

PESTICIDE REPORTS

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



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TEST HELP WORKSHOPS SCHEDULED FOR 2023

The Oklahoma State University Pesticide Safety Education Program (PSEP) has scheduled a test help workshops for February 7 in Tulsa and February 9 in Oklahoma City.

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

Registration cost is \$50 before February 6 for Tulsa and \$65 after February 6. Registration cost is \$50 before February 8 for Oklahoma City and \$65 after February 8. 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 2023 workshop dates can be found on the website as well.
(OSU PSEP)

EPA PROPOSES REGISTRATION REVIEW DECISIONS AND ECOLOGICAL PROTECTIONS FOR SEVERAL PESTICIDES

Today, the U.S. Environmental Protection Agency (EPA) released proposed interim registration review decisions (PIDs) for nine pesticide cases. The PIDs for the four conventional pesticide cases include Interim Ecological Mitigation measures described in EPA's November 2022 [Endangered Species Act \(ESA\) Workplan Update](#) to protect nontarget organisms, which may also protect federally endangered and threatened (i.e., listed) species. For the antimicrobial case, EPA is proposing to mitigate risks to nontarget species by cancelling higher risk uses, and for the four biopesticides, EPA found no effect on listed species, so no additional ecological mitigation is needed.

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires EPA to reevaluate pesticides every 15 years to ensure that as the ability to assess risk evolves and as policies and practices change, pesticides continue to meet the statutory standard of causing no unreasonable adverse effects on human health or the environment.

When EPA identifies risks of concern to human health from dietary or residential exposure, it must take steps to address those risks. For risks to workers or the environment, EPA may determine that additional mitigation is necessary based on the risks and benefits of the pesticide. During registration review, EPA also has obligations under the ESA that may result in additional assessments and mitigation.

These PIDs propose risk mitigation measures based on findings in the draft human health and ecological risk assessments (DRAs) and feedback submitted during the DRAs' public comment periods. The following pesticide PIDs are being released today for public comment:

Conventional pesticides

For the four conventional pesticide cases, EPA is proposing additional Interim Ecological Mitigation measures to provide protections for nontarget organisms,

which EPA expects may also reduce pesticide exposures to listed species. This work furthers the goals outlined in [EPA's April 2022 ESA Workplan](#) and its [November 2022 ESA Workplan Update](#).

The November update proposed a menu of Interim Ecological Mitigation measures that EPA will draw from for many conventional and biological pesticide registration and registration review actions to protect nontarget species. EPA considered this menu for the four conventional pesticide PIDs released today and is proposing specific measures based on the risks and benefits of each pesticide.

- [DCNA](#): A fungicide registered for use on crops such as celery, fennel, endive, lettuce, onion, shallot, garlic, snap beans and Christmas trees.
- [Etofenprox](#): An insecticide structurally similar to the pyrethroids, etofenprox is registered for use on rice, in indoor residential and commercial settings, on pets for flea and tick control, and for public health mosquito control.
- [Norflurazon](#): An herbicide used to suppress germinating grass and broadleaf weeds for agricultural crops such as alfalfa, almonds, apples, asparagus, citrus, grapes and cranberries. It is also used in non-crop areas on agricultural premises.
- [Thiophanate-methyl and Carbendazim](#): Thiophanate-methyl is a systemic fungicide registered for use on various fruits, nuts and vegetable crops, and as seed treatment for beans, peanuts and potatoes. It is also used in non-agricultural settings such as golf courses, sod farms, greenhouses and nurseries. Carbendazim is used in antimicrobial products as an industrial biocide for materials preservation and as a conventional tree injection.

Antimicrobials

- [1,3-Propanediamine, N-\(3-aminopropyl\)-N-dodecyl- \(1,3-PAD\)](#): Registered for use in poultry and animal housing facilities, restaurants, beverage and food processing plants, and schools, where it is used to sanitize non-food contact surfaces such as floors and walls and to control fruit flies in floor and sink drains. It is also registered for use in metalworking fluids and oil field flood water systems. In the PID for 1,3-PAD, EPA is proposing to terminate

uses in metalworking fluids and oil field flood water systems, which have the highest ecological risk.

