

PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University

<http://pested.okstate.edu>



October, 2013

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MCALESTER TESTING MOVED TO ATOKA FOR FALL DATES

Due to remodeling work being performed at the Kiamichi Technology Center in McAlester the October, November, and December testing dates will now be held in Atoka. The test session will occur at the Kiamichi Technology Center in Atoka at 1301 w Liberty Rd, in the seminar center.

OSU PSEP TEST HELP SESSIONS

The OSU Pesticide Safety Education Program will conduct the next test help sessions for 2013 in October. The next test help will be at the Tulsa County Extension Center on October 17th and Oklahoma County Extension Center on October 23rd.

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 October 10th for Tulsa. Registration will increase to \$50 after October 10th for Tulsa.

Cost of registration is \$30 if received by October 16th for OKC. Registration will increase to \$50 after October 16th for OKC.

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. Testing will begin at 1:30 pm.

The last test help session for 2013 will be December 13th in OKC.

NO CEU's will be given for this program!

PESTICIDE DISPOSALS COMING IN NOVEMBER

The 2013 Unwanted Pesticide Disposal Programs will occur November 19 in Wilburton and November 21 in Kingfisher. The Wilburton location will be held at the Wilburton Recycling Center and the Kingfisher location will be at the Kingfisher County Fairgrounds. The Disposals will run from 8 a.m. to 1p.m. at both locations. For more information please go to <http://pested.okstate.edu/html/unwanted.html>

OKLAHOMA PEST CONTROL ASSOCIATION MEETING: REGULATORY ISSUES IN OKLAHOMA

The Oklahoma Pest Control association meeting was held Sept. 19th and 20th in Tulsa, OK. The meeting was very well attended with a great speaker line-up. Thanks to all the speakers and those from OSU that came out to educate our pest control industry: Nathan Walker, Kevin Shelton, Brad Kard, and Jason Young. If you would like to review some of the presentations, I have summarized many of them on our Facebook site, which include links to important resources. If you have not liked the Oklahoma Pesticide Safety Education Program on facebook....do it now!
<https://www.facebook.com/pages/Oklahoma-State->

[University-Pesticide-Safety-Education-Program/549690528435191](http://pested.okstate.edu/549690528435191)

I wanted to highlight some presentations covering regulatory issues in Oklahoma. These presentations were given by Ryan Williams from ODAFF and Kevin Shelton from OSU. Ryan reported that in the fiscal year of 2013, ODAFF received 134 consumer-generated complaints and approximately 1/3 of these complaints resulted in violations of the Oklahoma Combined Pesticide Law and Rules. We have had a steady decline in the number of complaints in previous years. I hope to see this trend in 2014. Keep up the great work!

ODAFF conducted a total of 305 inspections and had a total of 105 violations. The most common violations included improper use of PPE, chemicals not being stored in a locked area, labels not carried in vehicles, leaky equipment, not following label directions, vehicles not properly identified, expired insurance, and expired certification. I would love to see the number of violations decline for the fiscal year of 2014. Our website is a great place to find important information on regulatory issues and other useful information <http://pested.okstate.edu/>. You can also visit the following website to check on your CEU status <http://www.apps.ag.ok.gov/ceu/>.

Kevin Shelton gave an update at OPCA on the new Termidor® HE label. If this product is used, Oklahoma requires that minimum standards must be met, which are more restrictive than the label. Make sure you are aware of Oklahoma minimum standards and use this product within those guidelines.

The OPCA held a great meeting and I hope to see you there next year! Next month, I will be writing about the upcoming changes to label language regarding bees. Stay tuned....

Jackie Lee, PhD
OSU Pesticide Coordinator

USDA CLEARS BAYER'S ISOXAFLUTOLE-TOLERANT SOYBEANS

The USDA's Animal and Plant Health Inspection Service (APHIS) has deregulated the genetically modified isoxaflutole- and glyphosate-tolerant FG72 soybeans developed by Bayer CropScience and US biotechnology company M S Technologies (West Point, Iowa). The APHIS has determined that the soybeans do not pose a plant pest risk and has issued a finding of no significant impact.

