

# PESTICIDE REPORTS

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



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CHEM

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## TEST HELP WORKSHOPS

The Oklahoma State University Pesticide Safety Education Program (PSEP) has will be holding test help workshops August 29 in Tulsa and September 4 in Oklahoma City.

The Oklahoma City workshop will be at the Oklahoma County Extension Center at 2500 N.E. 63<sup>rd</sup> St. in Oklahoma City. The Tulsa workshop will be at the Tulsa County Extension Office at 4116 E 15<sup>th</sup> in Tulsa.

Registration cost is \$50 before August 27 for Tulsa and \$65 after August 27. Registration cost is \$50 before September 2 for Tulsa and \$65 after September 2. Registration will include a copy of Applying Pesticides Correctly. This is the study manual for the core and service technician exams.

To register for this class please go to the Pesticide Safety Education Program (PSEP) website at <http://pested.okstate.edu/html/practical.htm> and click on the register online link. Class information and an agenda is also at that website. Future 2024 workshop dates can be found on the website as well.  
(OSU PSEP)

# EPA ANNOUNCES UPDATE ON ATRAZINE

Today, the U.S. Environmental Protection Agency (EPA) is announcing an update to the level at which atrazine is expected to adversely affect aquatic plants. The new revised atrazine concentration of 9.7 micrograms per liter ( $\mu\text{g/L}$ ), which was derived following an August 2023 peer review, will be used to develop a revised regulatory decision to help protect aquatic plants as well as fish, invertebrates, and amphibians.

Atrazine is one of the most widely used herbicides in the United States. It is used to control annual broadleaf and grass weeds in a variety of agricultural crops, primarily corn, sorghum, and sugarcane. Atrazine products are also registered for numerous other uses including macadamia nuts, guava, fallow crop lands, and turfgrass.

The level at which atrazine is expected to adversely affect aquatic plants is also known as the concentration-equivalent level of concern or CE-LOC. Included in this announcement is an EPA [memorandum](#) that provides details on updates to EPA's database of aquatic plant community studies and revised exposure modeling. Also included is an updated map that shows where the level of concern is expected to be exceeded. Collectively, these updates resulted in the removal of millions of acres of land from the 2022 map of watersheds that were expected to exceed the level of concern and added a much smaller number of acres in other areas of the country. Later this year, EPA plans to update its [2022 atrazine mitigation proposal](#) to reflect the revised level of concern and the corrections to the exposure modeling, as well as to incorporate feedback received during the 2022 public comment period. EPA will take public comment on the revised mitigation proposal and also release a response to comments on the 2022 proposed revisions to the interim decision at that time.

## Background

In its 2016 atrazine ecological risk assessment, EPA determined that the scientifically derived level of atrazine, measured as a 60-day average, that negatively impacted the aquatic environment was  $3.4 \mu\text{g/L}$ .

Since that time, questions about the scientific integrity of the assessment of atrazine were raised after the previous Administration directed career managers to exclude studies related to the effects of atrazine from being used as a basis for ecological risk management. The career managers refused to carry out the direction and instead, in September 2020, EPA set a less protective level for atrazine at  $15 \mu\text{g/L}$  that was based on a policy decision rather than a scientific one. The following month, EPA received a lawsuit alleging that the Agency violated its duties under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) by making its Atrazine Interim Registration Review Decision without substantial supporting evidence. In August 2021, EPA sought a voluntary partial remand and on December 14, 2021, the Ninth Circuit Court of Appeals granted that remand, which provided the agency the opportunity to reevaluate it.

In August 2023, the Agency convened a meeting of the FIFRA Scientific Advisory Panel (SAP) to evaluate eleven studies and their associated publications, which EPA had used to calculate its science-based level of concern for atrazine of  $3.4 \mu\text{g/L}$ . The SAP is a forum that provides independent scientific advice and recommendations on scientific issues related to pesticides. After the SAP, EPA also reevaluated two additional relevant studies based on public comments and letters to the Agency requesting reexamination. After [indicating concurrence](#) with the [recommendations received from the SAP](#) and taking into consideration its reevaluation of the additional two studies, EPA has recalculated the level of concern for atrazine as  $9.7 \mu\text{g/L}$  as a 60-day average.

