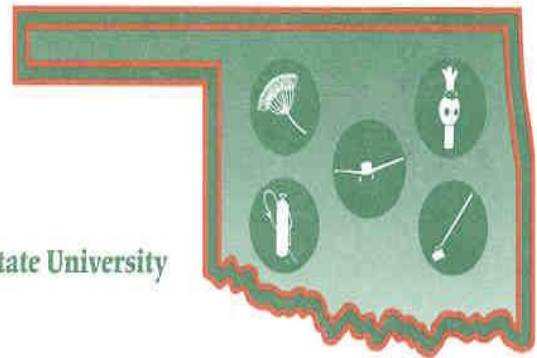


PESTICIDE REPORTS

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



October, 2019

CHEM

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NEW TESTING PROCEDURE AND LOCTIONS

ODAFF has contracted with PSI Services LLC to administer pesticide applicator exams. Testing began at the PSI test centers October 1, 2019

PSI uses proctored computer based testing at multiple test centers throughout the state. ODAFF will no longer give paper exams.

To take an exam at a PSI test center you must make a reservation either through the PSI website or reservation phone number at least one day prior to the date of testing. Walk-ins are not accepted at any of the testing locations! Applicators must have a reservation to test.

Multiple opportunities will be available to test every week. Times and dates will vary by location and will be selected though the reservation process.

All exams are now 50 questions and must be completed in 75 minutes. Each exam taken will now cost \$95.

Please see this link

<http://pested.okstate.edu/html/new-odaff-testing-procedure> at the OSU Pesticide Safety Education Program for PSI testing instructions, a link to the PSI website, and a frequently ask questions (faq) page about this new testing procedure.

PSI locations are listed below

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

(OSU PSEP)

EPA RECEIVES REQUEST FOR EXPERIMENTAL PERMIT TO COMBAT MOSQUITOES

The U.S. Environmental Protection Agency has received an application for an experimental use permit that would allow Oxitec to study the use of genetically engineered mosquitoes to reduce mosquito populations. EPA is sharing a description of the application with the public for a 30-day comment period, closing October 11, 2019.

Aedes aegypti mosquitoes can spread several diseases of significant human health concern, including the Zika virus and dengue fever. Oxitec's proposal is to conduct additional research on reducing these mosquito populations and to gather information that could support a subsequent application for broader use in the United States.

The Centers for Disease Control and Prevention has said that "preventing bites from insects and ticks is vital to stopping the spread of vector-borne diseases, and more prevention methods are needed."

Oxitec is proposing to release genetically engineered male mosquitoes into the environment to mate with wild female mosquitoes. Male mosquitoes do not bite people. These males are modified in such a way that causes their female offspring to die as larvae. Male offspring would survive to become fully functional adults with the same modifications, which can provide multi-generational effectiveness so that ultimately *Aedes aegypti* mosquito populations in the release areas decline.

Oxitec's proposed experimental program is designed to take place over 24 months on up to 6,600 acres in Harris County, Texas, and Monroe County, Florida.

After review of the application and public comments, EPA will decide whether to issue or deny the permit and, if issued, the conditions under which the study is to be conducted. Public comments about this proposed permit should be submitted to [EPA-HQ-OPP-2019-0274](https://www.epa.gov/pesticides/epa-receives-request-experimental-permit-combat-mosquitoes) on or before October 11, 2019.

(EPA September 11, 2019)
<https://www.epa.gov/pesticides/epa-receives-request-experimental-permit-combat-mosquitoes>

RUMORS SWIRL, BUT BAYER SAYS IT REMAINS COMMITTED TO ROUNDUP

As president of the Crop Science division of Bayer, Liam Condon says litigation and threats of litigation that swirled around the company's acquisition of Monsanto and, specifically, its glyphosate product, Roundup, made the first half of 2019 tough to navigate.

"That's been the low point for the year, though we're confident it will play out over time and be solved," he says, noting that spring flooding in the Midwest reduced farmers' use of its products, and the U.S. trade conflict with China added to the company's dismal first half.

One piece of good news for farmers who want to apply the glyphosate technology is that Condon says it will be available for use in 2020.

"We are completely committed to making sure that farmers all over the world continue to have access to glyphosate," Condon said earlier this week, during the Bayer 2019 Future of Farming Dialogue at the company's headquarters in Germany.