Biopesticides

- [Lavandulyl Senecioate](#): A synthetic pheromone to attract male vine mealybugs to disrupt their mating cycle and protect raisins, table grapes, and wine grapes.
- [Oregano Oil](#): A contact herbicide used to control moss on a variety of outdoor structures and surfaces.
- [Penta-termanone](#): A blend of naturally occurring hydrocarbons found in the waxy outer layer of some termites that acts as a pheromone and is used for termite control.
- [Plant Extract 620](#): A fungicide used to control parasitic nematodes and certain fungal infections. Also used as a plant growth regulator.

For the above biopesticides, EPA did not propose specific Interim Ecological Mitigation measures because EPA determined that each of these chemicals will have no effect on listed species or their designated critical habitats and no additional mitigations were needed.

The PIDs are now available for public comment in their respective pesticide registration review dockets at www.regulations.gov for 75 days. The docket for each pesticide is linked above.

After the publication of the PIDs, EPA will consider public comments and issue interim decisions. (EPA, December 23, 2022)
<https://www.epa.gov/pesticides/epa-proposes-registration-review-decisions-and-ecological-protections-several-pesticides>

EPA CONTINUES WORK TO REDUCE CHLORPYRIFOS EXPOSURE

This week, the U.S. Environmental Protection Agency (EPA) is issuing a notice of intent to cancel (NOIC) three products containing the pesticide chlorpyrifos and

is publishing a notice of receipt of voluntary requests submitted by some chlorpyrifos registrants to cancel 14 chlorpyrifos pesticide registrations and terminate food uses for three chlorpyrifos pesticide registrations.

These actions are the latest efforts by the Agency to cancel the use of chlorpyrifos on food consistent with its earlier revocation of chlorpyrifos tolerances — which is the amount of a pesticide that is allowed on food. Chlorpyrifos has been found to inhibit an enzyme that leads to neurotoxicity, including potential neurodevelopmental effects in children. As a result of the revocation, chlorpyrifos can no longer be used on or registered for food without resulting in adulterated food.

Previously, chlorpyrifos, an organophosphate insecticide, was used for use on a large variety of agricultural crops, including soybeans, fruit and nut trees, broccoli, cauliflower, and other row crops. Based on data from 2012-2018, the cancellation of food uses represented over 95% of the total chlorpyrifos use. Additionally, the insecticide is used for non-food uses, which are unaffected by these actions.

[In August 2021](#), EPA issued a final rule in response to the [Ninth Circuit Court of Appeals' order](#) for EPA to either modify the chlorpyrifos tolerances and issue a finding that the modified tolerances are safe or revoke the tolerances. In the final rule, EPA determined that the aggregate exposures from use of chlorpyrifos did not meet the legally required safety standard to assure a reasonable certainty that no harm will result from such exposures. [In February 2022](#), EPA denied the objections filed in response to the final rule. Thereafter, all chlorpyrifos tolerances expired and products containing the pesticide could no longer bear labeling for use on food.

EPA requested that registrants of pesticides containing chlorpyrifos submit registration amendments to remove all food uses from product labels or submit requests to either voluntarily cancel products with food uses or to terminate food uses from registered products. All but one registrant did so.

The remaining registrant, Gharda, submitted a request to remove some uses but failed to submit a request and/or label amendments to remove all food uses to conform

their product registrations with the fact that the tolerances for chlorpyrifos have been revoked.

Therefore, EPA is issuing a [NOIC](#) for the following Gharda products, which contain label instructions for use on food:

- EPA Reg. No. 93182-3 Chlorpyrifos Technical;
- EPA Reg. No. 93182-7 Pilot 4E Chlorpyrifos Agricultural Insecticide; and
- EPA Reg. No. 93182-8 Pilot 15G Chlorpyrifos Agricultural Insecticide.

