

PESTICIDE REPORTS

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2019 OKLAHOMA FUMIGATION WORKSHOP

The 2019 Oklahoma Fumigation Workshop will be held September 18, 2019 in Stillwater at the Oklahoma State University Stored Products Research and Education Center.

The workshop will have speakers from Oklahoma State University, Kansas State University, and USDA ARS. The workshop will start with registration at 8:00 a.m. and run through 3:00 p.m. with lunch provided with registration.

Registration is \$75 until September 6th and is \$100 after September 6th or on-site. Space is limited to 40 people for this conference. Online registration https://secure.touchnet.com/C20271_ustores/web/store_cat.jsp?STOREID=15&CATID=402

For more information, contact Edmond Bonjour at 405-744-8134. (OSU PSEP, September 1, 2019)

EPA TAKES ACTION TO PROVIDE ACCURATE RISK INFORMATION TO CONSUMERS, STOP FALSE LABELING ON PRODUCTS

EPA is [issuing guidance to registrants](#) of glyphosate to ensure clarity on labeling of the chemical on their products. EPA will no longer approve product labels claiming glyphosate is known to cause cancer – a false claim that does not meet the labeling requirements of the *Federal Insecticide, Fungicide, and Rodenticide Act* (FIFRA). The State of California’s much criticized Proposition 65 has led to misleading labeling requirements for products, like glyphosate, because it misinforms the public about the risks they are facing. This action will ensure consumers have correct information, and is based on EPA’s [comprehensive evaluation of glyphosate](#).

"It is irresponsible to require labels on products that are inaccurate when EPA knows the product does not pose a cancer risk. We will not allow California’s flawed program to dictate federal policy," said EPA Administrator Andrew Wheeler. "It is critical that federal regulatory agencies like EPA relay to consumers accurate, scientific based information about risks that pesticides may pose to them. EPA’s notification to glyphosate registrants is an important step to ensuring the information shared with the public on a federal pesticide label is correct and not misleading."

In April, EPA took the next step in the review process for glyphosate. EPA found – as it has before – that glyphosate is not a carcinogen, and there are no risks to public health when glyphosate is used in accordance with its current label. These scientific findings are consistent with the conclusions of science reviews by many other countries and other federal agencies.

On Feb. 26, 2018, the United States District Court for the Eastern District of California [issued a preliminary injunction](#) stopping California from enforcing the state warning requirements involving glyphosate’s carcinogenicity, in part on the basis that the required warning statement is false or misleading. The preliminary injunction has not been appealed and remains in place.

California’s listing of glyphosate as a substance under Proposition 65 is based on the International Agency on the Research for Cancer (IARC) classifying it as “probably carcinogenic to humans.” EPA’s independent evaluation of available scientific data included a more extensive and relevant dataset than IARC considered during its evaluation of glyphosate, from which the agency concluded that glyphosate is “not likely to be carcinogenic to humans.” EPA’s cancer classification is consistent with many other international expert panels and regulatory authorities.

Registrants with glyphosate products currently bearing Proposition 65 warning language should submit draft amended labeling that removes this language within 90 days of the date of [the letter](#).

For more information about EPA’s comprehensive evaluation of glyphosate, visit <https://www.regulations.gov/document?D=EPA-HQ-OPP-2009-0361-0073>.

(EPA August 8, 2019)

<https://www.epa.gov/newsreleases/epa-takes-action-provide-accurate-risk-information-consumers-stop-false-labeling>

BAYER PROPOSES TO SETTLE ROUNDUP SUITS FOR \$8 BILLION

Bayer AG is proposing to pay as much as \$8 billion to settle more than 18,000 U.S. lawsuits alleging its Roundup herbicide causes cancer, according to people familiar with the negotiations.

An agreement, which could take months to work out, would ease investor pressure over massive litigation exposure the German drug and chemical giant took on with its purchase of the weed killer's maker, Monsanto Co. The fallout has erased more than \$30 billion in market value, prompted an unprecedented shareholder vote of no confidence in the company's management and fueled speculation about a breakup.

While Bayer floated paying \$6 billion to \$8 billion to resolve current and future cases, plaintiffs' lawyers want more than \$10 billion to drop their claims, the people said, asking not to be identified because the talks are private. How to compensate consumers who have yet to be diagnosed with illness is a sticking point, and there's no guarantee the two sides will come to terms anytime soon, they added.

Bayer traded 3.5% higher in Frankfurt after surging more than 11%, the most in a decade. They've still fallen about one-third in the 14 months since the Monsanto deal was completed. The bonds also rose.

"\$8 billion would be lower than most analysts are forecasting and many investors fearing," Markus Mayer, an analyst at Baader Helvea, wrote by email.

Bayer spokesman Tino Andresen declined to comment on any settlement talks.

Bayer's lawyers and attorneys for former Roundup users are in ongoing talks, based in New York City, aimed at hammering out an accord to resolve all current cases and any future cancer claims filed over the world's top-selling weed killer, people familiar with the discussions said.

Cases Postponed

The negotiations have advanced to the point that Bayer and plaintiffs' lawyers asked two judges in St. Louis to push back cases set for trial starting soon, the people said. Bayer Chief Executive Officer Werner Baumann said at the end of July that he'd consider a "financially reasonable" settlement -- after the company's shares slumped amid a surge of new cases.

If a deal comes together, it would allay a shareholder revolt in the wake of three trial losses in a row in California that resulted in average payouts of almost \$50 million per plaintiff after judges reduced jury verdicts that added up to more than \$2.4 billion. Thousands of new cases followed each defeat.

Major investors -- such as U.S.-based billionaire Paul Singer's Elliott Management Corp. -- have been urging Bayer to drop its defend-at-all-cost approach to the suits and consider a settlement. Elliott disclosed in June that it has a \$1.3 billion stake in Bayer.