The soybeans were deregulated under the APHIS' previous public consultation process in which a plant pest risk assessment and a draft environmental assessment were issued simultaneously with a request for comment in July 2012 (*Agrow* No 644, p 13). The Service received 80 comments, with several including attachments of a consolidated document of many similar letters, bringing the total to over 5,000. Issues raised included the potential effects of FG72 on human health, non-target organisms, herbicide use changes and economic costs of herbicide-resistant weeds, the APHIS points out.

Bayer and M S Technologies have adopted the Balance GT brand for the soybeans, which will be licensed through a number of seed companies. They are due to be introduced in the US and Canada in 2015, subject to approvals being in place (*Agrow* No 659, p 24). Bayer plans to launch an isoxaflutole-based herbicide called Balance Bean for use on Balance GT soybeans. It is seeking approval for its use as a burn-down and residual treatment for the control of grasses and broadleaf weeds. Isoxaflutole is a 4-hydroxyphenylpyruvate dioxygenase inhibitor that controls weeds with resistance to glyphosate and herbicides with other modes of action, Bayer points out.

(Pesticide & Chemical Policy/AGROW, August 22, 2013)

TEXAS BOY DIES FROM FIRE ANT BITES

A Texas middle-school student died after ant bites he received on a football field last week sent him to the hospital with a severe allergic reaction, [ABC News](#) reports.

Cameron Espinosa, an eighth grade student at Haas Middle School in Corpus Christi, Texas, died Sunday night after spending several days in an induced coma because of swelling in his brain, Driscoll Children's Hospital officials told KIII, an ABC affiliate in South Texas.

Espinosa, 13, had been huddled with fellow players during halftime of a game with nearby Hamlin Middle School when he began to scream, "Ants! Ants!"

A coach ran over and attempted to squirt the ants off Espinosa's legs using a water bottle shortly before the 13-year-old lost consciousness and collapsed on the field, according to a spokeswoman for the school. (PCT Online, September 18, 2013) <http://www.pctonline.com/fire-ant-sting-death-Texas.aspx>

US EPA BRACES FOR ATRAZINE REVIEW FIGHT

Judging by recent comments submitted to the US EPA, there is not much grey area in the debate over continued use of the herbicide, atrazine, in the US. Grower groups and pesticide industry representatives contend that atrazine is a vitally important and safe crop protection tool, whereas environmental groups argue that the most commonly used herbicide in the US is an inherently dangerous chemical that should be banned. The EPA is wading through those divergent views as it finalises its work plan for the registration review of atrazine, with the aim of making a final decision by 2016.

The Agency received more than 160 comments last month on its preliminary work plan, which identifies some 150 end use labels for atrazine, with most use on maize, sorghum and sugar cane (Agrow No 668, p 13). The EPA's latest data shows that annual use during 2006-2010 averaged around 66 million lbs (26,000 tonnes) on 67 million acres (27 million ha), with 88% of that total applied to maize.

Concerns about the possible effects of low doses on amphibians and fish have prompted an aggressive campaign by environmental groups to ban atrazine, which is one of the most commonly detected pesticides in drinking water, surface waters, and ground water across the US. The EPA is still considering a petition filed in 2011 by the NGO, Save the Frogs, which asks for a ban on the use and production of the herbicide (Agrow No 624, p 14).

Worry about ground water contamination prompted the EU to ban atrazine in 2004. The EPA appears unlikely to follow suit even though it has stepped up its oversight of atrazine in recent years. The Agency has convened 11 Science Advisory Panels (SAPs) in the past decade to assess the science regarding atrazine's possible human health and environmental effects and has done little to indicate it shares the concerns raised by NGOs.

In the preliminary work plan released in June, the EPA says that it is confident it has the data required to complete the registration review. "An extensive amount of atrazine toxicity and effects data have been submitted to and reviewed by the Agency," the EPA says. "There are no remaining data gaps anticipated for the registration review of atrazine." However, further risk assessments are planned (Agrow No 668, p 13).

Grower groups and pesticide industry representatives contend that the herbicide has been thoroughly vetted and should be re-registered without delay. The scientific studies related to atrazine number "in the thousands" and demonstrate that it continues to be "a safe, effective crop protection tool", according to Dale Moore, executive director of public policy with the American Farm Bureau Federation.