Under the [Federal Insecticide, Fungicide and Rodenticide Act](#) (FIFRA), the cancellation of these products will become final and effective within 30 days of the receipt (or publication) of the NOIC, unless one of the following two things happen:

- Gharda makes the necessary corrections to its cancellation requests and label amendments to ensure the products will meet the FIFRA registration standard; or
- Gharda or a person adversely affected by the NOIC makes a timely and adequate request to EPA for a hearing. If a hearing is requested, it will be conducted according to the requirements of [section 6\(b\) of FIFRA \(U.S. Code Title 7, Chapter 6, subchapter II, section 136d\(b\)\)](#) and the Agency's Procedural Regulations at [40 CFR Part 164](#).

Upon publication of the Federal Register, the NOIC will be available in docket [EPA-HQ-OPP-2022-0417](#) at [www.regulations.gov](#).

Voluntary Cancellations

In addition, EPA is issuing a *Notice of Receipt of Requests to Voluntarily Cancel Certain Pesticide Registrations and Amend Registrations to Terminate/Amend Certain Uses* for certain registrants that submitted amendments and voluntary cancellations.

Upon publication of the Federal Register notice, public comments will be accepted for 60 days in docket [EPA-HQ-OPP-2022-0223](#) at [www.regulations.gov](#). EPA will consider comments received and determine the

appropriate outcome for addressing the requests for voluntary cancellation, which typically includes a cancellation order consistent with the requests. The Agency issued a cancellation order for one set of voluntary cancellation requests in [August 2022](#) and will continue to process the remaining voluntary requests and amendments it received. EPA will issue a notice(s) of receipt of voluntary cancellation requests and/or requests to terminate uses as those requests are processed.

Any existing stocks of products associated with the NOIC or voluntary cancellations will be governed by the existing stocks provisions of an applicable cancellation order. Until the cancellation order goes into effect, the products are not cancelled.

Registration Review of Non-Food Uses

Chlorpyrifos is also undergoing the registration review process for the remaining non-food uses. EPA's review may involve the proposal of additional measures to reduce human health and ecological risks associated with the remaining registered uses. More information on the [registration review process](#) is available online.

All chlorpyrifos registration review documents are available in the chlorpyrifos registration review docket [EPA-HQ-OPP-2008-0850](#) at [www.regulations.gov](#).

[More information about chlorpyrifos is available on EPA's website.](#)

(EPA, December 14, 2022)

<https://www.epa.gov/pesticides/epa-continues-work-reduce-chlorpyrifos-exposure>

AG GROUPS ARGUE DICAMBA AT DC CIRCUIT

Two agriculture groups made oral arguments last week on a case in federal appeals court that could determine the future of the herbicide dicamba.

On March 15, 2022, the EPA announced approved label amendments that further restricted the use of over-the-top dicamba in Iowa and Minnesota. Those changes were made to federal labels for XtendiMax, Engenia and Tavium.

The American Soybean Association and the Plains Cotton Growers, Inc. filed a petition for review with the U.S. Court of Appeals for the District of Columbia Circuit in St. Louis, Missouri, on March 24, 2022.

In oral arguments before the appeals court on Dec. 8, 2022, the groups asked the court to clarify jurisdictional rules under the Federal Insecticide, Fungicide and Rodenticide Act, or FIFRA, and to require the EPA to use the best available science when evaluating dicamba pesticide registrations and potential impacts to species protected under the Endangered Species Act.

The EPA's decision to revise the federal label, in consultation with the dicamba registrants, for state-by-state needs, was considered to be unusual. It stems from EPA's new policy of no longer permitting states to add further restrictions on a pesticide via Section 24(c) special local needs labels. Now states that want to further restrict dicamba must work through their own state rulemaking or work to create federal label amendments with EPA and registrants.

In the petition to the DC Circuit, the ag groups said the actions taken in March 2022 violated FIFRA, ESA and the Administrative Procedure Act by "imposing registration conditions that exceed statutory authority, are arbitrary and capricious, are an abuse of discretion, are not supported by substantial evidence when considered on the record as a whole and are not otherwise in accordance with the law."

The groups asked the court to remand the amendments back to the agency.

