost for many growers, and the cost is continuing to rise. Recent

Two of the most common weeds in container production are oxalis (*Oxalis stricta*) and spotted spurge (*Chamaesyce maculata*). A series of experiments were conducted to

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RCC *continued from page 5*

MRLs whenever possible,” stated Canadian PMC Executive Director, Manjeet Sethi. “Since we have already forged a partnership with IR-4, PMRA and EPA, we are well aware of which steps need to be taken in order to complete our action items.”

The team has identified tasks in timeframes of 3-6 months, 6-12 months, 12-18 months and beyond 18 months. Early tasks (3-6 months) include

conducting outreach to the registrant community and initiating planning and submission of a pilot application using IR-4/PMC data. This has already taken place. One task in the 6-12 month timeframe is to develop options for aligning a workplan for joint projects and joint review of EPA/PMRA, harmonized data collection (such as field data books) and submissions documents. A 12-18 month objective is to develop residue field trial data and guideline principles.

Looking beyond 18 months, the team will consider developing a process for holding joint IR-4/PMC priority setting workshops. More details and tasks are identified in the workplan, which can be viewed on the IR-4 website www.ir4.rutgers.edu.

The RCC and both countries are committed to evidenced-based, predictable, cost-effective regulatory approaches carefully targeted to enable businesses to continue to innovate and grow. 🌱

Community-based Control of Ticks and Tick-borne Diseases

— by IR-4 Public Health Pesticides Program Manager, Karl Malamud-Roam

After decades of being overshadowed by mosquitoes in discussions of blood-suckers, ticks have gained recent prominence, largely because of the spread of Lyme Disease, which is now the most common vector-borne disease in the US. However, while patients' advocates and the media have focused significant attention in recent years to the harm caused by tick bites and the pathogens they can carry, organized efforts to control ticks and tick-borne diseases are still uncommon and poorly funded, lagging far behind the mosquito control community by almost any measure of activity or outcome. There are a number of reasons that prevention of tick-borne diseases has been seen as the responsibility of families and individuals, rather than local governments or other community-based programs, but there are signs that this tradition is beginning to change, and IR-4 is a key player in this shift.

While mosquitoes fly and buzz and generally cause a nuisance even when they are not making you truly ill, the same is not true for ticks, which are more stealthy as they search for blood meals to help develop

their broods. This means that an early motivation for organized mosquito control programs – to allow outdoor recreation and protect tourism and property values from highly visible pests – had little parallel when the pest was small and silent and generally painless. The other motivation for committed mosquito control – to prevent vector-borne diseases – was also unlikely to inspire tax-payers to focus on ticks, as tick-borne diseases like Rocky Mountain Spotted Fever were generally seen as rare and remote. The fact that mosquitoes could fly across property lines also inspired community-wide programs, as good sanitation on your own property was not enough to protect you; ticks, in contrast seem pretty immobile, and the perception has been wide-spread that they could be easily avoided with some planning and perhaps the application of repellents.

It seems that two primary factors have led the public health community, and vector control specialists in general, to rethink the old paradigm that mosquitoes might be a community problem, but tick problems could be effectively dealt with by individuals and families. First was the increasing awareness that the old approaches to ticks and



Deer tick or black-legged tick, *Ixodes scapularis* (photo credit Oklahoma State U.)

tick-borne diseases weren't working – 10,000 cases of Lyme Disease rising to at least 30,000 each year with no end in sight, and no clear cure, simply could not be ignored. This was especially true as other tick-borne diseases (babesiosis, anaplasmosis, ehrlichiosis, etc.) were increasingly associated with significant mortality. At the same time, it was critical to prove that community-based or area-wide control programs could do better. The first evidence for this actually came from veterinary medicine, where control of cattle ticks and their associated diseases were only effective when area-wide programs were implemented. From 1997-2002, ARS scientists led an experimental area-wide control program against black-legged ticks by treating deer with acaricides; while results were promising, implementation was challenging and has spread slowly. Since then, small scale demonstration projects have shown variable degrees of success with both pesticide and non-pesticide community-based

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activities, such as deer population management, improved forest trail maintenance, land-use planning to reduce human contact with ticks, and social marketing to encourage greater use of repellents. None of these has been the silver bullet, and, as with mosquito control, it increasingly appears that careful use of conventional pesticides (e.g. bifenthrin) and botanicals (e.g. nooknatone), based on careful surveillance and integrated with non-pesticide tools, will be an essential component of effective tick-borne disease control.

