

PESTICIDE REPORTS

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



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DECEMBER TEST HELP WORKSHOPS

The OSU Pesticide Safety Education Program (PSEP) will provide the last 2019 test review sessions in December for anyone needing help on getting certified. The dates are December 3rd in Tulsa and December 12th for Oklahoma City. OSU PSEP will focus on reviewing information for the core/service technician exams but will answer category questions that applicators might have during the workshop. **The review session will be from 8:30 a.m. to 3:30 p.m. Walk-ins are welcome.**

The Tulsa program will be held at the Tulsa County Extension Office at 4116 E. 15th in Tulsa. The Oklahoma City program will be held at the Oklahoma County Extension Office at 2500 NE 63rd St. in Oklahoma City. Registration will start at 8:15 a.m.

Cost of registration is \$50 and includes a copy of Applying Pesticides Correctly for each registration. Pre-registration is encouraged walk-ins will be accommodated as long as space is available!

There will be no testing available on the day of the workshops!! With the change in ODAFF testing now being done at PSI testing centers testing will not be available after the

workshop. OSU PSEP has extended the review time on the workshop and will cover the new testing procedures and how to take pesticide certification exams at PSI testing centers.

<http://pested.okstate.edu/html/new-odaff-testing-procedure>

Register online at the Pesticide Safety Education Program (PSEP) website at

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

Registration forms may also be downloaded from the website.

Test help dates for 2020 will be scheduled soon. Once scheduled they will be listed on the PSEP webpage.

(OSU PSEP)

CALIFORNIA TO BAN CHLORPYRIFOS USE STARTING IN 2021

The California Environmental Protection Agency announced on Wednesday that virtually all use of the pesticide chlorpyrifos in California will end next year following an agreement between the Department of Pesticide Regulation (DPR) and pesticide manufacturers to withdraw their products.

“For years, environmental justice advocates have fought to get the harmful pesticide chlorpyrifos out of our communities,” said Governor Gavin Newsom. “Thanks to their tenacity and the work of countless others, this will now occur faster than originally envisioned. This is a big win for children, workers and public health in California.”

“The swift end to the sale of chlorpyrifos protects vulnerable communities by taking a harmful pesticide off the market,” said California Secretary for Environmental Protection Jared Blumenfeld. “This agreement avoids a protracted legal process while providing a clear timeline for California farmers as we look toward developing alternative pest management practices.”

Earlier this year, DPR announced it was acting to ban use of chlorpyrifos by canceling the pesticide’s product registrations. The decision follows mounting evidence that chlorpyrifos is associated with serious health effects in children and other sensitive populations at lower levels of exposure than previously understood, including impaired brain and neurological development.

At the same time, DPR and the California Department of Food and Agriculture (CDFA) have established a cross-sector working group to identify, evaluate and recommend safer, more sustainable pest management alternatives to chlorpyrifos. It will hold its first meeting this month and will hold three public workshops beginning in January.

The agreement with Dow AgroSciences and other companies means that use of chlorpyrifos will end sooner than anticipated had the companies pursued administrative hearings and potential appeals process, which could have taken up to two years. Under the settlement, the companies agreed that:

All sales of chlorpyrifos products to growers in California will end on Feb. 6, 2020.

Growers will no longer be allowed to possess or use chlorpyrifos products in California after Dec. 31, 2020.

Until then, all uses must comply with existing restrictions, including a ban on aerial spraying, quarter-mile buffer zones and limiting use to crop-pest combinations that lack alternatives. DPR will support aggressive enforcement of these restrictions.

To ensure consistency for growers and for enforcement purposes, DPR is applying the terms and deadlines in the settlements to seven other companies that are not part of the settlement agreement but are subject to DPR’s cancellation orders.

A few products that apply chlorpyrifos in granular form, representing less than 1 percent of agricultural

use of chlorpyrifos, will be allowed to remain on the market. These products are not associated with detrimental health effects. DPR will continue to monitor for any exposures associated with these products.

The development of safe, more sustainable alternatives to chlorpyrifos is being supported through the current state budget, which appropriates more than \$5 million in grant funding for the purpose.

DPR will award more than \$2.1 million in grants to fund projects that identify, develop, and implement safer, practical, and sustainable pest management alternatives to chlorpyrifos.

CDFA will award approximately \$2 million in grants to expand outreach about innovative, biologically integrated farming systems that reduce chemical insecticide inputs. Crops that have used chlorpyrifos will be a priority.

CFDA will also fund approximately \$1.5 million in research to develop alternatives to chlorpyrifos that provide safer, more sustainable pest management solutions.

Quick facts:

Chlorpyrifos is used to control pests on a variety of crops, including alfalfa, almonds, citrus, cotton, grapes and walnuts. It has declined in use over the past decade as California growers have shifted to safer alternatives.