Alan Meadows, American Soybean Association regulatory committee chairman and a soybean grower from Halls, Tennessee, said in a news release last week that the group is hopeful the court will see the new dicamba restrictions released in March 2022 were too restrictive.

"Growers need herbicides like dicamba to protect crops and maintain important conservation practices, for example, reduced tillage," Meadows said.

"By failing to use good science and data, EPA is unnecessarily making the farmer's job harder and hurting our bottom line."

Kody Bessent, Plains Cotton Growers CEO, said his group is concerned about EPA creating "nationwide arbitrary cutoff date" when it comes to dicamba.

In November 2020, the groups sued the EPA in the U.S. District Court for the District of Columbia, following the agency's release of three dicamba labels. The groups argued those labels were too restrictive and would hamper cotton and soybean growers' ability to control herbicide-resistant weeds.

The new labels include a national cutoff date for use -- June 30 for soybeans and July 30 for cotton -- as well as larger buffers to protect neighboring areas and endangered species.

The district judge issued a stay on Sept. 3, 2021, pending the outcome of the current case in the DC Circuit.

Read more on DTN:

"Two Commodity Groups Sue EPA, Demand Fewer Dicamba Label Restrictions," <https://www.dtnpf.com/...>

"EPA Amends Dicamba Labels to Add Cutoffs for Iowa and Minnesota," <https://www.dtnpf.com/...>

"EPA Reviews Proposed Dicamba Label Changes From Bayer for 2023,"

(Progressive Farmer, December 14, 2022)
<https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/12/14/ag-groups-wait-dicamba-decision-dc>

USDA REPORTS 99 PERCENT OF FOODS TESTED ARE BELOW PESTICIDE RESIDUE LIMITS

For its 31st annual report on pesticide residues in food, the Agricultural Marketing Service of the USDA has good news.

“In 2021, over 99 percent of the samples tested had residues below the tolerances established by the EPA with 24.0 percent having no detectable residue,” [according to the report](#) released on Dec. 26.

Referred to as the Pesticide Data Program (PDP), the testing program checked 10,127 samples in 2021. Of those samples, 94 percent were fresh and processed fruit and vegetables. Fresh and processed fruit and vegetables tested during 2021 were: blueberries (fresh and frozen), broccoli, cantaloupe, carrots, cauliflower, celery, eggplant, grape juice, green beans, peaches (fresh and frozen), pears, plums, summer squash, sweet bell peppers, tangerines, watermelon, and winter squash.

Corn grain and butter were also tested during 2021, accounting for 4.1 and 1.7 percent of the samples collected in 2021, respectively.

Domestic samples accounted for 67.8 percent of the samples, while 30.8 percent were imported, 0.9 percent were of mixed national origin, and 0.5 percent were of unknown origin.

Residues exceeding the tolerance were detected in less than 1 percent (0.53) percent, or 54, samples of the 10,127 total samples tested. Of these 54 samples, 29 were domestic, 24 were imported, and 1 was of unknown origin. Residues with no established tolerance were found in 3.7 percent, or 374 samples, of the 10,127 samples tested. Of these 374 samples, 220 were domestic, 150 were imported, and 4 were of unknown origin.

“PDP is a voluntary program and is not designed to enforce tolerances. However, PDP informs the U.S. Food and Drug Administration and EPA of presumptive tolerance violations if detected residues exceed the EPA

tolerance or if residues are detected that have no EPA tolerance established,” according to the report.

“Ultimately, if EPA determines a pesticide use is not safe for human consumption, EPA will mitigate exposure to the pesticide through actions such as amending the pesticide label instructions or changing or revoking a pesticide residue tolerance, or not registering a new use.”

Of foremost concern in selecting the foods to be tested is the likelihood that the foods will be consumed by infants and children who pesticide residues than most adults can have more effect.

“USDA uses the data to better understand the relationship of pesticide residues to agricultural practices and to implement USDA’s Integrated Pest Management objectives. USDA also works with U.S. growers to improve agricultural practices and to facilitate the adoption of integrated pest management techniques, including judicious use of pesticides, throughout the food supply chain,” according to the report.

