

PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University
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August, 2019

CHEM

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EPA REGISTERS LONG-TERM USES OF SULFOXAFLOR WHILE ENSURING STRONG POLLINATOR PROTECTION

Today, the U.S. Environmental Protection Agency (EPA) is issuing a long-term approval for the insecticide sulfoxaflor—an effective tool to control challenging pests with fewer environmental impacts. After conducting an extensive risk analysis, including the review of one of the agency’s largest datasets on the effects of a pesticide on bees, EPA is approving the use of sulfoxaflor on alfalfa, corn, cacao, grains (millet, oats), pineapple, sorghum, teff, teosinte, tree plantations, citrus, cotton, cucurbits (squash, cucumbers, watermelons, some gourds), soybeans, and strawberries.

“EPA is providing long-term certainty for U.S. growers to use an important tool to protect crops and avoid potentially significant economic losses, while maintaining strong protection for pollinators,” said Alexandra Dapolito Dunn, assistant administrator for EPA’s Office of Chemical Safety and Pollution Prevention. “Today’s decision shows the agency’s commitment to making decisions that are based on sound science.”

Sulfoxaflor is an important and highly effective tool for growers that targets difficult pests such as

sugarcane aphids and tarnished plant bugs, also known as lygus. These pests can damage crops and cause significant economic loss. Additionally, there are few viable alternatives for sulfoxaflor for these pests. In many cases, alternative insecticides may be effective only if applied repeatedly or in a tank mix, whereas sulfoxaflor often requires fewer applications, resulting in less risk to aquatic and terrestrial wildlife.

EPA's registration also includes updated requirements for product labels, which will include crop-specific restrictions and pollinator protection language.

Background

In 2016, following a 2015 [decision](#) of the Ninth Circuit Court of Appeals vacating the registration of sulfoxaflor citing inadequate data on the effects on bees, EPA reevaluated the data and [approved registrations](#) that did not include crops that attract bees. The 2016 registration allowed fewer uses than the initial registration and included additional interim restrictions on application while new data on bees were being obtained. Today's action, adding new uses, restoring previous uses, and removing certain application restrictions is backed by substantial data supporting the use of sulfoxaflor.

For additional information, please visit: www.epa.gov/ingredients-used-pesticide-products/decision-register-new-uses-insecticide-sulfoxaflor.

(EPA, July 12, 2019)
<https://www.epa.gov/pesticides/epa-registers-long-term-uses-sulfoxaflor-while-ensuring-strong-pollinator-protection>

JUDGE CUTS VERDICT TO \$25.3 MILLION IN ROUNDUP SUIT

Bayer AG won a reprieve as a federal judge cut a verdict linking its Roundup weedkiller to cancer by \$55 million, while the German company continues to fight thousands of lawsuits in the U.S.

The stock rose as much as 2.4% in Frankfurt trading after U.S. District Judge Vince Chhabria ruled Monday that the March verdict intended to punish the company was too high.

Bayer's future growth is clouded by thousands of legal cases filed by people who argue Roundup is to blame for their cancer, leading shareholders to question its decision to buy U.S. seed and pesticide giant Monsanto for \$63 billion last year. The company hired a high-profile mediator to lead settlement talks last month, though it continues to defend the herbicide as safe.

"While Monsanto repeatedly intones that it stands by the safety of its product, the evidence at trial painted the picture of a company focused on attacking or undermining the people who raised concerns, to the exclusion of being an objective arbiter of Roundup's safety," Chhabria wrote.

The judge rejected Bayer's bid to overturn the jury's finding that Roundup is defective because it's sold without a cancer warning. But he cut the verdict to \$25.3 million from \$80.3 million in the California case.

Rigorous Path

Bayer disagreed with Chhabria's ruling denying the company a new trial. While the reduction of punitive damages "is a step in the right direction," the verdict and damages "are not supported by the reliable evidence presented at trial," the company said in an emailed statement, adding that it plans to appeal.

