

# PESTICIDE REPORTS



Division of Agricultural Sciences and Natural Resources • Oklahoma State University  
<http://pested.okstate.edu>

## November, 2012

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Times for all locations: 8:00 am to 1:00 pm.

Nov. 13 Beckham County Fairgrounds in Sayre  
Nov. 15 Washington County Fairgrounds in Dewey

For more information please go to  
<http://pested.okstate.edu/unwanted.htm>

### OSU PSEP TEST HELP SESSIONS

The OSU Pesticide Safety Education Program will conduct two final test help session for 2012. The first will be November 27<sup>th</sup> in Tulsa. The meetings will be held at the Tulsa County Extension Center 4116 E. 15<sup>th</sup>. The last Test Help Session will be at the Oklahoma County Extension Center on December 11 and will be for Service Technicians only.

This testing session will focus on information covered in the core/service tech test. OSU PSEP will answer any questions over other category tests during this session.

Cost of registration is \$30 if received by November 20<sup>th</sup> for Tulsa and December 4 for OKC.

Registration will increase to \$50 after November 20<sup>th</sup> for Tulsa and \$50 after December 4 for OKC.

### UNWANTED PESTICIDE DISPOSALS 2012

The 2012 Unwanted Pesticide Disposals will be held November 13<sup>th</sup> in Sayre and November 15<sup>th</sup> in Dewey. There is no charge for this program. Limit is 2,500 pounds per entity. ONLY PESTICIDES will be taken at the sites (no fertilizer, paint, oil, etc)!

If you have any questions contact Charles Luper (OSU) at 405-744-5808 or Ryan Williams (ODAFF) at 405-522-5993.

**ODAFF Testing fees are not included in the registration fee and must be paid separately.**

Register online at the Pesticide Safety Education Program (PSEP) website at <http://pested.okstate.edu/practical.htm>. Registration forms can also be downloaded from the website.

Registration will start at 8:45 and the program will run from 9:00 am to 12:30 pm for both locations. Testing will begin at 1:30 pm for both locations.

**NO CEU's will be given for this program!**

## **UF STUDY REVEALS BED BUG FEEDING PATTERNS**

Researchers at the University of Florida examined the feeding patterns of bed bugs — and the impact they can have on humans' blood after several months. Their research was published in the journal [Medical and Veterinary Entomology](#).

The study shows that bed bugs will have a bigger or a smaller bloodmeal depending on when they last fed. For example, if bed bugs are fed every day, they have 1.5 times fewer instances of eating than those only fed occasionally, researchers found.

Researchers also found that production of bed bug eggs is linked with how much blood the bed bugs were able to consume the week prior.

"Longer and more frequent feedings increased egg production, which would allow a faster growth of bed bug populations," they wrote in the study. "The increase in bed bug populations obtained with more frequent and longer feedings can be the difference between a population that barely survives at a location and a thriving population."

Researchers conducted their study by letting bed bugs feed on chickens (both chickens and humans are known to be great "feeding hosts" for bed bugs). (PCT Online October 23, 2012)

<http://www.pctonline.com/University-Florida-bed-bug-feeding-pattern-research.aspx>

## **WATCH FOR DROUGHT-INDUCED HERBICIDE CARRYOVER**

This summer's lack of rain has translated into the potential for summer-applied herbicides to carry over into winter wheat or even spring-planted corn and soybean crops - something growers need to be monitoring, two Purdue Extension weed scientists say.

In a normal year, soil moisture helps dissipate herbicide soil concentrations, but in a drought year, the lack of moisture slows that process. Some herbicides might carry over and exceed the labeled crop rotation restrictions meant to prevent injury to the next crop.

"The largest concern this year is the carryover of atrazine and subsequent injury on wheat," Bill Johnson said. "It is off-label to plant any crop other than corn or sorghum during the same calendar year of an atrazine application."

Labels vary on exact rotational restrictions, but most atrazine premix labels range 14-15 months.

