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PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University
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U.S. STATE PROSECUTORS JOIN PUSH TO BAN PESTICIDE CHLORPYRIFOS

Six state prosecutors are seeking to join a lawsuit to force the U.S. Environmental Protection Agency to ban the pesticide chlorpyrifos from use on U.S.-grown fruits and vegetables, according to court papers filed on Thursday.

Democratic attorneys general for New York, Maryland, Vermont, Washington, Massachusetts and the District of Columbia filed a motion to intervene in a case environmental and social advocacy groups brought in a federal appeals court on June 5. It challenges EPA Administrator Scott Pruitt's March 29 decision not to ban chlorpyrifos from U.S. foods.

The action by the prosecutors adds momentum to a push by environmental groups to broadly oppose Pruitt and U.S. President Donald Trump in their stated aim to loosen U.S. environmental regulations.

"It is EPA's responsibility to protect Americans from unsafe chlorpyrifos residues on food because of the potential neurodevelopmental and other adverse health effects caused by exposure," the prosecutors wrote in their filing. "Citizens of the proposed state intervenors consume foods grown throughout the United States and the world that contain chlorpyrifos residues."

The EPA has previously said chlorpyrifos, which is sold under a range of brand names, did not meet safety standards laid out by a 1938 U.S. law, the Federal Food, Drug and Cosmetic Act. An EPA spokesman declined to comment on Thursday's filing.

The prosecutors' move is the latest in a series of administrative and courtroom actions against the pesticide that began long before Trump took office.

In 2007, environmental groups petitioned the EPA to revoke its tolerance of chlorpyrifos residues on food. Over the next nine years, the groups obtained a series of court decisions forcing action by the EPA, which said in 2015 it was "unable to conclude that the risk from aggregate exposure" to the pesticide was safe. Environmental groups have argued humans are exposed to harmful elements in chlorpyrifos not only by eating food containing residues of the pesticide, but also by drinking water contaminated by it.

The EPA issued two proposals to ban chlorpyrifos but never produced a final rule, despite being ordered by a court on two separate occasions to take final action on the matter. Pruitt's March administrative order reversed the agency's moves to ban the pesticide, denying the 2007 petition for the ban.

The case is League of United Latin American Citizens v. Scott Pruitt, U.S. Court of Appeals, Ninth Circuit, 17-71636.(Reuters, July 6, 2017) http://www.reuters.com/article/us-usa-environment-lawsuit-pesticide-idUSKBN19R2P4

REPORT QUESTIONS US EPA HERBICIDE RESISTANCE STRATEGY

A new report from the US EPA's Office of Inspector General (OIG) casts doubt on the effectiveness of the Agency's efforts to combat herbicide resistance. The OIG found that the EPA had taken "few steps" to address herbicide resistance despite public pronouncements that the issue was one of the "biggest challenges" facing US farmers. "The EPA does not have sufficient management and oversight controls to address potential risks and consequences of herbicide resistance," according to the OIG.

The report looked specifically at the EPA's strategy to combat resistance issues related to the proliferation of genetically modified crops. Some 90% of US maize, cotton and soybean crops are modified for tolerance to herbicides and farmers are increasingly concerned about the growth of weeds that have become resistant to glyphosate and other popular active ingredients. Herbicide-resistant weeds affect some 24 million ha of cropland across the US and the OIG says that "billions of dollars" in US crop value are at risk.

The EPA's efforts to date largely centre on draft guidance for product labelling related to herbicide resistance and on best management practices. The Agency also uses pesticide education and outreach to gather data on herbicide resistance.

The 30-page report criticises the Agency for failing to fully utilise the "registration and labelling processes to help mitigate herbicide resistance" and for failing to collect any herbicide resistance data through its adverse incident reporting database.

The OIG says that the EPA's herbicide resistance strategy has also been hindered by "little to no communication" between the Agency, growers and other stakeholders. "This limits the reach of actions proposed and taken by the EPA, the development of meaningful alternatives, and the agency's ability to proactively respond to herbicide resistance in the field," according to the OIG.