Mr Moore notes that atrazine has "been the subject of intense scrutiny" for more than 50 years. The UN WHO and FAO as well as regulators in Australia, Canada and the UK have all deemed atrazine safe for use, Mr Moore writes. "There appears to be no scientific basis to withhold re-registration of the product," he says. In comments echoed by a dozen maize, wheat and soybean grower groups and organizations representing pesticide manufacturers, Mr Moore argues that further restrictions could strike a serious blow to US farmers and their ability to provide a "safe and abundant food supply".

Comments submitted by environmental groups reiterate their view that evidence of atrazine's harm to the environment and human health warrants much closer scrutiny and a ban on its use. Given the EU and others have already banned the herbicide, "we hope the Agency, during this review, considers all the available scientific evidence, as well as the available commercial alternatives to atrazine, that support the removal of this substance from the market", says Nichelle Harriott from Beyond Pesticides.

(Pesticide & Chemical Policy/AGROW, September 12, 2013)

SCIENTISTS DISCUSS HOW BED BUGS 'SHRUG OFF' PESTICIDES

In a talk at the 246th National Meeting & Exposition of the American Chemical Society (ACS), scientists are describing identification of the genes responsible for pesticide-resistance in bedbugs, and the implications for millions of people trying to cope with bedbug infestations that have been resurging for more than a decade.

The bedbug presentation is part of an international research award symposium at the ACS National Meeting, which includes 12 other research papers on topics ranging from pesticide resistance to monitoring chemicals in the environment to tick spit.

"Every living thing on Earth has a unique set of strategies to adapt to life-threatening situations in the environment," said Fang Zhu, Ph.D., a leader of the research who spoke at the meeting. "The surprise discovery we never expected is that most of the genes responsible for pesticide resistance in the bedbug are active in its outer skin-like shell or cuticle. This is the unique adaptation that has not been discovered in cockroaches, termites, ants or other insects."

Zhu of Washington State University and colleagues, who are with the University of Kentucky, quickly realized that the location was the ideal spot for genes that mute the effects of pyrethroid insecticides—today's mainstay home and garden pesticides. The bodies of bedbugs, she explained, are extremely flat before the creatures slurp up a meal of human blood. That profile adapts bedbugs for a life of hiding in the seams of mattresses, upholstered chairs, the lining of suitcases and other concealed locations. But it also creates a vulnerability to environmental toxins, giving bedbugs an unusually large surface area where pesticides can enter their bodies. The shell is tough—and accounts for the difficulty in squashing

a bedbug. But research by Zhu's team and others has established that it's also a metabolic hot spot to protect against insecticides. Some genes in the cuticle, for instance, produce substances that tear apart the molecular backbone of insecticides, rendering them harmless. Other genes manufacture biological pumps that literally pump insecticides back out of the cuticle before they can enter the body. (PCT Online, September 13, 2013)

<http://www.pctonline.com/scientists-research-bed-bug-resistance-ACS.aspx>

US EPA URGED TO BOLSTER OVERSIGHT OF CONDITIONAL REGISTRATIONS

The US EPA needs to improve its oversight of conditionally registered pesticides as it lacks the tools to adequately track whether registrations have complied with data requirements, concludes a report by the independent investigative arm of the US Congress. The Government Accountability Office (GAO) finds that the Agency does not have accurate data on conditional registrations and is uncertain how many conditional registrations have been granted.

The EPA is permitted to grant conditional registrations under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) for pesticide products that are identical or similar to products that are already registered or for the new use of a registered product. Proponents note that the process promotes innovation by bringing new products into the marketplace more quickly, but critics worry that it allows pesticides to be sold without adequate evaluation of potential risks.

Prior to granting a conditional registration, the Agency must determine that the pesticide will not significantly increase the risk of unreasonable adverse effects on the environment. Under a conditional registration, manufacturers are given usually one to four years to provide the missing data

that would have been required for an unconditional registration.

But the GAO reports that the extent to which the EPA "ensures that registrants submit the additional data required when it grants conditional registrations or that it has reviewed these data is unknown". The Agency does not have a "reliable system" to track key information related to conditional registrations, the Office finds. "As a result, pesticides with conditional registrations could be marketed for years without EPA's receipt and review of these data," the report notes.

