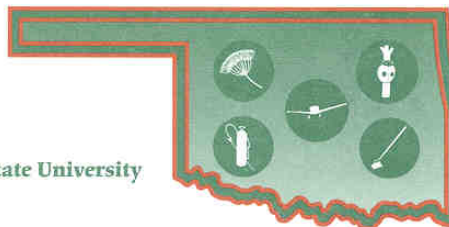


# PESTICIDE REPORTS

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



## FEBRUARY, 2005

## CHEM

### Table of Contents

Newsletter Renewal	1
Wheat Herbicide	1
Fumigation Practical	1
States Lack Tools for Biotech Regulation	1
Acute Pesticide Exposure in Schools	2
Pesticides Linked to Menstrual Disorders	3
Strip Tillage Most Effective Against Runoff	3
EPA Pressed to Include Neurotoxicity Testing	4
EPA Makes Judgment on Salmon Pesticides	5
Monsanto RoundUp Alfalfa	5
Oklahoma Ag Statistics for 2003	5
Blast From the Past	5
Testing Dates and Locations	6
CEU's	8

### NEWSLETTER RENEWAL

Last Chance!! We are updating our mailing/e-mail list for this newsletter.

If you have not done so already complete the form at the back of this newsletter and return it to us.

**If you would like to receive the newsletter by e-mail be sure and to include your e-mail address as well.**

If we do not receive a response from you, we will drop you from our distribution list.

### WHEAT HERBICIDE

Oklahoma Department of Agriculture, Food & Forestry has submitted a 24c for Finesse for aerial application to wheat. This use expires July 1, 2005.

As with all 24c products, the applicator must have the 24c label in their possession to apply this product.

A copy of the 24c label can be obtained from your distributor, DuPont or ODAFF.

### FUMIGATION PRACTICAL

The next Fumigation Practical is scheduled for March 22, 2005 at the Stored Product, Research & Education Center at OSU.

To register, you need to have passed the Fumigation category exam. Commercial & Non-commercial applicators need to have passed their core and Fumigation category exam. Private applicators need to have passed the Fumigation category exam.

You cannot register without having passed these exams.

You can obtain registration forms from our web page <http://pested.okstate.edu> or by calling 405.744.5531 for further information.

### STATES LACK TOOLS FOR BIOTECH REGULATION

Many stakeholders question whether state governments have the tools they need to play an oversight role in regulation of food biotechnology, the Pew Initiative on Food and Biotechnology reported.

Prepared by the Washington-based research organization Resources for the Future, the report on the state-federal relationship in oversight of biotech crops was based on targeted data collected from 17 states. It includes an analysis of 78 survey responses and interviews with biotech stakeholders across the country, along with vignettes intended to illuminate how some of these states are handling specific policy and process issues. No policy recommendations are included.

Key findings include:

- Most officials and stakeholders believe state regulation of biotechnology should address local concerns, whereas primary responsibility for human health and environmental protection should rest with federal regulators.
- That said, the definition of “local concerns” differs from state to state. For example, states with large agricultural sectors are intensely interested in the economic promise of agricultural biotechnology. However, in some cases they also need to take into account concerns that new biotech crops, such as Roundup Ready wheat, could threaten valuable export markets for conventional or organic crops. Local concerns in some states also include potential environmental and food safety risks of biotech crops and other Ag biotech products.
- There is broad sentiment among those interviewed that many states do not have the legal tools, technical expertise and financial resources needed to effectively partner with federal regulators in carrying out the necessary level of oversight.
- Legal frameworks that support federal regulators are problematic at the state level. For example, companies that apply for permits to conduct field trials of biotech crops can ask federal regulators to withhold key information—such as where trials will be conducted – from state regulators because such information is considered confidential business information.
- While some states are responding to the issues raised by agricultural biotechnology in an innovative manner, others are struggling to find approaches to managing conflicts. In Colorado, state officials have used the possible introduction of plant-made pharmaceuticals (biopharming) to develop a unique public participation process. In North Carolina, concerned parties have developed voluntary protocols to prevent bioengineered and conventional strains of tobacco from mixing. In contrast, litigation has been filed in Hawaii to challenge aspects of that state’s biotech oversight, including its practice of classifying some data submitted for permits as CBI.  
“The regulatory system for agricultural

biotechnology is dependent on state and federal regulators playing a complementary and collaborative role,” commented Michael Taylor, lead author of the report, in a statement. “The diverse levels of preparedness of states reflected in this report suggests that the federal-state partnership needs to be reviewed and strengthened to ensure the states have the resources they need to be full partners with federal regulators and to enable them to respond to unique local concerns.”

