OKLAHOMA COOPERATIVE EXTENSION SERVICE

PESTICIDE REPORTS

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

May, 2025 CHEM

DON'T MISS THE MAY UNWANTED PESTICIDE DISPOSALS

ODAFF will provide Unwanted Pesticide Disposals May 5 in Duncan, May 7 in El Reno, and May 8 in Vinita.

The locations are the Stephens County Fairgrounds, Canadian County OSU Extension Center, and the Craig County Fairgrounds. The Disposals will run from 8 a.m. to 1 p.m. rain or shine at all locations.

There is no charge for this program. **Limit is 2,000 pounds per entity.** ONLY PESTICIDES will be taken at the sites (no fertilizer, paint, oil, etc)!
If you have any questions, contact Charles Luper (OSU) at 405-744-5808 or Ryan Williams (ODAFF) at 405-522-5993.

May 5 Stephens County Fairgrounds
2002 S 13th St, Duncan, OK 73533

May 7 Canadian County OSU Extension Center
218 N. Country Club Rd.
El Reno, OK 73036

May 8 Craig County Fairgrounds
915 E Apperson Rd, Vinita, OK 74301

8 a.m. to 1 p.m. rain or shine at all locations

For more information please go to https://extension.okstate.edu/programs/pesticide-safety-education/unwanted-pesticide-disposal-program/index.html(OSU PSEP)

JUNE TEST HELP WORKSHOPS

The Oklahoma State University Pesticide Safety Education Program (PSEP) has will be holding test help workshops June 18 Tulsa in and June 25 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 June 15 for Tulsa and $65 after June 15. Registration cost is $50 before June 23 for Oklahoma City and $65 after June 23. 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 2025 workshop dates can be found on the website as well.
(OSU PSEP)

EPA ANNOUNCES MULTIPLE ACTIONS TO PROTECT ENDANGERED SPECIES FROM INSECTICIDE CARBARYL

Today, the U.S. Environmental Protection Agency (EPA) is announcing that it has approved labels that implement measures required by the National Marine Fisheries Service (NMFS) final biological opinion and is providing to the public the U.S. Fish and Wildlife Service (FWS) final biological opinion on carbaryl. Carbaryl is an insecticide used on a variety of crops, including field vegetables and orchard crops, in professional turf management, professional ornamental production, and in residential lawn and garden markets. EPA's 2021 biological evaluation for carbaryl determined that use of the pesticide according to label instructions was "likely to adversely affect" at least one animal or plant for 1,640 listed species and 736 designated critical habitats. EPA initiated formal consultation with NMFS and FWS (the Services) and, in response, both Services developed biological opinions for carbaryl.

The NMFS and FWS biological opinions were issued after completing consultation with EPA on the registration review of carbaryl and the effects of the insecticide on federally threatened or endangered (listed) species and their designated critical habitats.

National Marine Fisheries Service Biological Opinion Implementation

During consultation with NMFS, carbaryl registrants agreed to amend their product labels and registrations to include mitigations that would avoid potential jeopardy or adverse modification to the listed species and critical habitats identified in the NMFS biological opinion. The newly approved labels for carbaryl products will now:

- Include mitigations which would reduce runoff and spray drift from treated areas into species' habitats,
- Describe how to report any ecological incidents associated with carbaryl applications,
- Include application prohibitions, restrictions, and rate reductions, and
- Direct the user to the Endangered Species Protection Bulletins using the Bulletins Live! Two (BLT) website to identify additional carbaryl mitigations in geographically-located areas.

Fish and Wildlife Service Final Biological Opinion

FWS determined in its draft biological opinion that use of carbaryl was likely to jeopardize 78 listed species and adversely modify 14 critical habitats when used as currently registered. After the draft BiOp was issued, EPA worked with FWS and carbaryl registrants to identify additional mitigation measures to reduce exposure to listed species and avoid the above-mentioned jeopardy. With the release of the final FWS biological opinion, EPA will work with the registrants to implement the measures described in the final biological opinion.

As stated in the FWS final biological opinion, EPA will request that carbaryl registrants submit amended labels to EPA reflecting the mitigations identified by the final biological opinion and by the registration review Interim Decision (ID) within 60 days of the issuance of the carbaryl ID. The carbaryl ID is currently scheduled for completion in late 2025.

