

# PESTICIDE REPORTS

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



## February, 2013

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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.

Early bird registration has ended so cost registration is \$50 either online or at the door.

**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.

The next test help sessions for 2013 will be April 17 in Oklahoma City and May 30 in Tulsa.

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

## OSU PSEP TEST HELP SESSIONS

The OSU Pesticide Safety Education Program will conduct the second test help sessions for 2013 in February. The next test help will be at the Oklahoma County Extension Center on February 13<sup>th</sup>.

## **EPA MOVES TO BAN 12 D-CON MOUSE AND RAT CONTROL PRODUCTS / ACTION WILL PREVENT THOUSANDS OF ACCIDENTAL EXPOSURES AMONG CHILDREN EACH YEAR**

The U.S. Environmental Protection Agency is moving to ban the sale of 12 D-Con mouse and rat poison products produced by Reckitt Benckiser Inc. because these products fail to comply with current EPA safety standards. Approximately 10,000 children a year are accidentally exposed to mouse and rat baits; EPA has worked cooperatively with companies to ensure that products are both safe to use around children and effective for consumers. Reckitt Benckiser Inc., maker of D-Con brand products, is the only rodenticide producer that has refused to adopt EPA's safety standards for all of its consumer use products.

"Moving forward to ban these products will prevent completely avoidable risks to children, said James Jones, acting assistant administrator for EPA's Office of Chemical Safety and Pollution Prevention. "With this action, EPA is ensuring that the products on the market are both safe and effective for consumers."

The agency has worked with a number of companies during the last five years to develop safer rodent control products that are effective, affordable, and widely available to meet the needs of consumers. Examples of products meeting EPA safety standards include Bell Laboratories' Tomcat products, PM Resources' Assault brand products and Chemsico's products.

The EPA requires rodenticide products for consumer use to be contained in protective tamper-

resistant bait stations and prohibits pellets and other bait forms that cannot be secured in bait stations. In addition, the EPA prohibits the sale to residential consumers of products containing brodifacoum, bromadiolone, difethialone, and difenacoum because of their toxicity to wildlife.

For companies that have complied with the new standards in 2011, EPA has received no reports of children being exposed to bait contained in bait stations. EPA expects to see a substantial reduction in exposures to children when the 12 D-Con products that do not comply with current standards are removed from the consumer market as millions of households use these products each year.

For a complete list of the homeowner use rat and mouse products that meet the EPA's safety standards, visit:

<http://www.epa.gov/pesticides/mice-and-rats/rodent-bait-station.html>.

For a complete list of Reckitt Benckiser Inc.'s non-compliant products, visit:

<http://www.epa.gov/pesticides/mice-and-rats/cancellation-process.html#cancellation>.

The EPA's final Notice of Intent to Cancel will be available in the EPA docket EPA-HQ-OPP-2013-0049 at [www.regulations.gov](http://www.regulations.gov). After Federal Register publication of the Notice of Intent to Cancel, Reckitt Benckiser will have 30 days to request a hearing before an EPA Administrative Law Judge. If a hearing is not requested, the cancellations become final and effective. (EPA January 30, 2013)

<http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/3017786d7b82169e85257b0300573fde!OpenDocument>

## **SPECIALTY CROP COALITION PRESSURES MONSANTO, EPA ON DICAMBA TOLERANCES**

A coalition of farmers and food producers concerned with off-target movement associated with the anticipated widespread planting of dicamba-tolerant crops is expanding the number of specialty crops for which it wants EPA to establish dicamba tolerances.

The Save Our Crops Coalition (SOCC) on Tuesday said it plans to amend its earlier dicamba petition, which was sent to EPA on Dec. 18, to include 94 additional specialty crops it says are likely to be grown proximate to Monsanto's genetically modified dicamba-tolerant corn, cotton and soybean, which are pending deregulation by USDA.

The initial SOCC petition requested tolerances for eggplant, tomatillo, tomato, melon, cucumber and the other specialty crops in Federal Crop Groups 8 and 9. After receiving feedback that the initial list "was not comprehensive," the group has decided to amend the petition to include artichoke, beet, carrot, chervil, ginger, parsley, radish, turnip, yam bean, garlic, leek, onion, shallot, cabbage, rape, peas, soybean and other crops in Federal Crop Groups 1, 2, 3, 5, 6 and 7, SOCC Chairman Steve Smith in an email Tuesday.