Bayer's decision to seek postponement of the St. Louis trials is a clear signal settlement talks are progressing, said Carl Tobias, a University of Richmond law professor who teaches about mass personal injury litigation. U.S. judges traditionally put cases on hold to give the parties a chance to resolve them, he said.

'Great Deal'

"If they can get out of this for under \$10 billion after losing three in a row -- with big awards assessed -- it would be a great deal for Bayer," Tobias said. "They lose a couple of more big ones in St. Louis and settlement demand could balloon to \$20 billion."

Some litigation analysts have predicted Bayer will ultimately settle the cases for as little as \$2.5 billion and as much as \$20 billion. Experts have said that awards of tens of millions of dollars per plaintiff were a strong and bad sign for Bayer's

prospects in future trials, weakening its hand in settlement negotiations.

The settlement talks have been fostered by Kenneth Feinberg, a mediator called in by U.S. District Judge Vince Chhabria in San Francisco, who's overseeing cases consolidated in federal court.

Feinberg previously administered compensation funds for victims of the Sept. 11 attacks and later was hired by Volkswagen AG to oversee compensation for car owners affected by the diesel emissions-cheating scandal. He's been working with attorneys for both Bayer and plaintiffs as they swap settlement proposals, the people said.

Mediator's Role

Feinberg, appointed in May, had to work quickly as Bayer was slated to face the next Roundup trial starting Aug. 19 in state court in St. Louis, the former headquarters of Monsanto, which started selling Roundup in the 1970s.

Juries in another St. Louis-area court -- known for favoring plaintiffs -- have come back with some supersized awards over the years, including a \$4.69 billion verdict in 2018 against Johnson & Johnson over claims its baby powder was tainted with asbestos.

Bayer insists that Roundup is safe. The U.S. Environmental Protection Agency on Thursday issued guidelines for products containing the herbicide's active ingredient, glyphosate, saying it will no longer approve labels claiming that it's known to cause cancer. California listed the substance as a carcinogen under its Proposition 65 toxic warnings law two years ago.

Court officials said this week that Roundup trials set for August and September will probably be postponed. They did not say whether the postponements were tied to settlement talks.

Bayer wants to avoid getting thumped with another \$2 billion-plus verdict, like the one handed

down in May by a jury in Oakland, California, to a husband and wife who both blamed their cancers on exposure to Roundup, Tobias said. Last month, a judge slashed that verdict by more than 95 percent to \$86.7 million, saying it was beyond the limits allowed by legal precedent.

The Oakland award was the largest in the U.S. this year and the eighth-largest ever in a product-defect claim, according to data compiled by Bloomberg.

"They don't want to try these cases in St. Louis," Tobias said. "It could be worse than California."

What Bloomberg Intelligence Says

"We still have reservations about the underlying business. Crop Science still faces macroeconomic risks and Pharma is in need of further deals, which could be scuttled by the need to deliver and pay the settlement."

-Michael Shah, pharma analyst and Christopher Perrella, chemicals analyst

But coming up with a way to corral all future claims in a settlement that withstands court scrutiny may be difficult, said Jean Eggen, a Widener University law professor who teaches about toxic torts and environmental law.

The U.S. Supreme Court hasn't looked very favorably on other mass-tort settlements meant to resolve future claims over a product, she said.

"It's much cleaner if you just settle the current cases and then when more come in, you add to the original settlement," Eggen said. "It's a less problematic way to do this."

The consolidated case is In re: Roundup Products Liability Litigation, MDL 2741, U.S. District Court, Northern District of California (San Francisco).

(Southwest FarmPress, August 9, 2019)
<https://www.farmprogress.com/business/bayer-proposes-settle-roundup-suits-8-billion>

US EPA LOWERS SAFETY MARGINS FOR PYRETHROIDS

The US EPA has decided to lower a key metric used to determine safe exposure levels for pyrethroid insecticides. It has determined that new data show that specific protections for infants and children are no longer needed.

The move could make it easier for registrants to pursue new uses of the insecticides, but have already drawn the ire of environmentalists who contend that the EPA is ignoring its legal obligation to protect children and other sensitive populations from unsafe exposures.

At issue is a safety factor required under the Food Quality Protection Act (FQPA), the statute that lays out the EPA's framework for setting food safety tolerances for pesticides.

The FQPA requires that the EPA use an additional 10x margin of safety to protect children and only allows the Agency to reduce that safety factor if reliable data demonstrate that the resulting level of exposure is safe. In 2010, the EPA concluded that data raising concerns about how pyrethroids are absorbed and metabolized through the body supported a reduction and set a 3x safety factor for children.

Pyrethroids are a class of synthetic insecticides that are structurally based on pyrethrins, which are botanical insecticides extracted from chrysanthemum flowers. The EPA says that pyrethrins and pyrethroids are included in more than 3,500 registered products, used in household and agricultural products and for mosquito control.

The Agency says that its latest review of the available literature on pyrethroids -- along with new data generated by an industry-supported council -- show that the 3x factor should be reduced to 1x.

"The data indicate that there is no increased sensitivity, or in other words, there are no

pharmacokinetic differences between adults and children," according to the EPA.

The Agency said that it would use the reduced safety factor in its upcoming proposed interim registration review decisions for pyrethroids.

The Center for Biological Diversity contends that the EPA is on shaky ground and is ignoring ample evidence of health risks to children, including learning deficiencies and other neurological harms. The group argues that the evidence provided by the industry council on the metabolism rates of pyrethroids stands in contrast to other studies and should not be used to support a reduction in the FQPA safety factor.

(Pesticide & Chemical Policy/AGROW, August 5, 2019)

DICAMBA WEED CONTROL CONCERNS

Walking soybean and cotton fields is giving Larry Steckel a bad case of déjà vu this summer.

"With Xtend [dicamba-tolerant] technology, we've seen pretty pristine fields in 2016 and 2017," the University of Tennessee Extension weed scientist noted. "Then we started to see a little slippage last year and now, in 2019, we're seeing some weed escapes everywhere. It looks just like it did back when Roundup was starting to fail."

