

Global Minor Use Summit -2 Slated for Rome, Italy, February 2012

— by IR-4 Associate Director, Dan Kunkel

Plans are underway for the Global Minor Use Summit-2 (GMUS-2) that is slated to take place the week of February 20, 2012. The Summit will be held at the FAO headquarters in Rome, Italy. The GMUS-2 Organizing Committee has prepared a framework for the summit which includes the purpose, objectives and structure of the summit.

The first Global Minor Use Summit (GMUS) was held in Rome, Italy in December 2007. It was co-organized by the Food and Agriculture Organization of the United Nations (FAO), the USDA Foreign Agricultural Service (FAS), the U.S. Environmental Protection Agency (EPA) and the USDA / IR-4 Project (IR-4),

and its purpose was to highlight many of the issues and obstacles that growers of minor or specialty crops face. Nearly 300 participants from 60 countries identified four main action items:

- (1) Improvement of international communications and information exchanges.
- (2) Increase capacity building efforts for developing countries.
- (3) Engage the Codex Committee on Pesticide Residues to better support minor use crops.
- (4) Enhance research efforts through collaborative pilot projects and initiatives.

While various countries have made great strides and contributed to the progress of these four action items, many of the issues remain; such as access to safe and effective tools to protect crops and barriers to the international trade of commodities.

The co-sponsors of the first GMUS have agreed to facilitate another international forum to further the progress of minor use issues. GMUS-2 will further engage with FAO member countries (particularly developing country members) to ensure that their major issues of concern are reflected in the Summit program. The aim of

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GMUS-2

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GMUS-2 will be to continue improving the availability of newer, safer and more effective crop protection tools for specialty crop growers in both industrialized and developing countries. It is anticipated this will be accomplished through data generation and data sharing, facilitating the trade of agricultural commodities internationally, and learning from existing specialty crop program models.

Purpose of GMUS-2

GMUS-2 will focus on global agreements for pesticide policy, procedure and methodology to help deal with minor use issues while providing growers with access to safe tools to grow their crops and promote free and fair trade between nations. The Summit will provide a forum for the international exchange of information on current activities that address minor use issues and will identify future opportunities and challenges in technical and cooperative areas, and in policy considerations.

Summit Objectives

An update on the action items from the first summit, will be the first objective.

GMUS-2 will also address minor use issues in technical and cooperative areas through enhancing existing or developing new working groups to address issues of common

interest, international data sharing and research collaboration.

Additionally, the Summit will include a discussion of increasing involvement of all stakeholders especially specialty crop growers/ commodity associations and crop protection industry representatives in identifying needs and facilitating solutions to minor use problems.

Other technical and cooperation objectives will include: re-evaluating capacity building and reviewing, discussing and implementing guidance on crop groups and extrapolation.

Finally, policy considerations will be an important objective of GMUS-2. Some of these will include: advancing the topic of international harmonization through cooperation and transparency in establishment of MRLs and risk assessment by regulators, establishing criteria standards (in association with Codex CCPR) to define and recognize minor uses, developing a five year plan for implementation of new policies for minor use regulatory and harmonization priorities, and discussing policy aspects to enhance the registration of minor uses through the dedicated minor use programs, regulatory incentives, and guidance for crop groups and data extrapolation.

Recommendations and

guidance in the form of a manual for practical implementation of action items will also be discussed.

Structure of the Summit

The Summit structure will include a plenary session, group discussions and break-out sessions.

The break-out sessions will focus on data generation, data sharing and databases, crop grouping, and policy considerations such as regulatory incentives and harmonization.


On the final day of GMUS-2, participants will provide recommendations and summaries from the break-out sessions with the goal of identifying key action items to carry forward.

Who should attend?

The sponsors expect strong participation by developing countries, government pesticide regulators, Codex, FAO/WTO members, crop protection industry representatives, agricultural producers, and other consumer and environmental groups.

Sponsorship

The sponsors of GMUS-2 include: FAO, the USDA FAS, the U.S. EPA, IR-4 and other organizations etc. as identified.

Please visit the Global Minor Use Portal (one of the completed action item from GMUS 2007) at www.GMUP.org for more information and registration as it becomes available. 