For additional information, please visit docket [EPA-HQ-OPP-2013-0266](#) at [www.regulations.gov](http://www.regulations.gov).

(EPA, July 8, 2024)  
<https://www.epa.gov/pesticides/epa-announces-update-atrazine>

## **EPA RELEASES UPDATED OCCUPATIONAL EXPOSURE ASSESSMENTS FOR SEED TREATMENT USES FOR THREE NEONICOTINOIDS**

Today, the U.S. Environmental Protection Agency (EPA) is releasing its updated occupational exposure assessments for handling and treating seeds with clothianidin, imidacloprid, and thiamethoxam, which belong to a class of pesticides called “neonicotinoids.” Neonicotinoids are systemic insecticides that work by disrupting the central nervous system of insects. If humans are exposed to very high amounts of neonicotinoids, they could also experience harmful effects such as neurotoxicity (e.g., tremors and decreased motor activity), reproductive, or developmental effects. These pesticides are used on a wide variety of crops, turf, ornamentals, pets (i.e., flea treatments), and other residential and commercial indoor and outdoor uses. There are also over 100 different seed treatment products that contain clothianidin, imidacloprid, or thiamethoxam, which are used to control chewing and sucking insects that can cause significant damage to seeds and young plants soon after planting.

Since the issuance of the 2020 proposed interim decisions (PIDs) for these three neonicotinoids, EPA has updated the occupational exposure assessments for handling and treating seeds with the pesticides by incorporating new data on the extent to which workers treating these seed are exposed to them. These data were submitted by the Agricultural Handler Exposure Task Force (AHETF), a consortium of agricultural chemical companies that jointly develop worker exposure data for pesticides. The AHETF provided additional information on dermal and inhalation exposure to workers in various seed treatment related worker tasks. Using the new data in the updated occupational assessments results in higher worker exposure and risk estimates for various seed treatment tasks than were previously estimated and presented in the 2020 PIDs.

Based on these updated occupational risk assessments, EPA has identified several activities associated with seed treatment that can pose risks from dermal or

inhalation exposures to workers for these three neonicotinoids. The majority of these risks result from commercial seed treatment, particularly the cleaning of seed treatment equipment, even when the use of maximum personal protective equipment is considered.

### **Next Steps**

EPA is accepting public comments on the updated occupational exposure assessments for 60 days, closing the comment period on September 24, 2024. The amended proposed interim decisions (PIDs) for these neonicotinoids are anticipated in 2025. And the registration review documents can be found at [www.regulations.gov](http://www.regulations.gov) in the following dockets:

Clothianidin: [EPA-HQ-OPP-2011-0865](https://www.regulations.gov/docket/EPA-HQ-OPP-2011-0865)

Imidacloprid: [EPA-HQ-OPP-2008-0844](https://www.regulations.gov/docket/EPA-HQ-OPP-2008-0844)

Thiamethoxam: [EPA-HQ-OPP-2011-0581](https://www.regulations.gov/docket/EPA-HQ-OPP-2011-0581)

A reader’s guide entitled *Clothianidin’s, Imidacloprid’s, and Thiamethoxam’s Updated Occupational Exposure Assessments for Seed Treatment Uses: Guide to Commenters* will also be placed within each of the above dockets to provide commenters with guidance on the types of information the Agency is seeking.

(EPA, July 26, 2024)

<https://www.epa.gov/pesticides/epa-releases-updated-occupational-exposure-assessments-seed-treatment-uses-three>

## **EPA RELEASES PROPOSED PROTECTIONS FOR PESTICIDE MALATHION**

Today, the U.S. Environmental Protection Agency (EPA) is releasing the Proposed Interim Registration Review Decision (PID) for the pesticide malathion. The PID proposes mitigation measures to reduce potential ecological risks. The malathion PID—as well as the [revised Human Health Draft Risk Assessment and](#)

[Ecological Draft Risk Assessment](#) released earlier this year—will be open for public comment for 60 days.