Many of the missed weeds are Palmer amaranth, the aggressive, multi-herbicide-resistant plant that drives weed control in many states now. Although they haven't been tested in a laboratory yet, some of the weed escapes show classic resistance symptoms, Steckel said.

In many of the fields he's visited this summer, it's clear that dicamba was applied in a timely fashion, when the Palmer pigweeds were 2 to 6 inches tall, he explained. "You can see the damage it did on the apical meristem at the time of application, but the plant has recovered and branched out from lower branches on the stem -- that's how it's getting around the herbicide," he said. "It certainly

could be resistance because that's one of the mechanisms of resistance -- sequestering a lot of the herbicide in one part of the plant and letting that part die off."

A different problem is arising with grassier weeds, Steckel added. There, potential antagonism -- the reduction of weed control when two or more herbicides are mixed together -- between dicamba and glyphosate in tank mixes is compromising control of weeds like junglerice, goosegrass and barnyardgrass.

"If they run straight dicamba or straight glyphosate, it will often work well," he said. "So we're recommending they split herbicides up for better grass control -- as well as reduced dicamba volatility potential."

Weed scientists in Illinois and Indiana echoed Steckel's potential dicamba-resistance observations, though on a lower level and with a different weed -- waterhemp.

"We have at least a half-dozen fields we're investigating for dicamba control problems with waterhemp," said Purdue University Extension weed scientist Bill Johnson, an observation that was echoed by University of Illinois Extension weed scientist Aaron Hager.

Dicamba manufacturers are also hearing of problems. A Bayer spokesperson said the company has received 880 inquiries on the performance of their XtendiMax herbicide as of Aug. 16 -- up 31% from last year when the company had fielded 670 such inquiries within the same timeframe. (BASF had not responded to inquiries at the time of publication).

Some of these inquiries are a result of application errors, such as using the wrong rate or spraying when weeds were too big, Bayer spokesperson Charla Lord noted.

The challenging season -- a wet, cold spring with delayed applications under suboptimal conditions - - may also be playing a role in some dicamba control failures this summer, added Johnson. But

the fields they are investigating show distinct and alarming features of resistance, Johnson said.

"What is concerning is that you have live plants directly next to completely dead plants -- that is a classic case of what Roundup resistance first looked like," he explained.

None of the weed scientists expressed any surprise at these developments. Dicamba-tolerant traits are now grown on more than 60 million acres of cotton and soybeans -- a rapid scale-up from 2 million acres first planted in 2016. Bayer estimates that dicamba applications were made on more than 30 million acres of soybeans and more than 9 million acres of cotton this summer.

"Before dicamba-tolerant technology was deployed, I said that I'd only give it three years before we start to see problems," said Hager. "It makes sense, because first, we've used dicamba already for 40 to 50 years in agriculture, and second, we've never used it to the extent that we're using it now."

Farmers, as always, have been on the front lines of this development.

"We are starting to see some misses with dicamba," said John Lindamood, who grows cotton, corn, soybeans and wheat in northwestern Tennessee. "It's not too many escapes, but it's taking more than one application."

Other farmers have started increasing their rates of dicamba in each application to try to knock back pigweed, said Steckel.

"Farmers are the first ones to pick up on this," he noted. "And they start upping the rates. They did it with Roundup and they're doing it now. But eventually they get to a point where they can't go any higher."

The antagonism between dicamba and glyphosate that is compromising grass control is particularly a problem for cotton farmers, Steckel added.

"Cotton guys' herbicide expenses have doubled or tripled this year," he noted.

(Progressive Farmer, August 30, 2019)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/08/30/possible-dicamba-resistance-cropping>

RESEARCHERS CONNECT TICK DATA WITH RISK OF LYME AND OTHER TICK-BORNE DISEASE IN THE WESTERN U.S.

According to figures compiled by the Laboratory of Medical Zoology (LMZ), a national tick-testing service at the University of Massachusetts Amherst, tick submissions from California increased by just under 250 percent from 2017 to 2018, the largest single increase from any state, and are on track to match that level this year, as well, predicts microbiologist and LMZ director Stephen Rich.

Even more surprising is that tick test orders from Californians now edge out tick test requests from traditionally endemic states with smaller populations such as Vermont, New Jersey, Pennsylvania and Connecticut, he adds.

The 11-year passive surveillance data reported by LMZ reveal that most of the Lyme disease bacteria in these western ticks was found in non-western, non-endemic species, Rich says. "Those tick bites and the Lyme disease were associated with travel to the eastern United States," he adds. "Our data show that only 2 percent, or 9 of 430 native ticks, had Lyme there while 25 percent, or 30 of 119 infected ticks originated in the East but were plucked off of people in the West. That means that the threat of Lyme in the West is not from their ticks, but from ours."

Revealing this unexpected trend is one of the many new, more detailed analyses of little-studied public health endpoints related to tick-borne illness

in the United States that are now possible since Rich and colleagues established the LMZ in 2006. For example, Rich and extension associate professor Guang Xu, among others, are now able to query the lab's considerable database for such analyses as tick prevalence by region and varieties of pathogens occurring by species.

In a paper published earlier this year in the journal *Vector-Borne and Zoonotic Diseases*, they addressed the question of how people testing positive for Lyme disease in California, Washington and Oregon got the illness, which is far more common in the Northeast, and what tick species bit them. Results are based on LMZ's analysis of 549 ticks from the genus *Ixodes* submitted to its national TickReport service from California, Oregon, and Washington from July 2006 through August 2017.

Not only the prevalence but the ecology of Lyme disease in the western U.S. differs significantly from that in the Northeast, Rich points out. The overall incidence of Lyme disease in the West is 0.2 cases per 100,000 persons per year compared to 30–80 in the Northeast. A number of tick surveillance studies have tried to connect tick data with the risk of disease in the West, but traditional tick-collecting methods are not able to link tick information and diseases they carry directly to the humans who were bitten, he adds.