"It's the safest product (herbicide) out there, and so we've got to make sure that it remains available. And I would say, thankfully, every regulator in the world sees it similarly," he adds.

At the same time, the company pledged this past July that it would spend €5 billion (about \$5.6 billion) over the next decade on novel herbicide technologies. The investment is equivalent to about 15% of the company's annual R&D budget at current spending levels.

Bayer reports it plans to use the money to develop new seeds, plant traits and digital farming technologies. Some industry analysts have hinted that the company's investment might be a signal that Bayer is moving away from its commitment to glyphosate. However, Condon says that couldn't be further from the truth.

"It was a little misinterpreted that all this money would be invested to completely replace glyphosate. I can tell you—before we ever had the acquisition of Monsanto—that we spent decades looking for a better glyphosate," he says. "I mean, it would be great if we could find something that's even better, even safer. We never found it, and no other company did."

Despite Bayer's vocal commitment to the herbicide, the company still faces ongoing litigation from more than 18,000 U.S. plaintiffs who claim that Roundup caused their cancer.

Bayer is appealing the cases, and Condon says there are two paths forward in settling the disputes.

"Plan A is going through the court system, (though) we've had the first three decisions go against us," he notes. "Depending on how things play out, there might be multiple appeal levels, and it's very well possible that this might end up in the Supreme Court."

Condon says at the federal level, EPA has said that no one can put "cancer on the label" of Roundup because "that's not in line with scientific consensus."

The second path the company could take is to settle with plaintiffs outside of court. That's unlikely to occur, Condon says, unless the final cost of settling the cases would total a smaller dollar amount than the cost of going through the court system.

A Sept. 19 article in Bloomberg Businessweek reports that "analysts estimate that settling all the U.S. lawsuits could cost from \$2.5 billion to \$20 billion." Bayer AG has not said what an agreeable dollar amount would be to settle out of court.

Bayer also faces opposition to glyphosate on its home front from German politicians who want to phase out its use, because they say it kills insect populations crucial for biodiversity. However, Condon says the country can't make that decision. Instead, the decision is up to the European Commission at the end of 2022.

In the meantime, Condon says Bayer will go through the “normal re-registration scientific process” for glyphosate, which is managed by the European Food Safety Authority. “They make a recommendation to the politicians, and then the politicians need to decide. And very honestly, a lot will depend about where politics are at the end of 2022,” he notes.

While the company manages through the various glyphosate-related issues, it continues to work on weed-control solutions for the future that, Condon says, are likely to look different from what’s currently available.

“We’ve been moving more and more towards offering different options. Farmers don’t have enough options,” he says, noting that there’s been no new, herbicide active ingredient introduced for weed control in the past 25 years.

“It won’t only be new herbicides, but an integrated weed management approach—how to best manage weeds in the field, including cover crops, digital applications that mean more precise applications of herbicides with less volume used and perhaps even robotic methods of weed control,” he says. “From a technology point of view, we’re pretty open to what works. But for us, it needs to be effective, it needs to be safe, and it needs to be economical for the grower. That’s kind of the bottom line.”

(AGPRO, October 2, 2019)

<https://www.agprofessional.com/article/rumors-swirl-bayer-says-it-remains-committed-roundup>

US RESIDUE COMPLIANCE AT 96% IN 2017

Some 96.2% of domestic food samples tested by the US Food and Drug Administration (FDA) in fiscal 2017 (ended September 30th) complied with pesticide tolerances, according to a report issued this month. That compares with a compliance rate of 99.1% in fiscal 2016 and 98.2% in fiscal 2015.

Domestic food testing in fiscal 2017 found that 52.5% of 1,799 samples contained no detectable residues. Some 43.7% of samples had residues within tolerance limits and 3.8% had illegal residues. That compares with a violation rate of just 0.9% a year earlier. The increase was due to a higher violation rate in vegetables such as cilantro, kale and lettuces, which were targeted for increased monitoring, the FDA points out. Of the 68 illegal samples, 64 contained residues for which no tolerance was established and 13 exceeded tolerance limits.

The FDA tested imported food from 100 countries/economies. Of the 4,270 samples tested, 50% had no detectable residues, 39.6% had residues within tolerances and 10.4% (9.8% in fiscal 2016) had illegal residues. Among the 443 illegal samples, 427 had “no tolerance” violations and 13 had residues above tolerance limits.