The report, “Tending the Fields: State & Federal Roles In the Oversight of Genetically Modified Crops” is available at <http://pewagbiotech.org/research/fields/>. (Pesticide & Toxic Chemical News, Vol. 33, No. 7, December 6, 2004)

## **ACUTE PESTICIDE EXPOSURES IN SCHOOLS ARE PREVENTABLE**

Researchers conducting the first study of the hazards of pesticide exposures in U.S. schools have found that 2,096 people become sick due to pesticide exposures at schools between 1998 and 2002. Although pesticide drift accounted for 23% of the illnesses, the rest were caused by the use of pesticides inside the schools or on school properties, they said.

Physicians Walter Alarcon and Geoffrey Calvert, both from the National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention in Cincinnati, presented their findings, their full paper currently is under peer-review prior to publication.

Using the Sentinel Event Notification System for Occupational Risks-Pesticide Program (SENSOR) and the Toxic Exposure Surveillance System (TESS) to identify students, staff and faculty who may have been poisoned by pesticide exposure, health effects and any other information that would support an association between pesticide exposure and adverse health effects.

The researchers found that students took the brunt of the exposures, with 68% of the illnesses reported among those 18 years old or younger. Although no major illnesses were reported, the study found that 190 individuals,

or 9% of the reported illnesses, were of moderate severity.

Disinfectants caused the most illnesses of any chemical class, causing 32% of the reported illnesses. Insecticides were close behind with 30%, followed by repellents at 14% and herbicides at 8%.

Combing through the SENSOR data, which provided more detailed information than the TESS system, the researchers found that in 325 illnesses, 166 – or 51% - were work-related. Another 75 illnesses, or 23%, were caused by pesticide drift from adjacent properties. All other exposures were associated with pesticide use at the schools.

The researchers concluded that many acute illnesses related to pesticide exposures could be prevented through the use of integrated pest management practices and the establishment of restricted pesticide application buffer zones around schools to prevent drift exposures. (Pesticide & Toxic Chemical News, Vol. 33, No. 5, November 22, 2004)

## **PESTICIDES LINKED WITH MENSTRUAL DISORDERS**

Women who lived on farms and also applied pesticides have been found to have an increased risk of disrupted menstrual cycles than women who never used pesticides, according to a recently published study.

Researchers from the University of North Carolina at Chapel Hill and the National Institute of Environmental Health Sciences (NIEHS) found that among 2,103 women between the ages of 21 and 40 in 1993-97, those who used pesticides were somewhat more likely to have longer menstrual cycles and even missed periods. Those who used classes of pesticides such as lindane, atrazine, mancozeb and maneb that are likely to be hormonally active had an even greater risk (60%-100%) of experiencing longer cycles, missed periods or intermenstrual bleeding compared with women who never used pesticides.

The findings were reported in the December edition of the *American Journal of Epidemiology*.

The study is part of the American Health Study conducted by the National Cancer

Institute and NIEHS. Female pesticide applicators and spouses of applicators were queried about the type of pesticides exposures they may have experienced as well as their reproductive health. Questions included information about the mixing and application of 50 pesticides, farming practices, demographic characteristics and general health. Researchers developed an algorithm to gauge the statistical risk of menstrual abnormalities of women exposed to various pesticides compared with women who have never been directly exposed to pesticides. Physical activity, which may disrupt menstrual cycles, was factored into the risk estimates.

