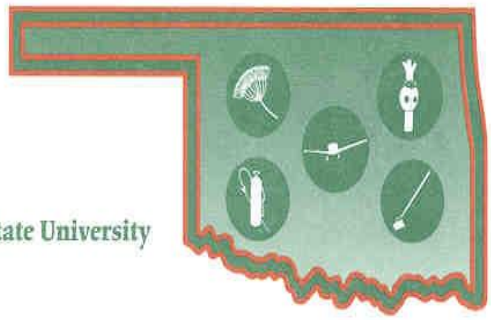
OKLAHOMA COOPERATIVE EXTENSION SERVICE

PESTICIDE REPORTS

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



April, 2018 CHEM

APRIL TEST HELP SESSIONS

The OSU Pesticide Safety Education Program will conduct the next test help workshops in April. The workshops will be held April 3rd in Tulsa and April 24th in Oklahoma City.

The Tulsa session will be at the Tulsa County Extension Office at 4116 E. 15th. The Oklahoma City Test help session will at the Oklahoma County Extension Office 2500 NE 63rd.

The help sessions will focus on information covered in the core and service tech tests. OSU PSEP will answer any questions over other category tests during this session.

Applicators should acquire and study the manuals before coming to the help session for optimum success. Study manuals can be purchased by using the manual order form available at our website http://pested.okstate.edu/pdf/order.pdf or by calling University Mailing at 405-744-5385.

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/html/practical.htm. Registration forms can also be downloaded from the website.

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

NO CEU's will be given for this program!

http://pested.okstate.edu/html/practical.htm

CROP DUSTER USED TO DROP EGGS FOR EASTER HUNT MAY HAVE CONTAMINATED THEM WITH HERBICIDE

The Mohave County Department of Public Health (MCDPH) released a notice Saturday warning residents that eggs used in an Easter event in Mohave Valley may be contaminated.

The notice came after the Mohave Valley Fire Department posted on their Facebook page that the eggs used in the Easter egg drop were dropped from a crop duster airplane.

The post went on to say that it appears that the tank of the crop duster was not rinsed out and that some of the eggs may have been covered in herbicide.

The county health department stated that the plane used by organizers was "reportedly scrubbed multiple times prior to being used for the candy drop." The health department also said that at the time of the notice, no illnesses had been reported.

MCDPH said that although no illnesses were reported, residents should not eat the candy. MCDPH recommended that anyone who touched the eggs should wash their hands thoroughly and remove and wash their clothing.

Anyone who came into contact with the eggs or candy and experiences nausea, vomiting, diarrhea, excessive seating or urination should seek medical assistance immediately. (KFOR.com, March 26, 2018) http://kfor.com/2018/03/26/crop-duster-used-to-drop-eggs-for-easter-hunt-may-have-contaminated-them-with-herbicide/?utm_campaign=trueAnthem:+Trending+Content&utm_content=5ab916a904d30116f99d2a28&utm_medium=trueAnthem&utm_source=twitter

EPA OPENS COMMENT PERIOD ON NMFS'S ASSESSMENT ON CHLORPYRIFOS, DIAZINON, AND MALATHION

EPA is seeking comment on the National Marine Fisheries Service's (NMFS's) Biological Opinion (BiOp) for the pesticides chlorpyrifos, diazinon, and malathion. EPA is asking for input from stakeholders on NMFS's jeopardy findings, Reasonable and Prudent Measures (RPMs), and Reasonable and Prudent Alternatives (RPAs), and is soliciting additional information, including comment on:

1. The scientific approaches and data sources used to support the BiOp and reach determinations for the listed species and critical habitat.
2. The RPAs and RPMs. Can they reasonably be implemented? If not, why not? Are there different measures that may provide equivalent protection to the ones in the BiOp but result in less impact on pesticide users?
3. National- and state-level use and usage data and information, in particular, information for non-agricultural use sites (e.g., nurseries, managed forests, pasture, rights-of-way, golf courses, and wide-area mosquito control). If possible, provide sources for data that should be considered.