The FDA found 221 of the 761 pesticides and industrial chemicals that could have been detected during routine monitoring. The most frequently detected were the insecticides, imidacloprid, chlorpyrifos, chlorantraniliprole and cypermethrin, and the fungicide, carbendazim.

The methods used for the FDA’s total diet study found residues of 157 pesticides, most at very low levels. It analysed 1,064 samples in four market basket surveys. The most frequently detected pesticides were: the fungicide, boscalid (31.2%); the insecticide, imidacloprid (24.6%); the fungicide, azoxystrobin (22.1%); the insecticide, bifenthrin

(21.2%); and the insecticide synergist, piperonyl butoxide (19.9%). (Pesticide & Chemical Policy/AGROW, September 18, 2019) <https://agrow.agribusinessintelligence.informa.com/AG031808/US-residue-compliance-at-96-in-2017>

BEEKEEPERS SUE EPA

The EPA now faces a second petition for review on its approval of the insecticide sulfoxaflor, as beekeepers filed a challenge in the U.S. Court of Appeals for the Ninth Circuit in San Francisco on Friday.

The Pollinator Stewardship Council and American Beekeeping Federation have asked the court to nullify the agency decision made in July.

"Petitioners ask this court to set aside EPA's July 12, 2019, orders with respect to sulfoxaflor in whole or in part, because they are contrary to federal law and unsupported by substantial evidence in the record," the groups said in the petition.

At the end of August, the Center for Food Safety asked the Ninth Circuit to review EPA's recent approval of sulfoxaflor.

In July, the EPA announced newly approved registrations and restored previous uses for the insecticide. The Center for Food Safety argued the agency violated its duties under the Endangered Species Act by "failing to consult with the United States Fish and Wildlife Service or the National Marine Fisheries Service."

Sulfoxaflor is used to control piercing and sucking insects such as the sugarcane aphid in sorghum and the tarnished plant bug in cotton. The agency was ordered by a federal court in 2015 to vacate the sulfoxaflor registration because of a lack of data about the effects on bees.

Will corn and soybean finish before a freeze? And how do farmers stay sane waiting for that...

In a July 12, 2019, announcement, EPA said it had enough data to show sulfoxaflor is safe for humans and bees and had granted unconditional registration for new uses of sulfoxaflor on the Transform WG and Closer SC labels. The new uses are alfalfa, corn, cacao, grains (millet, oats), pineapple, sorghum, teff, teosinte and tree plantations. The agency also added back cotton, soybeans, citrus, cucurbits and strawberry.

The restrictions on the registrations granted in October 2016 were also removed.

The petitioners are represented by attorneys from the environmental group Earthjustice.

"It is inappropriate for EPA to solely rely on industry studies to justify bringing sulfoxaflor back into our farm fields," Michele Colopy, a representative of the Pollinator Stewardship Council, said in a news release. "Die-offs of tens of thousands of bee colonies continue to occur and sulfoxaflor plays a huge role in this problem. EPA is harming not just the beekeepers, their livelihood, and bees, but the nation's food system."

In May 2016, the agency proposed a new label that excluded crops like cotton and sorghum and imposed spraying restrictions designed to minimize pollinators' exposure to the insecticide.

The Ninth Circuit vacated sulfoxaflor's registration in November 2015 because of pollinator concerns. The court cited a lack of data on possible harm to bees as the reason for ordering EPA to pull the registration.

The EPA then asked Dow AgroSciences (now Corteva Agriscience) for more data on sulfoxaflor.

EPA Assistant Administrator for Office of Chemical Safety and Pollution Prevention Alexandra Dapolito Dunn said during the July announcement the agency relied on raw data from industry studies in reaching the decision.

For years, states have petitioned EPA for emergency exemptions to be allowed to use sulfoxaflor.

In 2019 alone, Dunn said the agency has approved 12 state emergency requests for use in cotton and 14 in sorghum.

In making the decision, Dunn said the agency discovered many growers could see crop losses of 50% or higher without having sulfoxaflor available. Growers will still need to follow state regulations on the insecticide, she said.

(Progressive Farmer, September 6, 2019)
<https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/09/06/beekeepers-ask-ninth-circuit-set-2>

MULTISTATE TASK FORCE SETS OUT TO CURB RISING SALES OF ILLEGAL PESTICIDES

Clemson University leads a new multistate task force to control sales of illegal pesticides.