Some Tea Facts <http://www.teausa.com>

Tea is the most widely consumed beverage in the world next to water, and can be found in almost 80% of all U.S. households. It is the only beverage commonly served hot or iced, anytime, anywhere, for any occasion. On any given day, over 154 million Americans are drinking tea.

In 2010, Americans consumed well over 65 billion servings of tea, or over 3.00 billion gallons. About 80% of all tea consumed was Black Tea, 19.5% was Green Tea, and a small remaining amount was Oolong and White Tea. On any given day, about one half of the American population drinks tea. On a regional basis, the South and Northeast have the greatest concentration of tea drinkers. Approximately 85% of tea consumed in America is iced.

Over the last ten years, Ready-To-Drink Tea has grown by more than 15 times. In 2010, Ready-To-Drink sales were conservatively estimated at \$3.30 billion. 2010 was the 19th consecutive year that consumer purchases of tea increased. Retail supermarket sales alone surpassed the \$2.15 billion dollar mark. Away-from-home consumption has been increasing by at least 10% annually over the last decade. The industry anticipates strong, continuous growth over the next five years. This growth will come from all segments driven by convenience, interest in the healthy properties of tea, and by the continued discovery of Specialty Tea.

Much of the world's tea is grown in mountainous areas 3,000 – 7,000 feet above sea level, situated between the Tropic of Cancer and the Tropic of Capricorn in mineral rich soil. Leading tea-producing countries include Argentina, China, India, Indonesia, Kenya Malawi, Sri Lanka, and Tanzania.

Tea is nearly 5,000 years old. It was discovered in 2737 BC by Chinese Emperor Shen-Nung, known as the "Divine Healer," when as legend goes, some tea leaves accidentally blew into the Emperor's pot of boiling water. In the 1600's, tea became highly popular throughout Europe and the American colonies. Tea played a dramatic part in the establishment of the United States of America.

In 1767 the British Government put a tax on the tea used by American colonists. Protesting this "taxation without representation," the colonists decided to stop buying tea and refused to allow tea ships to be unloaded. One December night in 1723, men dressed as Native Americans boarded British ships in Boston Harbor and threw more than 300 chests of tea into the sea. This now famous Boston Tea Party, in protest of the British tea tax, was said to be one of the acts leading to the Revolutionary War.

Tea is an all-natural and environmentally sound product from a renewable source. The tea plant is naturally resistant to most insects; oxidation of the tea leaf is a natural process; and, many tea packers use recycled paper for packaging.

Tea is a refreshing beverage that contains no sodium, fat, carbonation, or sugar. It is virtually calorie-free. Tea helps maintain proper fluid balance and may contribute to overall good health. Tea contains flavonoids, naturally occurring compounds that are believed to have antioxidant properties. Antioxidants work to neutralize free radicals, which scientists believe, over time, damage elements in the body, such as genetic material and lipids, and contribute to chronic disease. Every day, new findings from the international scientific community lend credibility to tea's healthy properties.

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Ron Tjeerdema Appointed as WSR Program Director



Ron Tjeerdema has been appointed as the Western Region Director. Ron was appointed to the position after his predecessor, Marion Miller Sears, lost her valiant battle with cancer in February 2011.

Ron holds two BS degrees from Humboldt State University, an MA from UC Santa Barbara, and a PhD in Pharmacology & Toxicology from UC Davis. Upon graduation, he first served as a faculty member for 12 years in the Department of Chemistry & Biochemistry at UC Santa Cruz. He has been a professor in the Department of Environmental Toxicology at UC Davis for the past 12 years; for

nearly 8 years he has also served as department chair. He has been certified in General Toxicology by the American Board of Toxicology since 1994.

In nearly 25 years in the field of environmental toxicology, Ron Tjeerdema has attracted over \$25 million in extramural research support and published in excess of 200 peer-reviewed research articles and another 300 research abstracts.

His areas of expertise range from chemical fate in the environment, sensitive lifestage bioassays and biochemical mechanisms of toxicity. He has

worked extensively with pesticides, petroleum hydrocarbons and dispersants, and marine planktonic toxins.

He has recently been selected as Editor-in-Chief of *Aquatic Toxicology*, and serves on the editorial boards of a number of journals including *Reviews of Environmental Contamination & Toxicology*, *Journal of Toxicology*, *Marine Pollution Bulletin* and *Bulletin of Environmental Contamination & Toxicology*.