The EPA also does not have measures to track its progress addressing and slowing the spread of herbicide resistance, the OIG concludes. "With improved management and oversight controls, the EPA can be better prepared to assess and develop actions to address and prevent future herbicide resistance issues," the report states.

Additional information about the synergy of active ingredients could also help reduce uncertainties

about resistance. The report recommends that the EPA consider requiring herbicide labels to include mechanisms of action. Not requiring such information on labels can result in the improper use of pesticides to combat herbicide-resistant weeds, the OIG says. "The EPA's pesticide registration and reporting processes also do not generate necessary herbicide resistance information for tracking, monitoring and identifying where resistance occurs," according to the report.

The OIG also calls on the EPA to develop performance metrics and a plan for establishing consistent communication with stakeholders.

The Agency agrees with the report's recommendations and says that it is trying to increase communication about weed resistance with growers and other stakeholders. (Pesticide & Chemical Policy/AGROW, June 22, 2017)

NO EASY ANSWERS: BEE HEALTH THREATENED BY 'FOUR P'S

No single factor is behind the decline in honey bee health, a leading researcher said at presentations in Washington, D.C., Monday, the start of the officially designated National Pollinator Week.

"I don't think we're going to find one driver," said University of Minnesota entomologist Marla Spivak, who spoke as lead author of a commentary released the same day by the Council for Agricultural Science and Technology. She gave three presentations, including two on Capitol Hill.

Instead, she said the "four P's" – parasites, pathogens, pesticides and poor nutrition – combine to compromise bee health or, in some cases, kill bees. Varroa mites spread viruses from hive to hive, pesticides can alter bee behavior in significant ways, and a lack of floral resources can leave bees less able to fight off the effects of the other stressors.

Beekeepers began "screaming bloody murder" in 2006 when they started losing colonies in large numbers, Spivak said, and while the latest colony survey by the Bee Informed Partnership showed annual losses of 33 percent, the second-lowest rate in seven years, that number is still well above what beekeepers consider acceptable.

The varroa mite, which Spivak called "a very obnoxious parasite," feeds on the bees, reducing their body weight, including necessary proteins and carbohydrates. But "the most insidious thing about this pest," she said, is that as it feeds on the bee, it picks up other viruses that were not causing problems and then transfers them to other bees.

Spivak said that when colony losses accelerated about 10 years ago, beekeepers "reluctantly" began treating their hives with miticides. Those who do not treat can increase the chances that colonies belonging to nearby beekeepers will become infected. But treatment can bring its own problems, Spivak said – residue in the wax comb and "secondary effects" on bee health.

She said it's necessary to find ways to control mites without the use of synthetic compounds to which mites can become resistant. In the meantime, she said the Bee Informed Partnership – a collaborative effort of research labs and universities – has established tech transfer teams that will inspect hives for a fee and recommend ways to maintain bee health.

Pesticide exposure is a continuing problem for bees, Spivak said. "We've learned that on average, every load of pollen has five to six detectable pesticides in it," she said. And while any bee that encounters an insecticide at a high enough level can die of acute toxicity, Spivak said "sublethal effects are incredibly important."

Neonicotinoid insecticides, which are used in coatings on most corn and soybean seed, act systemically, moving through the plant tissue to the nectar and pollen. They "may persist in plant tissues or soil for long periods of time, in some cases more than a year, which violates the basic tenet of (Integrated Pest Management) and (Best Management Practices) regarding treating only when needed," according to the commentary.

But they can also "unintentionally be released by farm equipment during planting and drift onto neighboring plants contaminating nectar, pollen, and water sources for foraging bees," the commentary said. Bees exposed to neonics through contaminated pollen and nectar can exhibit "subtle behavioral and developmental impairments." For instance said Spivak, they can "become disoriented and may not find their way home."

Neonic manufacturers such as Syngenta and Bayer CropSciences are working to reduce "dust-off" of neonics during planting, which Spivak said "should be a relatively easy fix, I would hope."

Neonics' effects on bees have received the lion's share of attention among all pesticides, Spivak said, noting that "many people think they are the major cause of bee death." But she said that more research is needed on sublethal effects of "all classes of pesticides and fungicides."