(EPA, April 9, 2025)
https://www.epa.gov/pesticides/epa-announces-multiple-actions-protect-endangered-species-insecticide-carbaryl

EPA RELEASES INTERIM DECISION ON ORGANOPHOSPHATE PESTICIDE DICROTOPHOS

The U.S. Environmental Protection Agency (EPA) is releasing the Interim Registration Review Decision (ID) for dicrotophos, an organophosphate pesticide used on cotton for controlling arthropod pests. The ID released today responds to public comments on the Proposed Interim Decision (PID) which was published in the public docket in June 2024. It updates some of the Federal Insecticide Fungicide Rodenticide Act (FIFRA) Interim Ecological Mitigation measures after considering public comments on the Endangered Species Act Workplan Update and additional EPA and interagency review of the mitigation measures.

The PID identified human health risks of concern for occupational handlers and bystanders from non-occupational spray drift, and ecological risks of concern for birds, mammals, terrestrial invertebrates (pollinators) and aquatic invertebrates (freshwater and estuarine/marine).

To address worker, bystander and ecological risks, the agency has identified mitigation measures for dicrotophos products, which include the FIFRA Interim Ecological Mitigation measures to address pesticide risks to nontarget species. The following measures will be implemented by changes to product labels:

- Reduction in the single maximum application rate for aerial application to address risks to occupational handlers,
- Implementation of buffers to provide distance between application areas and areas where bystanders might be located to avoid potential bystander exposure, particularly to children,
- Use of applications that minimize runoff using EPA's mitigation menu,
- Inclusion of pollinator stewardship language on labels, including best management practices for pollinator protection, and
- Addition of guidance on labels to instruct users how to report an ecological incident.

EPA will consider if additional mitigation measures are necessary for dicrotophos prior to the final decision.

(EPA, April 18, 2025)
https://www.epa.gov/pesticides/epa-releases-interim-decision-organophosphate-pesticide-dicrotophos

FIVE STEPS TO HERBICIDE ESA COMPLIANCE

EPA's recent efforts to make pesticide registrations comply with the Endangered Species Act (ESA) have left farmers swimming in a veritable sea of agency alphabet soup and additional rules that can seem overwhelming. This season, three herbicide products -- Enlist One, Enlist Duo and Liberty ULTRA -- carry labels with specific and detailed requirements intended to protect threatened and endangered species.

However, decoding the alphabet soup and getting in compliance can be simplified into a handful of steps, said Stanley Culpepper, University of Georgia Extension weed scientist.

"I'd describe this as a 'crawl before you walk' scenario," Culpepper said. "We need to understand the process and the ultimate goal. We need to know what's expected and what's required. These three labels give us a chance to do that. Maybe we're crawling now, but in a year or two

when we hopefully add a few more tools into the weed management toolbox and it's likely to get a little more complex, we'll be running the 100-yard dash."

In a conversation with DTN, Culpepper offered the following five-step process that a farmer can use to simplify their ESA requirements for these three herbicides.

STEP 1: ACCEPT THE REQUIREMENT REALITY

As with any pesticide, the "label is the law." Using a product in a manner that is inconsistent with the use directions on the label is a violation of federal law, specifically the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), and can result in enforcement actions to correct the violations. The Enlist labels issued in 2022 and the Liberty ULTRA label issued in 2024 all include specific and detailed endangered species requirements with which farmers must comply.

"It's important to understand that even though we have different requirements on these three herbicide labels now, these sorts of requirements are expected to be on all herbicide labels as they are registered or reregistered," Culpepper said. "As a farmer, you have to accept that this is a reality and accept that there are going to be additional requirements for us to apply pesticides."

"We may not like the change, but one positive to this is that these requirements are aimed at putting a pesticide on target and keeping it there," he continued. "Ultimately, that can only help improve pest management and herbicide resistance management on our farms."

STEP 2: CHECK FOR BULLETINS

As described on all three product labels, users are required to visit EPA's "Bulletins Live! Two (BLT)" website and determine if a field falls within a Pesticide Use Limitation Area (PULA). If it does, an Endangered Species Protection Bulletin will be created that provides additional, geographically specific limitations not listed on the products' general labels.