Carbamate pesticides were found to have the greatest association with long menstrual cycles and more irregular cycles. Women who used herbicides were unlikely to have short menstrual, and were likely to have irregular or missed periods. Crop insecticides caused a shift toward longer cycles, decreased odds of irregular cycles, and greater odds of missed periods. Fumigants were associated with shorter cycles and missed periods, but the researchers noted that the correlation was imprecise.

An association was made between application of lindane or atrazine with long menstrual cycles, missed periods and intermenstrual bleeding, in addition to increased odds of irregular cycles. Women who applied mancozeb or maneb were found to have a four times greater risk of long cycles and two times greater odds for missed periods. (Pesticide & Toxic Chemical News, Vol. 33, No. 9, December 20, 2004)

## **STRIP TILLAGE MOST EFFECTIVE AGAINST HERBICIDE RUNOFF**

A study in the December edition of *Journal of Environmental Quality* shows that strip tillage can reduce runoff from two herbicides commonly applied to cotton fields in the southern U.S., although leaching into groundwater may be a concern with one of the chemicals.

In their report, "Fluometuron and pendimethalin runoff from strip and conventionally tilled cotton in the southern Atlantic Coastal Plain," researched from

USDA's Agricultural Research Service and the University of Georgia noted that cotton acreage in the Atlantic Coastal Plain is up threefold in the past decade. To better understand which agricultural best practices would best protect groundwater resources from pesticides applied to the cotton, the researchers compared runoff rates of fluometuron cotton crops with either strip or conventional tillage.

Rainfall simulations were applied to preemergent crops treated with both herbicides. Natural rainfall also was studied on preemergent crops applied with both herbicides and postemergent crops treated with fluometuron.

Runoff of pendimethalin was greater when conventional tillage was employed due in large part to strong soil absorption, with highest runoff noted during the rainfall simulation. Fluometuron runoff was lower in strip tillage during natural rainfall but less runoff was noted in fields with conventional tillage during the rainfall simulation. The runoff of fluometuron was low in all scenarios, however. In natural rainfall, about half of the runoff from fluometuron-treated fields was in the form of the herbicide's degradate, desmethylfluometuron (DMF). The low runoff rate of fluometuron was attributed to its rapid leaching into the soil, which could indicate potential for groundwater contamination. (Pesticide & Toxic Chemical News, Vol. 33, No. 9, December 20, 2004)

## **EPA PRESSED TO INCLUDE NEUROTOXICITY TESTS IN PESTICIDE DECISIONS**

EPA is facing an 11th-hour push from children's health advocates to require industry to routinely test neurological effects of pesticides on children.

The request comes as the agency's pesticide officials are in final negotiations with the White House Office of Management and Budget (OMB) over proposed revisions to regulatory requirements for data that support pesticide registration decisions.

Industry officials last month urged administration officials to clarify the data requirements on the neurologic and other tests to be required of pesticide makers

because of concerns that the agency has "drifted" from long-standing policies.

But in a letter to outgoing EPA Administrator Michael Leavitt, 13 groups representing environmentalists and children's health groups urge the agency to require pesticide manufacturers to conduct developmental neurotoxicity (DNT) studies when seeking to register the use of their products.

The groups say mandating DNT testing is critical because trends indicate there are an increasing number of children being diagnosed with learning and developmental disabilities that could be linked to pesticide use, and that EPA policies are insufficiently protective.

EPA and industry sources say a key part of negotiations with OMB has been whether the pesticide registration rule, known as the part 158 rule, should routinely or conditionally require DNT studies. The rule, which was last updated in 1984, gives EPA broad authority to require companies seeking to register or renew a pesticide license to provide scientific studies on a pesticide's safety.

Industry sources say routine use of DNT tests is controversial because they are expensive and difficult to interpret.

But the children's groups argue in their letter that EPA scientists have said conducting a DNT has "proved to be 4- to 5-fold less expensive than the industry predicted," and that two large inter-laboratory studies have standardized and validated the test.

But an official with CropLife America says pesticide companies must conduct additional studies to ensure a DNT test provides useful information, adding to the costs.

