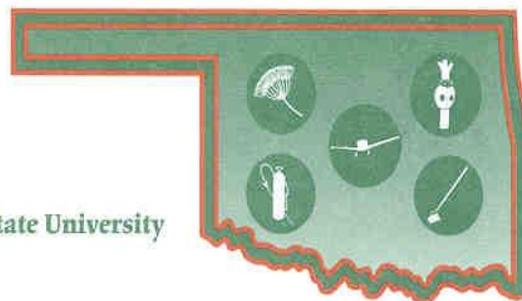


PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University

<http://pested.okstate.edu>



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Registration cost is \$200 (\$175 for OARA members) which includes the testing fee. Registration deadline is September 20th 2012. You can find registration forms or register online at <http://pested.okstate.edu/practical.htm>. Please contact Charles Luper or Kevin Shelton at 405-744-5531 for any questions. (PSEP)

NEW USE RESTRICTIONS ON INSECTICIDE CHLORPYRIFOS ADDRESS BYSTANDER RISK FROM SPRAY DRIFT

EPA is requiring significant reductions in application rates and mandatory buffers around sensitive sites to protect children and other bystanders who live, attend school, play, or otherwise spend time next to sites where chlorpyrifos is applied. To ensure timely implementation of the spray drift mitigation, EPA is taking steps to make sure that the new use restrictions appear on all chlorpyrifos agricultural product labels starting in late 2012.

To increase protection for children and other bystanders, the lower application rates and other spray drift mitigation measures ensure that any chlorpyrifos exposure outside the application site will not reach harmful levels. Maximum aerial application rates are being significantly reduced

FUMIGATION PRACTICAL

The last fumigation practical for 2012 will be held on September 25. The program will be held at the Store Products Research Education Center (SPREC) in Stillwater. The program will run from 8 am to 5 pm.

Attendees must have passed the core exam plus the written 7C Fumigation exam before attending the practical school. Only the practical exam will be given on September 25.

from about 6 pounds per acre to about 2 pounds per acre. Other new mitigation measures include buffer zones for ground and aerial applications around sensitive sites such as residential lawns, homes, sidewalks, outdoor recreational areas, and all property associated with buildings typically occupied by people.

As part of the agency's ongoing registration review, EPA examined chlorpyrifos spray drift and potential bystander exposures using current scientific methods. EPA found that health risks from exposure to chlorpyrifos spray drift around treated fields can be lowered through the use of buffers and specific application methods. The buffer distances are greatest for aerial applications, which pose the highest risk. By adopting the new mitigation measures, applicators can effectively lower spray drift levels and reduce risks to bystanders.

EPA's new mitigation measures also respond in part to a petition filed by the Natural Resources Defense Council and the Pesticide Action Network North America, which asked EPA to revoke all tolerances and cancel all registrations of chlorpyrifos. In a partial response addressing the first six of ten petition claims, EPA has found that none of the six claims warrants revoking tolerances or canceling registrations for chlorpyrifos at this time.

EPA's response to three of the remaining four claims involves highly complex assessments using precedent-setting risk assessment methodologies. Consistent with the agency's external peer review policy, EPA sought advice on these issues from the FIFRA Scientific Advisory Panel (SAP) at a meeting on April 10-12, 2012, and recently received the SAP's final report, dated July 11, 2012. The agency will consider the panel's comments in completing the petition response and final human health risk assessment for the chlorpyrifos registration review. EPA will address the risk issues necessary to respond to the petition in its entirety by

December 31, 2012. EPA intends to complete the comprehensive chlorpyrifos human health risk assessment, including both its dietary risk assessment and occupational risk assessment, in 2014.

The petitioners' fourth remaining claim, that EPA failed to incorporate inhalation routes of exposure, is partly addressed by the chlorpyrifos spray drift risk assessment and new spray drift use restrictions that the agency is announcing today. The agency is continuing to assess potential exposure and risk from spray drift and volatilization following chlorpyrifos applications, taking into consideration the recently received comments from the SAP. EPA will also address this claim fully, therefore, in its complete response to the petition in December 2012. Docket [EPA-HQ-OPP-2007-1005](#) at [Regulations.gov](#) includes NRDC and PANNA's petition, EPA's partial response, and related documents. Docket [EPA-HQ-OPP-2012-0040](#) at [Regulations.gov](#) includes documents related to the SAP's April 2012 meeting on Scientific Issues Associated with Chlorpyrifos Health Effects.