Guang Xu, lead author of the LMZ study, says that among western ticks occurring there naturally, the highest incidence of Lyme-like bacteria is found in *Ixodes spinipalpis*, not *Ixodes pacificus*. "This is noteworthy because *Ixodes pacificus* has long been thought to be the important tick. This is less important to the average person, but it does emphasize that we still don't understand how Lyme works in the West," Rich says. "It seems that it is a much more complicated story than we surmised and much more complicated than in the East, where it's basically one tick and one bacterium."

Xu and colleagues, with co-authors at the Washington State Department of Health and California Department of Public Health, found that

430 endemic western ticks were from three Ixodes species: *I. pacificus*, *I. spinipalpis*, and *I. angustus* while *I. scapularis* was the most common species among the 119 non-endemic ticks. The researchers used real-time PCR and DNA sequencing to accurately identify each tick sample to the species level.

In the eastern and north-central United States, *I. scapularis* is the primary vector of several pathogens including *Borrelia burgdorferi* which causes Lyme disease, *Borrelia miyamotoi*, *Anaplasma phagocytophilum* and *Babesia microti*. In the West, the researchers note, "*I. spinipalpis* had the highest pathogen prevalence of the endemic species, indicating it may pose a larger public health threat than previously thought."

In addition to differences in hosts and tick vectors, the species and population of Lyme spirochetes is more diverse in California, the authors point out. In the Northeast, Lyme borreliosis are mostly maintained in white-footed mice and other small mammals by *I. scapularis* ticks. Although *I. pacificus* ticks and similar mice are common in California, they appear relatively unimportant in the transmission cycles of Lyme borreliosis. Some tick species, such as *I. spinipalpis* and *I. angustus* are considered "rare" human biters, however their encounter frequency and public health impact are yet to be determined, they add.

Rich and colleagues point out that seasonal activity, age distribution and site of attachment data from this study also yielded valuable public health information. "For instance, young children are at an increased risk of tick bites, likely around their lower extremities, especially during the month of June when seasonal activity peaks for both nymphal *I. pacificus* and *I. spinipalpis* ticks. Public health professionals and physicians are encouraged to use this information to limit tick bites and tick-borne pathogens." (PCT Online, August 16, 2019)

<https://www.pctonline.com/article/ucr-researchers-study-neurotoxin-mosquitoes/>

ENVIROS APPEAL EPA ACTION

EPA decided in July not to ban the insecticide chlorpyrifos, and now, environmental groups have petitioned the U.S. Court of Appeals for the Ninth Circuit in Seattle to review that decision.

In July, EPA said it will expedite what is an ongoing review of chlorpyrifos in response to public concerns raised. The agency has until 2022 to complete its review.

Groups filing the petition include the League of United Latin American Citizens; Pesticide Action Network North America; Natural Resources Defense Council; California Rural Legal Assistance Foundation; Farmworker Association of Florida; Farmworker Justice; Labor Council for Latin American Advancement; Learning Disabilities Association of America; National Hispanic Medical Association Pineros y Campesinos Unidos del Noroeste; and United Farm Workers.

"EPA has repeatedly found chlorpyrifos unsafe, especially to children, yet time and time again it refuses to protect kids," said Patti Goldman, the Earthjustice managing attorney leading the case. "But Earthjustice and our clients won't stand for this. The science and the law call for a chlorpyrifos ban. We are hopeful the courts will do the same for the sake of children and farmworkers."

The EPA had until July 18 to address objections to its 2007 decision rejecting a petition asking for a ban. The deadline was set as part of a court order issued on April 19, 2019, by the U.S. Court of Appeals for the Ninth Circuit in San Francisco.

Chlorpyrifos is the main ingredient in Corteva Agriscience's Lorsban insecticide, which targets soybean aphids, spider mites and corn rootworm.

The EPA has consistently maintained available science supports the human safety of chlorpyrifos, while environmental groups continue to say it is unsafe for humans.

An EPA spokesperson told DTN in July that the agency may at some point place new restrictions on chlorpyrifos.

The legal pursuit aimed at chlorpyrifos began in 2007 when the Pesticide Action Network North America and the Natural Resources Defense Council petitioned EPA to cancel the insecticide's registrations.

The EPA denied the petition and said at the time that farmers need chlorpyrifos, and the agency uses "sound science" when making decisions.

The agency's rejection of the 2007 petition was a surprising reversal from the stance of the EPA under the Obama administration, which had indicated as recently as fall 2016 that it was prepared to issue a full ban on the pesticide. (Progressive Farmer, August 7, 2019) <https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/08/07/agency-finds-back-court-chlorpyrifos-3>

ALCOHOL IS NYC'S NEWEST WEAPON IN ONGOING RODENT BATTLE

As part of New York City's ongoing rodent war, the city is trying a new approach: the use of a machine that attracts rats with bait and then triggers a trap door that drops them into a pool of alcohol-based liquid.

As reported in Phys.org, Anthony Giaquinto, president of Rat Trap Inc., told reporters "It knocks them out and they drown eventually," Rat Trap Inc., imports the devices from Italy.

The machine — called Ekomille — is battery operated and resembles a cabinet around two-feet high.

Rats climb a ladder to eat the bait. A sensor deploys a trip lever which plunges them into a tray that can hold 80 rat carcasses.

A total of 107 rodents met their end this way during a month-long trial around the grounds of the borough hall in Brooklyn, officials said.

On Thursday, Brooklyn borough president Eric Adams presented the device as "humane and environmentally friendly" during a press conference. Following the press conference the device was demoed outside of the Brooklyn Borough Hall. (PCT Online, September 6, 2019) <https://www.pctonline.com/article/nyc-rodent-battle-alcohol-product/>

US EPA REVIEWING PESTICIDES FOR HEMP USES

The US EPA is reviewing requests by several pesticide manufacturers to allow use of their products on hemp. It is a move that officials say reflects the widespread interest among US farmers to grow the potentially lucrative crop.