Welcome to IR-4, Ron. 🌱

IR-4 Successes

Apr. '11 - Jun. '11

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: March 9, 2011

(not previously reported)

Fomesafen

Trade Name: Reflex

Crop: Pepper (bell and nonbell), Potato, Tomato

PR#: 09677, 08084, 08082

Federal Register: April 13, 2011

Etoxazole

Trade Name: Zeal

Crop: Avocado, Mango, Papaya, Black sapote, Canistel, Mamey sapote, Sapodilla, Star apple, Pepper/eggplant subgroup 8-10B, Melon subgroup 9A, Squash/cucumber subgroup 9B, Cranberry subgroup 13-07A,

Small vine climbing fruit except fuzzy kiwifruit subgroup 13-07E, Low growing berry subgroup 13-07G, Tea

PR#: 09738, 09216, 09292, 09234, 09814, 09018, 09205, 08096, 10342, 10341, 10552

Federal Register: April 20, 2011

Fluopicolide

Trade Name: Presidio

Crop: Root vegetable subgroup 1A

PR#: 09893, 09913

Federal Register: April 22, 2011

Trisulfuron-methyl

Trade Name: UpBeet

Crop: Garden beet

PR#: 08043

Federal Register: May 11, 2011

Propiconazole

Trade Name: Tilt

Crop: Bulb onion subgroup 3-07A, Green onion subgroup 3-07B, Caneberry subgroup 13-07A, Bushberry subgroup 13-07B, Low growing berry subgroup 13-07G except cranberry, Mint (revised tolerance)

PR#: 10501, 10502, 10503, 10504, 10505

None in June

Grzegorz (Greg) Krawczyk New SLR for Pennsylvania

— by Edith Lurvey, Northeast Regional Field Coordinator

Grzegorz (Greg) Krawczyk has agreed to serve as State Liaison Representative for Pennsylvania. This is a belated official announcement as he has actually been serving in this capacity for over a year. Greg will not be a new face for many of us, as he has been the tree fruit entomology representative for the northeast at several Food Use Workshops over the years.

Greg is a Research Associate Professor at Penn State's Fruit Research and Extension Center, Biglerville. He started at Biglerville as a post-doc in 1997, receiving a permanent appointment in 1999. His principle area of interest is Integrated Pest Management (IPM) in tree fruit, and is currently working on identifying some products that will control Brown Marmorated Stink Bug (BMSB) and fit into IPM programs. A small part of his preliminary BMSB screening work is being funded through the IR-4 Efficacy/Crop Safety Program. Greg received his doctorate from Michigan State University in 1996. His masters and undergraduate work were completed in his native Poland.



With his knowledge of insects and IPM, coupled with his great enthusiasm, Greg is a welcome addition to the IR-4 program. I am sure we all would like to welcome Greg, and look forward to working with him in the future. 🌱

More People in the News

Daniel Rossi, Executive Director of the NERA, a formal coalition of Directors of State Agricultural Experiment Stations (SAES) for the Northeastern Region of the United States of America, has rejoined the IR-4 PMC as the NER Administrative Advisor.

Doug Buhler, IR-4 PMC NCR Administrative Advisor has been appointed as interim dean of the Michigan State University College of Agriculture and Natural Resources. 🌱

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In Search of Brown Marmorated Stink Bug

On Wednesday, June 22, 2011, IR-4 hosted the EPA, USDA and others on a tour they titled "In Search of Brown Marmorated Stink Bug (BMSB) Solutions". This pest is now found in 33 US states and is causing millions of dollars of lost revenue to growers throughout the Mid-Atlantic and elsewhere. The purpose of this year's tour was to provide an opportunity for US EPA regulators, USDA personnel, and other participants to hear from growers, firsthand, about the severity and devastation caused by this pest.