The children's health groups say EPA has not imposed sufficient safety margins required by pesticide law to address children's risks. "Even where the [pesticide law] suggests an additional children's margin of safety should be presumptive in EPA's pesticide risk assessments where exposure and/or toxicity studies are lacking, the agency has not used this safety factor when DNT studies were lacking," the letter says.

Groups that signed onto the letter include the American Association of Mental Retardation, the Learning Disabilities Association of America and the Mercury Poisoning Project.

An EPA official says the negotiations with OMB over the part 158 rule will be complete in January. (EPA Press Release, December 23, 2004)

## **EPA MAKES JUDGEMENT ON SALMON PESTICIDES**

EPA has made request to U.S. National Marine Fisheries Service (NMFS) regarding the remaining seven pesticides (bromoxynil, carbofuran, 2,4-D, lindane, malathion, pendimethalin, triclopyr BEE) affect on 20 salmon species in the Pacific Northwest.

EPA has found that most of these pesticide have a "may but not likely", "not likely", or a "no effect" determination by EPA.

EPA will not consult with NMFS on these findings. In the mean time, EPA is developing county bulletins for these pesticides for the states in the Ninth Circuit Court's jurisdiction. (EPA Press Release, December 28, 2004 and web page [www.epa.gov/espp](http://www.epa.gov/espp))

## **MONSANTO REQUEST FOR ROUNDUP ALFALFA**

On November 24, 2004, USDA APHIS published a notice of Monsanto petitioning seeking a determination of non-regulated status for alfalfa that has been genetically engineered for tolerance to Glyphosate.

In response to this petition, Greenpeace has mounted a letter writing campaign to request USDA-APHIS to deny the non-regulated status.

Greenpeace says RoundUp Ready crops increase herbicide use, changes to weed populations and impacts on biodiversity, causes RoundUp weed resistance and poses unique risks such as affecting the gut microflora in livestock. (Federal Register, November 24, 2004, Food Industry Environmental Network, January 23, 2005)

## **OKLAHOMA AG STATISTICS FOR 2003**

The Oklahoma Agricultural Statistics for 2003 is available. Copies can be obtained by calling OASS at 405.522.6190.

Some interesting information included in the Oklahoma Agricultural Statistics are as follows:

- The top four agriculture productions.

Which are

1. Cattle & Calves
2. Winter Wheat
3. Poultry & Eggs
4. Hogs & pigs

- For cash receipts in 2003, the primary sources were:

Cattle & Calves 48.6%

Poultry 9.5%

Wheat 9.1%

Hogs 9%

- The average farm spent \$503 on pesticides. Livestock provided more income than crops for all counties

- The Panhandle out yielded the state average for:

Soybeans

Corn

Alfalfa

All hay

(Oklahoma Agricultural Statistics 2003)

## **BLAST FROM THE PAST**

Private applicator training and certification options and a two-phased sequential system have been drafted by the EPA. The first phase would provide sufficient training to allow a private applicator to buy a restricted use pesticide by permit and signature of understanding. The second phase would provide for broad certification that would ideally be based on eight hours of contact training consisting of instruction, discussion and problem-solving. (Pesticide & Toxic Chemical News, Vol. 33, No. 7, December 6, 2004) **Note:** Some may remember these days. The system has changed and some are working to change it more.



Jim T Criswell  
Pesticide Coordinator

# PESTICIDE APPLICATOR TEST SESSIONS

## JANUARY - DECEMBER 2005

All 23 exams will be available at each session. **PLEASE MAKE SURE** you know in advance which specific exam(s) you need to take (e.g. Service Tech, Ornamental & Turf, Core, Right-of-way, General Pest, etc.).

**RESERVATIONS ARE NOT REQUIRED FOR THESE TEST SESSIONS;** they are all open to anyone wishing to test for certification. Tests are **\$50.00 each**; please bring check, money order, or the exact amount of cash needed for testing, along with a form of photo ID.

There is no fee for government employees in the discharge of their official duties.