The agency has received ten applications for expanded use on hemp - commercial production of the crop was legalized by the 2018 Farm Bill. But there are no pesticides registered for use on hemp and the lack of products has proven a headache for some growers, a concern that the pesticide industry appears eager to remedy.

"Given the strong economic forecasts for hemp production in the United States, it comes as no surprise that we are beginning to see pesticide registrants intensify their interests in gaining crop protection approvals for use on hemp," says Alexandra Dapolito Dunn, assistant administrator of EPA's Office of Chemical Safety and Pollution Prevention.

The move comes in the wake of USDA figures that show that hemp production has reached 128,000

acres (51,000 ha) this year - up from 75,000 in 2018 - and predictions that it will increase dramatically next year once the USDA finalizes rules to regulate commercial production.

The ten applications under review - submitted by Agro Logistics System, Marrone Bio Innovations and Hawthorne Hydroponics LLC - are all for biological and microbial pesticides aimed at controlling insects, mites and fungi.

The EPA has deemed the ten products as low risk and "has previously determined the residues will be safe under any reasonably foreseen circumstances". The products thereby all have tolerance exemptions for residues on raw agricultural or food commodities under the Federal Food, Drug and Cosmetic Act.

"They are things that are effective at keeping pests off plants, repelling insects, but they are not what we call conventional pesticides which have a bit more toxicity to them," Ms. Dunn said in comments announcing the application review at a hemp event in Kentucky.

The agency sees "innovation in pesticide use" as critical to the hemp industry and is "committed to helping hemp growers obtain the tools needed to support and increase commercial production", she added.

The EPA will take public comments on the applications for 30 days, but said that public comment is not required because the use patterns for hemp are the same as the previously approved uses.

The Agency said that it is providing the opportunity for stakeholders to weigh in because of the "potential significant interest from the public in these initial applications" and in a bid to be "completely transparent".

EPA Administrator Andrew Wheeler says that the Agency is keen to approve crop protection products for hemp farmers to use in the 2020 growing season.

"We hope this transparent and public process will bring hemp farmers and researchers increased regulatory clarity in time for next growing season — something they have asked for since the passage of the 2018 Farm Bill and the legalization of commercial hemp," Mr. Wheeler adds.

Waiting for protection

While hemp farmers will no doubt welcome the EPA's move, experts at an agency stakeholder meeting in May cautioned that it will take several years before new products specifically developed for hemp are available.

Andrew Thostenson, a pesticide programme specialist with the US North Dakota State University's extension service, cautioned that when canola was introduced into the US in 1988, it took about 5-7 years to get new products approved for use.

"Perhaps we can do that a little faster with the hemp situation than we did with canola ... but before we get widespread adoption of pesticides for use on hemp, it is probably going to take 5-10 years to really get the information generated to be able to issue the pesticide labels," he said. "That is the reality."

The EPA must still determine the exposure pathways for hemp, what residue testing it would need and what kind of field trials it might require for pesticides intended for use on hemp.

A major potential issue is the wide array of uses for hemp, including food and cannabidiol, and that hemp is a bioaccumulator, meaning that it draws heavy metals and pesticides from the soil.

Hemp farmers contend that those issues are manageable and have been urging Congressional allies to press the EPA for action.

"A grower can lose an entire crop to weeds or pests," Kentucky hemp farmer Brian Furnish told the Senate Agriculture Committee last month. "Without an approved herbicide or pesticide, we may have to pay between \$500 - \$2,500 an acre to pull the weed to keep our hemp crop pure and health. We need your help to encourage EPA and USDA to make those approvals happen." (Pesticide & Chemical Policy/AGROW, August 23, 2019)

HEALTH AND ENVIRONMENTAL GROUPS CALL ON EPA TO REVOKE GLYPHOSATE'S REGISTRATION

Sixteen organizations representing health, environmental, farmer, and farmworker communities joined together yesterday to call on EPA to remove glyphosate from the marketplace. The groups cite a combination of high-profile lawsuits, environmental impacts, increasing reports of weed resistance, and growing public concern over the health effects of glyphosate in their comments on EPA's interim reregistration review decision for the chemical.

The comments warn that EPA is at risk of damaging the public's trust in the agency's review process for toxic pesticides. "EPA's myopic review and response to the dangers posed by glyphosate does a disservice to American farmers, farmworkers, and commercial landscapers wishing to use least-toxic products that do not put them at risk of health impacts, and consumers aiming to make the safest choice in regards to what to feed their family and how to manage their yards," the comments read.

The document likewise replies to EPA's attacks against the World Health Organization's International Agency for Research on Cancer (IARC), which determined glyphosate to be a probable carcinogen based on sufficient evidence of carcinogenicity in experimental organisms. EPA

has indicated that its process for evaluating glyphosate, "...is more transparent than IARC's process" and that IARC's "...conclusions are not well described." The comments cite IARC's response to these criticisms, which discuss the need to avoid "...interference from vested interests" and the ability to "...scrutinize the basis of its decisions rather than relying on appeals to authority or trust."

The comments take aim at EPA's attempt to sow doubt in IARC's process, writing, "It is also unacceptable for the agency to attack highly esteemed scientific institutions like the International Agency for Research on Cancer, which has been at the forefront of scientific determinations on carcinogenicity since its founding prior to EPA in 1965."

EPA has refused to test end-use glyphosate products sold on store shelves, saying "...though the Agency evaluates the product components, long term testing of individual products is not required." Under federal pesticide law, EPA is only required to test the active ingredient in pesticide formulations. Ingredients listed as "inert" on a pesticide label can be just as toxic as the active ingredient, but are not tested alongside the active ingredient and are considered confidential business information by pesticide companies. The groups "...urge the agency to employ due diligence and complete a full evaluation of all glyphosate-containing pesticide products registered by EPA."