Tracy Leskey, USDA-ARS, Appalachian Fruit Research Station Entomologist and BMSB expert was instrumental in organizing the stops along the tour. She delivered the opening session at the station, which serves the eastern fruit-production area from Georgia to Maine. Michael Glenn, Station Director and Tracy Leskey gave an overview of the research on BMSB and findings of their work. Ralph Scorza also gave participants a look at his research, rapid breeding of plums, and Scott Wolford discussed engineering research



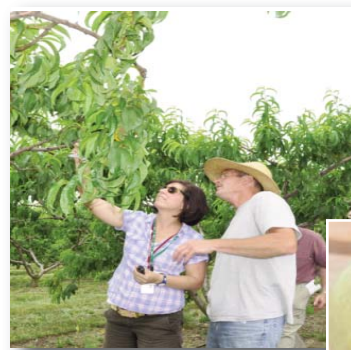
and operation of new equipment that gently shakes fruit from trees and was developed at the research station.

General BMSB Information

The BMSB is an invasive pest native to China, Japan, Korea, and Taiwan and it is believed to have been found first in the US in Allentown, PA in 1998. The insect deposits eggs on undersides of leaves and has five nymphal stages. It has two generations per year in the Mid-Atlantic area, and its developmental period lasts approximately 50 days from egg to adult. It can now be found in more than 300 host plants including tree fruit, small fruit, grapes, vegetables, legumes, and ornamentals.

In 2008 and 2009, in Kearneyville, WV, the pest was found late in the season and the crop loss of apples in 2009 was approximately 45,000 bushels for one grower. This amount had to be redirected to processing from fresh market due to damaged fruit. This amount was about 10% of the fruit harvested, resulting in a loss in crop value for those damaged fruit between 80 and 90%.

Last year, they began recognizing BMSB as a season long pest and growers held an emergency meeting in September 2010 to discuss strategies for managing this pest.



Tracy Leskey, USDA-ARS, Appalachian Fruit Research Station Entomologist and BMSB expert, shows Bill Gardenhour, owner of of Gardenhour Orchards evidence of BMSB damage (right) on the day of the tour.



Stinkbugs overwinter in homes and are particularly fond of climbing to the top stories and attics of homeowners, Tracy discussed the plight of one homeowner in Harpers Ferry, WV. She quoted the owner who stated, "This weekend I vacuumed up more than 8,000 stink bugs (vast majority were alive) in my attic, to add to the now more than 4,000 I've removed from my living space since January. I have now destroyed 12,348 stink bugs in my home in 45 days since January 1, 2011. After all the effort this weekend, another 100+ found their way into my kitchen (a two year old addition) Sunday afternoon."

Tracy discussed the challenges in managing the stink bug and identified them as:

- The tremendous season-long pressure from populations moving from wild and other cultivated hosts into cropped areas leading to constant re-infestation of plots.



Maryland's Deputy Director, looks on as Robert B... tour participants at h... Mountain Orchard.

Integrated Stink Bug Solutions

- The greatest efficacy has been observed when adults directly contact wet spray material. Only a small portion of the damaging population is likely exposed to wet deposits.
- Avoidance behaviors allow them to potentially escape treatments.
- Insecticides labeled as excellent against native stink bugs are not showing the same field efficacy against BMSB. Several insecticides caused initial knockdown but the BMSB recovered within 24 hours. Other materials were completely ineffective.

Recent studies involving 7 day survivorship evaluations using carbamates have been conducted. Of these, Lannate demonstrated moderate to good efficacy. The organophosphate chemistries generally showed some efficacy as well as one pyrethroid, bifenthrin. The neonicotinoids tested demonstrated significant levels of insect recovery.

Since this pest originated in another part of the world it has no known predators or parasites in the states. There is a parasitic wasp in Asia that effectively controls BMSB by parasitizing eggs but this wasp is not available for release in the U.S. yet.



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Hearing from the growers was very impactful. Bill Gardenhour is the fourth generation owner

of Gardenhour Orchards in Smithsburg, MD. On his farm, he grows pick your own and fresh market fruits and vegetables. He just spotted BMSB in his peaches a couple weeks ago and has been spraying his orchard regularly ever since. He stated, "It is only June, and I have pest pressure. I need to sustain my apples until September/October. Also, I worked a long time to develop an Integrated Pest Management (IPM) program here but I have to spray more than ever to control this pest so forget about IPM."

Robert Black, owner of Catocin Mountain Orchard, Thurmont, MD, and final tour stop of the day agrees with Bill. He and his family have worked hard to implement Best Management Practices that include trickle irrigation, which allows for increased growth while using less water and power along with an IPM program to allow the "good bugs" to control the "bad bugs," but he too has had to walk away from over 20 years



Agriculture Specialist Bob Rouse explains the impact brown marmorated stink bugs are having on local farms during the last tour stop of Catocin Mountain Orchard.

of IPM in order to control the BMSB.