"PULA is the new buzzword for agriculture," Culpepper said. "If you're using these products, you're required to go to the BLT page and see if your field is in one of these PULAs. This has to be done within six months of when you're going to spray the herbicide."

To generate a printable bulletin from the website, three items are required: the field location, which can be entered using an address or by zooming in on the map on the BLT page; the month in which the application will occur; and the herbicide's EPA registration number, which for these products are: Enlist One, 62719-695; Enlist Duo, 62719-649; and Liberty ULTRA, 7969-500.

Culpepper noted the website needs improvements, but EPA is working to make it more user-friendly. To access Bulletins Live! Two, go here: https://www.epa.gov/….

STEP 3: DETERMINE REQUIRED RUNOFF/EROSION MITIGATION CREDITS/POINTS

While some of the terminology on the product labels differs between the two Enlist products and Liberty ULTRA, EPA's goal is the same. By implementing mitigation measures such as field borders, cover crops and buffer strips, farmers reduce the potential for runoff and erosion and avoid off-field movement of pesticides to areas where they might affect an endangered or threatened species.

For each field on which they intend to spray one of the Enlist products, farmers must achieve either four or six mitigation "credits," depending on soil type. For Liberty ULTRA, a minimum of three mitigation "points" is required.

"The Enlist labels came out before EPA finalized the Herbicide Strategy, so they're different than Liberty ULTRA," Culpepper said. "For Enlist, you're limited to the mitigation measures listed in the table that's on the label. For Liberty ULTRA, there are a lot more options."

To see the complete list, a farmer needs to visit EPA's Mitigation Menu Website. The weed scientist noted that EPA has developed a runoff points calculator that a farmer can use to quickly add up mitigation points for practices already in use on a field. While the calculator is only applicable to Liberty ULTRA today, its usefulness

will increase as EPA registers and reregisters more herbicides.

Access the mitigation menu and points calculator here: https://www.epa.gov/….

STEP 4: DETERMINE SPRAY DRIFT BUFFER DISTANCE

To further protect endangered species and prevent off-target movement of herbicides, the Enlist labels and Liberty ULTRA label include spray buffer requirements. The Enlist label specifies a 30-foot downwind buffer for ground applications; the Liberty ULTRA label specifies a 10-foot downwind buffer for ground applications and a 50-foot downwind buffer for aerial applications.

"But it's not as simple as a 10-, 30- or 50-foot drift buffer," Culpepper said. "The labels have specific requirements for each application method, including boom height, droplet size and nozzle selection, wind speed and direction requirements, temperature and humidity parameters and more."

"The Liberty ULTRA label includes options for reducing buffer distances, including all the way to zero feet," he noted. "So, it's important to review the labels and make a field-by-field plan for spraying."

STEP 5: DOCUMENT THE PROCESS

It's been said "if you don't write it down, then it never happened," and that adage certainly applies when proving compliance with the endangered species protection requirements for Enlist One, Enlist Duo or Liberty ULTRA. None of the product labels offer specific guidance for documentation; however, Culpepper said it's a critically important step.

"If there's a complaint, then you, as a farmer, may need to protect yourself," he said. "Having a record that shows you went through the process with due diligence is going to be important."

Whether kept electronically or in hard copy form, here's a rundown of records that Culpepper recommends a farmer should keep for every field where any of these three herbicides are applied:

-- Proof that you visited the BLT website within six months prior to or on the day of applying the herbicide. If a field is affected by a PULA, note any additional restrictions beyond the general label and how compliance with those restrictions is achieved. Farmers can print or save PDFs of the bulletins generated when they visit the site.

-- Proof that you satisfied the runoff/erosion mitigation requirements for a specific field. Note the minimum credits/points required for a field and how you earned them. For Enlist One and Enlist Duo, use the table of mitigation options provided on the products labels; for Liberty ULTRA, use EPA's runoff points calculator.

-- Proof that spray drift management guidelines were followed. Record the date and time of application along with weather-related data, such as temperature, wind speed and wind direction, on the day of application. Note the rate of application, equipment used, and any other specific details required by the herbicide label.

"As long as farmers understand the drift buffer and the runoff requirements, they should be able to meet the label requirements for these three products without too much trouble, with the possible exception of a field that's within a PULA," Culpepper said.