SOCC maintains that residue tolerances first need to be established for the crops likely to be grown next to cotton treated with dicamba before Monsanto's request can be approved. If the EPA agrees with SOCC, Monsanto's tolerance request could be tied up for years, Smith says.

Monsanto, which is developing its dicamba-tolerant crops in partnership with BASF, is countering that grower contracts requiring growers to follow stewardship and application methods will adequately protect crops proximate to dicamba-treated fields, company spokesman John Combest tells *Pesticide & Chemical Policy*.

These best practices, which will include spraying limitations around field borders, prohibitions

against spraying under windy conditions, nozzle and boom restrictions, and a ban on aerial spraying, would provide adequate protection until dicamba residue tolerances can be established, Monsanto continues to maintain.

At the same time, Monsanto agrees to "collaboratively" undertake tests "to establish new uses and residue tolerances for dicamba herbicide on a wide range of sensitive crops, including those listed by SOCC," Combest says.

Group says advance warning given

SOCC is not swayed, however. Of primary concern is the possibility that farmers might lose entire crops because of the heightened sensitivity of tests for dicamba residue.

Smith tells *P&CP* that it notified Monsanto and BASF "three to four years ago" that not establishing residue tolerances before seeking EPA approval "was a problem."

The specialty growers and producers group says precedent is on its side. It points to Dow AgroScience's establishment of residue tolerances on specialty crops prior to rollout of Dow AgroScience's 2, 4-D tolerant crops.

"We appreciate Monsanto's recognition that it is essential to establish dicamba tolerances for crops likely to be grown in close proximity to dicamba-tolerant crops. .. However, we are not in agreement regarding the timing. .. It's so late in the game," Smith says.

Smith plans to meet with USDA and EPA officials to "discuss ... regulatory actions currently pending before each agency" in light of SOCC's agreement with Dow AgroSciences.

(*Pesticide & Chemical Policy* January 25, 2013, Volume: 41 Issue: 05)

## **PROPOSED RULE WILL ENHANCE THE PUBLIC'S RIGHT TO KNOW THE INGREDIENTS IN MINIMUM RISK PESTICIDE PRODUCTS**

The EPA is proposing to clarify the substances on the minimum risk pesticide ingredient list and the way ingredients are identified on product labels. Minimum risk pesticides are a special class of pesticides that are not subject to federal registration requirements because their ingredients, both active and inert, are demonstrably safe for the intended use. The agency is proposing to reorganize these lists and add specific chemical identifiers to make clearer to manufacturers, the public and federal, state and tribal inspectors the specific ingredients that are permitted in minimum risk pesticide products. The EPA is also proposing to require producer contact information and the use of specific common chemical names in lists of ingredients on minimum risk pesticide product labels.

EPA's proposal, announced in a December 31, 2012, [Federal Register notice](#), does not alter the substance of the minimum risk pesticide ingredient lists, but more accurately describes which chemical substances can be used in pesticide products that are exempt from federal pesticide registration requirements. State enforcement agencies have expressed support for the proposed changes.

The agency is sensitive to the economic impact of regulations and acknowledges that the proposed changes could have a very small impact on current manufacturers of minimum risk products. However, we believe the industry – manufacturers of these products and businesses considering entering the market for minimum risk pesticides – will ultimately benefit from clearer guidance. In addition, we believe that consumers of these products have a right to know in an easily

understandable way which chemicals the products contain. This proposed regulation promotes clearer information for consumers while maintaining the availability of minimum risk pesticide products in the market.

(EPA, January 3, 2013)

[http://www.epa.gov/oppfead1/cb/csb\\_page/updates/2013/min-risk-pesticides.html](http://www.epa.gov/oppfead1/cb/csb_page/updates/2013/min-risk-pesticides.html)

## **CHICAGO NAMED TOP CITY FOR BED BUGS**

Orkin has just released its rankings of U.S. cities in order of the number of bed bug treatments from January to December 2012. The "Windy City" of Chicago tops the list, followed by Detroit, Los Angeles, Denver and Cincinnati.