EPA encourages input on the RPMs and RPAs from pesticide users, registrants, public interest organizations, other interested parties, and state, tribal, and local governments. This request for input is necessary because, as a result of the U.S. District Court Western District of Washington's failure to extend NMFS's court-ordered deadline, NMFS had to issue the final BiOp in December 2017 without having received input from the public and applicants (pesticide registrants). This was at odds with EPA's 2013 public stakeholder process

for ESA consultations – an open and transparent process supported by the Services, EPA, and USDA.
This input will be considered prior to either reinitiating consultation on the BiOp or implementing the measures of BiOp. EPA will evaluate the comments received in determining how to proceed with respect to the final BiOp, whether the alternatives or measures can reasonably be implemented, and whether there are different measures that may provide equivalent protection but result in less impact on pesticide users.
The Biological Opinion is included in docket EPA-HQ-OPP-2018-0141 at Regulations.gov. EPA will forward to NMFS for its consideration all public comments we receive on this Biological Opinion. Submit your comments, identified by the docket identification (ID) number EPA-HQ-OPP-2018-0141 and the pesticides to which the Biological Opinion pertains, by one of the following methods:

- **Federal eRulemaking Portal:** Regulations.gov. Follow the online instructions for submitting comments.
- **Mail:** Office of Pesticide Programs (OPP) Docket, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
- **Delivery:** EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information. Hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number is (202) 566-1744.

(EPA March 23, 2018)
https://www.epa.gov/pesticides/epa-opens-comment-period-nmfss-assessment-chlorpyrifos-diazinon-and-malathion

EPA ANNOUNCES DRAFT PESTICIDE LABEL REVISIONS ON RESPIRATORS TO ENSURE CONSISTENCY BETWEEN EPA AND NIOSH

EPA is requesting public comment on revised respirator descriptions for pesticide labels.
EPA is making these revisions, with the encouragement of state regulatory agencies, as part of our efforts to:

- Bring the respirator descriptions on pesticide labels into conformance with the current National Institute for Occupational Safety and Health (NIOSH) respirator language;
- Ensure that pesticide handlers and their employers have the information they need to identify and buy the respirator required to provide needed protection;
- Delete outdated statements referring to respirators that no longer exist; and
- Clarify and update language to ensure easy compliance with the guidance.

After considering comments, EPA will update Chapter 10, "Worker Protection Labeling", of the Label Review Manual (LRM). After releasing the revised chapter, EPA will ask registrants submitting labels for other reasons to revise their personal protective equipment (PPE) statements to include the updated descriptions at the same time. Those registrants who wish to revise only the PPE statements to incorporate the new respirator descriptions, will be advised to submit a fast track amendment with the changes. For existing products not otherwise updated, EPA will require the submission of labels with the revised descriptions of respirators during the registration review process.
Please submit comments on the revised respirator section by May 22, 2018, to opprespiratortable@epa.gov. We are requesting comment from regulators, registrants, pesticide users, safety educators and other stakeholders on the revised respirator descriptions for the LRM.
Read the proposed revisions: Label Review Manual Chapter 10; Revised Respirator Descriptions for Public Comment.
(EPA March 23, 2018)
https://www.epa.gov/pesticides/epa-announces-

draft-pesticide-label-revisions-respirators-ensure-consistency-between-epa

(EPA March 23, 2018)
https://www.epa.gov/pesticides/epa-updates-method-establishing-economic-minor-use

EPA UPDATES METHOD FOR ESTABLISHING ECONOMIC MINOR USE

EPA has updated and clarified the criteria for classifying a particular pesticide use on a crop or other use (for example a public health use) as a "minor use." FIFRA defines a minor use as one that does not provide "sufficient economic incentive" for pesticide companies (i.e., registrants) to register or keep their products registered for certain uses. In some cases, this update would broaden the definition of minor use for specific pesticides, providing more opportunities for incentives to register pesticides for minor uses.