Of the three cases Bayer has lost so far, Chhabria created by far the most rigorous path for the plaintiffs to get to trial -- and they won. Because it's the first case of hundreds collected from federal

courts across the U.S. to go to trial, many of his rulings will serve as a bellwether for those suits.

Analysts' estimates for the costs to settle all the lawsuits Bayer faces in the U.S. range from about \$2.5 billion to \$20 billion. Bloomberg Intelligence analyst Holly Froum reiterated her estimate that a potential settlement could cost Bayer \$6 billion to \$7 billion. Chief Executive Officer Werner Baumann's job may hang in the balance as the architect of the Monsanto takeover.

Chhabria ruled that the \$75 million portion of the March verdict intended to punish the company was too high based on a legal precedent that punitive damages shouldn't be more than four times bigger than compensatory damages. He reduced the punitive damages to \$20 million -- the maximum allowed under guidance supplied by the U.S. Supreme Court -- while emphasizing that the jury's decision to award such damages was "reasonable."

The case was brought by Edwin Hardeman, who used the herbicide on his large plot of land in Sonoma County, about 60 miles (100 kilometers) north of San Francisco. As with many of the other 13,400 consumers suing Bayer, Hardeman alleged that his years of exposure caused his non-Hodgkin's lymphoma. Bayer is scheduled for a fourth trial this summer in St. Louis, where Monsanto was based.

Jennifer Moore, Hardeman's lawyer, called Chhabria's refusal to throw out the verdict a "major victory" for all individuals injured as a result of using Roundup.

"For decades Monsanto has lied about the safety of Roundup and undermined any effort to inform the public that Roundup causes cancer," Moore said in an emailed statement. "We disagree with any reduction of the jury's verdict."

The case is In re: Roundup Products Liability Litigation, MDL 2741, U.S. District Court, Northern District of California (San Francisco). (Southwest FarmPress, July 17, 2019) <https://www.farmprogress.com/business/judge-cuts-verdict-253-million-roundup-suit>

STUDY FINDS SYNERGISM BETWEEN NEONICS AND BEE MITES

A group of international scientists has demonstrated for the first time, a synergistic effect between the exposure of honey bees to neonicotinoid insecticides and the bee mite, *Varroa destructor*. The research was conducted by scientists at the Institute of Bee Health at the Swiss University of Bern and the international honey bee research association, Coloss. It involved researchers at the US Auburn University and the Thai Chiang Mai University.

The researchers found a "previously overlooked" mechanism for recent unsustainably high losses of managed honey bee colonies. They found that the exposure of honey bee colonies to two neonicotinoid insecticides, thiamethoxam and clothianidin, via pollen paste feeding did not affect honey bee worker mass or longevity. However, when in combination with *V destructor* infestation, a negative synergism was observed. While a negative synergism was observed for body mass in both summer and autumn, it was only observed for survival 16 weeks after neonicotinoid exposure. This suggests a previously overlooked time-lag effect of neonicotinoid exposure, the researchers point out. As colonies in temperate regions must produce significant quantities of long-living winter bees to survive, the negative synergistic effects on winter honey bee longevity are said to be most likely compromising colony survival.

In view of the results of the study, the researchers stress the importance of developing sustainable agro-ecosystem management and varroa mite management schemes. "Reduced usage of insecticides and sustainable solutions for *V destructor* mites in agriculture and beekeeping are urgently required," says Dr Lars Straub at the Institute of Bee Health.

The [study](#) has been published in the journal, Nature Scientific Reports.

(Pesticide & Chemical Policy/AGROW, June 11, 2019)

OFF-TARGET, ONCE AGAIN

Jennie Schmidt is an old pro at stewarding herbicide use in grain crops alongside sensitive specialty crops and organic fields.

On her operation on the Eastern Shore of Maryland, she grows genetically modified corn and soybeans and has been a vocal advocate for the use of biotechnology in agriculture, once serving as the first female president of the Maryland Grain Producers Utilization Board.