Mark Seetin, Director, Regulatory and Industry Affairs, US Apple Association was a participant on the tour. He stated in a letter to IR-4 Executive Director, Jerry Baron, "As vital as the work of IR-4 has been in the past, the unprecedented challenges posed to U.S. specialty crop production by the BMSB makes it even more critical. US Apple estimated that Mid Atlantic growers lost 18 percent of the 2010 crop to the BMSB, costing \$37 million to apples alone. When all the other specialty crops produced in the Mid Atlantic were factored in, the number was likely 5 times that amount. Worse, as we saw during last month's tour, prospects are growing that damage in 2011 could be significantly greater than in 2010. As the BMSB expands across the U.S., it is critical to the specialty crop industry that IR-4 continues to function in the critically needed role as a facilitator to bring the best available technology to specialty crop growers to use in combating the devastating potential of the BMSB. 🌱"

Major portions of this article were presented by Tracy Leskey as a slide presentation during the tour and have been used here with her permission. Tracy can be contacted at tracy.Leskey@ars.usda.gov IR-4's Kathleen Hester also contributed to this article.

UPDATE: see sidebar on page 11 for a related article.

More Tea Facts continued from page 3

Recent research has explored the potential health attributes of tea through studies in humans, animal models and through in vitro laboratory research. For the most part, studies conducted on green and black tea, which are both from the *Camellia sinensis* plant, have yielded similar results. Recent research suggests that tea and tea flavonoids may play important roles in various areas of health and may operate through a number of different mechanisms still being explored.

Heart Health

The current body of research suggests that drinking tea can offer significant heart health benefits ranging from reducing heart attack risk to lowering Low Density Lipoprotein (LDL) cholesterol, or “bad” cholesterol, with benefits seen with just one cup and upwards of six cups a day. A Harvard study found that those who drank a cup or more of black tea per day had a 44% reduced risk of heart attack. In a large population based study, adults who drank just over two cups of green tea per day reduced their risk of death from cardiovascular disease by 22-23%.² Additionally, a US Department of Agriculture study found that participants who drank five cups of black tea per day along with a diet moderately low in fat and cholesterol reduced their LDL cholesterol by about 11% after three weeks.

Certain Cancers

Benefits to gastrointestinal health reaped by tea-drinking seem to be cumulative and dependant upon the amount of tea consumed per day as well as the number of tea drinking years. One study found that women who consumed the equivalent of 2.5 cups of tea per day had a 60% reduction in rectal cancer risk, compared with women who drank less than 1.2 cups of tea daily. An additional study found tea drinkers to have an approximate 42% reduced risk of colon cancer compared to non-tea drinkers. Men who drank more than 1.5 cups of tea per day were found to have a 70% lower colon cancer risk. One study showed that participants who drank iced black tea and citrus peel had a 42% reduced risk of skin cancer and hot black tea consumption was associated with a significantly lower risk of the most common form of skin cancer, squamous cell carcinoma.


Neurological Decline

A recently published long-term study of nearly 30,000 adults found that drinking three or more cups of tea per day was associated with a 69% reduced risk of developing Parkinson’s disease. According to research presented at the 2007 Scientific Symposium on Tea and Health, theanine, an amino acid that is for the most part uniquely found in tea (green and black), may help prevent age related memory decline. This human-based data is supported by recent animal studies utilizing theanine. Another recent animal study shows that green tea may have protective effects against Alzheimer’s disease.

Caffeine Content

Tea is naturally low in caffeine. A cup of Black Tea, for example, contains about 40 milligrams of caffeine.

Cost Per Serving

Prepared in the home, tea costs about three cents per serving, cup or glass. Tea continues to remain one of the most economical beverages available. 

Focus on a researcher: Mark Czarnota, UGA

When Northerner, Mark Czarnota, took the job at the University of Georgia's (UGA) College of Agricultural and Environmental Sciences, he didn't know he'd learn a new skill, picking cotton, but such was the case for him and other "Yankees" who join the school in Griffin, GA.