(Progressive Farmer, April 3, 2025)
https://www.dtnpf.com/agriculture/web/ag/crops/article/2025/04/03/follow-five-steps-meet-endangered

HERBICIDES REMAIN DOMINANT SEGMENT IN NORTH AMERICAN CROP PROTECTION CHEMICALS MARKET

The report, **Crop Protection Chemicals Market,** published by MarketsandMarkets, highlights several key factors driving this expansion in agricultural pesticides, herbicides, and fungicides across the United States and North America.

Changing Pest Patterns Create New Challenges for American Farmers

Climate change is reshaping pest distribution patterns across agricultural regions, with research from North Carolina State University documenting the northward migration of destructive pests like the corn earworm (*Helicoverpa zea*). This migration threatens previously unaffected farming regions, creating new markets for both conventional and biological crop protection products.

Herbicides Continue to Lead Market Share

The analysis confirms **herbicides** remain the dominant segment in the North American crop protection chemicals market. Their popularity stems from effectiveness in weed control for major row crops and compatibility with genetically modified herbicide-resistant varieties. These solutions provide significant labor savings for commercial farming operations while enhancing overall field productivity.

Industry leaders including Bayer AG and Corteva Agriscience continue to introduce next generation weed management solutions focusing on efficacy, environmental sustainability, and resistance management.

High-Value Specialty Crops Show the Strongest Growth Potential

While traditional field crops including corn, soybeans, and wheat represent significant market segments, the fruit and vegetable category is experiencing accelerated growth in crop protection chemical usage.

According to FAO data, global fruit and vegetable production has increased by 63% and 71% respectively since 2000. These high-value specialty crops face unique pest management challenges and quality requirements that justify premium inputs, making them a key growth driver for advanced agricultural chemical solutions.

U.S. Maintains Market Leadership

The United States continues to dominate the North American crop protection chemicals market due to its expansive agricultural industry, technological adoption, and sophisticated farming practices. Recent product innovations underscore ongoing investment in the sector, with companies like FMC Corporation introducing integrated solutions such as their Ethos Elite LFR **insecticide/biofungicide** — combining conventional chemistry with biological control agents.

U.S. Tariff Policies Creating Market Adjustments

Recent tariff policies implemented by the Trump administration are creating ripple effects throughout the agricultural input supply chain. The crop protection chemicals industry, which relies heavily on global manufacturing and ingredient sourcing, is experiencing shifts in pricing structures and supply logistics.

Industry analysts note that tariffs on Chinese chemical imports, a significant source of active ingredients and technical materials, may lead to price increases for certain product categories. Meanwhile, domestic manufacturers are exploring opportunities to expand U.S.-based production capacity, potentially reshaping supply chains over the coming years.

“These policy changes are creating both challenges and opportunities for American agricultural suppliers”. Companies are actively reassessing their sourcing strategies and manufacturing footprints to maintain competitiveness while ensuring reliable product availability for US farmers.

(CropLife, April 14, 2025)
https://www.croplife.com/crop-inputs/herbicides-remain-dominant-segment-in-north-american-crop-protection-chemicals-market/

WHAT’S NEXT FOR PRECISION SPRAYING TECHNOLOGY IN BATTLING WEEDS?

No matter what commodity producers are growing, farmers strive to cut down on chemical use not only for the environment, but also for what that savings will do for their bottom line.

This is the experience of Dalton Magill, a row crop and cattle farmer in Verona, N.D. Within his operation, they raise corn, soybeans, dry edible beans and cattle. One pressure point they found on their farm was the input costs associated with dry edible bean production.

“The main reason we were getting into precision spraying was to see if we could cut some chemical costs for our dry edible beans and still do a good job at doing it,” Magill says. “Inputs are high on dry beans, especially on the chemical side, with not really any new inputs to mitigate this.”

The Magill operation decided that the next move to cut costs was to turn to a precision spraying technology provider, Greeneye Technology.

Economic edge

With every advancement in agricultural technology, it is crucial that there is a cost savings associated with it. In just one year of using the Greeneye system, Magill realized significant savings even on just one crop.

“Just on the edible dry beans last year, we saved almost $40,000 on chemical costs,” he says. “You could invest that in a lot of places, like plant health. Forty grand in savings on just one crop is a big deal.”