Herbicides have an indirect effect on bee health by killing off plants that provide floral sustenance, Spivak said. "Many of the weeds are flowering plants that bees really need and depend on for their nutrition," she said, quoting beekeeper and co-author Browning, who said honey bees, wild bees and other pollinators are often "reduced to feeding on scraps."

The importance of floral nutrition was driven home to Spivak by recent research showing that when bees feed on good nectar and pollen, they gain access to phytochemicals that help them fight off diseases and detoxify certain type of pesticides.

"Our greatest challenge going forward is how we protect our pollinators . . . and control our crop pests at the same time," Spivak said, stressing that it is not an "either-or" proposition. Instead, a "rebalancing" needs to take place so bees can be protected next to corn and soybean fields, but also in apple orchards and almond groves.

But the recent run of high commodity prices and biofuel mandates has contributed to the loss of hundreds of thousands of Conservation Reserve Program acres in prime beekeeping territory such as the Northern Great Plains, the commentary said.

The conversion of grasslands to cropland "is having a severe impact on honey production," Spivak said, and also eliminating many of the flowering plants that bees need.

Farmers need incentives through the farm bill to plant pollinator-attractive plants in marginal habitat, she said. "They're happy to do it as long as they can do it on their own terms," she noted, touting a seed mix from the Bee and Butterfly Habitat Fund.

"We are in the middle of this glorious pollinator revival, and people, because they're paying attention to bees and monarch butterflies, they're starting to realize they can help," she said.

Spivak said about a third of the human diet, "if you eat lots of fruits and vegetables (as you should) is dependent on bee pollination." And the CAST commentary said that "pollination services contribute directly to the economy and food security," citing annual revenues of $11.7 billion from the sale of honey bee-pollinated fruit, vegetable, and nut crops in the United States. "The additional value of pollination services by the thousands of species of native bees that live in the wild throughout the (U.S.) is estimated at $3.4 billion annually, and the total economic value of pollination worldwide, by all bees, was estimated at $216 billion."

Other authors on the commentary were beekeeper Zac Browning of Jamestown, N.D.; postdoctoral researcher Mike Goblirsch and Ph.D. candidate Katie Lee of the University of Minnesota's Bee Lab; research ecologist Clint Otto and wildlife biologist Matthew Smart of the U.S. Geological Survey's Northern Prairie Wildlife Research Center in Jamestown, N.D., and extension and research entomologist Judy Wu-Smart at the University of Nebraska.(AgriPulse June 21, 2017)
https://www.agri-pulse.com/articles/9427-no-easy-answers-bee-health-threatened-by-four-ps

MISSOURI LIFTS DICAMBA BAN, ISSUES STRICTER APPLICATION PARAMETERS

The Missouri Department of Agriculture has lifted its barely week-old ban on new dicamba technologies, which have been at the center of controversy as complaints about drift snowball in select Southern states, and replaced it with a set of tightened application restrictions.

The department issued the following statement on Thurs., July 13:

Missouri Director of Agriculture Chris Chinn today issued a Notice of Release from the statewide Stop Sale, Use or Removal Order for ENGENIA Herbicide, EPA Registration Number 7969-345; XTENDIMAX with VaporGrip Technology, EPA Registration Number 524-617; and FEXAPAN™ Herbicide Plus VaporGrip™ Technology, EPA Registration Number 352-913.

"From the moment the stop sale and use order went into effect, we've been working to get these weed control products back into the hands of our farmers," said Director of Agriculture Chris Chinn. "BASF, Monsanto and DuPont came to the table and agreed to additional safeguards for product use in response to issues we've faced this growing season."

In an effort to reduce off-target crop injury, the Department has approved a Special Local Need label for each herbicide which includes special provisions and safeguards for the use of this technology in Missouri.

According to the Special Local Need labels, to apply the herbicide to dicamba-tolerant soybeans and dicamba-tolerant cotton in Missouri, the following restrictions must be followed:

Wind Speed – DO NOT apply at wind speeds greater than 10 mph. Applicators must measure and record wind speed and wind direction for each field prior to application.

