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## Three Winners Chosen for 2010 Friends of IPM Award

Two individual integrated pest management specialists and one team have been chosen to receive the 2010 Friends of IPM Awards.

The IPM Educator award goes to Godfrey Nalyanya, school IPM Coordinator with NC State University. Louisiana IPM Coordinator Clayton Hollier will receive the Lifetime Achievement award, and the Florida A&M University Center for Biological Control will receive the Pulling Together award.

"Thank you for this exciting news!" exclaimed Moses Kairo, director of the Center for Biological Control (CBC), upon learning that his team had won the Pulling Together award. Based in Florida, the CBC unites experts from the College of Engineering Sciences, Technology and Agriculture and Florida A&M University; USDA Agricultural Research Service (ARS) and the Animal and Plant Health Inspection Service (APHIS). The CBC's research focuses on the prevention and management of invasive pests, along with the development of ecologically based pest management.

In addition to authoring journal publications and educating people both within and outside of the university, CBC team members have developed IPM tactics and identified management options for agricultural threats such as western flower thrips, honeybee pests and invasive pests not yet in the U.S. The diverse backgrounds of the team members, in addition to the variety of their accomplishments, earned them this year's Pulling Together award.

Louisiana IPM Coordinator Clayton Hollier won the Lifetime Achievement award for changing the way Louisiana growers managed disease pressures.

Hollier spent his first year at Louisiana State University teaching rice growers about IPM.

"His first agronomic audience was a small group of rice producers who had always used the 'spray and pray' method to manage fungal diseases," wrote Lawrence Datnoff, head of the plant pathology department at LSU. "Clayton's approach introduced basic scouting methods and the use of appropriate cultural practices that would reduce disease development."

He has since educated growers of other crops about disease prevention through IPM. Wheat growers have seen savings each year of approximately \$10 million since 2000, when Hollier began working with them on IPM adoption.

Hollier delivers his method both personally and through media and Internet and has increased his audience by adopting non-traditional teaching techniques.

This year's Friends of IPM Education award goes to North Carolina School IPM Coordinator Godfrey Nalyanya. Nalyanya took the reigns for the school IPM program in 2006, after former North Carolina IPM Coordinator retired. After a 2006 state law mandated integrated pest management programs in public schools, many school maintenance directors turned to NC State University specialists for help. Nalyanya conducted school IPM workshops around the state and consulted with public school personnel about the basic principles of scouting, prevention, and low-risk management practices.

Although the school IPM mandate included no funding, Nalyanya rewarded school district personnel who implemented an IPM

## 2010 Friends of IPM Winners (continued from previous page)

program. Every year, Nalyanya publicly recognized successful school IPM programs in an award program, complete with a plaque and a small cash award. Chris Mills, one of Nalyanya's award recipients, won the Friends of IPM Implementer award last year. Because of Nalyanya's efforts, 72 out of 115 North Carolina school districts have

implemented an IPM program, reducing their costs for pest control as well as the number of complaints about pesticides and pest problems.

The three Friends of IPM award winners will be recognized at separate award ceremonies early 2010.

## 2010 Enhancement Grant RFA is Open

The Requests for Applications for the 2010 IPM Enhancement Grants, Parts 1 and 2, were released on Tuesday, December 15. The deadline for proposals is **Monday, February 15, 2010**.

This year's RFA contains two changes. First, the individual, state-based State Contact Projects have been replaced by a single region-wide Regulatory Information Network. The Network will receive up to \$150,000 in funding and must cover the regulatory needs for the entire region. The SRIPMC Steering Committee made this change in November.

The second change is a new Information Database Project under IPM Documents. This data-

base will provide content for the current list of IPM resources on the main page of the SRIPMC site. This project will receive between \$2,000 and \$5,000 in funding.

More information, as well as links to both RFAS, can be found on [www.sripmc.org/ipmenhancement/](http://www.sripmc.org/ipmenhancement/).

For questions concerning the RFA, funding mechanisms or proposal content, please contact Steve Toth (919-513-8189 or [steve\\_toth@ncsu.edu](mailto:steve_toth@ncsu.edu)) or Jim VanKirk (919-513-8179). For problems downloading the RFA and accompanying forms, or uploading proposals, please contact Rosemary Hallberg at 919-513-8182.

## State Contacts Meet in DC

State Contacts gathered in Washington, DC, in early November to meet face-to-face with pesticide policy representatives.

Staff from EPA's Biologic and Economic Analysis Division (BEAD) summarized the current Registration Review process, which has slowed the frequency of federal requests for pesticide regulatory information for the past two years. BEAD staff explained the process of Registration Review, as well as the need for input when entries are added to the Federal Register. Finally, some of the State Contacts expressed concern new plant health claims appearing on fungicide labels.

State Contacts also met with staff from Crop-Life America to discuss some of the impacts of Endangered Species legislation on agriculture. Staff from USDA's Office of Pest Man-

agement Policy (OPMP) joined the group later to talk about the future of information requests and when the frequency of those requests would increase.