But she also grows fresh-market green beans, tomatoes destined for canning and manages a vineyard that supplies local wineries. Many of her neighbors also grow specialty crops and organic crops. Schmidt knows all the tricks for avoiding herbicide drift -- both her neighbors' and her own. Her fields are registered with FieldWatch, she communicates annually with neighbors and actually took over weed control from the railway along the stretch of railroad that runs next to her vineyard to make sure herbicides stayed put.

Nonetheless, for the first time in 15 years, Schmidt has watched extensive herbicide drift shrivel, pucker and stunt her vines, producing irregular grape clusters that taper into dead, burned tips, with small, inedible berries. Local experts believe her vines were hit by 2,4-D, dicamba, or both, up to three times this summer, including at bloom in early June -- the critical reproductive stage for a grapevine. While she is accustomed to some level of chemical drift most years, her vineyard usually grows out of it. This year, when it became clear that she would lose \$50,000 worth of contracts with local wineries, Schmidt reluctantly reported the injury to her state department of agriculture.

"I honestly don't know how I feel about the department of agriculture asking my neighbors for their spray records," she said. "But we've never had this level of problem before."

Schmidt's story is an increasingly common one, as crop acreage planted to new herbicide-tolerant crops has grown steadily over the past four years.

Dicamba-tolerant Xtend soybean and cotton fields are especially prevalent this year, with total acreage estimated at 60 million acres, exposing more of the landscape to dicamba even as more crop fields are protected from it. Over the past three years, university weed scientists have determined that the newly formulated dicamba herbicides can volatilize and drift large distances in the hours and even days following applications. EPA issued new labels for the dicamba herbicides XtendiMax, FeXapan and Engenia last fall, with new restrictions on who can apply them and how. But once again, state departments of agriculture across the Midwest and South are fielding calls of off-target dicamba movement.

This year, 2,4-D tolerant Enlist E3 soybeans joined the landscape, though in much smaller numbers, alongside millions of Enlist cotton acres. The corresponding Enlist herbicides are showing little volatility, but physical drift can still occur, weed scientists told DTN. Although not nearly as numerous as dicamba complaints, some 2,4-D injury complaints are also surfacing this summer, particularly in cotton, which is extremely sensitive to 2,4-D if it does not have the Enlist gene.

For help distinguishing 2,4-D and dicamba injury, see this Purdue guide: <https://ag.purdue.edu/...>

COMPLAINTS RISE ALONG WITH SUMMER TEMPERATURES

In Arkansas, dicamba use was banned after May 25, but injury reports are still coming into the state's Plant Board. As of July 23, they had fielded 321 pesticide misuse complaints, of which 121 were for dicamba, 11 for 2,4-D, and another 10 listed as dicamba or 2,4-D.

In east-central Arkansas, Mike Montgomery has experienced multiple years of dicamba damage on his non-Xtend soybeans, but this is the first year he is reporting injury on more than 2,000 soybean acres to the state's plant board.

"Usually, we would get a drift early on and the beans would grow out of it," he said. "But this year, it's been wave after wave of drift. Just when they start to recover, they get hit again. Fields just show uniform damage -- you can't tell where it came

from." Only Montgomery's 500 acres of Xtend soybeans remain healthy and unharmed so far this season -- except where he replanted Roundup Ready 2 soybeans in patches among them.

University of Arkansas Extension entomologist Gus Lorenz has lost soybean research fields to dicamba exposure in the past. Now this year, some of his cotton research plots in eastern Arkansas had to be destroyed after they were hit with 2,4-D drift. Lorenz had been testing a new transgenic cotton variety resistant to Lygus, or tarnished plant bug -- a major pest of cotton for Arkansas growers.

"So we're losing data on technology that is going to come to market pretty soon, and we want to tell growers what the value is, how it fits in their operation, and if it's worth what companies will charge for it," Lorenz said. "We're pretty upset about it. It's hard to support the growers in this state when we keep getting herbicide injury on our work."

