

## Director's Notes

As this issue goes "to press", several items of interest come to mind.

On November 20, Congress reached a final agreement on a \$388 billion spending bill funding many government departments including USDA. Thus, we now have a fairly clear picture of national figures for several key IPM lines. For the most part last year's 10 percent cut for many programs continued in the new budget. Funding for IPM Centers increased slightly from FY2004 to \$4,166,000. Smith-Lever 3(d) funds, used to support state IPM programs, also got a slight bump from \$9,563,000 in FY2004 to \$9,920,000. The IR-4 program was one of few to be funded at level at or above FY2003 (prior to the 10 percent cut). Sustainable Agriculture had a slight increase in research and education funds that was offset by a larger decrease in extension activities. CAR and RAMP are both up slightly while PMAP and RIPM were both decreased. For more information on the USDA/CSREES budget, download the spreadsheet at: [http://www.nasulgc-bac.com/documents/FY2005/2005\\_CSREES\\_Conference.xls](http://www.nasulgc-bac.com/documents/FY2005/2005_CSREES_Conference.xls)

Ron, Steve and I recently submitted a short list of regional priorities to be included in the Pest Management Alternatives Program (PMAP) RFA that will be released soon. To compile the list we reviewed existing Pest Management Strategic Plans from the region and also asked for input from IPM Coordinators, state contacts, Center Advisory Council members and Center Steering Committee members. Thank you very much to the many people who offered excellent information despite a very short period to respond.

The Center is a minor partner in the newly refunded IPM CRSP project led by Virginia Tech. IPM CRSP is a program funded by the US Agency for International Development (US AID, part of the State Department). Its purpose is to combine US and local expertise to develop and implement IPM projects in developing nations. Our role will be to develop an online reports management system.

Dr. Ed Rajotte, IPM Coordinator at Penn State, recently presented results of a survey of state IPM Coordinators regarding their interactions with and valuation of regional IPM Centers. The results show a mixed bag of clear successes and areas that need improvement. We will be working with Southern Region IPM Coordinators as well as the Advisory Council and Steering Committee to use these results as a starting point in evaluating ways we can be more effective with state IPM Programs, a key component of the national effort.

Finally, as 2004 comes to a close, we at the Center would like to wish everyone a safe and happy holiday season. We look forward to working with you throughout the upcoming year to continue to improve the Center and build successful programs.

- Director, Jim VanKirk

## Upcoming Events

The Southern Region IPM Center State Contacts and Project Leaders will meet in Raleigh, North Carolina on December 7th for workshops on the Electronic Information Requests Monitoring System, Crop Profiles and PMSP guidelines. In addition to the workshops, the State Contacts and Project Leaders will give brief updates about their states and current projects. The Center will host a reception on the evening of the seventh for all State Contacts, Project Leaders, and members of the Advisory Council and Steering Committee. The Advisory Council and Steering Committee will meet jointly on December 8th and hear Center updates, review the priorities website as well as the new Center website, and discuss other news within the Center. In addition, Advisory Council and Steering Committee members will discuss the rotation of committee leaders and members, and set membership bylaws. The Steering Committee will meet on December 9th for a half day of meetings to discuss the committee bylaws and review the new RFA and other issues brought forth in the Advisory Council meetings. Please contact Jim VanKirk or Jennifer Hodorowicz with further questions.

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## IPM CRSP

The Integrated Pest Management Collaborative Research Support Program (IPM CRSP) is a collaborative partnership among U.S. and developing country institutions with an emphasis on research, education, training and information exchange. It coordinates global research among more than 20 U.S. and foreign institutions on horticultural export crops as well as other food production systems.

Research activities of the IPM CRSP are based on collaboration between scientists of participating host countries and U.S. institutions. Participating host countries are: Albania, Bangladesh, Ecuador, Guatemala, Honduras, India, Jamaica, Mali, the Philippines, and Uganda. U.S. institutions are Montana State University, Ohio State University, Pennsylvania State University, Purdue, UC Davis, University of Georgia, North Carolina A&T University, Florida A&M University, Fort Valley State University, the U.S.DA, and Virginia Tech as the lead and Management Entity institution.

*Above information from the IPM CRSP website (<http://www.ag.vt.edu/ipmcrsp/index.asp>)*



## Profile: Geoff Zehnder, Ph.D.

When Geoff Zehnder was a child he spent a lot of time on his uncle's dairy farm where he learned that his uncle had a hard time controlling squirrels, rats and other pests. When he went to college he was originally interested in studying vertebrate pest management until he took a class as an undergrad that steered him down the IPM path.

