



The University of Georgia

College of Agricultural and Environmental Sciences
Department of Entomology

THE GEORGIA PEST MANAGEMENT NEWSLETTER

Your source for pest management and pesticide news

April 2010

IPM NEWS: PAUL SMITH, IPM COORDINATOR (pfsmith@uga.edu)

Happy spring everyone! Trees are blooming and the pollen is flying. With the emergence of the flowers and insects, we also bring to you the re-emergence of the pest management newsletter. We look to provide you with monthly updates on the Georgia Integrated Pest Management Program as well as valuable information concerning pesticides and pesticide safety. Please feel free to contact us (pfsmith@uga.edu) with questions or comments, or if you have any stories or information that you would like to see in the newsletter. Thank you for your interest, and enjoy the warm weather!

“Profile”Kit: A Valuable Tool for Battling Brown Rot in Southeastern Peaches

Collectively, Georgia and South Carolina make up the second largest peach producing region in the United States. Guido Schnabel, associate professor of fruit pathology from Clemson University, and Phillip Brannen, associate professor and extension fruit specialist from The University of Georgia, have teamed up to develop a monitoring system for detection of fungicide resistance in *M. fructicola* (Brown Rot), a major fungal pest of peaches in the southeast. This pathogen can devastate orchards if left uncontrolled, and it is largely the use of systemic fungicides that allows for control. Over time, *M. fructicola* may build up genetic resistance to these fungicides. The aim of this collaborative effort is to identify *M. fructicola* resistance prior to major economic losses, and make appropriate recommendations to producers for effective management of this pest. This collaboration has resulted in development of the Profile kit, a self-contained resistance management system that can be utilized by any trained individual.

The Profile kit is able to detect resistance to three major systemic fungicide classes commonly used to control brown rot. These are the benzimidazoles (BZIs), the demethylation inhibitors

(DMIs) and the quinone outside inhibitors (QoIs). The Profile kit is a lip-balm assay system developed using growth media infused with concentrations of fungicides sufficient to control typical populations of *M. fructicola*. Extensive growth of *M. fructicola* on slices of fungicide treated growth media after 72 hours would indicate resistance, alerting the grower of a problem. Being informed that resistant strains are present in their orchards, growers may select alternative, active fungicides for future use. Extension pathologists can also monitor resistance trends in the area. This information will benefit producers by supplementing local knowledge with a more global understanding of the disease patterns, thereby educating producers of trends in their region.

The effectiveness of this program was demonstrated during the 2009 growing season. Data collected from numerous disparate locations throughout the peach producing region of Georgia indicated DMI resistance in some areas. Producers were informed of their individual resistance issues, and recommendations were made to avert destructive epidemics of brown rot throughout the state as the season progressed. The ease of use of this system, and its relatively low cost make it a valuable management tool for southeastern peach producers. In addition, since the testing kit is fully self contained, and does not require the use of specialized equipment, it can easily be modified for use in other cropping systems. Visit www.peachdoc.com for more information on the Profile kit.

If you want to attract butterflies to your landscape, see our PowerPoint – “Attracting and Protecting Butterflies” in the DOWNLOADS section of the Georgia IPM website (<http://www.ent.uga.edu/ipm/index.htm>).

**PESTICIDE NEWS: PAUL GUILLEBEAU, PESTICIDE PROGRAMS
(bugman@uga.edu)**

You may never have thought about attending a public meeting of the EPA Pesticide Program Dialogue Committee (PPDC), but this one hits a lot of hot issues. The agenda includes Endangered Species Act; National Pollutant Discharge Elimination System general permit for pesticide applications; Nanotechnology; Pollinator Protection; Endocrine Disruptor Screening Program Test Orders; reports from the PPDC Workgroup on 21st Century Toxicology/New Integrated Testing Strategies and the PPDC Workgroup on Public Health. Brief updates will also be provided on several topics, including spray drift; public process for new pesticide registrations; fumigants implementation; total release foggers; worker safety; pet spot-on products.

The meeting is planned for Thursday, April 29, from 9:00 am to 5:00 pm, and Friday, April 30, from 9:00 am to 12:00 pm. The meeting will be held in OPP's first floor conference center at One Potomac Yard South, 2777 South Crystal Drive, Arlington, VA 22202. Information on the location of EPA's building and how to reach it by public transportation or car is available at <http://www.epa.gov/pesticides/contacts/officelocation.htm>.

A draft agenda is available at <http://www.epa.gov/pesticides/ppdc/>.
(EPA Pesticide Program Updates , 4-2-10)

If you like to use bug bombs when you have pests, the EPA is trying to make it safer. Bug bombs, also called total release foggers, have been associated with fires, injuries, and deaths. According to the California Department of Pesticide Regulation, a 2008 study found 466 illnesses related to foggers in eight states (<http://www.cdpr.ca.gov/docs/dept/factshts/fog2.pdf>) The EPA estimates that about 50 million bug bombs are used each year in the U.S. That is a lot of risk we could do without.