In Indiana, the Office of Indiana State Chemist has fielded 121 drift complaints, with 23 suspected dicamba cases. Since about 75% of Indiana growers adopted Xtend soybeans this year, soybean damage has been less common, noted Purdue University weed scientist Bill Johnson. "But wherever adoption of Xtend was less than 100%, you can find damaged soybean fields," he said. "And where there is 100% Xtend adoption, you can see it in the trees. It's not hard to find trees with curled and puckered leaves."

Missouri's Department of Agriculture is investigating 18 dicamba complaints and one 2,4-D complaint so far. In Tennessee, pesticide regulators have received a handful of dicamba injury complaints and 15 complaints about 2,4-D. Most of these complaints are not in row crops, but rather nurseries, vineyards, gardens, trees and landscape ornamentals, noted Chad Hayes, agricultural pesticide coordinator with the Tennessee Department of Agriculture.

This spring, the Illinois Department of Agriculture decided to extend a state-issued dicamba cutoff for June-planted soybean fields from June 30 to July 15. That decision led to a lot of spraying in some of the hottest, most humid days of the summer so far, noted Kris Ehler, a sales agronomist with Ehler

Bros., a family seed and crop consulting company in east-central Illinois. In his region of the state, temperatures soared above 90 degrees and relative humidity pushed beyond 90% on multiple days between June 30 and July 15.

"We're seeing more off-target dicamba movement than we've ever seen," Ehler said. "Extending the cutoff date pushed spraying into really hot and humid conditions. As a retailer, technical application conditions were ideal, such as the wind speed, but applications were made under such humid conditions that the opportunity for volatility was higher than we've ever seen before."

It has become extremely easy to spot those soybean fields that do not contain the dicamba-tolerant gene, thanks to the tell-tale signs of dicamba exposure -- cupped, puckered leaves and twisted stems and petioles on the plant's new growth. "You can see where the non-Xtend acres are, whether they are non-GMO or Liberty or Enlist," Ehler said. "They really stand out." So far, the Illinois Department of Agriculture has fielded nearly two dozen dicamba injury complaints, primarily to non-Xtend soybean fields, said Doug Owens, head of the IDOA's Bureau of Environmental Programs.

Bayer, who owns the dicamba-tolerant trait technology and sells XtendiMax, told DTN the company has not received many complaints about off-target damage this year, but could only supply data up to June 25. "As of June 25, we have received nine off-target movement inquiries, two crop response inquiries and 67 weed performance inquiries," the company said via email. "We are conducting field visits and, in some instances, have found that growers applied XtendiMax with VaporGrip Technology over a non-dicamba tolerant field."

People are often reluctant to make formal reports of herbicide injury, which has likely suppressed official complaints this year and past years, Johnson noted. The ensuing state investigations can be invasive, time-consuming and roil neighborly relations. Moreover, they do not result in compensation for the injured party, only potential fines for the applicator, some as low as \$100 per violation.

Because dicamba can volatilize and move large distances, it is particularly difficult to track down the source of the injury, which is only visible 10 to 14 days after an application. Last year, of the 200 dicamba-specific complaints filed in Arkansas, the state's plant board inspectors were only able to pinpoint a pesticide violation in 26 of them.

EYES ON DRIFT BEYOND AGRICULTURE

Now in its fourth year, the phenomenon of off-target dicamba injury is starting to catch eyes beyond the agricultural community.

In Arkansas, the state Audubon office has launched an effort to find and publicize dicamba injury to trees and plants, particularly in the eastern part of the state, where dicamba applications are common.

"We've really raised the profile of dicamba in the conservation community," said Dan Scheiman, bird conservation director for Audubon Arkansas. "It's become no longer just an agricultural issue in Arkansas."