The Pesticide Registration Notice (PRN 2018-1) explains that EPA will now also consider the following factors (in addition to considering the costs of generating data) in evaluating "sufficient economic incentive":

- the time between incurring costs of generating data for registration and obtaining revenue from product sales;
- the multiple years over which revenue is generated; and
- the costs of producing and distributing the product.

This Notice also explains how additional information can be used to inform the analysis and interpret the results. The revised approach can be applied to conventional pesticides, biopesticides, and antimicrobial pesticides to determine whether they meet the definition of minor use. Most commenters on the proposed update were broadly supportive of the approach as being simple and appropriate.

The final PRN 2018-1 (which supersedes 97-2) can be viewed in docket EPA-HQ-OPP-2015- 0814 at www.regulations.gov.

STUDY SHEDS NEW LIGHT ON CLIMATE CHANGE AND MOSQUITO AND TICK-BORNE VIRUSES

Spurred on by climate change, international travel and international trade, disease-bearing insects are spreading to ever-wider parts of the world. This means that more humans are exposed to viral infections such as Dengue fever, Chikungunya, Zika, West Nile fever, Yellow fever and Tick-borne encephalitis, Science Daily reported.

For many of these diseases, there are as of yet no specific antiviral agents or vaccines.

Global warming has allowed mosquitoes, ticks and other disease-bearing insects to proliferate, adapt to different seasons, migrate and spread to new niche areas that have become warmer.

These are the findings of a JRC report that aims to raise awareness about the threat posed by the spread of arboviruses (arthropod-borne viruses).

The report describes and discusses several methods that have been used to control the spread of mosquitoes, including insecticides, mosquito traps, genetic modification, land reclamation and habitat surveillance. (PCT Online, March 26, 2018)
http://www.pctonline.com/article/global-climate-change-mosquito-virus-spread/

THE IMPORTANCE OF PAPERWORK AND CLEANING IN THE DICAMBA AGE

As many speakers over the past few months have rightly pointed out, dicamba has been used within the agricultural marketplace to control weeds for several decades now. "The difference today is that we are applying it at times of the year when it was never applied before," say most. "And that's become the problem."

In many cases during 2017, custom applicators working with dicamba products on dicamba-resistant crops ran into problems with off-target movement caused by a number of factors, according to experts. In particular, said Dr. Mark Hanna, a trainer for BASF, a big part of the problem is the fact that it takes very little dicamba accidentally left in a self-propelled sprayer to cause unwanted crop damage.

"It takes 3 milliliters of dicamba to contaminate a 1,000-gallon solution tank," said Hanna, speaking at the 2018 Ohio AgriBusiness Association (OABA) meeting in February. "That's essentially the same amount of liquid you would find in a syringe."

During 2017, likely due to small amounts of dicamba accidentally left in sprayers and other factors such as unfavorable weather conditions, state agricultural agencies were inundated with crop damage complaints from growers across the eastern part of the country. In all, almost 3,000 complaints were filed, say experts, with the largest concentrations occurring in Arkansas (986), Missouri (310), Minnesota (250), and Illinois (245).

For 2018, this has led to several rule changes for dicamba applications across the country. For starters, says Ryan Rubischko, North America Dicamba Portfolio Lead for Mon-santo, dicamba is now listed as a Restricted Use Pesticide (RUP). This means that only licensed commercial applicators are allowed to purchase it for use. In addition, there are now restrictions in place against applying dicamba after sunset/before sunrise and in wind speeds less than 3 mph.

The other significant change for 2018 is that all applicators that plan to work with dicamba during the growing season will need to undergo training from the states in which they do business. According to Doug Owens of the Illinois Department of Ag, his state has been conducting these training sessions since the start of the year. "Compared with other states, we are way ahead of the game," said Owens in mid-January. "To date, we've had more than 3,000 applicators complete the required training." However, he pointed out, with an estimated 15,000 applicators in Illinois, the state's work has just begun.