The next day, State Contacts met to share reports of their projects. Some highlights include:

- Mark Mossler (FL) has developed transition plans for orange rust in sugarcane.
- Mike Weaver (VA) continues to develop IPM elements. Elements for 2009 included honeybees and Christmas trees. He has also changed the name of his program.
- Charles Luper and Jim Criswell (OK) have developed a measurement tool for IPM for food distributors such as SYSCO.
- Mark Matocha and Mike Merchant (TX) have been battling a new pest, the rasp-

## State Contacts (continued)

- berry crazy ant. The ant is beginning to concern beekeepers.
- Patty Lucas (KY) used Turning Point clickers to collect data during grower trainings. She is also involved with IPM projects on apples and canola.
- Darryl Hensley (TN) researched the distribution of a new corn cyst nematode. He is currently working on projects involving switchgrass and cogongrass.

## IPM At Work: UGA Scientist Finds Management Alternative for Small Hive Beetles

Keith Delaplane had never heard of small hive beetles before they began infesting Georgia honeybee colonies in 1998.



Small hive beetle, frontal and dorsal view  
Photo by James D. Ellis, University of Florida

"We were blindsided by the beetle. It was totally new," he recalls. "I had never heard of it; I had to look it up. None of my colleagues had ever heard of it, either."

An entomologist at the University of Georgia, Delaplane conducts research on pests of bees.

Much of his research has involved the varroa mite, a parasite that feeds on the blood of honeybees and causes colony death. Although the small hive beetle doesn't feed directly on adult bees, its presence in the hive contaminates the honey and causes bees to evacuate the hive.

The small hive beetle originated from South Africa where bee colonies are naturally more tolerant of the pest. In parallel studies conducted in Georgia and South Africa, Delaplane's group showed that the European-derived honeybees in the United States have no such tolerance to the South African pest. Beetles feed on bee brood and honey, and larval feeding causes the honey to drop from the cells and ferment, causing an odor that drives the adult bees out of the nest. When the larvae finish feeding, they migrate to the soil outside the nest to pupate, leaving behind a dead hive.

Hive deaths didn't seem to be happening in states outside of the South, Delaplane discovered. His colleagues in the western

and northern regions reported populations of small hive beetles but had not witnessed the large loss of bee populations that southern beekeepers were experiencing. Since populations of small hive beetles in the South seemed to exceed those of other regions, Delaplane hypothesized that more targeted pest management strategies might control the pest.

At the same time, policymakers at EPA felt that the critical losses of bees, especially in Florida, required immediate action. With no pesticides yet labeled for small hive beetle, beekeepers had little recourse against the pest. Faced with a quickly growing agricultural crisis, EPA quickly approved the organophosphate coumaphos for use on the small hive beetle.

Unfortunately, although the pesticide killed some of the beetles, it did little to remedy the problem of stress to the honeybee populations. In fact, the chemical added to the stressors in the hive.

"We felt that the decision was heading in the wrong direction," Delaplane says. "We didn't want more organophosphates; we wanted less, especially in beehives. So we felt that the small hive beetle was a classic candidate for IPM."



Small hive beetle larvae in hive  
Photo by Keith S. Delaplane

Delaplane and then-post-doctoral scientist Jamie Ellis (now on faculty at the University of Florida) began experimenting with non-

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## IPM at Work: Small Hive Beetles (continued)

chemical control methods, including hygienic queens that selectively remove bee brood infested with beetles, beetle traps that target adult beetles, and predatory soil nematodes that target beetles pupating in the soil.

After several years of testing, Delaplane and Ellis are beginning to see results. The most promising control method? Predatory soil nematodes.

“The beetle is obligated to pupate in the soil,” Delaplane says. The soil nematodes infect the pupa with bacteria, which eats the tissue and causes septicemia in the small hive beetle. The beetle dies, and the nematodes live inside the decaying carcass.

With a nematode producer near the University of Georgia, Delaplane has had easy access to soil nematode populations. The producer, a retired entomologist from USDA, typically sells the nematodes encased in the cadavers of mealworm larvae. The cadavers come in bags and are sprinkled into the soil, after which the nematodes emerge, burrow in the soil, and begin attacking beetle larvae. Delaplane also gets the nematodes in bags of agar pellets. Small hive beetle control through use of the nematodes has been at least as

successful as the coumaphos treatments, minus the added risk of a pesticide.

Although Delaplane and his colleagues are still collecting data from the hygienic queen and trap experiments, Delaplane finds the results with the nematodes encouraging. In fact, he has observed activity from the nematodes for up to 19 weeks, indicating that the nematodes are self-sustaining even after beetle populations have been eradicated.

“We’re quite excited about the nematode results,” Delaplane says. “We have yet to compare them to the hygienic queens and the traps, though. But overall the bee/beetle syndrome is a classic prescription for IPM. The chemicals that are labeled for beetles cause problems for the bees they are intended to protect. In this situation, a non-chemical solution is the only rational answer.”

Delaplane’s next challenge is to train beekeepers about the new management solution and convince them to test it. With additional options of resistant queens and beetle traps, he hopes that beekeepers will turn to solutions that will be more economical in the long run, as well as safer for the bee colonies themselves.

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For more information, visit our Web site at [www.sripmc.org](http://www.sripmc.org)

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## Publications and Events

February 2-3, 2010: IPM Center Directors Meeting, For Lauderdale, FL

February 15, 2010: IPM Enhancement Grant Proposals DUE. For more information, contact Steve Toth at 919-513-8189 or [steve\\_toth@ncsu.edu](mailto:steve_toth@ncsu.edu).

March 2-3, 2010: SERA-3 meeting, Knoxville, TN

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