Unless otherwise noted, sessions are located as follows:

<b>DURANT</b>	BRYAN CO EXT OFFICE 1901 S Ninth St
<b>ELK CITY</b>	ELK CITY CARNIEGE LIBRARY 221 W Broadway
<b>ENID</b>	GARFIELD CO. EXT OFFICE 316 E Oxford
<b>GOODWELL</b>	OKLA PANHANDLE RESEARCH & EXT CENTER Rt 1 Box 86M
<b>HOBART</b>	KIOWA CO. EXT CENTER Courthouse Annex 300 W Main
<b>LAWTON</b>	GREAT PLAINS COLISEUM Annex Rm 920 S Sheridan Rd
<b>MCALESTER</b>	KIAMICHI TECH CENTER on Hwy 270 W of Hwy 69
<b>OKC</b>	OKLA CO. EXT 930 N. Portland, Auditorium- <b><u>Park on North side &amp; enter North door</u></b>
<b>TALIHINIA</b>	KIAMICHI TECH CENTER on Hwy 263 A.
<b>TULSA</b>	NE CAMPUS OF TCC 3727 E. Apache (Apache & Harvard) Engineering Tech Rm 127

**If you have any questions, please call (405) 522-5950 or email  
elandero@oda.state.ok.us  
Testing will begin at 9 am, unless otherwise noted**

## 2005 Test Dates and Locations

### February

2 Hobart  
10 Tulsa  
14 OKC  
24 Tulsa  
28 OKC

### March

1 Goodwell  
2 Lawton  
10 Tulsa  
14 OKC  
23 McAlester  
24 Tulsa  
28 OKC

### April

6 Elk City  
11 OKC  
14 Tulsa  
25 OKC  
28 Tulsa

### May

4 Hobart  
9 OKC  
12 Tulsa  
23 OKC  
25 McAlester  
26 Tulsa

### June

6 OKC  
7 Goodwell  
9 Tulsa  
23 Tulsa  
27 OKC

### July

11 OKC  
14 Tulsa  
25 OKC  
28 Tulsa  
28 Enid

### August

3 Lawton  
8 OKC  
11 Tulsa  
25 Tulsa  
29 OKC

### September

7 Elk City  
8 Tulsa  
12 OKC  
22 Tulsa  
26 OKC

### October

5 Hobart  
10 OKC  
13 Tulsa  
24 OKC  
26 Durant  
27 Tulsa

### November

1 Goodwell  
2 Elk City  
3 Tulsa  
14 OKC  
16 Talihina  
17 Tulsa  
28 OKC

### December

1 Enid  
7 Durant  
7 Hobart  
8 Tulsa  
14 OKC  
29 Tulsa

## OPPORTUNITIES TO EARN CEU'S

---

FEBRUARY 2, 2005

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
CATEGORY: ALL CATEGORIES  
CEU'S: 2  
SPONSOR: CHRYSALIS EDUCATION & CONSULTING  
TOPIC: O&T, GENERAL PEST & STRUCTURAL  
PLACE: HOLLIDAY INN NORTH  
2540 MEACHAM  
FORT WORTH, TX  
CONTACT: DENNIS MALONEY  
806.468.8583  
FEE: YES

---

FEBRUARY 3, 2005

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: PENDING  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: PENDING  
SPONSOR: OKLAHOMA STATE UNIVERSITY  
TOPIC: GLOPBAL POSITIONING SYSTEM SCHOOL  
PLACE: NORTHWEST TECHNOLOGY CENTER  
FAIRVIEW, OK  
CONTACT: ROGER GRIBBLE  
580.237.7677  
FEE: ?