Another herbicide with potential to injure wheat is fomesafen applied post emergence in soybeans. The wheat rotational restriction for fomesafen is four months after application, but in areas that saw the least rainfall, Johnson said the carryover could be longer.

"Producers who applied a fomesafen product to soybeans this summer and have not seen significant

rain following application should be aware of the potential for injury on emerging wheat," he said.

The return of rain to some areas has reduced some of the concern for herbicide carryover into spring-planted crops, but it hasn't eliminated it altogether.

According to Travis Legleiter, Purdue Extension weed scientist, producers in areas that haven't had significant rain should still be aware of the potential for atrazine and HPPD inhibitors to carry over into soybeans - especially in high pH or high clay content soils.

He also suggested that producers be wary of potential imidazolinone chemistry carryover into spring-planted corn.

Growers concerned about herbicide carryover have two options for analyzing soil. The first is to conduct a bioassay, a method of planting susceptible crop seeds into suspected soil and comparing the growth and injury to plants grown in a non-herbicide treated soil. A bioassay can be done in the field or in containers.

The second option is to take soil samples from suspected carryover fields and have them analyzed by a commercial lab, which can be costly.

"Both bioassays and lab analysis should either be done in late fall or early spring to allow for maximum herbicide degradation and provide a more representative result of potential injury at planting," Legleiter said.

(Greenbook October 24, 2012)

<http://www.greenbook.net/news/Watch-for-drought-induced-herbicide-carryover-175670151.html>

## **DISPOSAL OF LARGE QUANTITIES OF TREATED SEED RAISES QUESTIONS AT SFIREG MEETING**

Row crop farmers are increasingly turning to seeds treated with one or more pesticides to protect newly

planted crop from soil-borne pests and diseases, but the success of seed treatments is raising another issue: What should farmers and seed merchants do with unplanted and unused seeds?

Growers have often brought up seed disposal issues at meetings with state regulators, but the disposal of large quantities of seed held by seed companies and distributors has become a bigger issue, said Craig Romary, an environmental programs specialist with the Nebraska Department of Agriculture, while leading a discussion on the issue at an Oct. 15 meeting of the State-FIFRA Issues Research and Evaluation Group (SFIREG) Environmental Quality Issues committee.

While EPA has clear directions on pesticide labels regarding disposal procedures for leftover pesticides and containers, treated items are exempt from FIFRA under EPA Pesticide Regulation Notice 2000-1. That exemption has led to confusion over rules and recommendations governing the disposal of treated seed disposal, as well as the question of which government agencies have jurisdiction.

On the smaller, farm-level scale, product labels direct that excess seed should be double sowed around the field or buried away from water sources, Romary said. But state waste agencies "certainly wouldn't be encouraging burial," he said, and the phrase "away from a water source" is subject to interpretation.

"Is it away from drinking water; is it away from a stream?" he asked.

Romary noted that the website *pesticidestewardship.org*, which is supported by the Center for Integrated Pest Management, says the best way to dispose of a small quantity of leftover treated seed is to plant it in fallow or other non-cropped areas of the farm, as the farmer would if planting it to be harvested.

The website advises against double sowing, instead calling for the excess seed to be disposed of in an approved municipal landfill, burned for fuel, incinerated at a waste management facility, or fermented for ethanol.

But some of these uses are frowned upon by state agencies. The Nebraska Department of Agriculture tells callers they should not burn treated seed in a corn stove, the Iowa Department of Natural Resources also recommends against it, and Minnesota has a state law prohibiting seed dealers from selling treated seed to be burned for heat, Romary observed.

#### Seed use in ethanol plants

There have been some recent changes on some seed bag tags that stipulate disposal methods for treated seed, Romary advised.

One change, for example, has to deal with the use of byproducts from ethanol plants that used treated seed. An issue came up when an Iowa ethanol production facility asked the state whether it could soil-apply distiller's grain, a residual ethanol product that had been made from treated seed.