With increased travel, both internationally and domestically, and higher bedbug resistance to existing pesticides, Orkin has seen an almost 33 percent boost in bedbug business compared to 2011.

The company has just released its rankings of U.S. cities in order of the number of bedbug treatments from January to December 2012. The "Windy City" of Chicago tops the list, followed by Detroit, Los Angeles, Denver and Cincinnati.

"This list shows that bedbugs continue to be a problem throughout the U.S.," Ron Harrison, Ph.D., Orkin entomologist and Technical Services Director said in a statement. "Based on the diversity of cities on the list, we all need to be very cautious when we travel - whether it is business or pleasure, or to visit family, friends or vacation."

Bedbugs are about the size and color of a flat apple seed, and are found not only on mattresses and upholstery, but in suitcases, boxes, shoes, wallpaper and headboards.

Harrison stresses that it's important to be vigilant

and take proper precautions wherever you are. It's a common misconception that sanitation is a factor in developing the tiny pests, Orkin says. (PCT Online, January 21, 2013) <http://www.pctonline.com/Orkin-top-bed-bug-city.aspx>

## **DOW'S CONTROVERSIAL 2,4-D-TOLERANT CORN VARIETY DELAYED FOR A YEAR**

Dow AgroSciences hoped to have its new Enlist biotech corn variety, which is tolerant of the herbicide 2,4-D, available for planting by farmers in the United States this spring, but it's not going to happen right away or, if advocacy groups have their way, perhaps ever.

"We got authorization in Canada [in October], but we're still waiting for USDA and EPA," Garry Hamlin, Dow AgroSciences spokesman, tells *Pesticide & Chemical Policy*. "It's January; growers have to make decisions, and so do we. We advised our customers to wait. We're still confident we'll see approval in the months ahead but not in time for this year's planting."

Dow's Enlist system addresses the increasing problem of weeds resistant to the herbicide glyphosate, which Monsanto markets as Roundup. Hamlin notes that the number of acres resistant to glyphosate, now in the millions, has risen by 80% over the past two years. The Weed Science Society of America plans to examine weed resistance problems at its annual meeting, held Feb. 4-7, in Baltimore.

The Enlist Weed Control System combines the weed-killers glyphosate and 2,4-D for spraying on crops tolerant of both herbicides. Dow plans to roll out Enlist-tolerant corn seeds first, then soybeans and cotton.

"The demand for Enlist is stronger than ever, and the science supporting it is robust," Hamlin says. "We're more enthusiastic than ever before."

### 'Chemical arms race'

However, critics are wary of adding older pesticides, such as 2,4-D and dicamba, to the widespread use of glyphosate on Roundup Ready crops, characterizing the proposed two-herbicide solution as a "chemical arms race" in the countryside.

Specialty crop growers, food processors and farm interests, organized under the Save Our Crops Coalition (SOCC), last month petitioned EPA to prohibit the use of generic forms of 2,4-D on crops genetically engineered to tolerate the herbicide.

The petition to EPA came three months after SOCC and Dow AgroSciences came to terms on the kinds of label restrictions and management practices that should accompany Dow's 2,4-D-tolerant Enlist soybeans, corn and cotton, pending USDA deregulation. As part of those discussions, Dow confirmed that its grower agreements would only permit Enlist Duo herbicide, which contains a 2,4-D choline salt the company says is ultra-low volatility, on Enlist crops.

"We shouldn't assume that Enlist will be approved at all," Bill Freese, science policy analyst for the Washington, D.C.-based Center for Food Safety, tells *P&CP*. "Hopefully, USDA and EPA are listening to all these groups [critical of 2,4-D]. It's certainly a good thing that it's not being introduced this year. Give everyone time to consider the effects."

Freese notes that EPA opened reregistration of 2,4-D, which was earlier used in Vietnam as a component of Agent Orange, on Dec. 14, with a comment period ending Feb. 12. "EPA should do an evaluation, which takes several years, before approving Enlist," he says. "You should know what you're dealing with."

As Dow awaits regulatory approval of Enlist, the company says, in a Jan. 18 news release, that it plans to display the Enlist system in five technology centers established in the Midwest and South to train farmers and seed retailers on pesticide application and crop management. Dow adds that it

will offer more than 100 small Enlist field plots at seed company and retail locations, and it is also hoping to create on-farm "experience plots" across the Corn Belt to demonstrate the product.