---

FEBRUARY 9, 2005

CATEGORY: 11 – PUBLIC HEALTH  
CEU'S: 3  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 3  
SPONSOR: PUBLIC HEALTH EQUIPMENT & SUPPLY CO.  
TOPIC: MOSQUITO CONTROL WORKSHOP  
PLACE: HOLIDAY INN SELECT  
5000 E. SKELLY DR.  
TULSA, OK  
CONTACT: CHARLIE REEVES  
210.532.9331  
FEE: NO

---

## OPPORTUNITIES TO EARN CEU'S

---

FEBRUARY 9, 2005

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
CATEGORY: ALL CATEGORIES  
CEU'S: 2  
SPONSOR: CHRYSALIS EDUCATION & CONSULTING  
TOPIC: 0&T, GENERAL PEST & STRUCTURAL  
PLACE: HOLLIDAY INN  
1550 N. LINCOLN, LIBERAL, KS  
CONTACT: DENNIS MALONEY - 806.468.8583  
FEE: YES

---

February 17, 2005

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: PENDING  
CATEGORY: 6 – RIGHT-OF-WAY  
CEU'S: PENDING  
CATEGORY: 7a – GENERAL PEST  
CEU'S: PENDING  
CATEGORY: 7b – STRUCTURAL  
CEU'S: PENDING  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: PENDING  
SPONSOR: B&G CHEMICAL COMPANY  
TOPIC: TULSA CONFERENCE & EXPO  
PLACE: TULSA, OK  
CONTACT: ANGELINE GULLOTTO - 214.357.5741  
FEE: YES

---

FEBRUARY 22-24, 2005

CATEGORY: A - AERIAL  
CEU'S: 2  
CATEGORY: 2 – FORESTRY  
CEU'S: 2  
CATEGORY: 5 – AQUATIC  
CEU'S: 2  
CATEGORY: 6 – RIGHT-OF-WAY  
CEU'S: 6  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
SPONSOR: SUMMIT HELICOPTERS  
TOPIC: RECERTIFICATION PROGRAM  
PLACE: 595 COUGAR DR., CLOVERDALE, VA  
CONTACT: JOHN REED - 540.992-5500  
FEE: ?

---

## OPPORTUNITIES TO EARN CEU'S

---

MARCH 8, 2005

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 5 - AQUATIC  
CEU'S: 1  
CATEGORY: 6 – RIGHT-OF-WAY  
CEU'S: 4  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 4  
SPONSOR: OKLAHOMA VEGETATION MANAGEMENT ASSOCIATION  
TOPIC: SPRING CONFERENCE  
PLACE: CLARION CONVENTION CENTER  
OKLAHOMA CITY, OK  
CONTACT: KATHY MARKHAM  
918.256.9302  
FEE: YES

---

MARCH 9, 2005

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
CATEGORY: ALL CATEGORIES  
CEU'S: 2  
SPONSOR: CHRYSALIS EDUCATION & CONSULTING  
TOPIC: O&T, GENERAL PEST & STRUCTURAL  
PLACE: HOLLIDAY INN  
3101 N. DALLAS PKW  
PLANO, TX  
CONTACT: DENNIS MALONEY  
806.468.8583  
FEE: YES

---

## OPPORTUNITIES TO EARN CEU'S

---

MARCH 30, 2005

CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
CATEGORY: ALL CATEGORIES  
CEU'S: 2  
SPONSOR: CHRYSALIS EDUCATION & CONSULTING  
TOPIC: O&T, GENERAL PEST & STRUCTURAL  
PLACE: HOLLIDAY INN  
GANDER MOUNTAIN LODGE  
10300 8-40 W At HEILUM RD  
AMARILLO, TX  
CONTACT: DENNIS MALONEY, 806.468.8583  
FEE: YES

---

ONGOING  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 10  
CATEGORY: 7b – STRUCTURAL  
CEU'S: 6  
CATEGORY: 7c - FUMIGATION  
CEU'S: 4  
CATEGORY: 7d – FOOD PROCESSING  
CEU'S: 10  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 10  
SPONSOR: PURDUE UNIVERSITY  
TOPIC: PEST MANAGEMENT TECHNOLOGY COURSE  
PLACE: CORRESPONDANCE COURSE  
CONTACT: JENNY TOWLER, 765.494.2960  
FEE: YES