“The PDP is not designed for the enforcement of EPA pesticide residue tolerances. Rather, the U.S. Food and Drug Administration (FDA) is responsible for enforcing EPA tolerances. The PDP provides FDA and EPA with monthly reports of pesticide residue testing and informs the FDA if residues detected to exceed the EPA tolerance or have no EPA tolerance established.”

The PDP methodology includes working with state agencies representing census regions of the country that include nearly half of the U.S. population. In 2021 the program tested samples from California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, and Washington.

The number of samples collected by each state is apportioned according to that State’s population.

Samples are randomly chosen close to the time and point of consumption at distribution centers rather than at the farm gate and reflect what is typically available to the consumer throughout the year. Samples are selected without regard to country of origin, variety, growing season, or organic labeling.

Because PDP data are used for risk assessments, PDP laboratory methods are geared to detect very low levels of pesticide residues, even when those levels are well below the tolerances established by EPA. Before testing, PDP analysts washed samples for 15 to 20 seconds with gently running cold water as a consumer may do; no chemicals, soaps, or special washes were used.

PDP data are provided to EPA for its consideration in setting and reviewing tolerances. FDA monitors food in interstate commerce to ensure that these limits are not exceeded.

The full results for more than 2.7 million analyses, representing each pesticide monitored on each commodity, are too numerous to be included in their entirety in the summary report, according to the PDP. However, the complete PDP database file for 2021 along with annual summaries and database files for previous years are available on the PDP website at <http://www.ams.usda.gov/pdp> or by contacting MPD at amsmpo.data@usda.gov.

PDP data are also available using the PDP database search tool that can be accessed at: <https://apps.ams.usda.gov/pdp>.

For more information about PDP, please visit [the program website](#). For additional information about pesticides and food, [please visit EPA's website](#).

(Food Safety News December 27, 2022)
<https://www.foodsafetynews.com/2022/12/usda-reports-99-percent-of-foods-tested-are-below-pesticide-residue-limits/>

REPELLENTS AS PART OF COCKROACH IPM

There is a time and place for the use of repellent pesticides as part of a comprehensive integrated cockroach control problem, according to PMPs interviewed by PCT.

Insecticide sprays for cockroaches work by exposing cockroaches to a chemical they absorb on contact, hopefully enough to provide a lethal dose. But should a PMP use a product that causes the cockroach to flee its hiding place, flushing it into a pretreated area, or attack them only in the spots where they are initially located as the PMP completes a thorough inspection of the client's site? As the *Mallis Handbook of Pest Control* notes, the increased activity of cockroaches after the application of repellents such as pyrethroids allows cockroaches to contact greater doses of insecticides and therefore increases the chance of cockroaches picking up a lethal dose.

Doug Foster, owner and president of Columbus, Ind.-based Burt's Termite & Pest Control, says early in his career, "fogging" was the answer, driving the cockroaches out of their hiding places and exposing them to insecticide. Still, he uses repellents in some limited cases today. The challenge, he noted, is that repellents will merely relocate the cockroaches without killing them. "We do not want to move the cockroaches. We want to attack them wherever they're at," especially since cockroaches may simply move from one hard-to-access hiding spot to another, like a drop ceiling. This problem is especially relevant when working in multifamily housing units since relocating the cockroaches means involving another unit and another set of residents."

Foster says that in addition to performing a thorough inspection, it's often a good idea to talk to staff about problem spots before using repellent sprays. "In restaurants," he says, "the staff is there eight, 10, 12 hours a day. They have the experience to say where they are seeing the roaches, where they are coming from." But, with hard-to-find cockroach hiding spots, he says, once you've searched, talked to the staff, and taken apart a few equipment motors where roaches like to hide,

sometimes the best choice is to "flush them out and see where they are coming from" while driving them toward an insecticide.

Mallis, citing the work of Brenner and Nalyana, calls this a "push-and-pull" strategy to 'herd' cockroaches towards areas strategically baited or treated with residual insecticides."