Paperwork, Cleaning

Besides all these changes, industry watchers say that two sectors of custom application work will receive renewed attention in 2018 when it comes to dicamba work — paperwork and cleaning.

In most states, applicators using dicamba in 2018 will have 14 days to fill in the necessary paperwork noting such factors as the amount sprayed, wind speed at the time of application (both start and finish), and how many acres were applied. However, in a few places such as Ohio, this initial paperwork must be completed on the day of application, with additional documents with even more details being finished within 14 days of the work.

These records must be kept by applicators for a period of two years following dicamba application. Furthermore, says Keith Buckingham, a representative for Monsanto, applicators must have these records immediately assessable at the time of inspections. "If you utilize an electronic recordkeeping system, you must be able to readily access these records," says Buckingham. "Our recommendation is to complete the label's recordkeeping requirement after each application and keep those records on hand."

But the paperwork goes beyond even this. According to BASF Ohio Representative Don Schneider, paperwork needs to be kept that details how sprayers were cleaned between dicamba and other herbicide application work. In other cases, speakers have reported that some ag retailers are

even keeping paperwork on hand detailing what products are being transported to customer fields in their tender trucks, just in case any issues come up later.

Schneider explained why keeping all this paperwork could be important for custom applicators and ag retailers, especially after the fact. “One of the things that throws people off is dicamba drift won’t show up with cupped leaves for a few weeks after the application was done,” he said at the 2018 OABA meeting. “It won’t affect older leaves. But it does show up once the new leaves start to appear. That’s why keeping track of everything done when using dicamba is important.”

Sprayer Cleaning Considerations

When it comes to sprayer cleaning, this must be done before and after dicamba applications when the unit is being switched over to another herbicide. According to Dr. Fred Whitford, Director of Pesticide Programs for Purdue University, some herbicide residue can become embedded in a sprayer’s tank lining if it contains pits or dents. This same condition could also exist in a sprayer’s hoses, particularly if they are made of rubber. “There are newer hoses now on the market made of a polyethylene-rubber blend that can resist this kind of damage,” added Whitford, speaking at the 2018 Illinois Fertilizer & Chemical Association meeting.

Booms themselves need special attention to be properly cleaned out between uses. According to Whitford, a 120-foot boom can contain up to 35 gallons of liquid after the pump loses its prime. “This amounts to one to three acres of product left in the boom and hoses, depending upon the application rate,” he said.

Of course, by far the most common place in a sprayer for leftover herbicide to “hide,” he said, was in the end-cap of the boom itself. “There are still tons of machines out in the market that have a set-up where the end-caps of the boom piping can serve as a dead space for product to accumulate and stay between cleanings,” said Whitford. “That’s why I recommend installing some kind of coupler or valve to the end to allow for easy access and clean-out between uses.”

Finally, said BASF’s Hanna, applicators need to remember to thoroughly wash the exteriors of their sprayers when switching from dicamba to other herbicide applications. “Naturally, this should be the final step in the cleaning process for sprayers before any applicator takes them into a field that contains plants that might be susceptible to dicamba damage,” he said.(CropLife, March 22, 2018) http://www.croplife.com/crop-inputs/importance-paperwork-cleaning-dicamba-age/

JUDGE WANTS TO RECALL EXPERTS IN US GLYPHOSATE CANCER CASE

The US federal judge considering lawsuits brought by hundreds of cancer victims against Monsanto is keen to ask the plaintiffs' experts additional questions about the potential carcinogenicity of glyphosate herbicide.

The decision by US District Judge Vince Chabbria to recall the two witnesses came several days after he voiced scepticism that their arguments might not support the plaintiffs’ claims that exposure to Monsanto's Roundup caused them to develop non-Hodgkin's lymphoma (NHL).

Judge Chhabria is in charge of an array of class actions that have been consolidated before the US District Court for the Northern District of California and is tasked with determining if the evidence provided by the plaintiffs to support their claims is reasonable and can be heard by a jury.