"Dow AgroSciences stands ready to help farmers meet the weed control challenges they're facing," says Damon Palmer, U.S. commercial leader for the Enlist Weed Control System, in the news release. "We are committed to introducing this technology responsibly and sustaining it for the long term."

(Pesticide & Chemical Policy, January 25, 2013  
Volume: 41 Issue: 05)

## **EPA FINALIZES PYRETHROID LABEL CHANGES**

The U.S. Environmental Protection Agency late last year approved revisions to pyrethroid labels that permit PMPs to make outdoor applications beyond applications to cracks and crevices and spot treatments, provided the application is made through the use of a coarse, low pressure spray over a treatable surface (bare soil, lawn, turf, mulch or other vegetation) and not an impervious surface like a driveway or sidewalk. More recently, EPA formally notified pesticide registrants of the label change. [Click here](#) to read EPA's communication to the registrants.

EPA originally decided to limit the outdoor non-agricultural use of pyrethroids in 2009, because of potential impacts on aquatic species. Those labels began showing up last year. Among other things, the labels largely limited the outdoor use of pyrethroids to crack and crevice and spot treatments. NPMA, along with the Association of Structural Pest Control Regulatory Officials, an organization representing state pesticide regulators, and the State FIFRA Issues Research and Evaluation Group, an EPA advisory committee also comprised of state regulators, recommended to EPA that the labels be further changed.

The recently approved language should begin showing up on labels by the middle of this year.

(PCT Online January 25, 2013)

<http://www.pctonline.com/EPA-Pyrethroid-Label-Changes.aspx>

## **EC TO PROPOSE PARTIAL BAN ON NEONICOTINOIDS**

The European Commission will propose a partial ban on neonicotinoid pesticides due to the "worrying" conclusions by the European Food Safety Authority (EFSA) on their effect on bees, P&CP has learned. While EFSA did not call for a ban, the EC will go one step further.

Brussels will call for "harmonized and legally binding measures inspired by the 'precautionary principle,' but also by the principle of proportionality," EU Health and Consumers Commissioner Tonio Borg told agriculture ministers at today's Farm Council meeting.

Neonicotinoids pose "a number of risks" to bees, EFSA concluded last week in a long-awaited risk assessment on the use of clothianidin, imidacloprid and thiamethoxam earlier this month (see *Pesticide & Chemical Policy*, Jan. 25, 2013).

"A number of safe uses of these substances as regards bees have been identified by EFSA. A total ban would not therefore be justified," stressed Borg.

A recent industry-backed study claimed that a ban on neonicotinoid seed treatments could cost the EU economy up to €17 billion, put 50 000 jobs at risk and reduce some crops yields by up to 40%.

EFSA will now work on a final guidance document - with data gaps having been identified in its reports - to be published in May, Agra Europe understands. (Pesticide & Chemical Policy, January 28, 2013)

## **MONSANTO MAKES DEAL WITH EPA TO ADDRESS CONCERNS OF CORN ROOTWORM RESISTANCE**

Facing mounting evidence that its genetically modified single-trait *Bt* corn is losing efficacy, Monsanto on Dec. 17 agreed to take a number of actions to help slow the spread of corn rootworm that is resistant to the Cry3Bb1 toxin.

The agreement ([1.usa.gov/103d3xR](http://1.usa.gov/103d3xR)), prompted by ongoing discussions with EPA, includes a plan to “aggressively increase” the availability of *Bt* products that have been “pyramided” with multiple corn rootworm toxins. To track the progress of the transition to pyramided corn, Monsanto will annually report sales volumes to EPA.

The biotech giant has also agreed to convert the majority of its single-trait *Bt* corn to its new “refuge in a bag” product, a seed blend of *Bt* and non-*Bt* seeds that helps ensure that a sufficient amount of refuge is planted.

Farmers across the Midwest, particularly in Iowa and Illinois, have in recent years reported *Bt* corn field failure because of corn rootworm pressure, and testing of corn rootworm collected at the fields has found the economically destructive pest has been increasingly resistant to the Cry3Bb1 toxin.