Groups say that in order to regain public trust EPA must conduct full-formulation testing on glyphosate's carcinogenicity and other health effects, consider impacts to soil organisms, the human microbiome, and growing weed resistance to the chemical. "In the absence of this additional and necessary data, we urge the agency to revoke the registration of glyphosate and promote the wide range of non-toxic and least-toxic products and practices currently available, which can readily replace the use of this hazardous pesticide," the comments read.

The following groups have signed on in support of these comments: Beyond Pesticides; Beyond Toxics; Central Maryland Beekeepers Association; Farmworker Association of Florida; Food and Water Watch; Friends of the Earth; Kansas Rural Center; Maryland Pesticide Education Network; National Family Farm Coalition; Northeast Organic Farming Association: Massachusetts Chapter; Northwest Center for Alternatives to Pesticides; Organic Consumers Association; People and Pollinators Action Network; Pesticide Action Network; Sierra Club; Toxic Free North Carolina. (Beyond Pesticides, September 4, 2019)

<https://beyondpesticides.org/dailynewsblog/2019/07/court-upholds-right-of-local-maryland-county-to-restrict-pesticides-rejects-pesticide-and-lawn-care-industry-stomping-on-local-rights/>

CEU Meetings

Date: September 10, 2019

Title: General Pest Services (Defined by label/What does this mean to you?)

Location: Hampton Inn Tulsa, OK

Contact: Donald Stetler (281) 217-2965

www.ensystemex.com www.for-thor.com

CEU's:	Category(s):
4	3A
2	7A
3	7B

Date: September 11, 2019

Title: General Pest Services (Defined by label/What does this mean to you?)

Location: Hampton Inn Edmond, OK

Contact: Donald Stetler (281) 217-2965

www.ensystemex.com www.for-thor.com

CEU's:	Category(s):
4	3A
2	7A
3	7B

Date: September 12, 2019

Title: General Pest Services (Defined by label/What does this mean to you?)

Location: Hampton Inn Durant OK

Contact: Donald Stetler (281) 217-2965

www.ensystemex.com www.for-thor.com

CEU's:	Category(s):
4	3A
2	7A
3	7B

Date: September 18, 2019

Title: 2019 Oklahoma Fumigation Workshop

Location: SPREC Oklahoma State University Stillwater OK

Contact: Edmond Bonjour (405) 744-8134

Online registration

https://secure.touchnet.com/C20271_ustores/web/store_cat.jsp?STOREID=15&CATID=402

CEU's:	Category(s):
5	7C
5	10

Date: September 19-20, 2019

Title: 2019 OPMA Fall Conference

Location: Marriott Southern Hills TulsaOK

Contact: Eileen Imwalle (405) 726-8773

<http://www.ok-pca.com/conferences>

Registration

http://ok-pca.com/uploads/forms_3_3831857276.pdf

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

Date: October 2-3, 2019

Title: OKVMA FALL CONFERENCE & TRADE SHOW

Location: Hard Rock Hotel and Convention Center

Catoosa OK

Contact: Kathy Markham (918) 256-9302

www.okvma.com/

Online registration

https://secure.touchnet.com/C20271_ustores/web

[/store_cat.jsp?STOREID=15&CATID=66](https://secure.touchnet.com/C20271_ustores/web/store_cat.jsp?STOREID=15&CATID=66)

CEU's:	Category(s):
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4	3A
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6	5
---	---

6	6
---	---

6	10
---	----

1	A
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Date: October 28-30, 2019

Title: Oklahoma Ag Expo

Location: Embassy Suites Norman OK

Contact: Tammy Ford-Miller (580) 233-9516

<https://www.oklahomaag.com/oklahoma-ag-expo.html>

CEU's:	Category(s):
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7	1A
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1	7C
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Date: November 7, 2019

Title: BWI Pest Control Seminar

Location: See contact info below

Contact: Tim Ruminer (405) 227-2985

<https://bwicompanies.com/>

CEU's:	Category(s):
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2	3A
---	----

3	7A
---	----

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

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>

NEW ODAFF Test Information

New computerized testing is coming in October. Testing will be done at testing centers in multiple locations around the state by PSI Services LLC.

Please click on the Testing Dates & Locations link at www.pested.okstate.edu or go directly to ODAFF's website <https://www.oda.state.ok.us/cps/testsession.pdf> for information and instruction on the new ODAFF testing procedures.

PSI exam information website.
www.psiexams.com/

PSI testing information has also been included at the end of this newsletter.

Find us on Twitter at
[@OkstatePestEd](https://twitter.com/OkstatePestEd)

Pesticide Safety
Education Program

Registration will open late September, testing will begin October 1st. Please check this site for updates.



PSI Services LLC

**3210 E Tropicana
Las Vegas, NV 89121
Phone: (800) 733-9267
E-mail: examschedule@psionline.com
www.psiexams.com**

**OKLAHOMA DEPARTMENT OF AGRICULTURE
PESTICIDE LICENSURE EXAMINATIONS**

CANDIDATE INFORMATION BULLETIN

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10/1/2019

EXAMINATIONS BY PSI SERVICES LLC

The Oklahoma Department of Agriculture has contracted with PSI Services LLC (PSI) to conduct the licensure examination program. PSI provides these examinations through a network of computer examination centers in Oklahoma and various locations throughout the United States.

Oklahoma Department of Agriculture
Pesticide Applicator
2800 N Lincoln Blvd
Oklahoma City, OK 73105
Phone: 405-521-3864
<http://www.oda.state.ok.us/>

Certified Applicator

If you are not currently a Certified Applicator:

- ✦ You must take the Core Exam PLUS a category exam to become a Certified Applicator.
- ✦ You must take and pass the Core Exam first. Within one year you can take one of the Category exams.