A dozen experts testified over the course of five days earlier this month about the potential carcinogenicity of glyphosate. Judge Chhabria held a subsequent hearing on March 15th with attorneys from both sides and cautioned the plaintiffs that their reliance on the UN WHO’s International Agency for Research on Cancer's (IARC) 2015 conclusion that glyphosate is a probable human carcinogen is "not enough" to support causation.

The judge called the epidemiological evidence provided by the plaintiffs' experts "shaky" and said

that it did little to demonstrate a link between glyphosate and NHL.

Recalling those two experts -- Dr Beate Ritz and Dr Christopher Portier -- suggests that Judge Chhabria has yet to determine whether their testimony will be admissible to a jury.

The causation hearing earlier this month offered "insufficient time" to address Dr Portier's opinion "as to the epidemiological evidence" and to "ask follow-up questions" of Dr Ritz, Judge Chhabria said in his March 19th order for additional testimony.

The judge has already questioned the claims of Dr Ritz, chair of the epidemiology department at the University of California, Los Angeles. A key witness for the plaintiffs, Dr Ritz reviewed research on glyphosate and said that current glyphosate exposures are causing NHL. "After reviewing all of the scientific literature at hand, I really concluded that, to a reasonable scientific degree of certainty, glyphosate and glyphosate-based compounds, including Roundup, do indeed cause NHL," Dr Ritz told the Court during her March 5th testimony.

Judge Chhabria called that conclusion "dubious", questioning if Dr. Ritz had correctly adjusted her assessment of a dozen studies to account for other pesticides that might cause cancer. He described the field of epidemiology as "very subjective" and suggested that it is at best unclear if glyphosate causes cancer. "There's at least a strong argument that the only reasonable conclusion one could draw right now is that we don't yet know," Judge Chhabria said.

Dr Portier is also a critical expert for the plaintiffs, who are in part relying on his statistical analysis about the harm from the herbicide. A biostatistician and cancer expert, Dr Portier conducted a "pooled analysis" that combined data from different glyphosate studies and underpins his assessment of the herbicide's carcinogenicity. "To a reasonable degree of scientific certainty, given the human, animal, mechanistic evidence, glyphosate probably causes NHL, and the probability that glyphosate causes NHL is high," he told Judge Chhabria on March 7th.

Critics contend that Dr Portier's approach is fundamentally flawed and incorrectly boosts the likelihood that glyphosate is a human carcinogen.

Judge Chhabria will convene this week with attorneys to set a timetable for recalling the two witnesses. (Pesticide & Chemical Policy/AGROW, March 26, 2018)

BED BUG SEASON MAY ARRIVE EARLY, BEDBUG CENTRAL REPORTS

Despite the traditional seasonal slowdown in bed bug activity for some regions, **BedBug Central's January Bed Bug Activity Survey** may indicate an early start to the season for some of the country.

"January was what we expected to see in terms of historic trends," said Jeff White, BedBug Central's Director of Innovation and Technical Content. "It seems as though bed bug activity is overall pretty slow across the country however, the Midwest (Region 4) has over 50% of companies reporting being 'up' and Region 3 is not far behind."

White explained that even though he expects to see the slowdown continue in February, he anticipates that there may be an early start to the bed bug season for a few regions.

"We saw less companies report being 'down' in Region 2 for January," White said. "Since Region 2 tends to be a warmer region, we believe that this region may see an increase in bed bug activity before some of the colder regions. There is a good possibility that Region 2 will see an increase in their February numbers."

In terms of the colder regions, Region 3 also saw a slight increase in activity from December to January.

"It's tough to say exactly what is causing the slight increase in bed bug activity for Region 3 as we are still in the heart of the colder months" White said.

"It'll be interesting to see what happens for February's data because we wouldn't expect to see that increase just yet but it could indicate an early jump start to the bed bug season. However, only time will tell if this holds true."