These two unlabeled bottles led law enforcement in both Carolinas to pursue an illegal pesticide case that claimed the lives of a pair of pets.

Mike Weyman, deputy director of Clemson University's Regulatory Services unit, which includes the Department of Pesticide Regulation, heads the effort, with co-leader George Saxton of the Office of the Indiana State Chemist, Dr. Jim Fredericks of the National Pest Management Association, Stephanie Binns of Responsible Industry for a Sound Environment and Aline DeLucia of the National Association of State Departments of Agriculture.

"States have been addressing this case by case and the cooperation has been excellent, but the quantity of cases just continues to grow," Weyman says in a Clemson media release. "All of a sudden there's been a rash of counterfeits. Every single major pesticide company has had problems with counterfeiters. This will give us a protocol and

practice to attack the problems together and get ahead of the curve."

One case that catalyzed the founding of the task force involved a North Carolina pet owner who purchased a flea and tick killer for her two adult dogs from a local store. The bottle had no label, but she said she wrote down the verbal instructions she was given: "Apply 1 cc via syringe to each dog." She did, using the dropper included in the bottle to give her dogs one drop each orally.

Her dogs died. She had tests run to find out why. Lab results showed the product contained the common insecticide imidacloprid, but at more than five times the recommended dose. Plus, imidacloprid is supposed to be administered on the nape of the animal's neck and be absorbed by the skin.

The sale of illegal and counterfeit pesticides continues to grow as e-commerce explodes. Last year, PMP reported on a \$1.2 million settlement Amazon paid to the U.S. Environmental Protection Agency for the company's alleged role in allowing third parties to sell and distribute imported pesticides not licensed for sale in the United States. The illegal pesticides were imported from China.

Weyman says consumers should be on the lookout for signs that the product is illegal. For one, it must have a label. If there is a label, read it for the following:

Check for an EPA registration label on each pesticide purchased.

Beware of falsified registrations, such as numbers that correlate to a medical device rather than a pesticide.

Beware of pesticides with product names in fractured or nonstandard English — like the illegal pesticides imported from China and sold/distributed via Amazon.

A little reading goes a long way in Weyman's view. He advises that use of the metric system on the label

is an easy-to-spot clue that the product isn't made for sale in the United States.

“We had one bottle from Asia that made it clear they knew what they were doing was illegal when they sold it,” says Weyman. “Written in Chinese it said: ‘Very Important: Do this with a brain do not get caught by Department of Public Health.’” (Pest Management Professional, October 3, 2019) <https://www.mypmp.net/2019/10/03/multistate-task-force-sets-out-to-curb-rising-sales-of-illegal-pesticides/>

STAGE SET FOR APPEAL OF FIRST US GLYPHOSATE CANCER VERDICT

Bayer legacy company Monsanto's conduct related to the safety of its glyphosate-based herbicide was "reprehensible" and a jury's decision to hit the company with \$289 million in punitive and compensatory damages should be upheld, according to attorneys for the California resident who filed the underlying lawsuit.

"Monsanto's behavior demonstrated a reckless disregard of the health and safety of others and involved repeated intentional malice, trickery and deceit," lawyers representing Dewayne Johnson, the former school groundskeeper, say in their latest legal filing.

The scathing assessment is at the heart of Mr Johnson's argument to convince a California appeals court to reinstate the \$289 million award, including the \$250 million in punitive damages, handed down in August last year. A 12-member jury in San Francisco unanimously ruled in favor of Mr Johnson in August 2018, agreeing that Monsanto failed to warn him of the cancer risks from its products and ordering the company to pay the former school groundskeeper \$289 million.

Bayer promptly filed an appeal with the California Court of Appeals for the First Circuit, arguing that

there was no evidence the company knew of any cancer risks from glyphosate and that the jury acted with "passion and prejudice". Following that, a state judge reduced the damages to \$78 million, concluding that the punitive damages exceeded constitutional limits. Bayer has filed its own appeal seeking to have the case dismissed.

The fate of the appeal could provide clarity for Bayer and for attorneys representing thousands of plaintiffs who allege that exposure to glyphosate caused them to develop cancer.