EPA, in two memorandums released Dec. 17, says it met in October with the company to review monitoring data submitted by Monsanto and published literature from academic scientists. Based on that review, EPA has found that monitoring data collected from 2007 to 2010 “indicate a general trend of reduced susceptibility of corn rootworm to Cry3Bb1.” EPA also says there are reports of “heavy corn rootworm damage in Cry3Bb1 fields” in at least 23 counties, along with academic research indicating Cry3Bb1 *Bt* corn field failure in Iowa and Illinois.

EPA, explaining the need for the agreement, says it puts a “high value on the efficacy” of *Bt* products and that it is “committed to maintaining effective

oversight of these products to prevent a further reduction in susceptibility.”

Monsanto, as part of a condition of EPA’s initial registration of *Bt* corn product that expresses the Cry3Bb1 toxin in 2003, worked with the agency to agree on a regulatory definition “confirmed resistance,” a status that would trigger mitigation measures.

Monsanto spokesperson Kelly Clauss says based on the available data, “we have not met all the criteria where we would actually be able to confirm a resistant population,” but notes the company is still working proactively.

“We’re kind of treating this situation as if it is confirmed, we’re doing all of the actions that we would do, we’re going through all the stewardship steps with growers as if it were confirmed,” Clauss tells *Pesticide & Chemical Policy*.

EPA agrees in its memo that the regulatory definition of confirmed resistance has not been met, meaning the regulatory requirement for remedial actions “has not been triggered.” However, EPA also notes that the existing approach of using a diet bioassay “is likely insufficient to reliably detect resistant populations.”

An upcoming meeting of EPA’s FIFRA Scientific Advisory Panel (SAP) in 2013 will address many of the ongoing concerns about *Bt* resistance, EPA says in a memo, including evaluating the definition of “confirmed resistance,” the criteria to identify fields with performance issues, and the criteria used to identify corn rootworm populations “at risk of future resistance development.”

In the Dec. 17 agreement, Monsanto has also agreed to continue efforts to educate growers about the benefits of crop rotation, and in areas of the greatest resistance risk, to work with growers to ensure that best management practices (BMPs) are being used. These BMPs include rotating fields with a “corn rootworm non-host crop,” such as soybeans, planting products pyramided with multiple modes of action against corn rootworm, and using

conventional insecticides to manage corn rootworm when pyramided products are not an option.

Some of those BMPs might already be generating results. EPA, in its memo, says the total acreage of fields affected this year by corn rootworm has decreased from about 75,000 acres to 45,000 acres. Though some of that reduction might be caused by the 2012 drought across the Midwest, EPA says “it can also be attributed to Monsanto’s BMP, which have been shown to be successful in controlling corn rootworm.”

#### Academic interest

Academic researchers voiced concerns about growing corn rootworm problems in March 2012, when 22 entomologists sent a letter to EPA expressing concerns over growing resistance to *Bt* corn, which they said was likely caused by widespread use of *Bt*, repeated planting year after year, violation of stewardship requirements and decreased options of other forms of pest management.

Patrick Porter, an entomologist at Texas A&M University and one of the co-signers on the March letter, tells *P&CP* that the agreement between Monsanto and EPA looks “totally reasonable to me.” He notes that corn rootworm is a complicated problem, and the solutions detailed in the agreement such as crop rotation and using pyramided *Bt* corn could help.

Another one of the co-signers on the letter, Joseph Spencer, an insect behaviorist at the University of Illinois at Urbana-Champaign, says the mitigation actions are a “tangible step” toward the type of long-term corn rootworm management that the entomologist letter had outlined. The proposed actions will improve refuge compliance and raise public awareness of the resistance problem, Spencer says.

However, Spencer says he remains concerned that continuing to use pyramided corn on areas already experiencing corn rootworm resistance problems “will continue to select for western corn rootworm resistance to Cry3Bb1.”

“Time will tell whether these actions reduce the area affected by corn rootworm performance inquiries; education, continued monitoring of suspect populations, refinement of bioassays and the practical definition of resistance, along with the economics of corn production will all play a role in the success of mitigation,” he says in an email to *P&CP*.

EPA has also recognized the potential problem. If a corn rootworm population is completely resistant to Cry3Bb1, EPA says in its Dec. 17 memo, “the pyramided product may function as a single toxin product and increase the risk of resistance to a second toxin.” EPA says additional research is needed to characterize the “nature of resistance (complete vs. incomplete) and better assess the risk of resistance to pyramided products.”