Application Timing – DO NOT apply before 9:00 a.m. and DO NOT apply after 3:00 p.m.

Certified Applicator – All applications of ENGENIA, XTENDIMAX and FEXAPAN must be made by a properly licensed Missouri certified private applicator or certified commercial applicator, certified noncommercial applicator or certified public operator.

Dicamba Notice of Application Form – Certified applicators must complete an online web-based form "Dicamba Notice of Application" prior to the actual application. The Dicamba Notice of Application Form is posted on the Missouri Department of Agriculture's website at: www.Agriculture.Mo.Gov/dicamba/notice/.

Recordkeeping Requirements – Certified private applicators, certified noncommercial applicators and certified public operators must keep and maintain a record of use for each application of ENGENIA, XTENDIMAX or FEXAPAN herbicide.(CropLife, July 14,2017)
http://www.croplife.com/crop-inputs/missouri-lifts-dicamba-ban-issues-stricter-application-parameters/

ZIKA-CARRYING MOSQUITOES EXPAND U.S. RANGE, CDC REPORTS

The southern United States shows a substantial increase in the number of counties that reported evidence of the mosquitoes that can spread chikungunya, dengue, and Zika viruses, according to new research by the Centers for Disease Control and Prevention (CDC) published in the Journal of Medical Entomology June 19.

In the spring and fall of 2016, CDC conducted surveys to record where Aedes aegypti and Aedes albopictus mosquitoes were found. The latest 2016 data add Ae. aegypti collection records from 38 new counties and Ae. albopictus collection records from 127 new counties, a 21 percent and 10 percent increase, compared with the previous report, in the

number of counties that report the presence of these mosquitoes.

These findings highlight the need for continued and improved mosquito surveillance. State and local health departments and mosquito control districts can use this information to plan for mosquito control and prevention activities in advance of possible outbreaks of mosquito-borne diseases. For more information: www.cdc.gov/zika. (PCT Online, July 6, 2017)

US DICAMBA CONTROVERSY SPROUTS NEW CLASS ACTION AGAINST MANUFACTURERS

Farmers from the US state of Arkansas have filed a class action lawsuit against BASF, DuPont and Monsanto that claims the companies should be held liable for crop damage caused by the herbicide, dicamba.

The lawsuit alleges that all three companies acted inappropriately in rolling out genetically modified dicamba-tolerant cotton and soybeans as well as new companion dicamba herbicides that have been touted as less prone to drift. "This is not an anti-GMO lawsuit -- it's a lawsuit about corporate greed, a rush to market and the resulting fallout," according to the plaintiffs. "[The] defendants acted selfishly, focused on profits, and ignored their responsibilities to the market."

The plaintiffs say that the roots of their complaint lie with Monsanto's decision to commercialize its dicamba-tolerant cotton and soybeans prior to receiving the US EPA's approval for companion herbicides. Monsanto began selling its Bollgard II XtendFlex (MON88701xMON88913xMON15985) cotton to farmers in 2015 and its Roundup Ready 2 Xtend (MON87708xMON89788) soybeans the following year.

Instructions provided with the Monsanto crops told customers not to apply existing dicamba products, but farmers allegedly ignored that warning and drift problems have emerged in Arkansas, Missouri and other states. Monsanto received approval for its companion XtendiMax herbicide in late 2016. EPA also registered BASF's Engenia and DuPont's FeXapan for use on the Monsanto dicamba-tolerant crops. But dicamba drift problems appear to have increased this year despite the availability of the new products.

Arkansas, which has received some 700 reports of crops damaged by dicamba, has imposed a temporary ban on the herbicide and the controversy has prompted Missouri and Tennessee to put new restrictions on uses. State officials in Illinois, Indiana and Iowa are also investigating reports of crop damage from dicamba drift.

The class action, filed on July 19th in the US District Court for the Eastern District of Arkansas, contends that Monsanto did little to quell illegal use of dicamba in 2015 and 2016. The plaintiffs say that company representatives assured farmers applying older dicamba products would "be just fine" and argue that Monsanto's "real plan" was to appear as it if were complying while "allowing its seed representatives to tell farmers the opposite in person".