Scheiman has recruited dozens of volunteers to search for and send photos of potential dicamba damage that they find in their communities. "I have engaged volunteers to go out and look for herbicide symptomology on native plants across eastern Arkansas," he said. "And they are seeing symptoms consistent with dicamba -- leaf cupping and petiole twisting on a variety of native plants -- oaks, maples, ashes, trumper creeper, greenbrier, pear and sycamore," Scheiman said. So far, he has received over 450 photos, which he will examine with a tree disease expert to weed out non-herbicide injury.

"Ultimately, it's all about protecting bird habitat," he said. "Exposure to dicamba over multiple seasons could end up killing a tree or reducing its biomass, which then reduces its insect biomass, which is the food for birds, and it reduces the cover available for birds."

For Schmidt, the continued growth of 2,4-D- and dicamba-tolerant acreage leaves her with tough decisions about the future of her highly diversified Maryland farming operation.

"What do we do if this happens again?" she wondered. "How many years do you put up with that? Does it make sense for us to stay in grapes? It would be a big loss -- we've invested in plants, post, wire, labor. That will be a discussion for next year."

Montgomery says he has never seen a situation quite like the one unfolding in Arkansas this summer with dicamba. At his house, the young red maple trees planted four years ago in his yard are dying, along with nearby cypress and oak trees and neighbors' vegetable gardens.

On top of the frustration of the season, he said he feels another emotion, too -- shame.

"This has brought out the absolute worst in people," he said. "I hate it for agriculture, because it's a real black eye for us."

(Progressive Farmer, July 25, 2019)

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/07/25/herbicide-injury-heats-across>

UCR RESEARCHERS REPORT PROGRESS CONTROLLING MOSQUITOES WITH BACTERIA

Researchers at UC Riverside have identified a neurotoxin that isn't harmful to any living thing except *Anopheles* mosquitoes. They plan to use it in developing a bacteria-based *Anopheles* insecticide.

About 30 years ago, scientists identified a strain of bacteria that kills *Anopheles*. Since the bacteria's method of attack was not understood, it couldn't be replicated or used as an alternative to chemical insecticides -- until now.

It took the team, led by Sarjeet Gill, a professor of molecular, cell and systems biology at UC Riverside, 10 years to achieve a breakthrough in understanding the bacteria. Gill attributes the success to modern gene sequencing techniques. The team hit the bacteria with radiation, creating mutant bacterial strains that could not produce the toxin. By comparing the nontoxic strain to the one that kills

Anopheles, they found proteins in the bacteria that are the keys to toxin production. The work is detailed in a paper published in Nature Communications.

“Identifying the mechanisms by which the bacteria targets Anopheles has not been easy,” Gill said. “We were excited not only to find the neurotoxin, called PMP1, but also several proteins that likely protect PMP1 as it’s being absorbed in the mosquito’s gut.”

Members of Gill’s team include postdoctoral scholars Estefania Contreras, Jianwu Chen, Harpal Dhillon and Nadia Qureshi, as well as graduate students Swati Chawla from UC Riverside, Geoffrey Masuyer and Pål Stenmark from Stockholm University and Han Lim Lee from the Institute for Medical Research in Malaysia. Their work was funded by the U.S. National Institutes of Health.

The researchers have applied for a patent on this discovery, and now hope to find partners that will help them develop their bacteria-based Anopheles insecticide. (PCT Online, July 4, 2019)

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

EPA REJECTS CALLS TO BAN CHLORPYRIFOS

The EPA will not ban the insecticide chlorpyrifos, the agency ruled on Thursday, in response to a court order handed down in April.

An EPA spokesperson, however, told DTN on Friday the agency will expedite an ongoing review of chlorpyrifos in response to public concerns raised. The agency has until 2022 to complete its review.

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 the agency may at some point place new restrictions on chlorpyrifos.

"In response to requests from the public, EPA is expediting the agency's review of chlorpyrifos, which should be completed well before the 2022 statutory deadline," the spokesperson said.