Mr Johnson's case was the first of three that have gone to trial. Bayer has lost all three, although the damages have been subsequently reduced by judges in all cases. A federal jury convened by the US District Court for the Northern District of California awarded another California resident some \$80 million, but that was cut by a federal judge to just over \$25 million. In the third case, a California state court judge slashed damages awarded to a couple who claimed that Monsanto's glyphosate-based herbicides had caused their cancer from over \$2 billion to under \$87 million.

In its July filing with the court, Bayer said the warning claim "fails as a matter of law because there was no prevailing scientific consensus that Roundup causes cancer". The company argued that Mr Johnson failed to show that Monsanto's glyphosate products "actually caused his cancer", adding that the company had "no duty to warn of a risk that, far from being a prevailing scientific view, worldwide regulators agree does not exist".

Bayer has called on the appeals court to either reverse the ruling or remand for a new trial and said that the court "should strike the punitive damages award because there is no evidence to support the jury's finding of malice or oppression".

In their August 19th response, Mr Johnson's attorneys noted that the juries, along with the judges in all three trials, have concluded that Monsanto's conduct "deserves to be punished" and that punitive damages are warranted. They point to evidence that showed Monsanto had a cosy relationship with EPA

regulators and took an array of dubious steps to influence public opinion and scientific assessments in a campaign to downplay evidence that exposure to glyphosate may pose risks to human health.

"This jury's finding was not the result of a breakdown of the judicial system wherein Monsanto claims 'virtually everything in this trial went wrong'," Mr Johnson's attorneys added. "Instead, it was a reasoned finding repeatedly confirmed based on Monsanto's reprehensible conduct. No one but Monsanto is responsible for its behavior."

The punitive damages must be "large enough to sting", they wrote, adding that \$250 million is roughly 3.8% of Monsanto's net worth, a total akin to a "slap on the wrist".

The brief also challenges the assertion that Monsanto could not have warned consumers about the cancer risks from glyphosate because EPA has not found the herbicide is a likely carcinogen.

A state jury is entitled to conclude that EPA failed to enforce federal pesticide law correctly when it approved Monsanto's glyphosate labels and the company "cannot hide behind the [agency] to avoid the consequences of its reprehensible conduct under California law", according to Mr Johnson's lawyers. Monsanto could have added a cancer warning, they wrote, noting that the EPA approved such a warning in September 2017 on the product label for a rival glyphosate manufacturer.

Oral arguments in the appeal are expected to be held this autumn. The fourth trial brought by a cancer victim against Monsanto is set to commence in a state court October in St Louis, Missouri, and will be the first case to be heard outside of California. (Pesticide & Chemical Policy/AGROW, September 2, 2019)

<https://agrow.agribusinessintelligence.informa.com/AG031752/Stage-set-for-appeal-of-first-US-glyphosate-cancer-verdict>

HERBICIDE-RESISTANT KOCHIA INVADING TEXAS HIGH PLAINS

Kochia, a kind of tumbleweed, has long been associated with the Texas High Plains, but its abundance is starting to alarm Texas A&M AgriLife officials as regional producers are experiencing challenges controlling kochia as herbicide resistance is mounting.

Dr. Muthu Bagavathiannan, Texas A&M AgriLife Research weed scientist in the Texas A&M Department of Soil and Crop Sciences, College Station, said kochia has been a major multiple herbicide-resistant weed problem for some time in parts of the Great Plains – Kansas, Colorado, Montana and surrounding states, and even in Canada.

Spreading their seed

Kochia is a summer annual plant, germinating in the spring and maturing in the fall. It is often the first weed species to germinate in the soil each spring, Bagavathiannan said. Thousands of seeds are produced on one plant and spread into the soil when the weed breaks free and begins to tumble.

The tumbling ability is an important dispersal mechanism for this weed, which can rapidly spread herbicide-resistant genes across agricultural landscapes, he said. It is common to see kochia tumbleweeds get caught up in fence lines, and the dropped seed establishes a patch along the field edges and ditch banks.

These patches are usually not well managed, leading to further spread into adjacent crop fields and pasture lands, Bagavathiannan said.

Falling behind

Dr. Jourdan Bell, Texas A&M AgriLife Extension Service agronomist, Amarillo, said where kochia is sprayed along a fence line, producers often use a non-selective burndown herbicide and overspray into the highway right of way. This can result in bare soil along the highway right of way and a perfect environment for weeds to proliferate. If the kochia patches are already resistant to glyphosate, it further magnifies the problem.