The EPA acknowledges that it relies on a variety of routine program operations, such as its review of a company's changes to a pesticide registration, to determine if data are missing. Such methods "fall short" because they are neither comprehensive nor do they ensure timely submission of the required data, the GAO concludes. "EPA's lack of a reliable system for managing conditional registrations constitutes an internal control weakness because the Agency lacks an effective mechanism for program oversight and decision making," the report says.

The GAO also found that Agency staff had misused the term "conditional registration" and incorrectly classified some registrations. According to EPA documents and officials, "weaknesses in guidance and training, management oversight, and data management contributed to these misclassification problems", the GAO says.

The 56-page report calls on the Agency to complete plans to automate data related to conditional registrations to improve its ability to track their status and identify potential problems requiring management attention. The EPA's Office of Pesticide Programs (OPP) should also develop guidance to ensure that product managers use a uniform methodology to track and document information on conditional registrations, the GAO recommends. The report further calls on the OPP to take steps to revise its website on conditional

registrations to clarify and update the information presented.

In a July 18th letter responding to the report, EPA assistant administrator Jim Jones says that the Agency agrees with its conclusions and is already taking steps to implement the recommendations. The report was requested by US Congressman Paul Tonko in the wake of criticism in 2010 by environmental groups who reported that the EPA had overused conditional registrations and lacked a reliable system to identify whether the required data had been submitted.

A subsequent report released in April by the Natural Resources Defense Council repeated those concerns, also claiming that the EPA had used the conditional registration process to approve as many as 65% of the 16,000 pesticides on the US market (*Agrow* No 662, p 19). The EPA took issue with the report, arguing the concerns about unsafe pesticides on the market were unwarranted. The Agency noted that more than 90% of conditionally registered products involved pesticides that were identical to those already on the market or differed in ways that EPA scientists believed would not significantly increase any negative effects. (Pesticide & Chemical Policy/AGROW, September 16, 2013)

MOSQUITOES TOP LIST OF PEST CONCERNS, NPMA SURVEY FINDS

When it comes to pests, Americans say mosquitoes, stinging insects and ticks caused them most concern during the summer, according to a new survey conducted by Harris Interactive on behalf of The National Pest Management Association (NPMA). More than half of those concerned about any pests during the summer say they are worried about contracting a disease as the number one reason behind their concern.

"It's no wonder mosquitoes are of most concern for the public, considering last year was one of the deadliest West Nile virus seasons on record, with

286 fatal cases reported by the Centers for Disease Control and Prevention,” noted Missy Henriksen, vice president of public affairs for NPMA.

“However, as we see from our survey, the public is also rightfully concerned about other pests that can transmit disease and cause other health problems.”

As summer begins to wind down, Americans may think the threats from these pests will decrease as well. “Not true,” says Henriksen. “Mosquitoes and stinging insects are very active up until the late fall, around October. It’s important for people to take proper precautions when spending time outdoors, especially amid concerns over WNV and reports of increased cases of Lyme disease, which can be transmitted by black-legged ticks.”

Below are the highlights of NPMA’s summer pest survey:

Among Americans...Among Americans...

- 62 percent are concerned about mosquitoes
- 38 percent are concerned about stinging insects (e.g., hornets, wasps, yellow jackets, bees)
- 30 percent are concerned about ticks
- 26 percent are concerned about spiders
- 11 percent are concerned about bed bugs
- 14 percent are concerned about other pests
- Women are slightly more concerned about any pests during the summer than men (87 percent vs. 82 percent, respectively)
- 90 percent who have children in the home are more concerned about any pests during the summer than those who do not have children (82 percent)

Among those who are concerned about any pests during the summer...

- 54 percent are concerned about contracting a disease from the pests (e.g., West Nile virus or Lyme disease)
- 43 percent are concerned about the pain associated with a bite or sting
- 35 percent are concerned about pest infestation in their home
- 11 percent say they have a severe allergy to certain pests
- 5 percent have contracted a disease from a pest in the past

The survey was conducted online within the United States by Harris Interactive on behalf of NPMA, from August 5-7, 2013, among 2,038 adults ages 18 and older. This online survey is not based on a probability sample and therefore no estimate of theoretical sampling error can be calculated.(PCT Online September 12, 2013)

<http://www.pctonline.com/mosquitoes-top-pest-npma-survey.aspx>

CONGRATULATIONS KEVIN SHELTON!