Zach Smith, owner of [Smith's Pest Management](#) in the San Francisco Bay area, has another valuable way to use repellents: as a barrier to keep cockroaches from coming into the home from the outside. For many of his clients, a good perimeter placement keeps cockroaches entering a structure. Is your client a good candidate for this kind of treatment? Citing research by Appel and his colleagues, *Mallis* directs pest management professionals to pay attention to factors such as "tree density, number of pets," as well as the "age of the home," and "the number of obvious cockroach harborages on the property" to decide if this is a good strategy. As PMPs know, cockroaches are attracted to "dead and rotting organic matter," such as the kind of yard waste that builds up around homes in the fall and winter months.

Repellents, Smith emphasizes, should be combined with efforts such as making sure door sweeps are all in place and that other standard methods of entry have been obstructed. John Myers, A.C.E., of Gunter Pest and Lawn, Kansas City, Mo., agrees, noting that this sort of barrier protection is most suited for clients troubled by American and Oriental roaches.

Foster offers an important final reminder for those in the field. "Be careful when switching equipment" that is use for non-repellent and repellent insecticides. You don't want to simply cancel one out with the other. If the equipment isn't cleaned thoroughly between those two chemicals, the repellent's impact will be dramatically impeded.

(PCT Online December 8, 2022)

<https://www.pctonline.com/news/cockroach-control-using-repellents/>

AG MAKES CASE FOR CHLORPYRIFOS IN 8TH

Though EPA had a written commitment from Gharda Chemicals International Inc. to continue selling the insecticide chlorpyrifos under certain safety conditions already found by the agency to be supported by science, the EPA revoked all tolerances of the chemical.

"Now, as a matter of law, EPA does not need the cooperation of any registrant in order to make a tolerance decision," Nash E. Long, attorney for ag groups and the chemical company, said during oral arguments before the U.S. Court of Appeals for the Eighth Circuit in St. Louis, Missouri, on Thursday.

"It can make the tolerance decision on its own on the basis of the information that it has. It does not need any cooperation from Gharda or any other registrant to do that. But in fact, what they did get, and it's in the record, is the written commitment from Gharda to change its registrations to comply with the agreed-upon list of safe uses. They had that commitment in writing, and what did they do? They just went silent over the last few weeks of the deadline period and walked away. There was nothing that forced this decision out of EPA; they had the information that is the scientific safety finding."

EPA finalized a rule on Feb. 28, 2022, revoking the food tolerances for chlorpyrifos, effectively banning legal use of the insecticide among U.S. farmers. That rule was issued by the Biden EPA in August 2021 in response to an order from the U.S. Court of Appeals for the Ninth Circuit.

The EPA issued a new interim registration for the insecticide in December 2020 before the Ninth Circuit handed down its order in April 2021. That order led EPA to issue its food tolerance revocation.

In the December 2020 action by EPA, it found 11 high-benefit, low-risk crop uses for chlorpyrifos.

All other chlorpyrifos registrants have since pulled their registrations.

EPA has maintained that because it was given just 60 days by the Ninth Circuit to act, the agency had to cancel all chlorpyrifos tolerances.

"I think the question for the court is whether EPA's decision was reasonable at the time it was made," Laura Glickman, Department of Justice attorney, said during oral arguments.

"I think it is true that normally their practice is to try to negotiate changes with registrants. And I think the record here shows that EPA really bent over backwards to try to maintain some uses."

Long said the interim decision issued by EPA in 2020 to re-register chlorpyrifos addressed safety issues based on available data at the time.

"It was certainly more than just a proposal," Long told the court.

"It was an announcement of the results of safety analysis that had been completed earlier. And it used very specific language saying, 'We have determined that the safe uses will not pose potential risks.' That finding then went through notice and comment. Even after that in the August 2021 rule, EPA said that the safe uses were indeed safe. This suggestion that my colleague has made that there's some doubt about the science here is just not true."

The court asked Long whether it was feasible to deny the ag groups' petition, meaning Gharda would then have to formally cancel its chlorpyrifos registration and file an administrative petition to reinstate tolerances.