Mark has been with UGA since 2001. As the school's Associate Professor and Extension Specialist, Mark travels throughout the state meeting with growers and regularly speaks to commodity groups where he presents current research findings, labeling changes and trends in weed control.

His 25% research appointment is a vital component of his position. Mark uses this appointment to support his extension program. Most of his projects are directly related to improving producer knowledge of weed control in the Ornamental, Floriculture, Christmas tree and small fruit industries. He also works closely with the agricultural chemical industry and has been conducting IR-4 research to help develop herbicides and control strategies for "difficult to control weeds".

At the beckoning of the blueberry industry, Mark used a portion of his time researching

weed control needs for this important commodity. Controlling weeds in a blueberry field is critical, as loss of newly established plants and annual yield losses due to weed competition can easily escalate to \$1,000 per acre. Through his research and extension efforts, he has developed valuable weed control information to help the blueberry industry reduce production costs. Over the past several years, experiments have been designed to evaluate herbicides for pre-emergence weed control in pine bark substrates, nutsedge control in blueberries, and woody weed control in blueberries. Information from this research has been presented in various publications and at state, regional and national meetings.

His work has also led to cooperation with faculty at both the University of Georgia and North Carolina State University. Information generated through these research and extension activities is helping to develop sound weed control information for the blueberry industry throughout the country.

Before Mark joined UGA, there was no program servicing ornamental and nursery crops, which generates an estimated \$1.5 billion annually in Georgia. Mark developed a comprehensive weed control program that has provided valu-



Mark Czarnota gets a lesson in picking cotton, which he explains is a UGA initiation for newcomers from the North.



able weed control information to county agents, growers and producers. Failures in weed control programs at a containerized nursery can lead to annual hand weeding costs of \$800 to \$1,200 per acre. Mark provides recommendations on selection and use of available herbicides, as well as alternative measures of weed control. With this information, growers and producers improve their business profitability and remain competitive in today's global market.

Mark uses a variety of outlets to disseminate his information, including journal articles, refereed extension bulletins, popular articles, and presentations. He has also developed E-Learning modules on how to get started in the greenhouse business. Mark's extension and research has generated over \$550,000 in grants and gifts and his efforts have generated significant regional and national interest thereby benefiting small fruit growers and the entire US ornamental and nursery industry. IR-4 recognizes Mark's hard work and is proud to focus on researchers like him. 🌱

Promiscuous Plant Propagation? Not at all!

— by Cristi Palmer, IR-4 Ornamental Horticulture Program Manager

The first step toward placing a beautiful plant in a residential or commercial interior or landscape is propagation.

Propagation simply means reproducing a plant. There are several ways plants reproduce. Seed production is a common



way to propagate, conferring the benefit of a mixed genetic pool. Specific parents are crossed whose progeny will possess certain desired traits in common. Many bedding plants including backyard vegetables are propagated in this way. Another common method of reproducing plants is through bulb or corm formation under or at the soil line. Gladiolus, tulips, iris and other flowering plants are grown in large fields until the bulbs or corms are large enough to be sold and replanted. An increasingly common method of propagation is asexual, vegetative propagation, through tissue culture or through rooting cuttings harvested from stock “mother” plants. Rooted or unrooted geranium, chrysan-

themum and poinsettia cuttings, for example, are often propagated at offshore locations whose environments are conducive to vegetative propagation and are sold by propagators to growers who will transplant them and grow them into finished materials.

The value of domestically propagated plants (seeds, cuttings, bulbs/corms) in the United States is \$694 million annually (2009 Census of Horticulture, NASS 2010). Growers also import \$697 million in propagative ornamental horticulture plant materials into the U.S. (Department of Commerce, U.S. Census Bureau, Foreign Trade Statistics, 2010). These imports can present challenges, and one of the most pressing is preventing non-native hitchhikers or potentially invasive species.

Hitchhikers can be new diseases or insects, or even weeds in the case of woody and perennial plant liner production (cycad scale, *Ralstonia solanacearum* Race 3 Biovar 2, yellow fieldcress). As international trade increases, regulatory agencies, environmental watchdog groups, and even concerned customers are increasingly focused on trade



in imported seeds, bulbs, vegetative cuttings, and other plant material, as well as other pathways. Wood pallets and other wood packaging materials, airplanes, ships and cargo containers have been sources to move organisms throughout the world (Asian long-horned beetle, brown marmorated stink bug). Travellers may intentionally or unintentionally bring non-native species back as they return to U.S. soil (gypsy moth, kudzu, giant African land snail). Storms and wind patterns have been suspects in certain exotic disease outbreaks (soybean rust).