"Registration review is a comprehensive, scientific and transparent process that will further evaluate the potential effects of chlorpyrifos. EPA has also been engaged in discussions with the chlorpyrifos registrants that could result in further use limitations, affecting the outcome of EPA's assessment."

EPA has "responded to some of the claims in recent years," the spokesperson said, while assessing available chlorpyrifos data, conducting risk assessments and consulting an EPA scientific advisory panel on many claims raised.

Corteva Agriscience said in a statement to DTN the company supports the ongoing review.

"Completion of registration review will provide needed certainty to growers who rely on chlorpyrifos and needed reassurance for the public that labelled uses will not pose unacceptable risk to public health or the environment," Corteva said.

"It is common for the federally-mandated registration review process to result in impactful label changes, which could include elimination of select product uses. We are committed to working with the agency as it seeks to make an accurate assessment, and if necessary, reduce potential exposures, while also ensuring that growers for whom chlorpyrifos is a critical tool can continue to use the product safely," Corteva added.

Bill Freese, science policy analyst at the Center for Food Safety, said EPA's latest decision doesn't take into account the chemical's threat to children.

"With this unconscionable decision, the Trump administration has betrayed America's children, using all the means at its disposal to ensure that kids will continue to suffer from entirely avoidable learning disabilities caused by this neurotoxic chemical," he said in a news release.

LEGAL PURSUIT

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.

The EPA's latest order came about after a series of court actions.

On Aug. 9, 2018, a three-judge panel on the Ninth Circuit ordered EPA to cancel all chlorpyrifos registrations in 60 days. The court ruled the agency was not justified in maintaining the insecticide's registration "in the face of scientific evidence that its residue on food causes neurodevelopmental damage to children." Chlorpyrifos' registration was set to end on Oct. 9, 2018.

The EPA asked for an "en banc" hearing before all non-recused judges in the Ninth Circuit. En banc hearings are reserved for cases that are particularly complex. A hearing was then held on March 26, 2019.

The agency indicated during oral arguments that it could have a decision within 90 days on objections filed in 2017. That deadline was July 18, as part of the court's April 19 order.

Read EPA's order here: <https://www2.dtn.com/...>

(Progressive Farmer, July 19, 2019)
<https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/07/19/agency-raises-possibility-new-2>

FEMALE BED BUGS CONTROL THEIR IMMUNE SYSTEMS AHEAD OF MATING TO PREVENT AGAINST STIS

Female bed bugs who are 'full bellied' and therefore more attractive mates for males, are able to boost their immune systems in anticipation of catching sexually transmitted infections (STIS), research has found.

Led by the University of Sheffield, the research discovered a correlation between fed females and the chances of them being inseminated and therefore infected as a result.

To mitigate this, female bedbugs that have just dined on blood and are therefore full, are able to cleverly manage their simple immune system in anticipation of mating. This is in comparison to female bedbugs that do not get regular food, do not mate regularly and therefore do not have the same need to boost their immune system in defense of infection.

Mating amongst bedbugs involves the male critter inserting its needle-like penis into the female bedbug's abdomen, in a process known as traumatic insemination.

The study found that females who boost their immune system in anticipation of this traumatic insemination also benefit from a longer lifespan—

by being better able to resist the effects of infection—and have greater reproductive success. This is despite laying eggs at the same rate as 'hungry' females.

While it was previously known that insects can aid their offspring when in a parasite rich environment, this is the first evidence that an individual bedbug can regulate immunity in anticipation of infection. The team now believe this ability to 'manage' immune systems might be shared by other insects.

Professor Mike Siva-Jothy, from the University of Sheffield's Department of Animal and Plant Sciences, who led the research, said: "This is a pretty clever skill that bedbugs have developed to protect themselves against infection from what is quite a brutal mating ritual.

"This ability for bedbugs to do complex things with their simple immune systems thanks to some clever management may well also be something other insects have grasped the ability to do.