At the time, Romary said, the seed tag "didn't have any mention of that use for the treated seed," but since then, at least some tags have been changed to allow ethanol byproducts from treated seed to be used for agronomic practice provided "no measurable residue of the pesticide remains."

The seed tag language has been changed within the last six months, Jeff Herndon, associate director of EPA's Registration Division, told the committee. He said EPA had discussions with the industry. "We outlined our concerns, and I think at the end we felt like they had pretty good measures where they could achieve, in essence, a no-residue type situation," Herndon said.

Clive Halder, manager of research and development administration with Bayer CropScience, added, "Everybody is supposed to have that language on their tags...We've had regulatory activities, and that was required as part of the approval."

Herndon said there is one ethanol facility that believes it can process the seed to leave zero residues, and it receives treated seed from multiple sources as a result. But because treated articles are exempt from FIFRA, Herndon said he didn't know

under what law the ethanol processor would be required to meet the standard.

Venus Eagle, who works with organophosphates and neonicotinoids in EPA's Registration Division, said USDA could take action if soil application of seed byproducts left pesticide residues.

"The treated seed bag tag has two sections, one for the Federal Seed Act and one for the EPA," she explained. On the other hand, if the residues turn up in animal feed, it would fall under the jurisdiction of FDA.

Romary tells *Pesticide & Chemical Policy* the EQI committee wants him to find out more about the new tag language from the American Seed Trade Association and with the American Association of Pesticide Control Officials.

While the label Romary saw indicated the language was required by the Federal Seed Act, "I couldn't find anything in the seed act or in the label review manual where that language was mandated," he says.

Another issue discussed at the meeting was how seed treatment facilities dispose of the wash water after they rinse their bins between batches. Romary says that information may be contained in a training module ASTA provides for applicators that apply seed treatments.

Given 2000-1 PR's treated article exemption, Romary says, "If that's not a pesticide, then who do you call if there's an issue?"

(*Pesticide & Chemical Policy*, October 19 2012, Volume: 40 Issue: 44)

## **MONSANTO SEEKS EPA PERMIT TO TEST CANDIDATE GLYPHOSATE/DICAMBA BLEND**

Monsanto Co. aims to begin testing, in February, a “candidate” herbicide mixture on more than 7,000 acres of soybean and cotton genetically engineered to be tolerant to dicamba and glyphosate, along with other non-tolerant crops, the company reveals in an experimental use permit (EUP) posted this week by EPA.

EPA posted notice Oct. 24 in the *Federal Register* that it received the form from Monsanto requesting permission to conduct large trials with the dicamba-glyphosate mixture, which the company calls M1751. EPA says it is seeking comments because it has determined that the permit may be of regional and national significance. The deadline for comments is Nov 23.

The application indicates Monsanto intends to conduct large trials with M1751 during the 2013 crop season on dicamba-tolerant soybeans and cotton that also carry glyphosate resistance traits and non-dicamba tolerant soybeans, cotton and corn with glyphosate resistance. The application also indicates plans for non-crop use of the mixture. The company intends to apply 121,424 pounds of M1751, including 19,533 pounds of dicamba and 52,854 pounds of glyphosate, to 7,660 acres from February 2013 through May 2014.

Monsanto’s dicamba-tolerant trait is anticipated for launch in 2014, and the company, along with BASF, the manufacturer of dicamba, “expect to launch advanced dicamba formulations in a complementary time frame,” says Monsanto media communications manager John Combest, who calls M1751 a “candidate” for a premixed herbicide formulation Monsanto intends to call Roundup Xtend.

When asked whether the M1751 is the version the company plans to use in the final version, Combest responded by email, “We’re looking at both existing and new formulations as commercial candidates to provide growers with the best options for effective and safe weed control.”

He added that M1751 is one of several candidates and that it is experimental.

Specialty crop group still has concerns

Growers of dicamba-sensitive crops remain concerned that drift from expanded use will reduce their yields.

“Our main concern is the entire system that’s being put out, and the increased use of dicamba, right square in the middle of cropping systems where sensitive crops and rural homeowners are going to be exposed,” says Steve Smith, director of agriculture for Indiana-based vegetable canner Red Gold.