## Background

Malathion is an organophosphate (OP) pesticide registered for controlling pests on fruit, vegetables, landscaping plants, and shrubs. Malathion is an important pesticide tool for local mosquito control districts who use it to manage adult mosquito populations, including those that vector disease. Mosquito-borne diseases, such as West Nile virus, Zika virus, chikungunya virus, Dengue, yellow fever, and St. Louis Encephalitis, pose a significant risk to people in the United States. Climate change also increases the risk of human exposure to mosquito-borne diseases, as studies show that warmer temperatures can expand the range and breeding season of mosquitos, as well as accelerate mosquito development, biting rates, and the incubation of the disease within a mosquito. Using pesticides like malathion to control mosquitos is important to maintaining public health, particularly in densely populated, overburdened communities.

Growers benefit from malathion use on fruit and vegetable crops due to the short pre-harvest intervals—the time-period required between when an application can be made and harvesting. Malathion is effective in controlling insect pests that can harm a harvest, such as fruit flies in cherries and blueberries, and dried fruit beetles in figs. Malathion is also the primary component of some federal and state insect pest management programs including the U.S. Department of Agriculture’s Cotton Boll Weevil Eradication Program and Fruit Fly (Medfly) Control Program, Mormon cricket and grasshoppers in rangeland, beet leafhopper within the Beet Curly Top Virus Control Program in California, and invasive Tephritid fruit flies in quarantine areas nationwide.

## Risk Assessment

Under the Endangered Species Act (ESA), EPA is responsible for ensuring that its actions—including pesticide registration actions—do not jeopardize listed species or destroy or adversely modify their critical habitats. In 2017, EPA released a biological evaluation for malathion under the ESA that found that malathion is

likely to adversely affect listed species and their critical habitats. As a result of these findings, EPA entered into required consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service (collectively, the “Services”). The Services developed biological opinions that required mitigation measures for malathion to protect these species and habitats. EPA implemented these measures on all malathion labels in August 2023. In April 2024, the [Bulletins Live!](#) Two [website](#) with maps showing geographically specific limitation areas for malathion use became available to the public.

In March 2024, EPA released an [ecological draft risk assessment](#) under the Federal Insecticide, Fungicide, and Rodenticide Act that assessed risks to non-listed species in order to determine whether mitigations were needed. This draft risk assessment found potential risks of concern to fish, aquatic invertebrates, birds, mammals, terrestrial amphibians, aquatic and terrestrial plants, and terrestrial invertebrates. The draft assessment also accounted for the mitigations required by the biological opinions.

Also, in [March 2024](#), EPA released an [updated draft human health risk assessment](#) (HH DRA), amending the 2016 malathion dietary, residential, aggregate, and occupational risk assessments using updated information and risk assessment methodologies. Given concerns that have previously been raised about OPs and their association with developmental neurotoxicity (DNT), in conducting the HH DRA, EPA paid particular attention to whether malathion had the potential to cause DNT. EPA evaluated multiple lines of evidence, including epidemiological studies (investigation of human populations for patterns and causes of health outcomes), animal toxicity studies performed with laboratory animals, and a battery of in vitro assays (testing of cells from the nervous system) and found potential DNT effects only occur at concentrations approximately 6 to 4,800 times higher than the level of the pesticide that causes neurotoxicity (shown by changes in acetylcholinesterase enzyme levels, which was the most sensitive effect). Therefore, protecting people from neurotoxicity will also protect them from DNT. The updated draft HH DRA found no human health risks of concern for malathion when used according to label instructions.

## Proposed Interim Decision

EPA did not find potential human health risks of concern when malathion is used in accordance with its current label, but did identify potential ecological risks of concern, even after considering the measures that EPA has adopted to protect listed species and their habitats. The PID is proposing mandatory spray drift language for boomless ground applications (e.g., one or two nozzles spraying laterally from an all-terrain vehicle) and updated advisory spray drift language for all spray applications. Pesticide spray drift is the movement of pesticide dust or droplets through the air at the time of application or soon after, to any site other than the area intended. Additionally, the Agency is proposing a 96-hour water holding time before releasing floodwaters after the treatment of rice. Holding water used to flood rice fields allows for pesticide residues to dissipate before being released into the environment.