"Everyone knows bedbugs are some of the most unwanted human bed-mates. We hope the findings might therefore help us pinpoint ways of making females more susceptible to natural routes of infection, something that may help us find new ways of controlling them."

The study looked at 100s of bedbugs over several years, during experiments that lasted two-three months.

The experts believe the key reason why male bedbugs are attracted to recently fed females is because they are full of blood and will therefore lay lots of eggs. In addition, these full females will be fat from their blood feast and so cannot fight back against traumatic insemination.

Professor Siva-Jothy added: "We now need to understand how this boost to the immune system is switched on and off in reproductive cycles and

whether other organisms use similar systems to minimise infection by sexually transmitted diseases.

The research has been published today (1 July 2019) in [Proceedings of the National Academy of Sciences \(PNAS\)](https://www.pctonline.com/article/female-bed-bugs-control-immune/). (PCT Online, July 4, 2019) <https://www.pctonline.com/article/female-bed-bugs-control-immune/>

BAYER GRANTED REQUEST TO MOVE SOME GLYPHOSATE TRIALS OUT OF CALIFORNIA

A federal judge in the US state of California has agreed to Bayer's request to move one of the next trials related to the safety of legacy company Monsanto's glyphosate-based herbicides to Nebraska.

The company is keen to see how it fares outside of California, where losses in the first three trials have resulted in huge damages being incurred to cancer victims. They won damages after courts found that exposure to Monsanto's Roundup herbicides had caused their illnesses.

A state jury in San Francisco, California awarded a former school groundskeeper \$275 million last August and a second state jury in neighboring Oakland awarded an elderly couple \$2 billion in damages in May. In between, a federal jury convened in San Francisco handed down an \$80 million verdict against Monsanto. All three cases found that exposure to glyphosate played a substantial role in causing the plaintiffs' cancers and found Monsanto should have warned consumers of the cancer risks from its herbicides.

US District Judge Vince Chhabria, who is overseeing more than 1,200 federal complaints consolidated in the US District Court for the Northern District of California, has called on Bayer

to mediate the federal cases and consider settling the remaining claims.

Bayer, which also faces thousands of lawsuits in state courts, has appealed all three rulings. The next federal trial is planned for San Francisco in February and Judge Chhabria intends to refer several other complaints to other federal courts in California. In an order issued June 14th, he agreed that this “first wave” of cases should be heard in California while five similar complaints will be sent back to the US District Court for the District of Nebraska. Hearings in those cases will begin in the autumn.

The second wave will consist of trials transferred back to federal courts in their home districts. The plaintiffs have chosen Illinois while Bayer has opted for North Carolina.

The decision is a win for Bayer, which has suffered financially from the jury verdicts amid lingering public concern about Monsanto’s glyphosate herbicides and the company’s past conduct.

Bayer purchased Monsanto for some \$63 billion last year, but the group’s stock has dropped more than 40% since the first ruling last August, a decrease equaling some \$40 billion in value.

In its request last month to move the forthcoming round of trials to a different state, Bayer called California a “poor candidate to be the sole source of preliminary information” about litigation that spans 66 jurisdictions.

“Focusing so heavily on California plaintiffs in this otherwise national litigation will not provide a representative sample from which the parties can value and evaluate the litigation,” Bayer said in its May 29th filing with Judge Chhabria.

The company pointed to California’s controversial Prop. 65 law, which requires warning labels on a long list of products that contain chemicals that major jurisdictions have found to pose risks of

cancer or reproductive harm. The law means California residents see cancer warnings “on an abundance of items” that do not require such labels in other jurisdictions, “distorting juror’s views of when and why cancer warnings are warranted”, according to Bayer.

The company noted that California does not cap non-economic damages or limit punitive damages awards and adds that courts in California are required by the US Court of Appeals for the Ninth Circuit to show “greater deference to experts in close cases” than other jurisdictions.

Bayer argued that the state’s pool of prospective jurors “is tainted by the extensive, and highly prejudicial coverage in local, state, and national news media of the prior three California verdicts”.