Smith is chairman of the Save Our Crops coalition, which represents farmers and agribusinesses that might be affected by increased use of dicamba and 2,4-D.

The coalition dropped its opposition to federal approval of a Dow AgroSciences herbicide mixture with glyphosate and 2,4-D called Enlist because of concessions made by Dow, including label changes to prohibit application if there is any measurable wind in the direction of a sensitive crop and assurances that older 2,4-D formulations would not be used.

“We haven’t gotten any indication from Monsanto or BASF that that is even something that they would be considering,” Smith says.

Smith tells *P&CP* that the Save Our Crops Coalition doesn’t have a comment about the EUP, rather saying it is “an extension of the bigger question: Is this cropping system good for Midwest agriculture in the long haul?” The coalition hasn’t seen any indication of data from the new experimental formulations of dicamba, Smith says,

but they were concerned about the new dicamba-tolerant crops in general because Monsanto has indicated an older formulation, called Clarity, that is more prone to volatilization would be used.

“We welcome experimentation with new formulations that would be non-volatile and we’ve been told that there are some of those coming, but that Clarity is also going to be a labeled product and a product that’s encouraged, and we just can’t be supportive of anything that’s going to allow Clarity to be used widespread,” Smith says.

(Pesticide & Chemical Policy, September 2 2012, Volume: 40 Issue: 41)

He said: 'Rats are incredibly good swimmers and they can climb.'

(PCT Online October 30, 2012)

<http://www.pctonline.com/Hurricane-Sandy-rodents.aspx>

## **HURRICANE SANDY COULD DISPLACE NYC RATS**

With Sandy flooding the New York City subway system, a natural question to ask is “Where will the rats go?” The New York City subway system is notorious for its growing rat population, and the severe flooding produced by Hurricane Sandy likely will displace rodents.

All seven subway tunnels running under the East River from Manhattan to Queens and Brooklyn took in water, and any resulting saltwater damage to the system's electrical components will have to be cleaned — in some cases off-site — before the system can be restored, a spokeswoman for the Metropolitan Transit Authority said on Tuesday. The rising water will force rats out of their underground lairs and into contact with humans, according to Rick Ostfeld of the Cary Institute of Ecosystem Studies in Milbrook, New York, speaking to The Huffington Post.

He says rats are expert survivors and will escape the floods and head for safer ground, such as apartments and other buildings inhabited by humans.

## **In-State CEU Meetings**

Date: November 6, 2012

Title: APWA OK Education Day

Location: Francis Tuttle Technology Center

Oklahoma City OK

Contact: Richard Kindberg (405) 216-7828

Course #: OK-12-103

<http://oklahoma.apwa.net>

| CEU's: | Category(s): |
|--------|--------------|
| 3      | 3A           |
| 2      | 6            |
| 5      | 10           |

Date: November 6, 2012

Title: Winfield Solutions Fall CEU Academy

Location: Renaissance Convention Center

Tulsa OK

Contact: Amy McDonald (254)-445-4359

Course #: OK-12-111

[www.winfieldsolutionsceus.com](http://www.winfieldsolutionsceus.com)

| CEU's: | Category(s): |
|--------|--------------|
| 4      | 3A           |
| 1      | 3C           |
| 1      | 6            |
| 1      | 7A           |
| 1      | 7B           |
| 1      | 8            |
| 5      | 10           |

Date: November 6, 2012

Title: Winfield Solutions Fall Conference

Location: Oklahoma City

Contact: Stacy Gingrich (405)-232-2493

Course #: OK-12-112

[www.winfieldsolutionsceus.com](http://www.winfieldsolutionsceus.com)

| CEU's: | Category(s): |
|--------|--------------|
| 5      | 3A           |
| 2      | 5            |
| 5      | 6            |