Use of the pesticide dropped more than 50 percent from two million pounds in 2005 to just over 900,000 pounds in 2017.

In 2015, DPR designated chlorpyrifos as a “restricted material” that requires a permit from the county agricultural commissioner for its application. In addition, application of chlorpyrifos must be recommended by a licensed pest control advisor and supervised by a licensed certified applicator.

Following DPR’s designation of chlorpyrifos as a toxic air contaminant in 2018, DPR recommended

that county agricultural commissioners apply additional permit restrictions, including a ban on aerial spraying, quarter-mile buffer zones and limiting use to crop-pest combinations that lack alternatives.

(CropLife, October 10, 2019)

<https://www.croplife.com/crop-inputs/insecticides/california-to-ban-chlorpyrifos-use-starting-in-2021/>

BAYER/MONSANTO AGREES TO US PLEA DEAL OVER ILLEGAL PARATHION-METHYL USE AND STORAGE

Bayer legacy company Monsanto last week pleaded guilty to using and storing the banned organophosphate insecticide, parathion-methyl, on crops at a research farm on the Hawaiian island of Maui. The company has agreed to pay \$10.2 million in restitution, including \$6 million in criminal penalties, a \$200,000 fine and \$4 million in community service payments. In return, the government agreed to dismiss the felony charges in two years if Monsanto abides by the plea deal and successfully completes a two-year period of compliance.

“The illegal conduct in this case posed a threat to the environment, surrounding communities and Monsanto workers,” said US attorney Nick Hanna. “Federal laws and regulations impose a clear duty on every user of regulated and dangerous chemicals to ensure the products are safely stored, transported and used.”

Monsanto admitted to spraying parathion-methyl on maize seed and research crops in 2014, even though officials knew the pesticide had been banned. Concern about the highly toxic pesticide prompted the EPA to strike a deal in 2010 with registrants to voluntarily cancel registrations, including Monsanto’s PennCap-M product. The cancellation notice called for all existing stocks to be disposed of or used by the end of 2013.

Monsanto admitted in court documents that it used PennCap-M in 2014 and also told employees to re-enter sprayed fields seven days later, ignoring a requirement that the workers should have been blocked from entering for 31 days.

As part of the plea deal, Monsanto admitted that it knowingly used, transported and stored PennCap-M in violation of federal law. The company acknowledged that it stored more than 270 lbs. (122.5 kg) of the banned pesticide at several of its facilities in Maui.

Bayer apologized for Monsanto's illegal conduct. "The health and safety of our community, employees and environment have always been our number one priority," said Darren Wallis, Bayer North America's vice-president of communications. "As stewards of the land, it is our responsibility to use agriculture products safely and to manage our waste correctly. We take this very seriously and accept full responsibility for our actions." (Pesticide & Chemical Policy/AGROW, November 26, 2019) <https://agrow.agribusinessintelligence.informa.com/AG032051/BayerMonsanto-agrees-to-US-plea-deal-over-illegal-parathionmethyl-use-and-storage>

HERBICIDE RULE REMINDERS

Get ready to go back to chemistry class.

The federal label requires special training if you intend to use Engenia, XtendiMax, FeXapan or Tavium dicamba formulations in 2020. And, for the first time, applicators using paraquat must complete training specific to that herbicide.

For dicamba, it doesn't matter if you've taken the class before -- it is an annual obligation if you intend to use the formulations approved for use in the Xtend Crop System.

Jean Payne, Illinois Fertilizer and Chemical Association president, said there were cases where applicators were asked to produce evidence a class

was completed in 2019 -- only to find they'd taken it the year prior.

"We can't stress this enough -- the class must be taken every year and everyone who intends to apply any of these four dicamba products must take the class," said Payne. It's also a federal requirement that only certified applicators apply and handle these dicamba products. Employees or family members working under the supervision of a certified applicator -- whether retail or private -- is no longer sufficient.

Both classroom and online classes may be available for certification, but availability can vary by state. To find where to obtain dicamba training or the oversight agency in your state, go to: <http://npic.orst.edu/...>

In attempts to reduce crop and landscape damage from off-target movement of dicamba, several states have also announced a narrowed application window for spraying these four dicamba formulations. Recently, Illinois, Indiana and Minnesota set a June 20 cutoff date for 2020, and other states could make similar moves.

In announcing a calendar restriction, Minnesota Agriculture Commissioner Thom Petersen noted the importance of dicamba as a tool for combating herbicide-resistant weeds, but also stressed the importance of protecting neighboring homes, farms and gardens.

