

# PESTICIDE REPORTS

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



June, 2022

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## JUNE TEST HELP WORKSHOPS

The Oklahoma State University Pesticide Safety Education Program (PSEP) has scheduled test help workshops for June 14 in Oklahoma City and June 21 in Tulsa.

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 for each location and 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 as well as future 2022 classes.  
(OSU PSEP)

## **EPA RELEASES LIST OF DISINFECTANTS FOR EMERGING VIRAL PATHOGENS (EVPS) INCLUDING MONKEYPOX**

On Monday, May 23, EPA triggered its emerging viral pathogen (EVP) [guidance](#) in response to recent cases of monkeypox in the United States. EPA expects products on its [List of Disinfectants for Emerging Viral Pathogens](#) to kill monkeypox when used according to the label directions.

When rare or novel viruses cause outbreaks of disease, there may be few if any disinfectants that have been tested and registered for use against that specific pathogen. To prepare for situations like these, EPA created the EVP guidance, which allows disinfectant manufacturers to submit data to EPA demonstrating a product's efficacy against difficult-to-inactivate viruses.

Monkeypox belongs to a group of viruses that is more susceptible to disinfectants than other types of viruses. While there are no disinfectants registered for use against monkeypox, all products with EVP claims have been tested against viruses that are more difficult to kill than monkeypox.

The use of products with EVP claims supplements but does not replace other infection control practices. Individuals should follow Centers for Disease Control and Prevention (CDC), state, and local public health guidelines. Learn more about monkeypox from the [Centers for Disease Control and Prevention](#).

[See the list of disinfectants for EVPs, including monkeypox](#)

(EPA, May, 26,2022)

<https://www.epa.gov/pesticides/epa-releases-list-disinfectants-emerging-viral-pathogens-evps-including-monkeypox>

## **DOJ URGES REJECTION OF ROUNDUP PETITION**

The U.S. Department of Justice filed an opinion with the U.S. Supreme Court on Tuesday recommending the court deny a petition filed by Bayer AG asking the court to review a verdict in a Roundup cancer lawsuit.

In August 2021, Bayer AG asked the Supreme Court to review a landmark Roundup case, arguing in a petition that a federal appeals court committed errors in the case brought by non-Hodgkin's lymphoma victim Edwin Hardeman.

Bayer said in its petition, *Monsanto Company v. Edwin Hardeman*, that the U.S. Court of Appeals for the Ninth Circuit in San Francisco committed two errors worthy of review.

The company said state law failure-to-warn claims at the center of the case were preempted by federal law and the admission of expert testimony departed from federal standards, leading to what Bayer said was "unsupported testimony" on Roundup's safety profile.

"The court of appeals correctly held that FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) does not preempt respondent's claims, and that decision does not conflict with any decision of this court or another court of appeals," the U.S. solicitor general said in a brief filed with the Supreme Court.

"The court's evidentiary ruling likewise does not conflict with the standards applied by other circuits in considering the admissibility of expert testimony. The petition for a writ of certiorari should be denied."

The DOJ said it finds no evidence in statute that federal law preempts state law when it comes to labeling requirements on pesticides.

"Although some aspects of EPA-approved labeling may preempt particular state-law requirements, EPA's approval of labeling that does not warn about particular chronic risks does not by itself preempt a state-law

requirement to provide such warnings," the DOJ brief said.

In a statement to DTN, Bayer AG said it continues to believe it has good legal arguments the Supreme Court should consider.

"Indeed, the expert U.S. agency, the Environmental Protection Agency, has consistently found that glyphosate-based herbicides can be used safely and are not carcinogenic," Bayer said.

"Therefore, a cancer warning would be false and misleading and would be preempted by the Federal Insecticide, Fungicide, and Rodenticide Act. The decision to accept or deny review rests with the Supreme Court, which will consider the views of the parties -- including an additional brief to be filed by the company -- as well as the brief from the solicitor general. Regardless of the final outcome at the Supreme Court, the company is fully prepared to move forward with its five-point plan, manage litigation risks and bring closure to the Roundup litigation."