The EPA says that most of the incidents are caused by a failure to read and follow directions. They want manufacturers to write bug bomb labels in plain language with clear headings. The new labels will also incorporate pictograms to convey explosion hazards and the amount of time the use area should be vacant. Instructions to vacate the use area and ventilate the area will be give greater prominence. Finally, a door hang-tag must also be provided to warn people that may enter the treated area. EPA is requiring manufacturers to make a number of labeling changes by September 30, 2011. (EPA Pesticide Program Update, 3-24-10)

I am skeptical that label changes will substantially reduce the number of incidents, but EPA only has limited options. The Agency will also work with manufacturers to make the products more “idiot proof”, with smaller foggers and nonflammable propellants.

By far, most problems are caused by people using too many bug bombs for the treatment area. If one fogger will treat an apartment, many people will use five or more. A client once called me saying that she had used so many bombs that her floor was sticky. She wanted to know if the use of the bug bombs could be related to her respiratory problems.

One reason that people overuse bug bombs is that the foggers don't work very well on some pests. Rather than use other options, people tend to just add more.

My advice is to never use bug bombs. Instead, take action to avoid problems and reduce the need for any insecticide. Cooperative Extension offers Integrated Pest Management (IPM) plans for every common pest. The results are better, and the risks are greatly reduced. If any pesticide is part of the IPM plan, read and follow the label directions.

The EPA is concerned about spot-on flea/tick treatments for pets. In spring of 2009, the EPA noticed an increase in pet incidents reported after using these products. The Agency formed an expert panel of veterinarians to analyze the data. The group investigated the incidents, active and inert ingredients, product labeling, and other data.

Most of the incidents were minor, but some pets died. Most commonly, the dermal, gastrointestinal, and nervous systems were most commonly affected.

Dogs – For some products, small dogs were affected more than large dogs. The amount of product in a single dose packet needed to vary more to account for the differences in weight.

Cats – Misuse or accidental exposure to dog products was a serious problem. Cats can be poisoned by dog products, and current labeling is not effective enough to prevent cats from being exposed to dog products.

The EPA is continuing to collect data, and they are formulating an action plan to reduce the risks of spot-on products. Used properly, the products are an important tool to manage fleas and ticks, which pose health risks to both pets and their owners.

If your pet is adversely affected by a spot-on product, report the incident.

Pet owners can report incidents through several routes:

- **Tell the Registrant:** Pet owners should always report adverse effects to the product registrant. Pesticide manufacturers are required by law to report incident information to EPA. Contact information can be found on the product label. Clearly identify the name of the product used, the EPA Registration Number, the type and breed of animal affected, symptoms observed in the pet, and any other details pertaining to the incident.
- **Tell EPA:** Forward the information in our “ask a question” site:
 - **Go to the** Pesticides Frequent Questions Web page, <http://pesticides.custhelp.com/>.
 - **Select “flea and tick” in the drop-down box**
 - **The question that will give you the information about reporting an incident will be the first question.**
- **Tell Your Veterinarian:** Veterinarians have access to a reporting mechanism called the Veterinary Pesticide Adverse Effects Reporting portal (<http://npic.orst.edu/vet>) to report incidents. This portal is not for use by the public.
- **Tell the National Pesticide Information Center:** Call 1-800-858-7378 to report an incident.

I accidentally poisoned one of my cats last year. I used a product labeled for cats, but I think the liquid ran down where the cat could lick it. He huddled over in a corner for hours, and he did not want to be touched or bothered. Fortunately, the cat was OK by the time my wife and children returned, or I may have been adversely affected.

The new USDA Pesticide Data Program (PDP) is available. The purpose of the program is to collect information about pesticide residues on food. The EPA uses the data to establish realistic patterns of dietary pesticide exposures.

In 2008, PDP tested more than 13,000 samples of fresh/processed foods and water. More than 10,000 of the samples were fresh and processed fruits and vegetables. About 75% of the samples were domestic products, and about 20% were imports (the rest unknown).

For fruits and vegetables, 30% of the samples had no detectable pesticide residues. For the vast majority of samples with detectable pesticide residue, the pesticide level was well below

established tolerances. *Tolerance – a level set by EPA, the maximum amount of a pesticide that can be on food.* About 0.5% of the samples had pesticide levels that exceeded the tolerance; 3.7% of the samples had pesticides for which there is no tolerance (the pesticides cannot be used on the crop). The pesticides were at very low levels and may have been the result of pesticide spray drifting in from other areas.

For fruits and vegetables with detectable residues, 24% had one pesticide; 46% had more than one pesticide detected. For groundwater, 44% of the samples had pesticides; more than forty different pesticides were detected in groundwater. Fifty-nine different pesticides were detected in finished drinking water.