Date: November 7, 2012

Title: Winfield Solutions Fall CEU Academy

Location: Reed Conference Center

Midwest City OK

Contact: Amy McDonald (254)-445-4359

Course #: OK-12-111

[www.winfieldsolutionsceus.com](http://www.winfieldsolutionsceus.com)

| CEU's: | Category(s): |
|--------|--------------|
| 4      | 3A           |
| 1      | 3C           |
| 1      | 6            |
| 1      | 7A           |
| 1      | 7B           |
| 1      | 8            |
| 5      | 10           |

Date: November 13 & 14, 2012

Title: 67<sup>th</sup> Annual Turfgrass Conference and Trade Show

Location: OSU Wes Watkins Center Stillwater OK

Contact: Justin Moss (405)-744-5729

Course #: OK-12-125

<http://www.otrf.net/>

| CEU's: | Category(s): |
|--------|--------------|
| 11     | 3A           |
| 11     | 10           |

Date: February 28, 2013

Title: Univar's 2013 Annual CEU Training

Location: Clarion Hotel

Broken Arrow OK

Contact: Deb Chamber (918)-630-3222

Course #: OK-12-

[www.pestweb.com](http://www.pestweb.com)

| CEU's: | Category(s): |
|--------|--------------|
| 3      | 3A           |
| 3      | 7A           |
| 1      | 7b           |
| 1      | 8            |
| 6      | 10           |

## ODAFF Approved Online CEU Course Links

Technical Learning College  
<http://www.abctlc.com/>

Green Applicator Training  
<http://www.greenapplicator.com/training.asp>

All Star Pro Training  
[www.allstarce.com](http://www.allstarce.com)

Wood Destroying Organism Inspection Course  
[www.nachi.org/wdocourse.htm](http://www.nachi.org/wdocourse.htm)

CTN Educational Services Inc  
[http://www.ctnedu.com/oklahoma\\_applicator.html](http://www.ctnedu.com/oklahoma_applicator.html)

Pest Network  
<http://www.pestnetwork.com/>

Univar USA  
<http://www.pestweb.com/>

Southwest Farm Press Spray Drift Mgmt  
<http://www.pentonag.com/nationalsdm>

SW Farm Press Weed Resistance Mgmt in Cotton  
<http://www.pentonag.com/CottonWRM>

Western Farm Press ABC's of MRLs  
<http://www.pentonag.com/mrl>

Western Farm Press Biopesticides Effective Use in Pest Management Programs  
<http://www.pentonag.com/biopesticides>

Western Farm Press Principles & Efficient Chemigation  
<http://www.pentonag.com/Valmont>

For more information and an updated list of CEU meetings, click on this link:  
<http://www.state.ok.us/~okag/cps-ceuhome.htm>

## ODAFF Test Information

Pesticide applicator test sessions dates and locations for November/December 2012 are as follows:

| November |           | December |           |
|----------|-----------|----------|-----------|
| 1        | Tulsa     | 3        | OKC       |
| 5        | OKC       | 4        | Goodwell  |
| 5        | McAlester | 5        | Lawton    |
| 6        | Goodwell  | 6        | Tulsa     |
| 7        | Hobart    | 13       | Enid      |
| 15       | Tulsa     | 17       | McAlester |
| 19       | OKC       | 17       | OKC       |
|          |           | 20       | Tulsa     |

Altus: Western OK State College  
 2801 N Main, Room A23

Enid: Garfield County Extension Office,  
 316 E. Oxford.

Goodwell: Okla. Panhandle Research &  
 Extension Center, Rt. 1 Box 86M

Hobart: Kiowa County Extension Center  
 Courthouse Annex, 302 N.

Lincoln

Lawton: Great Plains Coliseum, Annex Rm.  
 920 S. Sheridan Road.

OKC: Oklahoma County Extension Office,  
 930 N. Portland.

Tulsa: NE Campus of Tulsa Community  
 College, (Apache & Harvard)  
 Large Auditorium

McAlester: Kiamichi Tech Center on  
 Highway 270 W of HWY 69

**Pesticide Safety  
 Education Program**