The lawsuit also alleges that Monsanto, BASF and DuPont "drastically underplayed" the risk of damage from their new dicamba formulations due to volatilization and temperature inversions. The approved herbicides "even if properly applied, were not non-drifting or non-volatilizing," the plaintiffs argue, and the companies were aware that "no matter what safeguards were taken, damage due to temperature drift, volatility and drift would result, and hid such information from the EPA".

The complaint further suggests that the companies have run afoul of antitrust laws because farmers who have suffered, or fear suffering, dicamba damage are being forced to protect themselves by purchasing the dicamba-tolerant seeds. "Ironically, and as a potential motivating factor, dicamba damage only helps sales of Xtend soybeans, XtendFlex cotton and other upcoming Xtend products as well as the over-the-top dicamba formulations with which they are used," the lawsuit alleges.

Dicamba damage in 2015, 2016 and 2017 shows "whenever Xtend products are used, damage due to

temperature inversions, dicamba drift and volatilisation will follow", the plaintiffs explain. "This creates and perpetuates the cycle of damage to non-target crops which do not have the Xtend dicamba resistance trait. The only solution for innocent farmers then is to play defence: if they do not want their crops hurt by dicamba, they must also buy Xtend products with dicamba resistance if they are available for their crops and plants."

Monsanto and BASF are also facing two other class actions brought by Arkansas soybean growers for damage from dicamba drift. Monsanto faces several other similar lawsuits filed by farmers in Missouri. (Pesticide & Chemical Policy/AGROW, July 25, 2017)

PURDUE RESEARCHERS WORKING ON NOVEL VECTOR CONTROL SOLUTIONS

Purdue University entomology professor Catherine Hill is researching a way to respond to new and reemerging vector borne diseases, specifically without wiping out the mosquito population.

Arthropod vectors include insects such as mosquitoes, sandflies, blackflies and ticks. These insects transmit diseases through biting a host; and many of these diseases are on the rise due to human population growth, climate change and habitat destruction, Hill says.

Increased human population leads to large groups of people relocating to find more resources. These people bring diseases to which the people in new regions are not immune. Local mosquitoes that feed on infected people are then able to spread diseases to others.

Higher global temperatures mean that insects can survive in different geographical regions that were previously off limits for their biology. According to Climate Nexus, an environmental advocacy agency, mosquitoes can move farther away from the equator, as well as survive in higher altitudes.

Deforestation also plays a role in the movement of vector-borne diseases by changing the dynamics of an ecosystem; this eliminates mosquito habitats and the natural vertebrate hosts used by mosquitoes. These changes then reshape existing ecosystem boundaries, which are typically sites of contact between humans and infected vectors. Therefore, humans living near fragmented forests have a higher risk of being infected and then spreading this infection says Hill.

Hill's team is looking to develop new control technologies to combat the growing problem of these diseases, with research specific to the viruses that cause West Nile, dengue, Zika and yellow fever. These viruses are from a class of viruses called flaviviruses. She wants to develop non-toxic, non-lethal pesticides that will suppress pathogen transmission of these diseases.

"The global societal goal that we're trying to address is to control infectious diseases transmitted by mosquitoes in a way that's safe for humans and the environment and that also preserves biodiversity, so without killing the insect ... that's a bit of a radical idea," Hill says.

Within five to 10 years, Hill wants to partner with a company to develop an insecticide.

Specifically, she is looking for a chemical compound that will make it impossible for a mosquito to transmit diseases. Mosquitoes are showing high levels of resistance to traditional insecticides, and diseases are on the rise.

"You can see we're kind of on this collision course, this perfect storm, and it's essential that we develop an arsenal of new weapons to control mosquitoes within the next 5-10 years," she says.

Up until this point, the main approach of mosquito control has been to use insecticides that are rapidly toxic and quickly cause the death or paralysis of the insect. Hill says this can have negative effects on many other insect populations, as well as being dangerous to humans.