If you are already certified as a Certified Applicator:

- ✦ You do not have to take the Core exam and can take any of the other Category exams.
- ✦ If candidates are already certified in a category (exam) and want to add another category (exam) they do not have to take the Core again, as long as they keep their certification current (5-year cycle)

The following categories require a practical examination in addition to the Core and the written exam. These exams are performed at OSU in Stillwater:

- ✦ (7A)- General Pest
- ✦ (7B)- Structural Pest/Termite ✦ (7C)- Fumigation

The practical exam must be taken within twelve (12) months of passing the written examination. Failure to pass the practical within this period of time will require retaking the written exam.

Service Technician

If you are taking the Service Technician exam, you are NOT required to take the Core exam. Service Technician only need to take the Service Technician exam.

Private Applicator

If you are taking the Private Applicator exam, you are NOT required to take the Core exam. Private Applicators only need to take the Private Applicator exam. **Aerial Exam**

The Aerial exam requires that you take the Core Exam first, as well as the Category exams. The Aerial exam cannot be taken alone.

IN ORDER TO KEEP CURRENT, YOU NEED CEU'S OR RETEST IN THE CATEGORY AT THE END OF THE CERTIFICATION PERIOD.

EXAMINATION PAYMENT AND SCHEDULING PROCEDURES

ON-LINE (WWW.PSIEXAMS.COM)

For the fastest and most convenient examination scheduling process, PSI recommends that you register for your examinations using the Internet. You register online by accessing PSI's registration website at www.psiexams.com. Internet registration is available 24 hours a day.

- + Log onto PSI's website and create an account. You will be asked to put in your email address and the spelling of your name exactly as it is shown on your identification that will be presented at the examination site.
- + You will be asked to select the examination. You will then enter your personal and contact information. Note: the ID# is your driver's license number. You will then be ready to pay and schedule for the examination. Enter your zip code and a list of the examination sites closest to you will appear. Once you select the desired examination site, available dates will appear.

TELEPHONE

Call (800) 733-9267, PSI registrars are available to receive payment and to schedule your appointment for the examination.

To register by phone, you need a valid credit card (VISA, MasterCard, American Express or Discover). PSI registrars are available Monday through Friday between 6:00 am and 7:00 pm, and Saturday-Sunday between 8:00 am and 4:30 pm, Central Time.

RESCHEDULING/CANCELING AN EXAMINATION APPOINTMENT

You may cancel and reschedule an examination appointment without forfeiting your fee if your *cancellation notice is received 2 days before the scheduled examination date*. For example, for a Monday appointment, the cancellation notice would need to be received on the previous Saturday. You may reschedule online at www.psiexams.com or call PSI at (800) 733-9267.



Note: A voice mail message is not an acceptable form of cancellation. Please use the PSI Website or call PSI and speak directly to a Customer Service Representative

MISSED APPOINTMENT OR LATE CANCELLATION

If you miss your appointment, you will not be able to take the examination as scheduled, further you will forfeit your examination fee, if you:

- + Do not cancel your appointment 2 days before the scheduled examination date;
- + Do not appear for your examination appointment;
- + Arrive after examination start time;
- + Do not present proper identification when you arrive for the examination.

EXAMINATION ACCOMMODATIONS (ADA)

All examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and every reasonable accommodation will be made in meeting a candidate's needs. Candidates who require special accommodations will need to complete the necessary forms prior to registering for an exam with PSI. Please contact the Department for more information.

EXAMINATION SITE CLOSING FOR AN EMERGENCY

In the event that severe weather or another emergency forces the closure of an examination site on a scheduled examination date, your examination will be rescheduled. PSI personnel will attempt to contact you in this situation via telephone and email. However, you may check the status of your examination schedule by calling (800) 733-9267. Every effort will be made to reschedule your examination at a convenient time as soon as possible. You will not be penalized. You will be rescheduled at no additional charge.

EXAMINATION SITE 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

[Click Here](#) to request out-of-state testing.

REPORTING TO THE EXAMINATION SITE

On the day of the examination, you should arrive 30 minutes before your appointment. This extra time is for sign-in, identification, and familiarizing you with the examination process. *If you arrive late, you may not be admitted to the examination site and you will forfeit your examination registration fee.*

REQUIRED IDENTIFICATION

Candidates need to provide one (1) form of identification.

Candidates must register for the exam with their LEGAL first and last name as it appears on their government issued identification. The required identification below must match the first and last name under which the candidate is registered. Candidates are required to bring one (1) form of a valid (non-expired) signature bearing identification to the test site.

REQUIRED IDENTIFICATION (with photo) - Choose One

- ↘ State issued driver's license



- ✎ State issued identification card ✎ US Government Issued Passport
- ✎ US Government Issued Military Identification Card ✎ US Government Issued Alien Registration Card

SECURITY PROCEDURES

The following security procedures apply during examinations:

- + You will have access to an online calculator. You may not bring your own calculator.
You will be given a piece of scratch paper and a pencil. These will be returned to the proctor at the end of your examination.
- + Candidates may only take approved items into the examination room.
- + All personal belongings of candidates, with the exception of close-fitting jackets or sweatshirts, should be placed in the secure storage provided at each site prior to entering the examination room. Personal belongings **include, but are not limited to**, the following items:
 - **Electronic devices of any type**, including cellular / mobile phones, recording devices, electronic watches, cameras, pagers, laptop computers, tablet computers (e.g., iPads), music players (e.g., iPods), smart watches, radios, or electronic games.
 - **Bulky or loose clothing or coats** that could be used to conceal recording devices or notes, including coats, shawls, hooded clothing, heavy jackets, or overcoats.
 - **Hats or headgear not worn for religious reasons** or as religious apparel, including hats, baseball caps, or visors.
 - **Other personal items**, including purses, notebooks, reference or reading material, briefcases, backpacks, wallets, pens, pencils, other writing devices, food, drinks, and good luck items.
- + Person(s) accompanying an examination candidate may not wait in the examination center, inside the building or on the building's property. This applies to guests of any nature, including drivers, children, friends, family, colleagues or instructors. ✎ No smoking, eating, or drinking is allowed in the examination center.