The Agency will be accepting public comments for 60 days on the malathion PID and the DRAs that were released in March. The PID, DRAs, and supporting documents can be found in the public docket at [www.regulations.gov](http://www.regulations.gov) (Docket ID: EPA-HQ-OPP-2009-0317).

### [Read the Proposed Interim Decision](#)

(EPA, July 17, 2024)

<https://www.epa.gov/pesticides/epa-releases-proposed-protections-pesticide-malathion>

## EPA RELEASES DRAFT INSECTICIDE STRATEGY

On Thursday, the U.S. Environmental Protection Agency announced the release of its draft Insecticide Strategy, which is available for public comment for 60 days. The document outlines EPA plans to protect threatened and endangered species and their critical habitats from insecticides, moving the agency closer to meeting its obligations under the Endangered Species Act (ESA).

"Ensuring the safe use of insecticides is a critical part of EPA's mission to protect endangered species and the environment," said Jake Li, EPA deputy assistant administrator for pesticide programs. "This draft strategy is another major step in the administration's efforts to protect endangered species, support farmers and other insecticide users, and provide critical environmental protections for communities across the country."

The draft strategy identifies protections that EPA will consider when it registers a new insecticide or reevaluates an existing one. In developing this plan, EPA identified protections to address potential impacts for more than 850 species listed by the U.S. Fish & Wildlife Service (FWS). It is the second such strategy, following the July 2023 release of the draft Herbicide Strategy.

In Thursday's EPA announcement, the agency stated that the draft Insecticide Strategy is part of its ongoing efforts to develop a more efficient, effective and protective multichemical, multispecies approach to meeting its ESA obligations. EPA focused the draft strategy on conventional insecticides used in agriculture in the lower 48 states, where approximately 34 million pounds of insecticides are applied each year.

"The draft identifies protections earlier in the pesticide review process, thus creating a far more efficient approach to evaluate and protect the FWS-listed species that live near these agricultural areas," the agency stated.

EPA noted that the draft Insecticide Strategy incorporates lessons learned from the draft Herbicide Strategy.

"For example, based on feedback on the draft Herbicide Strategy, EPA designed the mitigations in the draft Insecticide Strategy to maximize the number of options for farmers and other pesticide users," EPA wrote. "These mitigation options also consider farmers who are already implementing measures to reduce pesticide runoff and those who are located in areas less prone to pesticide runoff, such as flat lands and regions with less rain to carry pesticides off fields."

These measures also include USDA Natural Resources Conservation Service practices and state or private

stewardship measures that are effective at reducing pesticide runoff, the agency said.

According to EPA, the draft Insecticide Strategy uses the most updated information and processes to determine whether an insecticide will affect a listed species and identify protections to address any effects. To determine effects, the draft strategy considers where a species lives, what it needs to reproduce (for example, food or pollinators), where the pesticide will end up in the environment and what kind of impacts the pesticide might have if it reaches the species.

"These refinements greatly reduce the need for pesticide restrictions in situations that do not benefit species," the agency wrote, adding that once final, the Insecticide Strategy will expedite future ESA consultations with FWS. Once EPA finalizes the Insecticide Strategy, the agency and FWS expect to formalize their understanding of how this strategy can inform and streamline future ESA consultations for insecticides.

Through a separate initiative, EPA is addressing potential effects of insecticides to listed species and critical habitats protected by the National Marine Fisheries Service.

The release of the draft Insecticide Strategy is the latest development stemming from litigation against EPA that began more than a decade ago. In 2011, the Center for Biological Diversity and Pesticide Action Network filed suit against the agency, alleging that it violated the ESA when it registered or reevaluated the registration of 382 pesticide active ingredients.

Ultimately, the list of active ingredients was reduced to 35, covering more than 1,000 pesticide products containing one or more of these active ingredients. This became known as the "megasuit" because of the number of pesticides it covered.

In September 2023, EPA reached a settlement agreement, which set deadlines for these pesticide strategies. The final version of the Herbicide Strategy, originally set to be released on May 30, 2024, is now due by Aug. 30, 2024. The final version of the Insecticide Strategy is expected to be issued by March 2025. While no deadlines have been set for the

completion of a final Fungicide Strategy, the determination of such a deadline is expected to take place no later than August 2024.