For honey, pesticides were detected in 0.4% of the samples. The mostly commonly detected pesticide was coumaphos; beekeepers use coumaphos (legally) to manage mites. Varroa mites and tracheal mites are serious pests of bees.

PDP detected pesticides in 1.6% of catfish samples. Approximately, $\frac{3}{4}$ of all domestically farmed fish is catfish. Remarkably, the most commonly detected residues were metabolites of DDT. Fish farmers do not use DDT in their operations, and DDT has been banned in the U.S. for nearly forty years. The presence of DDT metabolites in fish is a testament to how long DDT and its metabolites persist in the environment.

If you want to see the report, look for USDA Pesticide Data Program. The latest report is dated December 2009. The data were collected in 2008.

The bottom line question for most people is – “Is my food safe to eat?” There is no simple answer to that question. Even though the levels of pesticides detected were nearly all well below established legal limits, no one know if the constant exposure to a pesticide has any health impacts over a lifetime. Furthermore, PDP usually detected a number of different pesticides in foods and water. No one knows if any of the pesticides interact in unpredictable ways that may have health impacts. Finally, you are also exposed to many other non-pesticide chemicals every day. No one knows how all of these chemicals could interact.

On the positive side, people are living longer than ever before. Overall, the health of the population has never been better. There is clear evidence that a diet rich in fruits and vegetables offers many health benefits over a diet with few fruits and vegetables.

Bottom line- Keep eating those fruits and vegetables. Wash or peel them to reduce pesticide residues. Pressure EPA and state regulators to improve the safeguards to minimize our exposure to chemicals. We are doing much better. We are exposed to far fewer dangerous chemicals compared with 30 years ago. However, we can still do better.

You can use auto safety as an analogy. When I was a child (more than 40 years ago), it was common for a child to ride standing up in the front seat while Mom tried to drive. We had not seen the seatbelts for years. Now, I would only my son and daughter with every kind of seat belt and air bag available. We have changed the norm and expectations. While still receiving the

benefits of automobiles, we have greatly reduced the risks. Society needs the benefits of pesticides, but we need to minimize the risks.

UPCOMING EVENTS

Friday, April 16, 2010 - Grow Your Own Vegetables

This program will teach you how to get started growing your own vegetables. Whether you are a beginner or a seasoned pro, you will learn tips and techniques to grow the best vegetables around. Topics will include: Working the soil and amendments, starting seed and transplants, proper timing of planting and harvest, proper fertilization and irrigation. We will also cover basic trouble shooting of disease, weeds and insects. Organic alternatives will also be discussed. Refreshments will be served. **Pre-registration required.** Bob Westerfield, UGA Horticulturist, and vegetable specialist, will be the program speaker.

Location: UGA Research Demonstration Garden – Griffin, GA

Time: 9:00 a.m. - 12:00 p.m.

Cost: \$25.00

Contact: Val Schott – (770) 233-5598

Friday, April 23, 2010 - Grow Your Own Fruit

This program will explain the A-Z of how to establish and maintain your own home orchard. Topics will include variety selection, planting, as well as other maintenance issues. Both large and small fruit will be covered. Bob Westerfield and Marco Fonseca, UGA Horticulturists will be the program speakers. Refreshments and lunch are included in the program fee as well as all materials. **Pre-registration required.**

Location: UGA Research Demonstration Garden – Griffin, GA

Time: 9:00 a.m. - 12:00 p.m.

Cost: \$25.00

Contact: Val Schott – (770) 233-5598

Friday, May 7, 2010 - Growing Fabulous Herbs in Raised Beds & Containers

This program will cover the basics of growing both common and some unusual herbs in raised beds and containers. Participation will be hands-on as well as lecture, and participants will get to take home what they plant. By attending this program you will learn to grow and maintain fresh, fabulous herbs for all your culinary needs. Bob Westerfield and Bodie Pennisi, UGA Horticulturists, will be your program speakers. All refreshments and materials are included in the cost of the program. **Pre-registration required.**

Location: UGA Research Demonstration Garden – Griffin, GA

Time: 9:00 a.m. - 12:00 p.m.

Cost: \$45.00

Contact: Val Schott – (770) 233-5598

Dear Readers:

The Georgia Pest Management Newsletter is a monthly journal for Extension agents, Extension specialists, and others interested in pest management news. It provides information on legislation, regulations, and other issues affecting pest management in Georgia.

Do not regard the information in this newsletter as pest management recommendations. Consult the [Georgia Pest Management Handbook](#), other Extension publications, or appropriate specialists for this information.

Your input in this newsletter is encouraged.

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f you wish to be added to the mailing list, just call us at 706-542-9035.

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Please visit the Georgia Integrated Pest Management website for additional information.

<http://www.ent.uga.edu/ipm/index.htm>