Greeneye’s retrofit solution allowed Magill to upgrade his existing sprayer, adding precision spraying capabilities alongside traditional broadcast application, without the need to purchase a new machine.

Nadav Bocher, CEO of Greeneye Technology, explains that beyond significantly reducing chemical costs, the Greeneye system offers additional benefits.

“We are leading on the savings, but we understand that efficacy and operator efficiency is also important,” Bocher says.

With the ability to have the second herbicide application being more targeted, users of this technology will see the chemical savings firsthand.

At the University of Nebraska-Lincoln, Amit Jhala, Extension weed management specialist, has conducted many different trials utilizing different precision spraying technologies. From the economic standpoint, he also sees the return on investment with the opportunity to try new and emerging chemicals.

With precision spraying, the opportunity to invest in new chemicals becomes a reality for farmers that could otherwise not justify purchasing a new chemical that was released.

“By the time that chemical comes to the market, it becomes so expensive that growers cannot afford it if they want to apply in broadcast application,” Jhala says. “With precision spraying, they can buy this effective chemical because they are using targeted spraying.”

Unique to the Greeneye system is the dual tank feature that can give more efficacy to the chemical because there is no mixing.

“The precision sprayer has a dual tank option that means you can apply two herbicides from different tanks at the same time,” Jhala says. “Some studies we did suggest that this feature can reduce herbicide antagonism if applied from different tanks compared with mixing in the same tank in traditional sprayers.”

Good for environment

If your operation is looking to cut chemical costs and can justify investing in this technology, Jhala

has glowing reviews based on agronomic research done at UNL.

“If you applied herbicide and then if it rained in a day or two, then there will be less chance for runoff of that chemical because you are not applying everywhere; you are just applying when it is needed,” Jhala says. “So, because of the chemical savings, you will see less chemical just sitting on the soil to be lost, either by runoff due to rain, or even there is a chemical loss that can happen due to photo degradation.”

Not only are you reducing the amount of chemical applied, but plant health also can be bolstered through the targeted spraying approach.

“Another benefit is we also have seen relatively less crop injury when you use target application,” Jhala says.

In practice, Magill has seen the benefits to soil health because of the precise weed control that precision spraying offers.

“I think the less chemical we can throw out there is the better for everyone,” Magill says. “It is better on your soil biology, and then it might help with resistance.”

Future focused

From cost savings to better soil health, farmers are quickly adopting the new technology. Whether they are retrofitting their current machinery, which is a benefit of Greeneye Technology, or buying a new sprayer with the technology already installed, precision spraying companies are already looking to what is next.

“We're developing the Greeneye Plus platform, which will empower farmers to maximize the value they gain from this technology,” Bocher says. “It will go beyond herbicides, enabling precise application of fungicides, micronutrients and fertilizers, ensuring greater efficiency and sustainability in their operations.”

Jhala can see precision spraying going even further in the future, to the point where the first application of herbicide does not have to be a broadcast application.

“In the future, I wish we can do some research, and identify somehow, by using some laser technology to identify where the weed seeds are present in the soil,” Jhala notes. “If we can apply that preemergence residual herbicide in a target application, that will be really useful, because right now we can use this precision sprayer only for postemergence application.”

The future of spraying appears to be bright, giving producers more options and tools to better manage weeds and take care of the soil beneath their feet.

(FarmProgress April 10, 2025)
https://www.farmprogress.com/weeds/precision-spraying-technology-cuts-chemical-costs-boosts-soil-health-for-farmers

PEST CONTROL COMPANIES HELPING NEIGHBORS IN NEED ERADICATE BED BUGS

Pest management professionals are known for their generosity as results from the latest PCT reader poll illustrate. Sixty percent of those surveyed said they have provided bed bug control services at no cost to a resident in need.

John Rosario, owner of ProSource Pest Solutions, Waterbury, Conn., has been in the industry for over two decades and has made it a priority to give back to the communities the company serves.

“I grew up in inner-city Waterbury and saw some of the

challenges with single parents or people that didn't have the means to actually pay for the service," said Rosario, who launched ProSource seven years ago and has helped several residents throughout the years.

One memorable case involved a family struggling with a severe bed bug infestation in their apartment. Despite repeated calls to the landlord, the issue remained unresolved, and the family couldn't afford professional pest control. In response, Rosario offered to treat their home free of charge, using the opportunity as a training session for his staff.