The draft Insecticide Strategy and accompanying support documents are available here: <https://www.regulations.gov/...>

(Progressive Farmer, July 26, 2024)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2024/07/26/epa-opens-60-day-comment-period-plan>

## IMPROVING THE EFFECTIVENESS OF FIRE ANT BAIT

The red imported fire ant, *Solenopsis invicta*, threatens public health, agricultural productivity and biodiversity. Bait and mound treatment with synthetic insecticides are major tools for controlling fire ants.

Fire ant baits are usually formulated as granules containing three major components: a slow-acting insecticide, vegetable oil as a food source, and a carrier. Unfortunately, all fire ant bait products in the current market have two big issues: 1) they attract a wide range of native ants since many native ants are also attracted to vegetable oil (ants that are vital to our ecosystems), and 2) they are easily dissolved and degraded when they get wet, so they can't be used when rain is expected or in environments with high moisture.

Fire ants are social insects, meaning they live together in organized colonies in which they work cooperatively and efficiently. As social insects, ants communicate through pheromones, which are chemical signals they use for different purposes, such as marking their territory, signaling danger to their colony or alerting others about food sources nearby.

Jian Chen, a research entomologist with ARS's Biological Control of Pests Research Unit in Stoneville, MS, studies the chemistry of fire ants, including understanding fire ant pheromones and their utilization

in managing fire ants.

Recently, Dr. Chen found that fire ants feed their own venom to their nest mates when he found venom in their digestive systems. Fire ants use venom alkaloids as internal antibiotics, which keeps them healthy because their venom can suppress the growth of various pathogens. Interestingly, he also discovered that incorporating venom alkaloids into vegetable oil does not affect the feeding of fire ants, but it could shut down the feeding of native ants that compete with fire ants for the bait. Adding fire ant venom alkaloids in vegetable oil can enhance the specificity of current bait products. ARS has filed a patent application for this unique approach to solve fire ant bait specificity issue.

“Collective utilization of venom as an internal antibiotic must play an important role in the social life of fire ants and their evolution,” said Chen. “This discovery will not only help us better understand fire ant social immunity, but also have a great impact on efforts to develop baits and microbial insecticides for managing fire ants”.

In addition to the improvement of bait specificity, Dr. Chen’s group has been working on creating a bait that is more water resistant than current commercial products.

“In commercial fire ant products, corn grit is generally used as a carrier,” said Chen. “Since corn grit easily disintegrates when in contact with water, current bait products can only be used when the ground and grass are dry, and rain is not expected. We have developed water-resistant fire ant baits by either modifying or replacing corn grits.”

For home mound treatment, Chen noted that homeowners have an ever-increasing interest in less toxic products for fire ant control, and chemicals from natural products are believed to be more desirable than conventional synthetic insecticides. Collaborating with his scientific partners, Chen’s group is screening several naturally occurring compounds for new and safer alternatives.

(PCT, July 10, 2024)

<https://www.pctonline.com/news/improving-the-effectiveness-of-fire-ant-bait/>

## COMMENT PERIOD OPEN ON SYNGENTA DICAMBA

A new proposed label for Tavium, Syngenta's dicamba herbicide, would maintain over-the-top (OTT) application of the product in soybeans, but only through the V2 growth stage or until June 12, whichever comes first.

On July 23, EPA published a notice of receipt in the Federal Register and announced the start of a 30-day public comment period for Tavium, which contains the active ingredients S-metolachlor and dicamba for use on tolerant soybeans and cotton. The agency stated that because the application involves a new use pattern for dicamba, it is required to provide a comment period on the registration application consistent with the Federal Insecticide, Fungicide and Rodenticide ACT (FIFRA).

EPA also seeks comment on the associated draft labeling that was submitted by Syngenta, which is available here: [https://www.regulations.gov/...](https://www.regulations.gov/)

With the announcement, Syngenta joined Bayer and BASF in submitting new labels for their previously registered OTT dicamba products. It comes more than five months after a federal court in Arizona vacated the products' 2020 registrations. Public comment periods for proposed registration and labels for Bayer's XtendiMax and BASF's Engenia herbicides ended June 3 and July 5, respectively, receiving nearly 23,000 comments combined.