Chlorpyrifos is used widely for controlling insects on food crops including fruits, nuts, vegetables, and grains, and on non-food sites such as golf course turf, industrial sites, greenhouses, nurseries, sod farms, and wood products. Public health uses include aerial and ground-based fogger treatments to control adult mosquitoes. An organophosphate, chlorpyrifos can cause cholinesterase inhibition in humans; that is, it can over-stimulate the nervous system if there is sufficient exposure. (EPA July 18, 2012

http://www.epa.gov/oppfead1/cb/csb_page/updates/2012/chlorpyrifos.html)

THE EPA DENIES PETITION SEEKING EMERGENCY SUSPENSION OF CLOTHIANIDIN AND RELEASES PETITION FOR PUBLIC REVIEW

The EPA is denying a petition requesting emergency suspension of clothianidin based on imminent hazard. The agency will, however, be taking comment from the public for 60 days on the petition's request for cancellation of clothianidin. The agency received the petition from a group of beekeepers, Beyond Pesticides, Pesticide Action Network of North America and others on March 20, 2012. The petition alleges that clothianidin poses an "imminent hazard," requiring swift regulatory action to protect bees. After considering the petition and the supporting information, the EPA is denying the request to suspend clothianidin use because the petition fails to show that an imminent hazard to bees exists. Under the FIFRA standard, suspension is appropriate only if there exists a substantial likelihood of serious, imminent harm. Having reviewed the petition and supporting information, the EPA does not believe there is a substantial likelihood of imminent serious harm from the use of clothianidin. Specifically, the EPA does not believe the petition demonstrates that the use of clothianidin is causing or will cause:

- significant reduction in populations of domestic bees or native pollinators,
- significant decreases in honey production,
- serious effects on other agricultural systems as a result of decreases in pollination services or
- a reduction in pollination of wild plants in a way that may alter ecosystems.

EPA is continuing its comprehensive scientific evaluation on all the neonicotinoid pesticides, including clothianidin. This extensive review will determine if any restrictions are necessary to protect

people, the environment, or pollinators. Also, in September, EPA will seek independent scientific peer review on how to better assess the risks of pesticides to pollinators. This effort will improve our understanding and strengthen the scientific and regulatory process to protect honey bees and other pollinators.

The EPA's response denying the petition is available at [regulations.gov](http://www.regulations.gov) under docket [EPA HQ-OPP-2012-0334](http://www.regulations.gov).

A Federal Register notice next week will open a 60-day comment period on the remaining issues in the petition. The EPA will respond to the entirety of the petition at a later date after it has obtained and reviewed any public comments.

In the same Federal Register notice, the EPA will announce the availability of the final work plan for clothianidin's re-evaluation under Registration Review and its response to comments received during the initial public comment period for the registration review of clothianidin.

The *Federal Register* notice announcing the 60-day comment period on the petition is available at <http://www.federalregister.gov/a/2012-18321>.

http://www.epa.gov/oppfead1/cb/csb_page/updates/2012/clothianidin.html(EPA July 19, 2012)

COLORADO COURT HANDS PESTICIDE DRIFT VICTORY TO ORGANIC FARMERS

A Colorado state judge has ruled that pesticide drift onto an organic farm is akin to trespass under state law, granting a permanent injunction that restricts a farmer's use of an insecticide intended to combat West Nile virus.

The July 5 ruling by Judge Charles R. Greenacre of the Delta County District Court is the first in Colorado to conclude pesticide drift can be considered trespass, according to Randall Weiner, the attorney who represented the plaintiffs.

“It sets a precedent that can be followed in Colorado,” Weiner tells *Pesticide & Chemical Policy*. “It is especially important for our state because we have an active and growing organic foods community.”

The plaintiffs in the case — Gordon Macalpine and Rosemary Bilchak — have sought to get their farm certified as organic, in part because Macalpine suffers from leukemia and is registered with the state as “pesticide-sensitive person.”

Organic certification requires that no pesticides be used on the property, and the use of pesticides results in withdrawal of organic certification for three years.

In July 2010, their neighbor — James Hopper — sprayed the insecticide Fyfanon, which contains the active ingredient malathion, on his property. The court found Hopper’s “inexperience” with applying pesticides, notably with wind speed and direction, caused the chemical to drift onto the plaintiffs’ farm.

In addition, Hopper, while driving on a road on his farm, “intentionally sprayed Fyfanon on the plaintiffs’ property” south of his land and applied the insecticide “without regard for the plaintiffs’ health or property rights,” Greenacre writes in his 10-page ruling.

Macalpine and Bilchak saw the pesticide drift onto their property, suffered respiratory irritation and discomfort, and left the farm to avoid further exposure. The judge concludes the evidence “does not support a finding” that their health was endangered.

While the Hoppers have the right to spray Fyfanon on their property, they do not have the right to allow the product to “intrude” on the plaintiffs’ property, Greenacre writes.