During the last year, the momentum for community-based control of ticks and tick-borne diseases has increased substantially, and the IR-4 Public Health Pesticides Program has been substantially involved. In March 2011 we helped sponsor a national conference on "IPM for Preventing Tick-Borne Diseases" and led the session on community-based tick control programs. We are now a key partner in the federal Tick-Borne Diseases Integrated Pest Management Subgroup, which is drafting a white paper on practices to recommend and recommendations for research and funding.

Finally, IR-4 is preparing an inventory of all pesticides that are labeled anywhere in the world for tick control, as one critical step to identify best practices that communities can use to protect themselves. 🌿

New CLC Chair, Rich Bonanno

Excerpts and photo from this article were taken from the Mass. Farm Bureau Federation News & Views December 2009 Vol. 17 Issue 10.

Dr. Rich Bonanno was elected chair of the IR-4 Commodity Liaison Committee in March 2012. Rich was also elected President of the Massachusetts Farm Bureau Federation in December 2009. He is the owner and operator of Pleasant Valley Gardens of Methuen, MA where he raises potted flowering plants, bedding plants, vegetable transplants and grows fifty acres of fresh market vegetables that he

wholesales to supermarket chains and roadside stands within the Boston area.

Rich received his B.S. and M.S. degrees from Cornell University and his Ph.D. in Plant Physiology from Oregon State University. Prior to returning to the family farm in 1989, he was a tenured professor at North Carolina State University.

Dr. Bonanno is a Senior Extension Specialist at the University of Massachusetts Extension responsible for vegetable and small fruit weed management and is also an Adjunct Professor, Department of Plant, Soil and Insect Science at the University of Massachusetts, Amherst. 🌿



The IR-4 Newsletter Vol 43 No. 2 Spring 2012

The IR-4 Newsletter is published quarterly for distribution to cooperators in our partner State/Federal/Industry research units, State and Federal officials, commodity groups, and private citizens. Material from the IR-4 Newsletter may be reproduced with credit to the publication. Major funding for IR-4 is provided by USDA-NIFA and USDA-ARS in cooperation with the State Agricultural Experiment Stations. New Jersey Agricultural Experiment Station Publication No.P-27200-12-02, supported by state, US Hatch Act, and other USDA funds.

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Weeds


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evaluate early postemergence control of spurge and oxalis in two early stages of growth [including cotyledon to one leaf (C-1L) and two to four leaf (2-4L) stages] using preemergence active herbicides.

Early postemergence spurge control was evaluated following applications of Broadstar (flumioxazin), Casaron 4G (dichlobenil), HGH-63 (oxyfluorfen), Certainty (sulfosulfuron), Tower 6.0 EC (dimethenamid-p), Pendulum 3.3 EC (pendimethalin), and FreeHand 1.75 G (dimethenamid-p 0.75% + pendimethalin 1.0%) at labeled rates (1x) and twice the

labeled rate (2x). Tower, Pendulum, FreeHand, and Certainty all provided excellent control of spurge in the C-1L stage at all rates tested. Although control began to decrease once spurge reached the 2-4L stage, Tower, Pendulum, Certainty, and FreeHand (2x) controlled spurge at this stage. Due to extensive research through IR-4, Tower is now labeled for over the top use on many nursery crops.

Similar experiments were also conducted to evaluate early postemergence oxalis control following applications of Gallery 75 DF (isoxaben), Indaziflam SC, and Tower at labeled rates. Indaziflam consistently provided the best postemergence control of

oxalis of any treatment in the C-1L stage. Gallery treatments showed some postemergence activity at the C-1L stage, while Tower only had a marginal effect. Indaziflam also provided excellent control of oxalis when applied at the 2-4L stage of growth, while in most cases Gallery and Tower treatments had little to no effect on the larger oxalis. Again, due to IR-4 research it appears Indaziflam will be brought on the market for nursery production in early 2013. 

Save The Dates
SOR priority setting Conference 1, June 25, 2012 10 AM ET. Contact Michelle Samuel-Foo for more information.

National Education Conference
February, 27-28, 2013,
San Antonio, TX



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United States Department of Agriculture
National Institute of Food and Agriculture



Major funding for IR-4 is provided by Special Research Grants and Hatch Act Funds from USDA-NIFA, in cooperation with the State Agricultural Experiment Stations, and USDA-ARS.

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