- + During the check in process, all candidates will be asked if they possess any prohibited items. Candidates may also be asked to empty their pockets and turn them out for the proctor to ensure they are empty.
The proctor may also ask candidates to lift up the ends of their sleeves and the bottoms of their pant legs to ensure that notes or recording devices are not being hidden there.
- + Proctors will also carefully inspect eyeglass frames, tie tacks, or any other apparel that could be used to harbor a recording device. Proctors will ask to inspect any such items in candidates' pockets.
- + If prohibited items are found during check-in, candidates shall put them in the provided secure storage or return these items to their vehicle. PSI will not be responsible for the security of any personal belongings or prohibited items.

- + Any candidate possessing prohibited items in the examination room shall immediately have his or her test results invalidated, and PSI shall notify the examination sponsor of the occurrence.
- + Any candidate seen giving or receiving assistance on an examination, found with unauthorized materials, or who violates any security regulations will be asked to surrender all examination materials and to leave the examination center. All such instances will be reported to the examination sponsor.
- + Copying or communicating examination content is violation of a candidate's contract with PSI, and federal and state law. Either may result in the disqualification of examination results and may lead to legal action.
- + Once candidates have been seated and the examination begins, they may leave the examination room only to use the restroom, and only after obtaining permission from the proctor. Candidate will not receive extra time to complete the examination.

TAKING THE EXAMINATION BY COMPUTER

The examination will be administered via computer. You will be using a mouse and computer keyboard.

IDENTIFICATION SCREEN

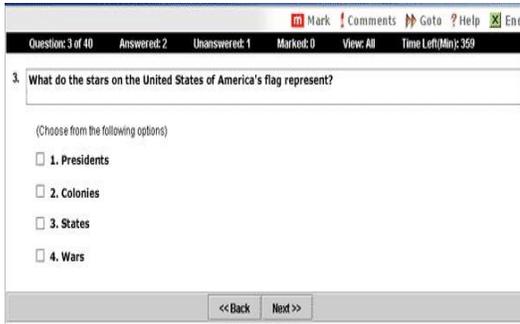
You will be directed to a semiprivate testing station to take the examination. When you are seated at the testing station, you will be prompted to confirm your name, identification number, and the examination for which you are registered.

TUTORIAL

Before you start your examination, an introductory tutorial is provided on the computer screen. The time you spend on this tutorial, up to 15 minutes, DOES NOT count as part of your examination time. Sample questions are included following the tutorial so that you may practice answering questions and reviewing your answers.

TEST QUESTION SCREEN

The “function bar” at the top of the test question screen provides mouse-click access to the features available while taking the examination.



One question appears on the screen at a time. During the examination, minutes remaining will be displayed at the top of the screen and updated as you record your answers.

IMPORTANT: After you have entered your responses, you will later be able to return to any question(s) and change your response, provided the examination time has not run out.

EXAMINATION REVIEW

PSI, in cooperation with the Department, will be consistently evaluating the examinations being administered to ensure that the examinations accurately measure competency in the required knowledge areas. While taking the examination, examinees will have the opportunity to provide comments on any questions, by using the clicking the Comments link on the function bar of the test question screen.

These comments will be analyzed by PSI examination development staff. PSI does not respond to individuals regarding these comments, all substantive comments are reviewed. **This is the only review of examination materials available to candidates.**

SCORE REPORTING

Your score will be given to you immediately following completion of the examination. The following summary describes the score reporting process:

- If you **pass**, you will receive a successful score report.
- If you **do not pass**, you will receive a diagnostic report indicating your strengths and weaknesses by examination type on the score report.

DUPLICATE SCORE REPORTS

You may request a duplicate score report after your examination by emailing scorereport@psionline.com or by calling 800-733-9267.

EXAMINATION INFORMATION

Exam Name	# of Items	Exam Timing (mins)	Exam Fee	Percent Scoring
1-Core Exam	50	75	\$95	70%
1a-Agricultural Plant	50	75	\$95	70%
1b-Agricultural Animal	50	75	\$95	70%
2-Forest Pest Control	50	75	\$95	70%
3a-Ornamental & Turf Pest Control	50	75	\$95	70%
3b-Interiorscape	50	75	\$95	70%
3c-Nursery/Greenhouse	50	75	\$95	70%
4-Seed Treatment	50	75	\$95	70%
5-Aquatic Pest Control	50	75	\$95	70%
6-Right-of-Way	50	75	\$95	70%
7a-General Pest Control	50	75	\$95	70%
7b-Structural Pest Control	50	75	\$95	70%
7c-Fumigation	50	75	\$95	70%
8-Public Health Pest Control	50	75	\$95	70%
9-Regulatory Pest Control(do not use)	50	75	\$95	70%
10-Demonstration & Research	50	75	\$95	70%
11a-Bird & Vertebrate Animal Pest Control	50	75	\$95	70%
11b-Predatory Animal	50	75	\$95	70%
12a-Pressure Facility Timber Treating	50	75	\$95	70%
12b-Groundline Utility Pole Treating	50	75	\$95	70%
13-Antimicrobial	50	75	\$95	70%
14-Metam Sodium/Sewer Root Control	50	75	\$95	70%
14b-Cooling Tower	50	75	\$95	70%
Aerial	50	75	\$95	70%
Service Technician Exam	50	75	\$95	70%
Private Applicator Exam	50	75	\$65	70%

All examinations are closed book.

**NOTE: EXAMINATION FEES ARE NOT REFUNDABLE OR TRANSFERABLE.
THE EXAMINATION FEE IS VALID FOR ONE YEAR FROM THE DATE OF PAYMENT.**

PSI Services LLC
3210 E Tropicana
Las Vegas, NV 89121