"When I was an undergraduate student at the University of California at Davis I took a class in biocontrol and decided to switch to insects," said Zehnder. "I've always been interested in agriculture and pest management, and looking for alternatives to pesticides because it has always been a challenge for people. I think that challenge is what originally drew me to it."

After receiving his Ph.D. in entomology from the University of California at Riverside, Zehnder accepted a position with Virginia Tech University at their Eastern Shore Experiment Station. There he had a 100 percent research appointment working on vegetable pest management. After six years in Virginia, Zehnder moved to Auburn University where he was a research professor in Entomology and also served as IPM Coordinator. In 2000 he moved to his current position as a professor of entomology and coordinator of the IPM and Sustainable Agriculture Programs with Clemson University and South Carolina.

"Currently my time is split 50 percent to the IPM coordinator position and 50 percent to the sustainable agriculture coordinator position," said Zehnder. "Holding both positions gives me the opportunity to leverage funds and work with projects that are related to both programs."

Zehnder is currently working on numerous projects between his two positions to promote sustainable agriculture and IPM, starting with children as young as elementary school level.

"To me, "Integrated Pest Management" is an imposing term that can turn some people off," said Zehnder, "I think if kids are educated and understand the concepts of IPM they will work to practice IPM in their everyday lives. We hope once they realize there are little things they can do, such as tolerating some bugs around the house and in the yard, they will grow into adults that won't be as prone to using pesticides routinely."

One program Zehnder is developing with the elementary schools incorporates IPM topics in experiential curriculum. "Our idea is to work with elementary schools and target fifth grade students," said Zehnder. "We are working with teachers to develop the curriculum so that students learn about IPM tactics, and then they have to put these practices into place by developing a pest management strategic plan for the school."

Zehnder is also involved in a regional project supported by the Southern Region SARE Program to develop a core training curriculum for extension agents in sustainable agriculture. The first topic slated for development will be IPM for Organic Crops. "The idea here is to create a web-based curriculum that can be utilized by all land grant university extension systems in the region, so that sustainable agriculture and IPM training will become an integral part of extension system training."

Another program Zehnder is working with at Clemson University is a student organic farm located on campus. "The organic farm fits with the IPM and sustainable agriculture program because it gives students experience in scouting and managing pests," said Zehnder. "Because we are certified organic the students get hands-on experience with prevention and avoidance strategies for pest management, so it has been a very successful teaching resource."

In addition to all the work he does with Clemson University and South Carolina, Zehnder is a member of the Southern Region IPM Center Steering Committee. Being a member of the program has provided mutual benefit to the Center and to Zehnder. "I think that getting the regulation folks, the research folks, and the extension folks together is a benefit of the steering committee because now these programs can work together to address issues that impact all areas," said Zehnder. "I also like the idea of operating funding programs through the region because it gives us, the state constituents, more input on priority setting."

If you would like more information about Zehnder's programs contact him at 864-656-6644 or [zehnder@clemson.edu](mailto:zehnder@clemson.edu).



Dr. Geoff Zehnder, professor and coordinator, IPM and sustainable agriculture programs at Clemson University.

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**"I think everyone needs to be aware of IPM, obviously the practitioners, but also the general public. Here at Clemson University we are working hard to educate the general public."**

**- Dr. Geoff Zehnder**

## *Methyl Bromide Critical Use Exemptions*

In May 2002, the U. S. Environmental Protection Agency (EPA) solicited applications for critical use exemptions from the phase-out of methyl bromide in the United States. The exemptions permit the continued production and importation of methyl bromide for use in agricultural production after the January 1, 2005 phase-out date established under an international agreement (Montreal Protocol on Substances that Deplete the Ozone Layer) and the Federal Clean Air Act. Exemptions are allowed only for those methyl bromide uses that have no technically or economically feasible alternatives. Applicants for these critical use exemptions were required to provide information for the EPA, U. S. Department of Agriculture (USDA) and other Federal agencies to determine whether specific uses of methyl bromide are critical and no suitable alternatives exist. The deadline for submitting the first round of critical use exemption applications to the EPA was September 9, 2002.

In June and July 2002, Land-grant university scientists worked with State Department of Agriculture personnel to contact grower groups to identify the critical uses of methyl bromide. Methyl bromide uses that were identified as critical in southeastern U. S. included strawberry fruit, strawberry nursery, tomato, pepper, melon, cucumber, and squash production.