Kevin won the Dick Parker award for service to the pest control industry for his years of support as an amazing educator! Kevin has worked for the OSU pesticide safety education program for 13 years and at OSU for 29 years. He has been instrumental in implementing the Structural and General Pest Practical Schools and developing many of the education programs that we offer.



In-State CEU Meetings

Date: October 15, 2013

Title: Target Specialty Products
Location: Hard Rock Hotel & Convention Center
Catoosa OK
Contact: Jennifer Gonzalez 800-352-3870
Course #: OK-13-057
www.target-specialty.com

| CEU's: | Category(s): |
|--------|--------------|
| 2 | 3A |
| 3 | 7A |
| 1 | 7B |
| 5 | 10 |
| 1 | All |

Date: October 15, 2013

Title: Red River Specialties ROW & Bare Ground Workshop
Location: Courtyard Marriott Norman OK
Contact: Philip Lawrence (580)-235-5194
Course #: OK-13-058
www.rrsi.com

| CEU's: | Category(s): |
|--------|--------------|
| 6 | 6 |
| 6 | 10 |

Date: October 17, 2013

Title: APWA Education Day
Location: Francis Tuttle Technology Center
Contact: Richard Kindberg (405) 216-7828
Course #: pending

| CEU's: | Category(s): |
|---------------------|--------------|
| 5(pending approval) | 3A |
| 5(pending approval) | 10 |

Date: October 25, 2013

Title: Asmark Professional Applicator Training-Hydraulic Sprayers
Location: Chisholm Trail Expo Center Enid OK
Contact: Dustin Warder (270)-926-4600 ext. 203
Course #: OK-13-056
www.asmark.org/TrainingCourses/PATCourse.cgi

| CEU's: | Category(s): |
|--------|--------------|
| 5 | 1A |
| 5 | 6 |
| 5 | 10 |

Date: November 19, 2013

Title: Winfield Applicator Training
Location: Reed Center Midwest City OK
Contact: Adelita Tyson (254) 445-4359
Course #: OK-13-067
www.winfieldsolutionsceus.com

| CEU's: | Category(s): |
|--------|--------------|
| 6 | 3A |
| 3 | 3C |
| 2 | 6 |
| 3 | 7A |
| 2 | 7B |
| 2 | 8 |
| 10 | 10 |

Date: November 20, 2013

Title: Winfield Applicator Training
Location: Hard Rock Hotel & Convention Center
Catoosa OK
Contact: Adelita Tyson (254) 445-4359
Course #: OK-13-068
www.winfieldsolutionsceus.com

| CEU's: | Category(s): |
|--------|--------------|
| 4 | 3A |
| 2 | 3C |
| 2 | 6 |
| 2 | 7A |
| 2 | 7B |
| 6 | 10 |

Date: December 3-5, 2013

Title: 2013 Oklahoma Ag Expo
Location: Reed Center Midwest City OK
Contact: Tammy Ford-Miller (580) 233-9516
Course #: pending
www.oklahomaag.com

| CEU's: | Category(s): |
|----------------------|--------------|
| 1(pending approval) | Aerial |
| 7(pending approval) | 1A |
| 1(pending approval) | 7A |
| 4(pending approval) | 7c |
| 12(pending approval) | 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

Wood Destroying Organism Inspection Course
www.nachi.org/wdocourse.htm

CTN Educational Services Inc
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 October/November 2013 are as follows:

| October | | November | |
|---------|-------|----------|----------|
| 7 | OKC | 4 | Atoka |
| 7 | Atoka | 5 | Goodwell |
| 10 | Tulsa | 5 | Ardmore |
| 21 | OKC | 7 | Tulsa |
| 23 | Altus | 7 | Hobart |
| 24 | Tulsa | 15 | OKC |
| | | 21 | Tulsa |
| | | 25 | OKC |

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

ATOKA KIAMICHI TECH CENTER 1301
 W Liberty Rd, Seminar Center

Ardmore Carter County Extension Center

Pesticide Safety Education Program