Resistance is a major concern, Bell said, because without effective management of kochia and other weeds, producers can see a big effect on their yields. In her research, she has seen up to an 80-bushel-per-acre difference between a corn plot with well-controlled weeds and an untreated control plot due to the resources being wasted by weeds.

Kochia tumbleweed caught on fence lines and establishing along the edge of a winter wheat field. These are not usually managed.

Kochia tumbleweed caught on fence lines and establishing along the edge of a winter wheat field. These are not usually managed.

Bell said she has received multiple calls from farmers in the area who faced kochia control failures with glyphosate, dicamba, metsulfuron and fluroxypyr and suspect multiple resistance to these herbicides.

Kochia is also found increasingly common in cotton and grain sorghum fields and fence lines in the South Plains.

“Though effective control has not been an issue so far in the area, we are beginning to monitor its spread and paying close attention to its response to herbicides,” said Peter Dotray, Ph.D., AgriLife Research weed scientist, Lubbock. “The key to

effective kochia control is timeliness of preplant applications when weeds are very small.”

Surveying resistance

Bagavathiannan said he conducted a survey in the Texas High Plains in 2018 to start documenting the distribution of kochia and determine herbicide resistance status. He said he frequently observed kochia in winter wheat-fallow fields, especially in no-till systems, a pattern consistent with the Great Plains states. He also found corn, grain sorghum and cotton fields with severe infestations of this weed.

“Preliminary screenings and resistance evaluations are underway, and we plan on conducting additional surveys in 2019 as well,” he said.

Bagavathiannan said resistance to glyphosate is suspected to be widespread in the samples since this chemical is frequently used for weed control in the fallow fields as well as in glyphosate-resistant corn and cotton.

Bell said a key to control is understanding there’s not just one chemical needed for a successful herbicide program.

“A successful program generally includes herbicides with residual activities in addition to post-emergence herbicides with several modes of action,” she said.

Gaining control

Dotray agreed heavy reliance on fewer herbicide modes of action for kochia control is fueling the issue – management must include diversified options. Pigweed resistance in the Texas High Plains followed a similar pattern.

Bell said she stresses to producers that most branches on the kochia plant have a growing point so when they only “burn back” the plant, they will still have seed production from lower branches in addition to contributing to herbicide resistance due to partial control.

A combination of chemicals and vigilance are important.

“This is a serious problem,” Bagavathiannan said. “Farmers need to be proactive and aggressive in treating it using chemicals with multiple modes of action and incorporate other tools in their management programs. They also need to control the weed in field edges and roadsides, instead of letting it produce seed.”

More research

Bagavathiannan said the increasing concern about kochia is prompting more research to fully understand the nature and distribution of resistance. He is collaborating on a regional-scale resistance evaluation study with Dr. Vipin Kumar, Kansas State University, Hays, Kansas; and Dr. Misha Manuchehri, Oklahoma State University, Stillwater.

Dr. Nithya Subramanian, AgriLife Research molecular weed scientist, College Station, will begin looking at mechanisms that might be contributing to resistance. (Southwest FarmPress, October 2, 2019)

<https://www.farmprogress.com/weeds/herbicide-resistant-kochia-invading-texas-high-plains>

US FARMER ADVOCATES UNCONVINced BY EPA REVIEW OF DICAMBA

A coalition of more than 20,000 farmers is urging a federal court to grant a request by environmentalists to cancel the US EPA's registration of Bayer legacy

company Monsanto's dicamba herbicide, arguing that the pesticide poses unreasonable risks to non-target crops.

The EPA ignored evidence that Monsanto's XtendiMax herbicide would "cause serious harm to other farmers" because of its propensity to drift, according to farm groups led by the Save Our Crops Coalition.

The Agency's approval of the pesticide has hurt farmers and left soybean growers with "an impossible choice" of whether to buy Monsanto's dicamba-tolerant seeds or worry about damage from neighboring farms, the coalition said in an August 21st filing with the US Court of Appeals for the Ninth Circuit.

"Produce farmers have no choice at all - there is no dicamba resistant alternative," the groups added. "EPA should not put farmers in this position. The consequences of recent growing seasons confirmed the prediction that the widespread use of dicamba is incompatible with Mid-western agriculture."