Methyl bromide tanks

A workshop was held in Raleigh, North Carolina on August 7-8, 2002 to complete and submit multi-state applications for these crops. Extension and research scientists, county Extension agents, state regulatory personnel, commodity organization representatives, growers and other interested parties from Alabama, Arkansas, Georgia, North Carolina, South Carolina, Tennessee and Virginia attended the workshop, and more than 25 individuals participated. Representatives from the major fumigant companies were invited and provided information on methyl bromide usage in the respective states. Christine Augustyniak, Office of Pesticide Programs, EPA, and Burleson Smith, Special Assistant, Pest Management Policy, USDA, attended the workshop and provided valuable direction and advice on the completion of the critical use exemption applications. Nancy Kokalis-Burelle, USDA/ARS, U. S. Horticultural Research Laboratory, Fort Pierce, Florida, also provided input at the workshop. Barclay Poling, Department of Horticultural Science, and Steve Toth, Department of Entomology, North Carolina State University, served as facilitators for the workshop. Significant progress toward the completion of the multi-state applications was achieved at the workshop;

however, much work remained following the workshop. Barclay Poling and Steve Toth worked with workshop participants in the cooperating states to gather research data from university scientists in participating states, complete the application forms, and submit the applications to the EPA by the September 9 deadline. Barclay Poling, David Monks, Doug Sanders, Jonathan Schultheis, Gina Fernandez and Bill Jester, Department of Horticultural Science, and Frank Louws and Gerald Holmes, Department of Plant Pathology, North Carolina State University, provided much of the research data included in the multi-state applications. Methyl bromide critical use exemption applications from the Southeastern Strawberry Consortium (representing over 700 farmers and 4,040 acres of strawberry fruit production in Alabama, Arkansas, Georgia, North Carolina, South Carolina, Texas and Virginia, and representing 7 farmers and 156 acres of strawberry nursery production in North Carolina and Tennessee), the Southeastern Tomato Consortium (representing over 100 farmers and 15,000 acres of tomatoes in Alabama, Arkansas, North Carolina, South Carolina and Tennessee), the Southeastern Pepper Consortium (representing 15 farmers and 1,850 acres of tomatoes in Alabama, Arkansas, North Carolina, South Carolina, Tennessee and Virginia), and the Southeastern Cucurbit Consortium (representing over 300 farmers and 12,500 acres of melons, cucumbers and squash production in Alabama, Arkansas, North Carolina, South Carolina, Tennessee and Virginia) were completed and submitted to the EPA by the September 9, 2002 deadline.

The USDA, EPA, and U. S. State Department collectively submitted a request to the International Committee for exemption of the critical uses of methyl bromide in the U. S. This request included the methyl bromide critical use exemptions for strawberry, pepper, tomato, melon, cucumber and squash production in the southeastern U. S. Applications for methyl bromide critical use exemptions for 2006 and 2007 were completed and submitted by the Southeastern Consortia (which grew to include Kentucky, Louisiana and additional states) in 2003 and 2004 for inclusion in ongoing U. S. requests to the International Committee.

The first round of requests by the U. S. resulted in 19.7 million pounds of methyl bromide allowed for critical uses, including for strawberry, pepper, tomato, melon, cucumber and squash production in the southeast. This and future decisions regarding methyl bromide critical use exemptions represent a balance of the needs of agricultural producers to manage damaging pests and the need to reduce the potential environmentally-damaging effects of methyl bromide.

Considerable research into alternatives to methyl bromide in managing weeds and plant diseases in agricultural crops has been accomplished in the past ten years. The need for and subsequent usage of methyl bromide on agricultural crops has dramatically declined over the ten-year period. However, economically and technically-feasible alternatives for methyl bromide have not been developed and/or successfully transferred to growers of certain small fruit and vegetables in the southeastern U. S. Therefore, it is imperative that methyl bromide continues to be available to these growers until suitable alternatives are available and successfully implemented by the growers.

The Southern Region IPM Center is committed to supporting activities that will help growers in the southern region identify and adopt methyl bromide alternatives that will result in effective soil pest management as the methyl bromide phase-out proceeds.

## *Soybean Rust in the United States*

As of December 1, Asian soybean rust was confirmed in Louisiana, Mississippi, Florida, Georgia, Alabama, Arkansas, South Carolina and Missouri. Visit [http://spdn.ifas.ufl.edu/soybean\\_rust.htm](http://spdn.ifas.ufl.edu/soybean_rust.htm) for more information about soybean rust in your area and what you should do if you suspect you have soybean rust in your fields.