In 2019, a jury awarded Hardeman \$80 million in damages after the ruling his non-Hodgkin's lymphoma was caused by his use of Roundup. The damages later were reduced to \$25 million. Bayer has faced thousands of similar lawsuits connected to the glyphosate-based product.

In May 2021, the Ninth Circuit upheld the Hardeman judgment. Bayer officials have maintained the Hardeman case could shape how future cases are litigated. Also, that month, a federal court in California rejected Bayer's \$2 billion Roundup settlement, ruling it would not adequately address the concerns of families who may later be diagnosed with non-Hodgkin's lymphoma.

Bayer AG recently filed a second petition for writ of certiorari on a second Roundup trial.

For the second time in eight months, Bayer petitioned the U.S. Supreme Court to review a verdict in a

Roundup product liability case. The new petition, filed in March, however, is the first Roundup challenge filed by Bayer alleging a California jury's awarding of \$87 million in damages to cancer victims violated the Constitution.

The new petition asks the court to review the verdict in *Pilliod v. Monsanto Company*. In August 2021, a California state appellate court upheld the verdict that awarded \$87 million in damages to Alva and Alberta Pilliod of Livermore, California. The couple had used Roundup at home for about 30 years; later, the Pilliods developed similar types of cancers, according to court documents.

(Progressive Farmer, May 11, 2022)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/05/10/us-solicitor-general-tells-scotus>

## **INVASIVE PESTS: A GROWING CHALLENGE FOR PMPS**

Any animal transported from where it is endemic to a new area could become an invasive pest, provided the environment is suitable for its survival. The lack of its natural enemies allows the animal to proliferate and no group of animals is more adaptable to new locations than insects and other arthropods.

Most such exotic arthropods may thrive locally in their new habitats, but some, in particular various species of ants, become truly invasive causing harm to food crops, other animals and even people. Likely, the most invasive insect species in the U.S. has been the red imported fire ant. Originally imported in the South during the 1920s, fire ants have spread across the Southeast becoming a serious public health threat as well as a pest in agriculture. Other invasive ant species include the Argentine ant, the Pharaoh ant, various types of crazy ants, and the dark rover ant.

The Asian multi-colored lady beetle and brown marmorated stink bug have largely displaced native overwintering pests, such as cluster flies and box elder bugs, as the key pests plaguing buildings during the fall

and winter. These two insects continue to expand their range, moving into more states.

The brown widow spider made a big splash in many sites along the Gulf Coast and parts of California, but it has since become a localized pest where it occurs. In the past five years, the Joro spider from Southeast Asia has become a noticeable resident of yards across northern Georgia into neighboring states. A large orb weaver, the Joro may be out-competing native orb weavers such as the various Argiope garden spiders. Although not a threat to humans or pets, the large Joro spiders may concern many homeowners.

**ARE YOU PREPARED?** Pest professionals living where one or more invasive pests thrive must be prepared to offer services for controlling such pests in and around their customers' buildings. Each pest species is different but most all originate from outside the building where exterior and perimeter services are the key to stopping inside sightings of these pests. A number of invasive species, particularly crazy and Argentine ants, can be very difficult to control and require a comprehensive strategy. For pests like the brown marmorated stink bug and lady beetles, the timing of treatments can be critical.

As with any pest situation, a survey of the conditions around a building that attract and support target pests should be completed. A plan to address conducive conditions should be presented to the customer with explanation of the benefits provided by eliminating or minimizing such conditions. For example, removing piles of items from the ground where ants will nest can reduce the numbers of ants found on the property. Replacing aphid-prone plants with those less prone to aphids in landscaping can be very helpful in limiting Argentine and crazy ants. Sealing off potential entry points and ensuring all vents have tight screens is especially important for long term relief from overwintering pests.

For ants, it is helpful to choose a water-based product that can be used to drench or treat ant colonies as they are uncovered as well as labeled for application to the foundation and into exterior cracks where ants may

enter. Treatments to the base of trees and shrubs may also be necessary if ants are foraging from or up into such plants. A product labeled to control ants directly on landscape plants can benefit some situations. It is also important to look for and treat discovered ant colonies all the way out to the perimeter of protected properties to limit the potential for target ant species moving up to and into the structure.