International propagators try to minimize the spread of hitchhikers as much as possible. Finding an unidentifiable insect or a diseased plant is enough for the U.S. Customs and Border Patrol to reject shipments at the ports. States may also reject shipments from out-of-state for pests of local concern. Reputation is important, and if domestic or international propagators get known for sending problems routinely, sales may go down. To avoid having shipments rejected at the border, propagators and growers may have



to rely on chemical management tools, particularly right before harvest and shipment. While necessary to ensure minimal pest movement and good reputation, reliance on a limited number of chemical tools can, if not carefully designed and monitored, lead to resistance issues further down the crop production cycle.

The best strategy for propagators is to keep their operations as clean as possible utilizing Integrated Pest Management, or all available means to manage diseases, pests, and weeds. Sanitation and scouting are critical, as is tapping into beneficial organisms and biological and chemical control options as needed. When chemical control options are used, it is important to rotate to different modes of action to reduce resistance. For nursery liner propagation, preemergent or postemergent herbicides can be applied, and any escaping weeds should be manually removed before they have the opportunity to flower and set seed to prevent unwanted propagation.

IR-4's research focus is primarily on tools to help with growing finished plants, but some experimental data are applicable to maintaining stock plants or growing rooted cuttings. To read IR-4 summary reports on various disease, insect, and weed efficacy projects, visit the Ornamental Horticulture page on the IR-4 website. 🌱

*Photo credits: Cristi Palmer
Sources: Joe Neal, Lance Osborne, Lin Schmale*

Calendar of Events

IR-4 Southern Region
2011 Priorities Setting Call
#2-August 4, 2011 10am ET

North Central SLR Meeting
University of Illinois
Urbana-Champaign
August 15-16, 2011

2011 Food Use Workshop
September 13-14, 2011
Cary, NC

2011 Ornamental Horticulture
Workshop
October 5-6, 2011
Sacramento, CA

2011 National Research
Planning Meeting
IR-4 HQ
October 25-26
Princeton, NJ

Global Minor Use Summit -2
Rome, Italy
February 22-24, 2012

EPA Approves Two Insecticides for Control of Brown Marmorated Stink Bug

WASHINGTON – On June 24, 2011, EPA approved, for emergency use, the insecticide dinotefuran (trade names Venom and Scorpion) on tree fruit to help manage populations of the brown marmorated stink bug, an invasive insect that has caused extensive yield losses in tree fruit production in the mid-Atlantic region. The approval, known as an emergency exemption, or Section 18, applies to Virginia, Maryland, Delaware, Pennsylvania, West Virginia, North Carolina and New Jersey. Under the exemption, producers of stone fruit (such as peaches, plums and cherries) and pome fruit (including apples and pears) are allowed to manage the brown marmorated stink bug with two applications of dinotefuran by ground equipment per season. 🌱

*EPA Pesticide Program
Updates
www.epa.gov/pesticides
From EPA's Office of
Pesticide Programs -
06/30/2011*

Call for Nominations

Nominate someone today for the IR-4 National Recognition of Excellence Award.

The nomination deadline is October 1, 2011.
This award is presented once every 3 years.


Nominees can be anyone associated with the program except active members of the PMC. The number of nominees is not restricted, but a maximum of 3 persons will receive the award.

The nomination must show evidence of outstanding achievements well beyond normal job performance, and achievements that have resulted in a major positive impact on the IR-4 program.

Once a person has been given this award, they are not eligible to receive it again.

Find the nomination form at ir4.rutgers.edu. 

IR-4 is now using Constant Contact

IR-4 is now using Constant Contact to communicate news and information about events and happenings throughout the program. However, some of you may not be receiving our announcements due to spam filters. If you have not received announcements since April you may need to contact your IT professionals to look into allowing Constant Contact emails to land in your inbox, or have them contact Sherrilynn Novack at novack@aesop.rutgers.edu for more information on allowing these emails to get through. 



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