Soybean leaves infected with soybean rust.

# Curtis Consulting, Inc.



Founded in 2001 by Jennifer Curtis, Curtis Consulting Inc. provides strategic and technical services to clients interested in advancing environmental stewardship in agriculture. It is Curtis Consulting's mission to "work with its clients to assess needs and opportunities, develop partnerships and resources, design and manage projects, and document results."

With a Masters of Science in Environmental Management and Policy from the University of North Carolina, Chapel Hill, Curtis has worked to help improve the sustainability of agricultural production and pest management systems since 1986.

"My interest in IPM and sustainable agriculture began when I was an undergrad in public health at the University of Oregon," said Curtis. "It was then that I received an internship with a grassroots organization advocating for alternatives to forestry applied herbicides."

With a strong background in IPM and sustainable agriculture, Curtis Consulting works with farmers, buyers, researchers and policy advocates to help develop partnerships, create standards, advance policies, support research, design outreach and education programs, and evaluate opportunities and outcomes.

"I really enjoy working with diverse stakeholders to articulate common goals, map out projects and bring in funding," said Curtis. For the past 4 years, Curtis has worked closely with Gerber Products Company helping to develop field-level projects as well as company agricultural programs that promote environmental stewardship. Notes Curtis, "It's been an honor to work with a food company that is focused on establishing a progressive model for real environmental change in agriculture."

Currently, within the southern region, Curtis Consulting is concentrating on the development of IPM tools in sweet potato. In 2001, Gerber Products Company hired Curtis Consulting to identify opportunities for advancing IPM in southern sweet potato production. After meeting with growers, crop consultants and land grant researchers and extension personnel in Louisiana, North Carolina, Alabama and Mississippi, Curtis Consulting suggested developing an industry partnership to engage in a strategic planning process to determine the highest-priority pest problems and potential solutions. In collaboration with North Carolina State University (NCSU) horticultural research staff, Curtis Consulting wrote a successful grant to the U.S. Environmental Protection Agency's Region 4 Agricultural Stewardship Initiative to fund the strategic planning process.

Shortly after, NCSU hired Curtis Consulting to develop the partnership and facilitate the strategic planning process between the four states. Gerber then hired Curtis Consulting to coordinate the development of a funding proposal to USDA's Risk Avoidance and Mitigation Program (RAMP). Curtis Consulting worked with key personnel, growers, and industry associations to develop a cohesive research and education project and then drafted the proposal, "Development of Grower Decision-Making Tools to Reduce Risk and Enhance the Sustainability of Southern Sweet Potato Pest Management Systems."

In June 2003, the Southern Sweet Potato IPM project was awarded \$2 million for 4 years. Curtis continues as the Project Outreach & Evaluation Coordinator, and works to; oversee development of a database to house research and grower production data; facilitate meetings among investigators and cooperators; design and implement project evaluation activities, and coordinate outreach to growers and others in the industry.

In addition to working with NCSU and Gerber, Curtis Consulting has worked with the Food Alliance, Natural Resources Defense Council, SureHarvest, Self-Help Credit Union, and the World Wildlife Fund.

A member of the SRIPMC Advisory Council, Curtis Consulting has formed partnerships with other members of the council, and looks forward to cooperating with other organizations working towards a common IPM goal.

"Being on the committee has helped me think about how to start other projects like the Southern Sweet Potato IPM project, and how to keep this project connected to other programs in the southern region," said Curtis. "The Center has a tremendous opportunity to promote and initiate the types of projects that I believe will provide growers, researchers, food companies, consumers and others involved in agriculture with the tools and resources they need to address agriculture's environmental challenges."

If you would like more information about Curtis Consulting please contact Jennifer Curtis at [jencurt@mindspring.com](mailto:jencurt@mindspring.com) or visit their website: [www.curtis-consulting.com](http://www.curtis-consulting.com).



Jennifer Curtis, founder and principal, Curtis Consulting, Inc.

## Did you know?

"In 1526 -31 the monks of Troyes formally excommunicated the caterpillars that were plaguing the crops, but added that the interdict would be effective only for lands whose peasants had paid their church tithes."

Durant, W. 1957. The History of Civilization: Part IV. The Reformation. New York. Simon & Schuster. P. 850