At Pestco Professional Services, Pittsburgh, Pa., Robert Weimer, executive general manager, and Nick Vasco, operations manager, help around 20 families annually, providing services valued at up to $50,000. Referrals come from local hospitals and school districts, "We don't charge for these services. Helping people get their lives back is rewarding in itself," he said.

The initiative started in 2019 when Pestco was approached by a hospital to assist a patient with a severe infestation. Since then, they've received referrals from local institutions and even employees. "We've never once turned anyone down," Weimer said.

Similarly, Dayton Hylton, former owner of Dayton's Pest Control (now part of Wayne's, an Anticimex company) Knoxville, Tenn., responded to community needs. Dayton's had a relationship with Dr. Karen Vail, professor and extension urban entomologist, University of Tennessee. She would occasionally call on Dayton's to help a family in need.

"One that I recall was an elderly women living in unsanitary conditions with bed bugs. While his company did not have a formal protocol for pro-bono work, they consistently helped whenever possible, serving both individuals and nonprofit organizations. "We always wanted to do top-quality work and stand behind it," Hylton said. "If I recall there were two houses side by side, so we had three guys work on the houses until the problem was eliminated." Hylton paid his employees, explaining that the experience was a crucial part of the company's giving-back culture. (PCT, April 11, 2025) https://www.pctonline.com/news/pest-control-companies-helping-neighbors-in-need-eradicate-bed-bugs/

FARMERS SHOULD ANTICIPATE TARIFF PRICE INCREASES ON AG CHEMICALS, SAYS FBN REPORT

Price discrepancies for agricultural chemicals are decreasing, according to Farmers Business Network (FBN) 2025 Ag Chemical Price Transparency Report. The 2025 report collected more than 1,390 data points from farms across 26 states.

"The difference between the high price and the low price is getting smaller over time," said John Appel, FBN senior director of category management. "The market's getting more competitive and this survey is a tool to get a fair shake in conversations with retailers."

FBN Finds as Much as 283% Price Variation Between Farmers Buying Same Ag Chem

Market Trends

The 2025 report notes that prices are down compared to years past. However, with a 10% tariff in place for goods imported from China and the potential for additional tariffs for Canada and Mexico, the potential for increased prices exists.

According to the report, more than 580 million kilos of ag chemicals are imported into the U.S. every year. "This includes some of the key actives like glyphosate, glufosinate, 2,4-D, atrazine, clethodim, as well as others," Appel said. "The impact from tariffs will be pretty broad unless something changes."

The FBN survey notes that in 2024, 100% of atrazine, 99% of glyphosate, 85% of glufosinate, 75% of clethodim, and 49% of 2,4-D were sourced from China.

Prices were down in 2024 due to factors such as lower commodity prices, Appel said. In addition, the market has been working on destocking excess inventory, which also helps create competitive pricing. "As that channel inventory has been worked down, now importers are

going to be restocking and bringing more material in so that may compound the tariff issue," he said.

Survey Findings

While prices were lower, variability still existed from region to region, depending on the product.

Farmers Business Network has released their 2025 Ag Chemical Price Transparency Report. Farmers Business Network (FBN)

What Product Price Varied the Most?

"Variability is very different product to product and region to region," Appel said. "We've seen variations up to three times the price on some products."

The product with the widest price range for the 2025 survey was Liberty 280 SL Herbicide, with 211% price variation, followed by AMS (dry) with 200% price variation.

What Was the Average Product's Price Variance?

FBN found that across 122 different agricultural chemical products analyzed, 12 products had over 100% difference in price, meaning some farmers paid more than double for the exact same product.

The report shows the average national list price for AMS dry was 37¢ per pound, but farmers paid between 28–60¢ per pound.

Similarly, the average national list price for atrazine 4L was $16.75 per gallon, but prices ranged from $12.25–23.60 per gallon.

How Does This Compare to 2024?

Compared to the 2024 report, national prices are trending down for almost every product analyzed.

One of the most notable changes was the drop in overall price variability. For example, AMS (dry) variability dropped from a 468% gap in 2024 to just 73%. "This change indicates that a growing focus on price transparency, fueled by an increasingly competitive ag chem landscape, has created a fairer market opportunity for farmers," said the report.