The brief from the coalition comes in support of a renewed bid by environmentalists to upend the EPA's approval of XtendiMax. The agency first approved the herbicide - a mix of dicamba and glyphosate - in November 2016, allowing it to be sprayed on Monsanto's dicamba-tolerant soybeans and cotton in 34 states. Environmental groups, led by the Center for Food Safety (CFS), filed their initial complaint in early 2017, but the Ninth Circuit dismissed the lawsuit after the EPA issued a revised registration for XtendiMax in November 2018.

The new litigation rests on the same concerns that the EPA failed to ensure legal uses will not pose undue risks to the environment and to endangered species. In their brief supporting the lawsuit, the Save Our Crops Coalition - along with Family Farm Defenders, the Farm and Ranch Freedom Alliance, Iowa Organic Association, Kansas Rural Center and the Organic Farmers Association (OFA) - says that

the past three years have provided ample evidence that the EPA failed to account for the potential of the dicamba herbicide to volatilise and drift, particularly in hot temperatures.

The EPA has agreed with Monsanto that XtendiMax is less volatile than older formulations of the herbicide and not prone to move off-site, but state agricultural agencies received more than 4,200 official complaints of dicamba damage in 2017 and 2018 and reported harm to more than 4.7 million acres (1.9 million ha) of non-target soybeans, along with dozens of other crops. The farmer advocacy groups contend that the pesticide industry has tried to blame the issue on farmers, by suggesting that they have illegally used older dicamba products or failed to follow the EPA-approved label.

"The evidence, however, shows that much of the damage can be traced to farmers who adhered to the label instructions as closely as possible," according to the coalition, which contends that many damage reports from 2017 and 2018 show the characteristics of vapor drift, something that is largely the result of the chemical characteristics of the herbicide formulation, and not an applicator error.

"To the extent that applicators have trouble complying with the label, that is a result of the label's extreme complexity and the limited times when spraying can be done consistent with the label," the groups say. "Finally, because the label fails to address vapour drift, the argument about off-label application is a red herring."

The coalition is also unconvinced by the EPA's revised 2018 label. The agency said that revisions addressed worries about the impacts to non-target crops, as they imposed limits on when the herbicide can be sprayed, restrictions on the number of applications and additional tank clean out instructions, as well as required buffers to protect endangered species.

But the farmer advocates say that the new label "only exacerbated" the damage that growers experienced in 2017 and 2018. They argue that the new restrictions make it "even harder to comply with the label" and fail to address the problem of vapour drift, which is "driven by dicamba's inherent volatility," not by application techniques.

"Serious damage to non-target crops continues to an extent that state agencies cannot hope to keep up with complaints, despite dedicating all their resources to dicamba injuries," the coalition concludes.

Despite the controversy surrounding XtendiMax - and similar dicamba herbicides made by DuPont and BASF - US soybean and cotton farmers appear to be keen on the technology. All told, more than 50 million acres were planted in 2018 and that figure is expected to jump by at least 10 million this year. The EPA is also considering a request from Bayer, which now owns Monsanto, to allow farmers to use XtendiMax on its dicamba-tolerant maize. (Pesticide & Chemical Policy/AGROW, September 3, 2019)
<https://agrow.agribusinessintelligence.informa.com/AG031757/US-farmer-advocates-unconvinced-by-EPA-review-of-dicamba>

CEU Meetings

Date: October 8, 2019

Title: WinField United Academy

Location: Renaissance Tulsa Hotel and Convention Center 6808 S 107th E Ave, Tulsa

Contact: 918-234-0560

<http://www.cvent.com/events/winfield-united-academy-october-8-tulsa-ok/event-summary-f7ea72d4c3ae47a18aaea255f6ad80ae.aspx>

CEU's:	Category(s):
TBD	3A
TBD	3B
TBD	3C
TBD	6
TBD	7A
TBD	7B
TBD	10

Date: October 10, 2019

Title: WinField United Academy

Location: Sheraton Midwest City Hotel at the Reed Conference Center 5750 Will Rogers Rd Midwest City

Contact: 405-232-2493

<http://www.cvent.com/events/winfield-united-academy-october-10-oklahoma-city-ok/event-summary-45d571aeab51464c825cb6e96398fa77.aspx>

CEU's:	Category(s):
TBD	3A
TBD	3B
TBD	3C
TBD	6
TBD	7A
TBD	7B
TBD	10

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):
7	1A
1	7C

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):
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://ageuonline.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

**Pesticide Safety
Education Program**