The proposed label for Tavium would allow applications to dicamba-tolerant soybeans before, during and immediately after planting as well as over the top until the crop reaches the V2 growth stage -- when the second trifoliolate leaf is fully unfolded -- or until June 12, whichever comes first. The previous label allowed for OTT application in soybeans until the V4 growth stage or until June 30.

Syngenta's proposed label for Tavium mirrors BASF's proposed label for Engenia with the same growth stage and cutoff dates. The proposed label for Bayer's XtendiMax product also carried the same June 12 cutoff

date but did not include any OTT application in soybeans.

In dicamba-tolerant cotton, applications of Tavium would be allowed before, during and immediately after planting as well as over the top until the crop reaches the 6-leaf growth stage but no later than July 30. These proposed application restrictions in cotton are the same as the previous Tavium label.

The proposed product formulation, maximum single application rate and maximum annual rate for Tavium is the same as previously labeled.

The federal court's action to vacate the 2020 registrations of Tavium, Engenia and XtendiMax led EPA to issue an existing stocks order for the 2024 season, allowing for the use of the herbicides already distributed from the product registrants following application cutoff dates on previously approved labels. Details about that order can be found here: <https://www.dtnpf.com/...>

Sale and distribution of these three dicamba products for use in soybeans and cotton was prohibited in all states as of June 30, the same as the final OTT application cutoff date for soybeans. Application to cotton is allowed to continue until July 30 this year.

In an email to DTN, a Syngenta spokesperson said the company's decision to include OTT application in soybeans on the proposed Tavium label was based on "grower needs, product use and application timing 'fit.'"

"Syngenta is confident that Tavium brings strong, unique value to growers for use in Xtend and XtendFlex crops," the spokesperson wrote. "As with the prior registration, if Syngenta's new application is approved by EPA, Tavium would be the only premix residual dicamba herbicide for use in dicamba-tolerant soybeans and cotton that contains two active ingredients and two effective sites of action providing contact and residual control to manage key ALS-, PPO- and glyphosate-resistant weeds.

"As growers consider their options and the uncertainties associated with future dicamba registrations and uses on Xtend and XtendFlex crops, the importance of pre-emerge and overlapping residual herbicides becomes

even more critical to controlling weeds," the company statement continued. "Syngenta offers a robust portfolio of pre-emergent and post residual herbicides that help growers control weeds regardless of trait platform."

## CONCERNS OF SOYBEAN GROWERS

Previously, soybean growers expressed concerns with the proposed labels for OTT dicamba products. In May, following the announcement of the public comment period for Bayer's XtendiMax, Alan Meadows, a soybean farmer from Tennessee and director for the American Soybean Association, said that tens of thousands of U.S. soybean farmers would be "sitting ducks" without post-emergent dicamba. In June, he noted that soybean fields would be susceptible to weed reinfestation between the V2 growth stage cutoff -- as proposed by BASF and Syngenta -- and crop canopy closure.

The proposed June 12 cutoff date was also questioned because it doesn't account for environmental factors, such as a wet spring, that delay soybean planting and subsequent herbicide applications.

EPA stated that its announcement of the public comment period should not be interpreted as a registrant proposal that has been endorsed for future approval by the federal agency.

"Should EPA determine that this or any other registrant-submitted application including over-the-top dicamba meets the standard for registration of a new use under FIFRA, EPA will provide a separate opportunity for public comment on the proposed decision at a future time," the agency stated.

The last day to submit a comment regarding the proposed registration and label for Tavium is Aug. 22, 2024. EPA will review public comments as part of the proposed application process and incorporate any feedback into the registration decision. To comment, go here:

(Progressive Farmer, July 24, 2024)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2024/07/24/proposed-syngenta-dicamba-label-top>



## CEU Meetings

Please note that some of these meetings are virtual using Zoom or Microsoft Teams. Please contact the meeting host directly if you have any questions.