Does a Farm's Location Make a Difference?

Regional pricing differences often showed certain areas were prone to paying more for certain products.

According to the report, there was a 108% difference between the highest and lowest price for Atrazine in Illinois last season, meaning farmers could pay almost double for the same product in the same state. Differences of up to 106% for clethodim and 39% for 2,4-D were found in Nebraska.

Strategies for Fair Pricing

Dynamics that influence the price variation include cash versus finance pricing, transportation costs, and pricing some products lower to attract sales, Appel said. "Pricing conversations are often happening on a one-on-one basis between a farmer and retailer. That's where we take back that curtain a bit and make the prices known in our store."

Farmers have delayed chemical purchase decisions due to cash availability and commodity prices, Appel said. "The best strategy is to buy early and that will especially be true with some of the compounding issues around supply and tariffs that we've seen in the marketplace."

The FBN store also offers data tools for farmer members that can help with their price transparency, Appel said. "When farmers upload an invoice, it's turned into a shopping list and they can see the total savings versus what they actually paid for an equivalent product," he explained.

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: May 1, 2025
Title: 2025 Canadian County Wheat Field Day
Location: Contact Canadian County for location
Contact: Kyle Worthington (405)-262-0155
https://extension.okstate.edu/county/canadian/

CEU's:	Category(s):
1	1a
1	Private
1	10

Date: May 7, 2025
Title: Drone & Pesticide Applicator Field Day
Location: Contact Latimer County for location
Contact: Crystal Shipman (918)-465-3349
https://extension.okstate.edu/county/latimer/

CEU's:	Category(s):
2	1a
2	Private
2	10

Date: May 9, 2025
Title: Pettit Seed Farm Wheat Field Day
Location: Caddo Kiowa Technology Center Contact for location
Contact: Heath Hull (405)-668-0108

CEU's:	Category(s):
2	1a
2	Private

Date: May 14, 2025
Title: CoAXium Wheat Meeting and Field Day
Location: Contact for location
Contact: Mike Johnson (405)-641-3332

CEU's:	Category(s):
2	1a
2	Private

Date: May 16, 2025
Title: Lahoma Wheat Field Day
Location: North Central Research Station
Contact: Lisa Stejskal (405)-744-9607
https://agresearch.okstate.edu/field-days.html

CEU's:	Category(s):
TBD	1a
TBD	Private

Date: May 21, 2025
Title: Washita County Wheat Plot Tour
Location: Contact Washita County Ext. for location
Contact: Paige Brittain (580)-832-3356
https://extension.okstate.edu/county/washita/

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

Date: June 5, 2025
Title: Green Country Livestock Field Day
Location: Contact for location
Contact: Brian Pugh (918)-686-7800

CEU's:	Category(s):
2	1a
2	Private
2	10

Date: June 5, 2025
Title: Oklahoma Pecan Growers Association Annual Conference
Location: Glenpool Conference Center
Contact: Becky L Carroll (405)-744-6139
https://www.okpecangrowers.com/annual-convention

CEU's:	Category(s):
2	1a
2	Private
2	10

Date: June 6, 2025
Title: Payne Co Pasture Tour
Location: Contact Payne County Ext. for location
Contact: Jennifer Kay Patterson (405)-747-8320
https://extension.okstate.edu/county/payne/

CEU's:	Category(s):
3	1a
3	Private
3	10

Date: June 27, 2025
Title: Sustainable Urban Landscape Conference
Location: OSU Okla county Extension
Contact: Julia Laughlin (405)-640-9363
https://extension.okstate.edu/county/oklahoma/

CEU's:	Category(s):
2	3a
2	10

Date: November 10, 2025
Title: ECKROAT SEED COMPANY Interactive Sprayer Calibration
Location: Contact for location
Contact: Mike Link (405)-317-8484

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

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
https://ctnedu.com/

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

American Pest CEUs https://americanpestceus.com/

Pestschool.com **https://pestschool.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 Sevices 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 2840 E. 51st Street, Brittany Square Office Park, Suite 215, 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, Room 402, Enid, OK 73703

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

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

Weatherford-Southwestern Oklahoma State University
1001 N 7th St. Weatherford OK

Durant-Choctaw Nation of Oklahoma
1802 Chukka Hina Drive, Durant oK

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