"The problem with that, your honor, is that for the registrants, the manufacturers, it takes years and hundreds of thousands of dollars to do," Long said.

"But more critically for the other petitioners here, the growers, that gives them no relief in the interim, and the pest pressure grows every year that the pests are untreated. Those losses will continue to bind clients. They will get worse over time."

Long asked the court to vacate EPA's decision to revoke chlorpyrifos tolerances and send it back to the agency to

enter a safety finding for the safe uses the EPA already identified.

Gharda was joined in the Eighth Circuit lawsuit by Red River Valley Sugarbeet Growers Association, U.S. Beet Sugar Association, American Sugarbeet Growers Association, Southern Minnesota Beet Sugar Cooperative, American Crystal Sugar Company, Minn-Dak Farmers Cooperative, American Farm Bureau Federation, American Soybean Association, Iowa Soybean Association, Minnesota Soybean Growers Association, Missouri Soybean Association, Nebraska Soybean Association, South Dakota Soybean Association, North Dakota Soybean Growers Association, National Association of Wheat Growers, Cherry Marketing Institute, Florida Fruit and Vegetable Association, Georgia Fruit and Vegetable Growers Association, and National Cotton Council of America.

(Progressive Farmer, December 16, 2022)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/12/16/aggies-ask-eighth-circuit-force-epa>

CEU Meetings

Please note that many of these meetings are now being done virtual. Please contact the meeting host directly if you have any questions.

Date: January 15-17, 2023

Title: 2022 OAAA Ag Aviation Expo
Location: Embassy Suites Norman, OK
Contact: Sandy Wells (405) 341-3548
<http://www.okaaa.org/>

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

Date: January 18-19, 2023

Title: Red River Crops Conference
Location: Childress Event Center 1100 7th St. NW
Childress TX
Contact: Gary Strickland (580) 477-796
<https://agriflife.org/txrollingplainsagronomy/files/2022/12/2023-RedRiverCropsConf-Brochure-FINAL2.pdf>

CEU's:	Category(s):
3	1A
3	10

Date: January 23, 2023

Title: Updates on Managing the Asian Longhorned Beetles
Location: US Environmental Protection Agency (Virtual)
Contact: Dr. Marcia Anderson (908)-577-2982
<https://www.epa.gov/ipm/upcoming-integrated-pest-management-webinars>

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

Date: January 26, 2023

Title: Farmers' Cooperative Association Winter Agronomy Update
Location: Contact for Location
Contact: Kody Leonard (918) 244-8250
<https://www.gocoopok.com/pages/custom.php?id=34099>

CEU's:	Category(s):
1	4

Date: February 6, 2023

Title: Carter County Early Spring Roundup
Sprayer and Nozzle Calibration for Effective Application
Location: Contact for Location
Contact: Tayler Denman (580) 223-6570
<https://extension.okstate.edu/county/carter/agriculture.html>

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

Date: March 2, 2023

Title: OSU Grape Management Course Grape Disease Management

Location: Contact for Location

Contact: Aaron Essary (405) 744-7472

<https://extension.okstate.edu/programs/viticulture-and-enology/2023-grape-management-course.html>

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

Date: March 7-8, 2023

Title: 2023 OKVMA Spring Conference

Location The Champion Convention Center Oklahoma City OK

Contact: Kiersten Riggs (918) 314-9032

<https://okvma.com/conferences/>

CEU's:	Category(s):
1	A
4	1A
4	3A
6	5
6	6
1	7A
6	10

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

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/>

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>

MarKev Training <https://www.markevtraining.com/>

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

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

Find us on Twitter at @OkstatePestEd

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/ 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

Norman Moore Norman Technology Center, 4701
12th Ave NW, Norman, Oklahoma, 73070

South Penn - Moore Norman Technology Center
13301 S. Pennsylvania, Oklahoma City, OK 73170

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

Kevin Shelton
405-744-1060 kevin.shelton@okstate.edu or

Charles Luper
405-744-5808 charles.luper@okstate.edu

Pesticide Safety
Education Program