### Date: August 14, 2024

Title: Corteva Pesticide Programs for Wheat/Cereal Crops

Location: Contact for location

Contact: Rhonda Franklin (317) 220-0665

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

### Date: August 14, 2024

Title: 2024 Oklahoma Fumigation Workshop

Location: Horticulture Education Center at  
The Botanic Garden

Contact: Edmond Bonjour (405) 744-8134

[https://secure.touchnet.com/C20271\\_ustores/web/store\\_c at.jsp?STOREID=15&CATID=45](https://secure.touchnet.com/C20271_ustores/web/store_c at.jsp?STOREID=15&CATID=45)

CEU's:	Category(s):
2	7A
3	7C
5	10

### Date: August 14, 2024

Title: Winter Wheat 2024- Pesticide and Fertility Efficiency Management

Location: Helena Agri-Enterprises - Altus and Reed

Contact: David Dugan (580) 318-3575

CEU's:	Category(s):
4	1A
4	Private

### Date: August 22, 2024

Title: Adair County OSU Extension CEU Course

Location: Contact County Office

Contact: Jennifer Patterson (918) 696-2253

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

### Date: October 1, 2024

Title: ENSYSTEX 2024 Workshop

Location: TBA Tulsa OK

Contact: Don Stetler (281) 217-2965

<https://ceuworkshop.com/>

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

### Date: October 2-3, 2024

Title: OKVMA FALL CONFERENCE

Location: Hard Rock Hotel Catoosa, OK

Contact: Kiersten Riggs (918) 314-9032

<https://okvma.com/>

CEU's:	Category(s):
3	1A
2	2
3A	3
3B	2
3C	2
4	2
5	3
6	3
2	7A
2	7B
2	8
3	10
2	11A
2	11B

## ODAFF Approved Online CEU Course Links

### Online Pest Control Courses

<https://www.onlinepestcontrolcourses.com/>

### PestED.com

<https://www.pested.com/>

### Certified Training Institute

<https://www.certifiedtraininginstitute.com/>

### WSU URBAN IPM AND PESTICIDE SAFETY EDUCATION PROGRAM

<https://pep.wsu.edu/rct/recertonline/>

### CEU University

<http://www.ceuschool.org/>

### Technical Learning College

<http://www.abctlc.com/>

### 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://ctnedu.com/oklahoma\\_applicator\\_enroll.html](http://ctnedu.com/oklahoma_applicator_enroll.html)

### Pest Network

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

### Veseris

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

### AG CEU Online

<https://agceuonline.com/courses/state/37>

### Target Specialty Products Online Training

<https://www.target-specialty.com/training/online-training>

MarKey Training <https://www.markeytraining.com/>

For more information and an updated list of CEU meetings, click on this link:

<http://www.kellysolutions.com/OK/applicators/courses/searchCourseTitle.asp>

## ODAFF Test Information

Testing will be done at testing centers in multiple locations around the state by PSI Services LLC.

For more information and instructions, please go to <https://bit.ly/3sF4y0x>.

**Reservation must be made in advance** at [www.psiexams.com/](http://www.psiexams.com/) or call **855-579-4643**

### PSI locations.

Oklahoma City 3800 N Classen Blvd, Ste C-20, Oklahoma City, OK 73118

Tulsa 2816 East 51st Street, Suite 101, Tulsa, OK 74105

McAlester 21 East Carl Albert Parkway (US Hwy 270), McAlester, Oklahoma 74501

Woodward 1915 Oklahoma Ave, Suite 3, Woodward, OK 73801

Lawton Great Plains Technology Center, 4500 West Lee Blvd Building 300- RM 308, Lawton, OK 73505

Enid Autry Technology Center, 1201 W. Willow Rd, Enid, OK 73703

Ponca City Pioneer Technology Center, 2101 N Ash, Ponca City, OK 74601

If you have questions on pesticide certification. Please email or call:

Kevin Shelton  
405-744-1060 [kevin.shelton@okstate.edu](mailto:kevin.shelton@okstate.edu) or

Charles Luper  
405-744-5808 [charles.luper@okstate.edu](mailto:charles.luper@okstate.edu)

**Pesticide Safety  
Education Program**