Follow label directions for applying perimeter treatments for ants. Avoid relying solely on a foundation application when dealing with ants. Also, look for active and suspected ant trails and apply spot or band treatments along edges and corners of buildings and other structural guidelines. Again, follow label directions are water-based products containing pyrethroids and other insecticides have restrictions on how and where applications can be made outside.

**TIMING OF TREATMENT.** For invasive and other overwintering pests, the ideal time to treat is just prior to the time these insects begin flying to buildings. The timing varies by area of the country and is tied to when temperatures begin to cool at night. Late August and September are good times in northern states while October and even November might be better further south. Check with local county extension entomologists for recommendations on timing.

Application of residual dust or aerosols into exterior cracks around windows, doors and soffits helps to kill insects that may evade surface treatments outside. For overwintering pests, perimeter treatments are focused above foundation level to sites around windows and doors, soffits, fascia boards and around any vents in the foundation and/or attic. Typically, these applications will be spot treatments or band treatments limited to a certain width around entry points. Choosing a formulation that sits on top of a variety of surfaces is preferred as these are more easily picked up by insects as they crawl to enter cracks.

Invasive pests can be difficult to control, especially in chronic or severe infestations. Understanding where the target species prefers to live or harbor and its habits goes a long way to successful control. Remember, a

perimeter treatment is not simply application to a building foundation but entails the direct application to ant nests, insect harborages and potential pest entry points. Choosing a control product labeled for a variety of application sites is helpful in being efficient when controlling any exterior pest situation, but be sure to use multiple formulation types and products when needed.

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(PCT Online May 2, 2022)  
<https://www.pctonline.com/article/invasive-pests-growing-pmp-problem/>

## **EPA LOOKS FOR FARMER FEEDBACK**

The future of pesticide labels is undergoing active construction at EPA, and farmers, pesticide applicators and other ag stakeholders may have an opportunity to influence that work.

In short, EPA is tackling a long overdue project to make pesticide labels that fully comply with the Endangered Species Act (ESA), in an effort to stem a raft of lawsuits that has bogged the agency down in federal courts, trying to defend its pesticide registrations. That means labels and registrations will include mitigations and restrictions designed to protect certain endangered species and critical habitats that the agency identifies as at risk from pesticide use.

Many ag stakeholders are nervous to see what these new, ESA-compliant pesticide labels might look like, especially after the debut of new Enlist herbicide labels in January took many off guard with dozens of banned counties. (See more on that here: <https://www.dtnpf.com/...>).

EPA recently rolled out a work plan, designed to explain just how the agency will go about making these new, ESA-compliant labels. You can read the whole thing here: <https://www.epa.gov/...>

But for a quicker read, here are the top three things to know -- how farmers get a say, what pesticides are the first to be affected and how you can stay tuned to the process.

### **FARMERS AND OTHER AG STAKEHOLDERS GET A SAY**

EPA is especially interested in farmer and other pesticide users' feedback on what "ESA-compliant" labels look like, said Jan Matuszko, EPA's acting director of the Environmental Fate and Effects Division (EFED).

"Your input is the key to our ability to identify practical yet effective mitigations that folks on the ground can actually implement," Matuszko told listeners on a May 16 webinar, designed to explain the EPA's ESA work plan and its impact on growers.

Already, EPA has received lots of feedback that county-level bans on entire pesticides, such as were issued with the Enlist herbicides, are deeply unpopular and viewed as impractical and overly harsh by the farming community. Most of the initially banned counties were eventually put back on the Enlist labels after new data was presented to the agency. But the experience has left some farmers feeling vulnerable to losing pesticide access.

To avoid future label requirements like that, EPA is exploring ways for farmers to "offset" any harm to endangered species by their pesticide use. That could mean building or maintaining additional habitat for listed species, Matuszko said.