Therefore, Hill and her team look for changes in mosquito behavior, biology or morphology rather than the death of the insect when screening chemicals that could be used for an insecticide. Hill

and her team "recognize mosquitoes are playing a fundamental ecological role and we don't want to disrupt that delicate web," she says

While finding novel and non-toxic chemistries to control mosquitoes is vital to Hill's research, political scientists, communications specialists and environmental health experts play pivotal roles in changing the way the public views mosquitoes, she says.

"There could be a lot of skepticism from the public, and (not killing mosquitoes) could be a tough thing to accept," she says. Therefore, Hill's team is composed of many different scientists with expertise in different areas to not only create a chemical, but also to address social concerns and change public policy regarding mosquito and disease control.

For instance, Hill's team includes political scientist Leigh Raymond, medicinal chemists and molecular pharmacologists Val Watts and Daniel Flaherty, entomologist Michael Scharf and communication specialist Linda Pfeiffer.

The team is based in Discovery Park, a research park dedicated to using interdisciplinary teams to solve global problems. Hill's research was one of the winners of Discovery Park's Big Idea Challenge, a program that provides resources to interdisciplinary teams with innovative research.

Hill is eager to produce these new chemicals and get them on the market, but she said her team will take whatever time needed in order to extensively research a product and ensure that there is enough data to show effective disease control, human safety and low environmental impact.

"I don't want this to languish in the lab. Everything we do in the lab is about application. The mindset has always been to move it out of the lab as quickly as possible, so it's a rapid trajectory," she says. (PCT Online, July 6, 2017)
http://www.pctonline.com/article/purdue-vector-control-mosquitoes/

MONSANTO APPEALS US PROP 65 GLYPHOSATE LISTING

Monsanto has asked a US state of California court to revive a lawsuit challenging the state's decision to add the herbicide, glyphosate, to the Proposition 65 list of chemicals known to cause cancer, arguing that the move is unconstitutional.

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California's listing of the herbicide became effective on July 7th. State officials made the move in light of the 2015 decision by the UN WHO International Agency for Research on Cancer (IARC) to declare glyphosate a probable human carcinogen. The IARC is one of the "authoritative bodies" that can be relied upon for listing a chemical under Prop 65's Labor Code listing mechanism.

When it first proposed adding glyphosate in 2015, California's Office of Environmental Health Hazard Assessment (OEHHA) said that the Labor Code provision effectively required the state to add glyphosate to the list because of the IARC declaration.

The listing is of serious concern to Monsanto and the agrochemical industry as it could require warning labels on some glyphosate products. Prop 65, approved by California voters in 1986, requires the state to inform consumers about products that contain chemicals known to cause cancer or reproductive harm. More than 800 substances are listed under the law, including an array of chemicals commonly found in foods and drinks.

Monsanto filed a lawsuit in state court in January 2016 to reverse the decision, arguing that relying solely on the IARC declaration was unreasonable and unlawful. Fresno Superior Court Judge Kristi Kapetan dismissed the lawsuit in March 2017, ruling that the OEHHA's move was justified and supported by state law.

In its appeal to California's 5th District Court of Appeals, Monsanto says that the Judge got it wrong and should have let the case go to trial. "The Labor Code listing mechanism, as applied by OEHHA in proposing to list glyphosate, violates the California and US Constitutions," the company says in its July 21st filing with the Court. "It delegates rulemaking authority to an unelected, international body that is not accountable to the California electorate and is not subject to adequate procedural safeguards or oversight."

Monsanto notes that no regulatory agency, including the OEHHA, has concluded that glyphosate causes cancer and also argues that the state agency's view that the IARC classification requires it to list the herbicide is wrong. The Labor Code listing mechanism was originally understood to incorporate by reference only those substances that were classified by IARC as carcinogens and "not understood to be a mechanism for updating that list on an ongoing basis", the company said in its 59-page brief.

Monsanto contends that requiring it to add warning labels to glyphosate products is an unfair as it compels the company to "engage in false speech, in violation of its rights to free speech under the California and US Constitutions". The appeal asks the Court to reverse dismissal of its lawsuit and remand the case for discovery and trial.