#### New bioassay may improve detection

When EPA first authorized *Bt* corn, to detect resistance problems, Monsanto had agreed to use a diet-based bioassay in which corn rootworm were fed the Cry3Bb1 toxin in an artificial diets. But EPA has identified problems with this approach, specifically that it “is unlikely to proactively detect resistance and/or differentiate between susceptible and resistant populations,” as it said in an Oct. 11 memo ([1.usa.gov/SWYIFN](http://1.usa.gov/SWYIFN)).

Academic researchers have since come up with a new approach, known as a whole plant bioassay, that exposes corn rootworm directly to *Bt* corn that has been planted in greenhouses. EPA researchers say in the Oct. 11 memo that overall, they believe the new approach is “a better scientific approach” than the existing diet bioassay.

But Porter, the A&M entomologist, says which bioassay works best is still not known. He notes that he, along with other researchers, are writing a scientific paper to explain the need to look at the methods. The issue will also be explored at the upcoming FIFRA SAP meeting.

“We learn by doing, basically, and back when Monsanto and EPA worked out the registration, the diet-incorporated bioassay was the best thing we

had,” he says. “It is not known which technique is best in every situation, so the strengths and weaknesses need to be elucidated.”

Monsanto, recognizing the potential benefits of the new assay, has over the past few years started to incorporate the whole plant bioassay into their testing program to “see if it’s consistent, to make sure it’s a good system,” says Monsanto spokesperson Clauss. She said she couldn’t comment on which bioassay was scientifically better, but said that the new plant bioassay is “a good assay.”

All monitoring of corn rootworm in 2013 will use both the old diet bioassay and the new plant bioassay, Clauss says, and this data will be submitted to EPA. Monsanto is also in the process of awarding \$3 million in support of academic research on corn rootworm. A group of industry and academic scientists is currently assessing research proposals, and the recipients of the grants will be announced in mid-February, Clauss says. (Pesticide & Chemical Policy, January 25, 2013 Volume: 41 Issue: 05)

## **In-State CEU Meetings**

Date: February 7, 2013

Title: Oklahoma Nursery and Landscape

Associations Pests and Pest Control Update

Location: Tulsa Technology Center Broken Arrow Campus

Broken Arrow OK

Contact: Becky Sellers (405)-945-6737

Course #: OK-13-021

[www.oknla.org](http://www.oknla.org)

CEU's: Category(s):

1 3A

1 3C

Date: February 12, 2013

Title: Jackson County Annual Winter Agriculture Conference

Location: Southwest Technology Center Altus OK

Contact: Gary Strickland (580)-482-0823

Course #: OK-13-023

[www.oces.okstate.edu/jackson](http://www.oces.okstate.edu/jackson)

CEU's: Category(s):

3 1A

3 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-12-127

[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

Date: March 5-6, 2013  
Title: OKVMA Spring Training and Trade Show  
Location: Meridian Convention Center  
Oklahoma City OK  
Contact: Kathy Markham (918)-256-9302  
Course #: OK-12-132  
www.okvma.com

CEU's:	Category(s):
4	A
4	6
4	10
2	3a
2	5

Date: March 27, 2013  
Title: Invasive Plant Management Technical  
Webinar: Southwest Region  
Location: **Webinar**  
  
Contact: Emily Rindos (406)-994-6832  
Course #: OK-13-022  
www.weedcenter.org

CEU's:	Category(s):
3	1A

Date: August 14, 2013  
Title: CTN Educational Workshop  
Location: Courtyard Marriott 4301 Highline Park  
Blvd, Oklahoma City OK  
Contact: Tommy Kezar (512)-829-5114  
Course #: OK-13-019  
www.ctnedu.com

CEU's:	Category(s):
1	1A
3	3A
1	6
1	7A
2	7B

**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 February/March 2013 are as follows:

February 2013		March	
4	OKC	4	McAlester
14	Tulsa	5	Goodwell
19	OKC	5	OKC
21	Enid	12	Hobart
28	Tulsa	14	Tulsa
		19	OKC
		28	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

<h1>Pesticide Safety Education Program</h1>
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