That's a big change from how EPA pesticide use requirements have worked in the past, and the agency is still figuring out if it is legal and how it would be implemented, added Jake Li, deputy assistant administrator for EPA's Office of Pesticide Programs. But for now, the agency is interested in pilot projects

with ag chem companies and farmers to determine whether or not this is a feasible ESA mitigation option, he said.

"What we're hoping through a pilot project ... is to demonstrate how all of that plays out in real life and we are also hoping in [the] not-too-distant future to actually put some of this down on paper so that you all can see what that process looks like [and] what are the standards are," he explained.

Other pilot projects are getting underway, as well, Matuszko said. They will allow EPA to see how certain current farm practices, such as buffer strips or cover crops, help mitigate pesticide run-off and risks to nearby endangered species. (Some of these practices are already listed as runoff prevention requirements on the new Enlist herbicide labels. See page 4 of the label here: [https://www.cdms.net/...](https://www.cdms.net/)).

The agency hopes to have a website listing those pilot projects and giving the ag community information on how to participate soon. "Stay tuned," Matuszko said.

#### **WHICH PESTICIDES WILL BE AFFECTED FIRST?**

EPA is struggling with its workload, officials admitted.

"We have an enormous backlog of past, current and future regulatory decisions that require ESA compliance and not enough resources or processes to meet the requirements all at once," Li explained. "So that is why under the work plan we describe for the first time what we can do with our resources and just as importantly, what we're not going to get around to doing immediately."

First up?

"Our highest priority is to meet litigation-related commitments," Matuszko explained. That means the EPA will first work on meeting "court-committed" deadlines for ESA-compliant labels for 18 pesticides, listed on page 68 of its work plan.

They include common ag pesticides such as atrazine, glyphosate, and neonicotinoids. Expect to see labels with new ESA requirements for these pesticides first.

EPA's next highest priority for ESA-compliant labels are new active ingredients. As of January 2022, no active ingredient will be registered by the agency without going through a full ESA evaluation. For more details on what that process looks like, see this DTN story: <https://www.dtnpf.com/...>

Finally, as EPA cycles every pesticide through its routine, 15-year registration review, it will begin the task of evaluating each one for effects on endangered species, Matuszko said. That means, ultimately, all pesticides will go through this.

#### **HOW FARMERS CAN GET THEIR FEEDBACK TO EPA**

EPA has been hosting webinars and listening sessions on its pesticide work for the Endangered Species Act. The webinars have fielded more than 200 listeners each so far, many of them from the ag community, who were free to comment and ask questions. See one from January here: <https://www.epa.gov/...> and watch for the posting of the May 16 one here: <https://www.epa.gov/...>

Farmers can also get feedback to EPA on its pesticide work via their state regulators, found here in the Association of American Pesticide Control Officials: <https://aapco.org/...>

EPA also publishes its various pesticide registration decisions -- including ESA actions -- in the Federal Register and accepts public comment on them, said Elissa Reaves, director of EPA's Pesticide Re-Evaluation Division. Farmers can keep up to date with these publications by subscribing to the agency's Office of Pesticide Programs' news alerts here: <https://www.epa.gov/...>

Finally, the USDA's Office of Pest Management Policy accepts feedback here: <https://www.usda.gov/...>, and the Farm, Ranch, and Rural Communities Federal

Advisory Committee holds regular meetings that welcome public participation on many issues, including EPA's pesticide work. See more here: <https://www.epa.gov/...>

(Progressive Farmer, May 18, 2022)  
<https://www.dtnpf.com/agriculture/web/ag/crops/article/2022/05/18/use-pesticides-epa-wants-input-label>

## DDT STILL HARMING BIRDS OF PREY, 50 YEARS AFTER ITS BAN

Fifty years after the banning of DDT, the notorious insecticide is still harming iconic birds of prey along the California coastline. According to research published in [Environmental Science and Technology](#), California condors and marine mammals along California's coast are contaminated with several dozen different halogenated organic compounds (hazardous, often-chlorinated chemicals) related to DDT, chlordane, and other now-banned legacy chemicals. The findings highlight the incredible importance of addressing these original "forever chemicals," and making certain that we do not continue to repeat the mistakes of the past with new and different, yet equally dangerous, chemistries.