"We have seen continued improvement of the use of these products because of the June 20 cutoff date, and that's why we are moving forward with this again in 2020," Petersen said in a news release. Find the entire statement here: <https://www.mda.state.mn.us/...>

These state restrictions stack on top of a lengthy list of federal application requirements for the dicamba products aimed at reducing off-target movement. Find federal dicamba details here: <https://www.epa.gov/...>

PLAN TO USE PARAQUAT IN 2020?

It is now an Environmental Protection Agency (EPA) regulation that, in addition to certified applicator status, you must also complete a special paraquat safety class.

"Use" includes pre-application activities of mixing and loading the pesticide, applying the pesticide, and other pesticide-related activities. It also includes transporting or storing opened pesticide containers, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers and other paraquat-containing materials.

The EPA is requiring additional safety steps due to deaths caused by accidental ingestion of paraquat and injuries caused by the pesticide getting onto the skin or into worker eyes. According to EPA documents, one of the main purposes of the paraquat training is to reinforce that paraquat must not be transferred to or stored in improper containers.

The paraquat training must be retaken every three years and is available online. This training was developed by paraquat manufacturers as part of EPA's 2016 risk mitigation requirements. The EPA-approved online module is available here:

<https://campus.extension.org/...>

For more details on the decision to require special paraquat dichloride training go to:

<https://www.epa.gov/...>

(Progressive Farmer, November 29, 2019)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/11/29/time-go-chemistry-class>

MEXICAN ENVIRONMENT MINISTRY REJECTS GLYPHOSATE IMPORTS

The Mexican Minister of the Environment (Semarnat), Víctor Toledo, has this week rejected the import of 1,000 tons of glyphosate herbicide, citing the precautionary principle against the active ingredient. A Semarnat communique adds that: authorizations to import glyphosate would be denied as long as there is no conclusive scientific information that ensures that the use of this herbicide does not affect or violate any fundamental right enshrined in our legislation, and that it does not put the environment at risk.

The Semarnat's directorate general for integral management of materials and hazardous activities (DGGIMAR) applied the precautionary principle to deny an individual the authorization "given scientific evidence" that cites the herbicide as "potentially toxic to human health and the environment". The Semarnat further justifies the move, saying: "respect and protection of the right to a healthy environment and to health constitute an obligation of the Mexican State to establish certain limitations on the imports it approves".

The Semarnat widens the resolution. It "privileges environmental law over property or industry rights, since it affects biodiversity", because "it has been shown that pesticides, and especially insecticides, have many lethal and sub-lethal effects on pollinators", such that a series of actions with a precautionary approach is suggested, to reduce that risk. They include the adoption of specific application practices, the promotion of IPM, farmer education, risk assessments and implementation of policies aimed at reducing use, it adds.

Call to switch from agchems

The Minister called for the promotion of organic adoption in agriculture to counter "the harmful [social, cultural and environmental] effects of modern ag". This implies the immediate prohibition of 111 cataloged pesticides as highly dangerous, the

Semarnat notes. It adds that the ruling is backed by a national human rights commission recommendation allowing the Semarnat to restrict the use of "highly dangerous" pesticides, "[a standard that] is met in the case of glyphosate."

The Ministry links the increasing global use of glyphosate with genetically modified crops, the use of which have been suspended in Mexico, and "if [glyphosate's] is related to that, it should also be restricted."

(Pesticide & Chemical Policy/AGROW, November 27, 2019)

<https://agrow.agribusinessintelligence.informa.com/AG032062/Mexican-Env-Ministry-rejects-glyphosate-imports>

MAKING PROACTIVE BED BUG CONTROL PROGRAMS WORK

More frequent inspections and treatments, even when bed bugs aren't present, can prevent full-blown infestations and help clients manage costs.

One of the biggest trends in bed bug control is the growth of proactive service. Pest management professionals across the country have found it delivers long-term, consistent revenue for what typically has been a one-and-done service.

"We came up with a recurring revenue model for bed bugs," says Ravi Sachdeva, CEO of American Pest Management in Manhattan, Kansas. The company's ProActive bed bug service was launched in 2011 and is geared to multi-family and senior-living facilities.

A proactive approach helps pest management companies operate more efficiently. Instead of being swamped with jobs or waiting for them, proactive bed bug service and the revenue it generates are predictable, which means PMPs can plan for growth more effectively.

"In a lot of cases, I think it helps you run your business a lot better; helps you manage your people, manage their time, manage their schedule," says Chelle Hartzler, technical services manager at Rollins, which launched the Orkin's ProAct service for the hospitality industry in July 2017.

Clients see the benefit, too. For years, hospitality and property managers have been jerked from one bed bug drama to the next. They've spent tens of thousands of dollars, only to have bed bugs reintroduced and get out of control, which sets them right back at square one.