Attorneys for the plaintiffs called on Judge Chhabria to ignore Bayer’s request, arguing that the company had failed to justify remand of the Nebraska and North Carolina cases.

“Monsanto overstates the necessity of remand to other jurisdictions in order to evaluate the nature and strength of the claims,” the plaintiffs said in their filing last month.

They noted that Judge Chhabria had called California “a very diverse state” adding that pending state trials in Missouri would also provide information to evaluate the claims. (Pesticide & Chemical Policy/AGROW, June 25, 2019)

COURT UPHOLDS RIGHT OF LOCAL MARYLAND COUNTY TO RESTRICT PESTICIDES, REJECTS PESTICIDE AND LAWN CARE INDUSTRY STOMPING ON LOCAL RIGHTS

On Friday, Maryland's highest court upheld the right of local governments to restrict the use of toxic lawn care pesticides more stringently than the state. By denying an appeal from the pesticide industry's challenge to a lower court ruling, the Maryland Court of Appeals has made official Montgomery County's 2015 Healthy Lawns Act, which prohibits toxic pesticides from being used on public and private property for cosmetic purposes.

"This long-awaited decision affirms local democratic decision making to protect health and the environment, upholding the first U.S. county law to ban toxic pesticides on private and public property," said Jay Feldman, executive director of the organization Beyond Pesticides. "The law, now in force, will bring critical health protections for pregnant mothers, children and other vulnerable residents in Montgomery County, and safeguard sensitive wildlife species like pollinators."

The decision by the Maryland Court of Appeals upholds local democratic decision making in the face of a challenge by industry groups representing lawn care companies and chemical manufacturers. The chemical industry has fought for nearly three decades to suppress the right of local governments in the U.S. to protect public health and safety with pesticide law, having successfully lobbied 43 states to preempt their local political subdivisions' authority. Seven states uphold local authority, including the state of Maryland, which has affirmed in its legislature the rights of localities by rejecting preemption legislation on numerous occasions.

"This is an important win for the local organic land management movement sweeping the country, as local elected officials embrace practices that protect the health of people and the environment," said Mr. Feldman. "We hope other Maryland countries

watching this lawsuit will follow Montgomery County's lead and implement these important protections for their own residents."

The Healthy Lawns Act, first passed in 2015, was overturned by a Circuit Court in 2017. In response, the Montgomery County Council voted to appeal the decision. Nine organizations, including Beyond Pesticides, filed an Amicus brief in support of the county law. This led to a ruling earlier this year by the Maryland Special Court of Appeals, overturning the circuit court decision and affirming Montgomery County's right to implement the law. "We thank local advocates from Safe Grow Montgomery and the Montgomery County Council for standing up to multi-national pesticide companies' bullying and regulating these toxic chemicals in a way that reflects the values of their residents and the community," Mr. Feldman said. (Beyond Pesticides, July 15, 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/>

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

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.ensystex.com www.for-thor.com

CEU's:	Category(s):
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4	3A
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2	7A
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3	7B
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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.ensystex.com www.for-thor.com

CEU's:	Category(s):
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4	3A
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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.ensystex.com www.for-thor.com

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

ODAFF Test Information

Pesticide applicator test sessions dates and locations for August are as follows:

August	
6	Lawton
8	Tulsa
13	El Reno
22	Tulsa

El Reno: Canadian County Fairgrounds
Education Building
220 N Country Club Rd

Enid: Garfield County Extension Office,
316 E. Oxford.

Goodwell: Okla. Panhandle Research &
Extension Center, Rt. 1 Box 86M

Lawton: Great Plains Coliseum,
920 S. Sheridan Road., Prairie Bldg

McAlester: Kiamichi Tech Center on
Highway 270 W of HWY 69

Tulsa: Tulsa County Extension Office
4116 E 15th St.

**Pesticide Safety
Education Program**