Between 1947 and 1971, the Montrose Chemical Corporation of California, the largest historical producer of DDT, [released over 1,700 tons of DDT into the LA sewer system](#), which eventually made its way into the Pacific Ocean. During this time, several other companies discharged PCBs, leading to further chemical contamination of land and sediment. As recent as April 2021, [scientists discovered 25,000 barrels likely containing DDT](#) near Catalina Island along the southern California coast.

These releases have resulted in serious environmental and health problems throughout the coastal food chain. Yet, as the present study shows, scientists are only beginning to understand the far-reaching effects.

DDT and similar halogenated organic compounds present significant risks to bird populations. Throughout the 1960s, populations of birds of prey declined precipitously throughout the United States, similar to [the serious pollinator decline that is currently being experienced with the continued use of neonicotinoid insecticides](#). DDT biomagnifies up the food chain; the chemical does not break down, and as each animal progressively up the food chain consumes contaminated prey, the amount of the chemical accumulates, increasing the toxicity to predators at the top. Birds that consume high amounts of fish and other marine organisms contaminated with DDT are more likely to experience eggshell thinning. Thin eggs crack and become nonviable in the nest, which resulted in a widespread failure to procreate among birds of prey during the middle of the 20<sup>th</sup> century.

By 1987, only 27 California condors remained in existence. It has taken 40 years of captive breeding to grow the population to its current level of 537, yet as the present study highlights, the same threats still remain. "The abundance is so high in Southern California," said Eunha Hoh, PhD, study coauthor and researcher at San Diego State's School of Public Health to the [LA Times](#). "We can't just move on ... our ocean is so much more polluted with DDT."

Scientists assess the continuing threat of DDT (and DDT-related compound) contamination by comparing blood plasma samples from California condors and coastal marine life located at different locations in California. Using two-dimensional gas chromatography coupled to time-of-flight mass spectrometry, levels of halogenated organic compounds were determined for both inland and coastal California condors, as well as marine mammals (various dolphin species, seals, and California sea lions) from both Baja California, Mexico, and southern California.

In summary, researchers identified 415 unique halogenated organic compounds in tested samples. Nine classes of compounds found, likely related to the past chemical dumping, were unknown to scientists. Coastal condors contained four times greater levels of halogenated compounds than inland condors, and

marine mammals along the southern California coast contained levels three times higher than those located in Baja California. For DDT alone, coastal California condors had concentrations in their blood seven times higher than their inland neighbors.

“Our ongoing work has demonstrated that the more years a female condor spends on the coast, and thus likely feeding on marine mammals, the lower the probability her egg will hatch,” said Myra Finkelstein, PhD, an environmental toxicologist at UC Santa Cruz to [LA Times](#).

[According to previous reports](#), thinning eggshells have been seen in coastal California Condors since 2006. These coastal populations have been observed feeding on the carcasses of various marine life, including highly contaminated seals and sea lions. Condors along Big Sur are experiencing hatching success as low as 20-40%, while those farther inland near Tejon are seeing rates of 70-80%. Perhaps the silver lining of the present research is the relatively lower levels of contamination found in Baja California, indicating that location as a possible site for coastal reintroduction.

(Beyond Pesticides May 31, 2022)  
<https://beyondpesticides.org/dailynewsblog/2022/05/dt-still-harming-birds-of-prey-50-years-after-its-ban/>

Find us on Twitter at @OkstatePestEd

## 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: June 9, 2022**

Title: Oklahoma Pecan Growers Association Annual Conference

Location Ardmore Convention Center Ardmore, OK

Contact: Becky Carroll (405) 744-6139

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

### **Date: September 28, 2022**

Title: ENSYSTEX 2022 CEU Workshop

Location: Hilton Garden Inn· Oklahoma City OK

Contact: Don Stetler (281) 217-2965

<https://ceuworkshop.com/>

CEU's:	Category(s):
4	7A
2	7B
1	8

## 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>

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

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](mailto:kevin.shelton@okstate.edu) or

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