Although White thinks some regions may experience an early start to the bed bug season, Regions 4 and 5's activity has defied all the historic bed bug data to date. "We saw a peak of activity in November with Region 4, then saw it slowdown in December and the trend remained the same for January," White said. "However, this is still a region where we are seeing more activity than many other regions."

White isn't sure what could be causing the increase in activity for the Midwest (Region 4) and Rocky Mountain (Region 5) areas but he indicates that the regions could still be experiencing an overall increase in bed bug populations while other regions have not been noting an exponential increase in activity for several years.
Tim Goeringer, President of JHTG Inc. DBA Orkin Pest Control in Arizona (Region 5), reported seeing a significant increase in bed bug activity for his region in the past year.

"In my opinion we are seeing a significant increase in bed bug activity and we have entered into performing proactive treatment for hospitality clients, which also accounts for a significant portion of the increase," Goeringer said. "I believe the increase is due to a warmer than normal winter in our area along with the proactive treatments."

Goeringer doesn't anticipate a slowdown in bed bug work anytime soon either. "Our bed bug revenue was up 305% over last year," he said. "Given what we're seeing, I anticipate a very strong year for bed bug work as I just received our February numbers and they are up over 100%. I would guess we will be up 50% by the end of the year."

Larry Bard of Nose Knows Best LLC in Phoenix also noted a significant increase in bed bug activity for his company. "We've seen an uptick in canine inspections in medical clinics," he said.

Bard also noted that compared to this time last year, his bed bug activity has increased dramatically, and he anticipates to see similar results for February's activity.

White, who is still uncertain about what may happen in the coming months for Region 4 and 5's activity, is looking forward to seeing February's numbers for the region.

"It'll be interesting to see if these regions see an increase in activity more significant and sooner than others because of the activity they have been seeing for the past three months," he said. "Normally I would expect February to be slow but these regions have been slightly unpredictable, so we will have to wait and see what the data says."

To participate in BedBug Central's monthly bed bug surveys and receive the complete results for each region, **sign up here**. (PCT Online, March 23, 2018) http://www.pctonline.com/article/bed-bug-season-early-start-bedbug-central/

JUDGE REBUKES US EPA FOR DELAYING AGCHEM RULE

A judge ruled last week that the Trump administration had violated federal law when it delayed implementation of the US EPA's pesticide applicator rule. The ruling reinstates the original effective date for the rule, but the Agency has yet to respond to the decision and could appeal.

Environmentalists and farmworker advocates filed suit last June in the US District Court for the Northern District of California alleging EPA officials had failed to justify the delay and had ignored evidence that the rule was needed to ensure that applications of restricted use pesticides did not pose "unreasonable adverse effects" to human health or the environment.

At issue is the EPA's Certified Pesticide Applicator (CPA) rule, which was developed under the Obama administration and finalized in December 2016. The rule raises age and competency requirements and

imposes stricter standards for certification, training and supervision of applicators of restricted-use pesticides.

The EPA said that the revised rule would likely impact one million certified pesticide applicators nationwide and could prevent some 800 acute poisonings each year while ensuring consistent enforcement across all 50 states. The regulation was originally set to go into effect on March 6th, 2017 -- states and other certifying authorities would have three years to submit certification plans and another two years to fully implement the new requirements.

State officials, the American Farm Bureau and the USDA all called for a delay, arguing that the EPA had failed to provide critical guidance on implementation. EPA Administrator Scott Pruitt agreed and pushed the effective date for the rule to May 2018.

The Agency argued that the delay would not affect the implementation schedule, suggesting that states would still be required to submit their certification plans by March 2020.

US District Judge Jeffrey S White said that he was "unconvinced" by the EPA's assurances, noting that the Agency had "consistently stated it intended to delay actual implementation of the Pesticide Rule, not just its effective date".

The EPA's actions and statements demonstrate that a "real, credible threat" that implementation of the rule will be delayed, the judge wrote in the March 21st order.