Proactive bed bug control changes this dynamic. Clients feel like they have more control; they don't have to take rooms out service and can save money as well. Neither are they riding the bed bug cost rollercoaster, spending zero dollars one month to control the pests and thousands of dollars the next. "It equalizes their costs" and is a predictable line item in their budget, says Hartzler.

Proactive bed bug programs also better protect the brand. "The threshold for brand security is very small," says Stephen Kells, a bed bug expert at the University of Minnesota. It only takes one bed bug in one of ten thousand rooms to create havoc for a hospitality company on social media. A proactive treatment may help prevent that one incident from occurring, he says.

Proactive vs prevention. Proactive services don't promise to prevent bed bugs, which are savvy hitchhikers and easily can be carried in on clothing, luggage, backpacks and other personal belongings. Their goal is to catch problems early and reduce the likelihood that introduced bed bugs become an infestation that spreads to other rooms or apartments.

Proactive services generally fall into two camps. The first involves frequent inspections – two to four a year depending on a property's infestation history – and treatment of rooms or apartments as needed.

Using this approach, Chris Christensen, owner of Truly Nolen franchises in greater Lexington, Ky., got a 1,600-unit public housing complex with 30 percent of units infested down to 4 percent over a nine-year period. For large properties like office buildings and movie theaters, PMPs use canines to perform frequent sweeps for bed bugs.

The second approach to proactive service involves frequent inspections plus treatment, even if no bed bugs are detected during inspection.

As part of the ProActive service at American Pest Management, technicians generally inspect and treat units twice yearly, once any infestations in the building have been eliminated. On the rare occasion when technicians do find live bed bugs during a subsequent inspection, they're usually dealing with one or two, not hundreds, says Sachdeva. Orkin's ProAct service likewise inspects and treats rooms on a rotating schedule.

A key part of proactive service is using a control product that has long-lasting residual efficacy to knock down any bed bugs that get introduced between inspections. (PCT Online, November 22, 2019) <https://www.pctonline.com/article/bed-bugs-what-we-learned/>

AMERICAN PEST CONTROL TECHNICIAN MAKES RARE DRYWOOD TERMITE SIGHTING IN ATHENS, GEORGIA

Termites are a common threat to homes in the South, with Eastern Subterranean termites being the most common in Northeast Georgia.

American Pest Control has been servicing homes in the area since 1971 and their technicians are highly trained in insect identification. When technician Andy Deutsch spotted a drywood termite in the Five Points area of Athens, Ga., he knew he had encountered something different. With the assistance of termite manager and long-time employee, David Butler, and Dr. Brian Forschler of the UGA Entomology department, the insect was positively identified as a West Indian drywood termite.

After discovering the infestation, Andy noted "I was absolutely shocked to find the species in this part of Georgia, especially being a structural infestation and not just in a piece of furniture."

According to the National Pest Management Association, drywood termites can chew through support beams, floors and walls, causing expensive home repairs. Termite species cause a collective \$5 billion in property damage each year in the United States. In Northeast Georgia, that damage is usually caused by Eastern Subterranean Termites, not drywood. This species is usually seen along coasts, and can be transported in furniture and other timbers. "Somebody brought in a piece of furniture or a piece of artwork, had it sitting in the house, and had a swarm from that structure. That's the only way it could have gotten started, said Dr. Brian Forschler, Principal Investigator for the University of Georgia Household and Structural Entomology Research Program. (PCT Online, November 15, 2019) <https://www.pctonline.com/article/american-pest-drywood-termite-discovery-deutsch/>

CEU Meetings

Date: January 7-8, 2020

Title: 2020 Arkansas/Oklahoma Turfgrass Short Course

Location: Arkansas Cooperative Extension office, Education Wing – Auditorium, 2301 S. University Ave Little Rock AR

Contact: Dr. Matthew Bertucci (479) 575-3979
bertucci@uark.edu

<https://horticulture.uark.edu/research-extension/turf/turf-education/shortcourse.php>

CEU's:	Category(s):
5	3A
5	10

Date: January 20-21, 2020

Title: 2020 OAAA Conference

Location: Embassy Suites Norman OK

Contact: Sandy Wells (405) 431-0381

sandy@okaaa.org

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

CEU's:	Category(s):
6	A
8	1A
3	3A
3	5
3	6
3	8
9	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/>

Univar USA

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

AG CEU Online

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

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**

NEW ODAFF Test Information

New computerized testing began October 1, 2019. 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 <http://pested.okstate.edu/html/new-odaff-testing-procedure> or the PSI exam information website www.psiexams.com/.

Reservation must be made in advance at www.psiexams.com/ or call (800) 733-9267

PSI locations.

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

Oklahoma City II NW 23rd St and Villa Avenue, Suite 60, Shepherd Mall Office Complex, Oklahoma City, OK 73107

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

<p style="text-align: center;">Pesticide Safety Education Program</p>
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