Monsanto's appeal comes as the OEHHA is still considering where to set the "no significant risk level" for glyphosate. Exposures below that level will not require a warning label. The OEHHA has proposed a level of 1.1 mg per day, a level far more stringent than the US EPA's reference dose of 140 mg. But the OEHHA is facing pressure from environmentalists who say that the state's proposed level is still too high and have asked the agency to lower the level to no more than 0.01 mg. (Pesticide & Chemical Policy/AGROW, July 27, 2017)

WOMAN SUES EXTENDED STAY AMERICA FOR ALLEGED BED BUGS IN HOTEL

A professional poker player sued Extended Stay America after a 2014 stay resulted in what she and her lawyer say are bed bug bites, Local10.com reported.

Kimberly Stone stayed at the Tamarac hotel for a tournament when she woke to bug bites covering her body, Local 10 reports. Now, three years later, she says she still has scars from the bites.

Stone claimed the hotel staff were "not surprised" when she brought the issue up to them, and they simply suggested she visit an urgent care and switch rooms. Additionally, she said she saw the hotel staff change the sheets in her room, making no other effort to remove the bugs.

The suit suggests the hotel was aware of the issue, but was negligent in eradicating the problem. Also, other customers have left online reviews claiming their rooms were infested with bed bugs. (PCT Online, July 6, 2017)
http://www.pctonline.com/article/extended-stay-bed-bugs-lawsuit/

EPA REJECTS PESTICIDE USE IN CANNABIS PRODUCTION, PAVES WAY FOR ORGANIC MARIJUANA

With the legalization of medical and recreational marijuana in dozens of states, the question of pesticide use in commercial cannabis production and resulting residues in a range of products is a burning issue. The U.S. Environmental Protection Agency (EPA) injected itself into this question when last week it issued a notice of intent to disapprove the planned registration of four pesticides for cannabis production by the state of California.

Given cannabis' narcotic status by the federal government, EPA does not register pesticides for use in marijuana production. However, states and previously EPA have considered using a Special Local Needs (SLN) permit under the nation's pesticide law, the Federal Insecticide Fungicide and Rodenticide Act (Section 24c), to allow this unregistered pesticide use to meet an "existing or imminent pest problem." While reports suggest that EPA's rejection is likely politically motivated based on the current administrator's opposition to cannabis legalization in general, the agency's determination is consistent with Beyond Pesticides' letters to states and EPA, which encourage the burgeoning industry to root itself in organic production, without the use of toxic pesticides. "The cannabis industry has the opportunity to develop with organic soil management and fertility practices that prevent pest problems and the need for pesticides," said Jay Feldman, executive director of Beyond Pesticides.

Under review by EPA were four pesticide products submitted by the California Department of Pesticide regulation for planned use on cannabis. The manufacturer of the products, General Hydroponics, was seeking guidance from the agency on specific use directions for pests and diseases of cannabis. Although the products in question contain active ingredients that are of lower toxicity than conventional pesticides, federal approval of these pesticides would provide a pathway for the registration of more toxic products on cannabis.

Over the past several years, cannabis production has been marred by consistent reports of contamination with illegal pesticides. States where the substance is legal have experienced large recalls over contamination. In 2015, the Governor of Colorado issued an executive order declaring pesticide-tainted pot "A threat to public safety." The pesticide most often cited for illegal use on cannabis is a fungicide called Eagle 20, which contains the active ingredient myclobutanil. Myclobutanil is an endocrine (hormone) disruptor that can turn into cyanide gas when ignited. It is also listed as a reproductive toxicant under California's Proposition 65: Chemicals Known to the State to Cause Cancer or Reproductive Toxicity.

Federal approval of registered pesticides under state SLN regulations could quickly lead to approval of products containing myclobutanil, in addition to other toxic pesticides, including insecticides like neonicotinoids and synthetic pyrethroids. Rather than approve the use of toxic chemicals, advocates urge states to step up enforcement to ensure that consumers, and particularly medical patients with underlying conditions, are not subject to toxic exposure.