"Over one-third of the contemplated three-year implementation period has now been lost to delay," Judge White said. "Each week that passes without EPA and the states beginning the process of implementing the Pesticide Rule makes it that much more likely that the rule cannot be implemented by March 2020 as originally intended."

Judge White concluded that the EPA had violated the Administrative Procedure Act (APA) by failing to provide notice and comment before delaying the rule's effective date.

"By repeatedly delaying the effective date of the Pesticide Rule, EPA engaged in substantive rulemaking and was thus required to comply with the requirements of the APA," he explained.

The judge rejected the EPA's argument that it had relied on the "good cause" exception to the notice and comment requirements.

"The good cause, exception, however, is extraordinarily narrow and is reserved for situations where delay would do real harm," according to Judge White. "A new administration's simple desire to have time to review, and possibly revise or repeal, its predecessor's regulations falls short of this exacting standard."

The order reinstates the rule with its original effective date of January 2017 but it is unclear what impact it will have. The Trump administration in December said that the rule would go into effect in 2018, but that it would conduct a new rulemaking to reconsider minimum age requirements -- notably the "family exemption" provision.

The current language for the exemption may not be "flexible enough to accommodate for common practices in rural communities", according to the EPA. The Agency has yet to announce the new rulemaking.

The plaintiffs praised the ruling and said that the rule provides vital protections for farmworkers and pesticide applicators.

"We are heartened that the courts are holding Scott Pruitt accountable for this illegal delay," said Margaret Reeves, senior scientist at the Pesticide Action Network North America. "Training for the workers who handle the most toxic pesticides in the nation is essential." (Pesticide & Chemical Policy/AGROW, March 27, 2018)

CEU Meetings

Date: April 4, 2018
Title: Pest Management and Sprayer Calibration Seminar
Location: Noble Research Institute Ardmore OK
Contact: Eddie Funderburg (580) 224-6420
www.noble.org

CEU's:	Category(s):
5	1A
5	10

Date: April 25, 2018
Title: Rolling Plains Wild Pig Management Workshop
Location: Region 9 Edu. Center Wichita Falls, TX
Contact: David Graf (940) 716-8610
www.wichita.agrilife.org

CEU's:	Category(s):
4	11A

Date: May 10, 2018
Title: Target Bed Bug Symposium
Location: Omni Hotel Irving, TX
Contact: Jennifer Gonzalez (800) 352-3870
www.target-specialty.com

CEU's:	Category(s):
1	7A
1	10

Date: September 18, 2018
Title: 2018 Ensystex CEU Workshop
Location: Hampton Inn & Suites 85th Ave Tulsa OK
Contact: Donald Stetler Jr. (281) 217-2965
www.ceuworkshop.com

CEU's:	Category(s):
2	3A
2	7A
1	7B
1	8
6	10

Date: September 19, 2018
Title: 2018 Ensystex CEU Workshop
Location: Holiday Inn Express Durant OK
Contact: Donald Stetler Jr. (281) 217-2965
www.ceuworkshop.com

CEU's:	Category(s):
2	3A
2	7A
1	7B
1	8
6	10

ODAFF Approved Online CEU Course Links

PestED.com
https://www.pested.com/

CEU School
http://www.ceuschool.org/

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://ctnedu.com/oklahoma_applicator_enroll.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.oda.state.ok.us/cps-ceu.htm

ODAFF Test Information

Pesticide applicator test sessions dates and locations for April/May are as follows:

April			May	
2	OKC		3	Enid
11	Lawton		7	OKC
12	Tulsa		17	Tulsa
16	OKC		21	OKC
26	Tulsa		31	Tulsa

Altus: SW Research & Extension Center 16721 US HWY 283

Ardmore: Carter County Extension Office 107 1st Ave Ardmore OK

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, 920 S. Sheridan Road., Prairie Bldg

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

OKC: ODAFF Building 2800 N Lincoln BLVD Oklahoma City OK **(New Location)**

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

Pesticide Safety Education Program