---

ONGOING  
CATEGORY: 7c - FUMIGATION  
CEU'S: 3  
CATEGORY: 7d – FOOD PROCESSING  
CEU'S: 10  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 10  
CATEGORY: 11 – BIRD & PREDATORY ANIMAL  
CEU'S: 2  
SPONSOR: PURDUE UNIVERSITY  
TOPIC: FOOD PLANT PEST MANAGEMENT COURSE  
PLACE: CORRESPONDANCE COURSE  
CONTACT: JENNY TOWLER, 765.494.2960  
FEE: YES

---

## OPPORTUNITIES TO EARN CEU'S

---

ONGOING  
CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 2  
CATEGORY: 7a – GENERAL PEST  
CEU'S: 1  
CATEGORY: 7b - STRUCTURAL  
CEU'S: 1  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 6  
CATEGORY: ALL CATEGORIES  
CEU'S: 2  
SPONSOR: CHRYSALIS EDUCATION & CONSULTING  
TOPIC: O&T, GENERAL PEST & STRUCTURAL  
PLACE: HOLLIDAY INN  
CONTACT: 3101 N. DALLAS PKW  
PLANO, TX  
DENNIS MALONEY  
806.468.8583  
FEE: YES

---

ONGOING  
CATEGORY: 3a – ORNAMENTAL & TURF  
CEU'S: 4  
CATEGORY: 10 - DEMONSTRATION & RESEARCH  
CEU'S: 4  
SPONSOR: UNIVERSITY OF GEORGIA  
TOPIC: PRINCIPLES OF TURFGRASS MANAGEMENT  
PLACE: CORRESPONDANCE COURSE  
CONTACT: PHYLISS BREWER  
706.542.6692  
FEE: YES

---

ELECTRONIC PROGRAMS  
CATEGORY: VARIOUS  
CEU'S: 1  
SPONSOR: UNIVAR  
TOPIC: VARIOUS  
PLACE: INTERNET – WWW.PESTWEB.COM  
CONTACT: JEFF SMITH  
916.371.7602  
FEE: NO

---

## OPPORTUNITIES TO EARN CEU'S

---

### ELECTRONIC PROGRAMS

CATEGORY: 1a – AGRICULTURAL PLANT  
CEU'S: 1  
CATEGORY: 10 – DEMONSTRATION & RESEARCH  
CEU'S: 1  
SPONSOR: SOUTHWEST FARM PRESS  
TOPIC: SPRAY DRIFT MANAGEMENT  
PLACE: WWW.SOUTHWESTFARMPRESS.COM  
CONTACT: HARRY CLINE  
512.288.8288  
FEE: YES

---

### ELECTRONIC PROGRAMS

CATEGORY: VARIOUS  
CEU'S: VARIOUS  
SPONSOR: PEST NETWORK  
TOPIC: VARIOUS  
PLACE: PESTNETWORK.COM  
CONTACT: MEL YELL  
512.626.1645 CELL  
FEE: YES

---

### ELECTRONIC PROGRAMS

CATEGORY: VARIOUS  
CEU'S: VARIOUS  
SPONSOR: UNIVAR  
TOPIC: VARIOUS – GENERAL PEST CONTROL  
PLACE: HTTP://WWW.PESTWEB.COM  
CONTACT: VIC PRRALEZ  
888.755.5566  
FEE: YES

---

**RENEWAL FORM TO REMAIN ON OR BE ADDED TO  
*PESTICIDE REPORT's* MAILING LIST**

**PLEASE PRINT - THANK YOU!**

Name \_\_\_\_\_

Company/Business Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_ Zip Code \_\_\_\_\_

E-Mail \_\_\_\_\_

Please send to:     **Jim T Criswell**  
                          **C/O Sahar Enis**  
                          **127 NRC**  
                          **Oklahoma State University**  
                          **Stillwater, OK 74078-3033**

or E-mail us at: [bsahar@okstate.edu](mailto:bsahar@okstate.edu). Please type Pesticide Report in the subject box.

**If this is not returned your name will be removed from the *Pesticide Report's* mailing list.**

**Oklahoma State University EXTENSION personnel ARE NOT TO RETURN this form.**