EPA's denial of these four registrations provides an opportunity for the industry to flourish based on organic principles. As Cary Giguere of the Vermot Agency of Agriculture, Food and Markets told Bloomberg BNA, "It's a minor hindrance. It isn't slowing the industry down, it's not slowing states working with the industry down." Beyond Pesticides has long encouraged limiting the allowance of pesticides on cannabis to products that are allowed under organic production and exempt from federal pesticide registration (25b minimum risk).

This regulatory approach has only been completely realized in the state of New Hampshire. Given EPA's position on SLNs for cannabis, other states may follow New Hampshire's lead on allowed pesticides, and go further to foster organic practices by requiring growers submit a system plan. By mandating the submission of a systems plan, states ensure: a detailed description of the practices and procedures that will be undertaken by the certified producer, substances to be used as production inputs will be listed, a narrative description of how practices will be monitored, and recordkeeping requirements to confirm the plan is followed. This process will assist in orienting producers towards a pest prevention strategy, rather than a reactive approach that may result in toxic or illegal pesticide use when pest or fungal outbreaks occur.(Beyond Pesticides, July 25, 2017)
http://beyondpesticides.org/dailynewsblog/2017/07/epa-rejects-pesticide-use-cannabis-production-paves-way-organic-marijuana/

CEU Meetings

Date: August 3, 2017
Title: Current Challenges in Floriculture
Location: Wes Watkins Stillwater OK
Contact: OSU Mike Schnelle (405) 744-7361
Course #: OK-17

CEU's:	Category(s):
2	3A
1	3B
1	3C
2	10

Date: October 4-5, 2017
Title: OKVMA Fall Conference, Training and Trade Show
Location: Hard Rock Hotel & Convention Center Catoosa OK
Contact: Kathy Markham (918) 256-9302
Course #: OK-17

CEU's:	Category(s):
TBD	A
TBD	3A
TBD	5
TBD	6
TBD	10

Date: October 12, 2017
Title: A Focus on Pest Management
Location: Embassy Suites Kansas City MO
Contact: FISA Deborah Murphy (913) 397-1185
Course #: OK-17

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

Date: February 3, 2018
Title: Integrated Pest Management for the Food Enviroment
Location: Holiday Inn Express Denton TX
Contact: FISA Deborah Murphy (913) 397-1185
Course #: OK-17

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

ODAFF Approved Online CEU Course Links

PestED.com
https://www.pested.com/

CEU School
http://www.ceuschool.org/

Technical Learning College
http://www.abctlc.com/

Green Applicator Training
http://www.greenapplicator.com/training.asp

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/

Southwest Farm Press Spray Drift Mgmt
http://www.pentonag.com/nationalsdm

SW Farm Press Weed Resistance Mgmt in Cotton
http://www.pentonag.com/CottonWRM

Western Farm Press ABC's of MRLs
http://www.pentonag.com/mrl

Western Farm Press Biopesticides Effective Use in Pest Management Programs
http://www.pentonag.com/biopesticides

Western Farm Press Principles & Efficient Chemigation
http://www.pentonag.com/Valmont

For more information and an updated list of CEU meetings, click on this link:http://www.oda.state.ok.us/cps-ceuhome1.htm

ODAFF Test Information

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

August			September	
8	OKC		11	OKC
10	Tulsa		14	Tulsa
17	Enid		19	Altus
21	OKC		28	Tulsa
24	Tulsa			

Altus:	SW Research & Extension Center 16721 US HWY 283
Atoka	KIAMICHI TECH CENTER 1301 W Liberty Rd, Seminar Center
Enid:	Garfield County Extension Office, 316 E. Oxford.
Goodwell:	Okla. Panhandle Research & Extension Center, Rt. 1 Box 86M
Hobart:	Kiowa County Extension Center Courthouse Annex, 302 N. Lincoln
Lawton:	Great Plains Coliseum, 920 S. Sheridan Road.
McAlester:	Kiamichi Tech Center on Highway 270 W of HWY 69
OKC:	Arcadia Conservation Education Building 7201 E 33rd St. Edmond OK **(New Location)**
Tulsa:	NE Campus of Tulsa Community College, (Apache & Harvard) Large Auditorium

Pesticide Safety Education Program