“Because the application of Fyfanon is likely to drift onto plaintiffs’ property unless it is applied properly, plaintiffs will be irreparably harmed if the Hoppers do not comply with certain restrictions,” according to Greenacre, who adds that the threatened injury to the plaintiffs “outweighs any harm” that an injunction will cause to the Hoppers.

“Plaintiffs have an interest, shared by the public in general, in not having their property invaded by third persons or things,” the judge explains. “Plaintiffs also have a specific interest in not having pesticides invade their property because such invasions will delay or negate their efforts to have their property certified for the production of organic crops.”

The injunction bars Hopper from applying Fyfanon within 150 feet of the plaintiffs’ property, requires him to keep records of applications and to properly follow label instructions and ensure his equipment is correctly calibrated. Furthermore, he must only apply the insecticide when wind direction and speed conditions will ensure the chemical does not drift onto the plaintiffs’ property.

Greenacre also notes that the injunction is in the public interest.

“The public has a strong interest in protecting and preserving property rights from invasions by others,” he writes. “The public also has an interest in insuring that pesticides are applied safely and in accordance with legal requirements.”

A similar case is being closely watched in Minnesota. Last July the Minnesota Court of Appeals reversed a lower court decision and ruled that pesticide drift onto an agricultural property can be considered trespass under state law. The defendants appealed the decision and the Minnesota Supreme Court heard oral arguments in February. A decision is expected within the next few weeks. (*Pesticide & Chemical Policy*, July 13 2012, Volume: 40 Issue: 30)

PURDUE SCIENTISTS FIND GLYPHOSATE-RESISTANT “SUPERWEEDS” MAY ALSO RESIST DISEASE

Purdue University scientists have found that soil microbes might play a role in the development of so-called “superweeds” resistant to the popular herbicide glyphosate, commonly marketed as Roundup.

Most laboratory tests performed to understand glyphosate resistance are undertaken in sterile soil void of those microbes, the Purdue weed scientists note in a university news release issued July 17. However, those microbes may play a significant role in how the herbicide affects plants, they conclude in research published online in the journal *Weed Science* (www.bioone.org/toc/wees/60/2).

“The soil you’re growing the plants in is important to the results,” Jessica Schafer, a graduate student who participated in the research, is quoted as saying. “If we’re growing in a sterile media, we could get some false positive results, because the plants are more tolerant to glyphosate in those conditions.”

The Purdue weed scientists grew giant ragweed, horseweed and common lambsquarter in both sterile soil and field soil and subjected them to glyphosate. In each soil, strains of weeds both susceptible and resistant to glyphosate were tested.

Both versions of giant ragweed were damaged more from the glyphosate in field soil. The susceptible version of common lambsquarter was also more heavily damaged in field soil. Horseweed fared the same no matter which soil or strain — susceptible or resistant, the scientists report.

The scientists say their results “show that microbes can play an important role in the activity of glyphosate, presumably by invading the glyphosate-weakened plants. The results also suggest that glyphosate-resistant weeds may be more resistant to disease pressure as well.”

“Soil microbes can be minor to major contributors to how glyphosate is able to affect plants,” the scientists say. “We may be selecting not only for glyphosate resistance, but inadvertently selecting for weeds that have disease resistance as well.”

The Purdue researchers say further studies will examine how fungi in the soil affect root development, both with and without glyphosate. “Dirt is a living organism,” says Bill Johnson, weed science professor. “It’s important to know how all the pieces interact.”

The research was conducted with internal funding from Purdue’s Department of Botany and Plant Pathology.

(Pesticide & Chemical Policy, July 27 2012, Volume: 40 Issue: 32)

NGOS PRESS EPA TO WITHDRAW SULFURYL FLUORIDE TOLERANCES AS GROWERS, OTHERS CITE VALUE

Non-governmental organizations are calling on EPA to move ahead with its January 2011 proposal to withdraw all tolerances for fluoride and sulfonyl fluoride, asserting that action is required even if exposure to pesticidal fluoride makes up only a small percentage of overall fluoride exposure.

The groups, which include Beyond Pesticides, Environmental Working Group and Fluoride Action Network, further assert that U.S. obligations under an international treaty to protect the ozone layer do not trump its obligations under the FQPA when it comes to addressing sulfonyl fluoride.

Meanwhile, almond growers and others assert that with the phaseout of methyl bromide, sulfonyl fluoride has become a favored option for post-harvest sanitary treatments.

On May 1, EPA opened a second comment period on its proposed order to withdraw the fluorine and sulfur fluorides tolerances. The agency sought feedback on three legal questions concerning pesticide tolerances, along with other information. Comments were due by July 30.

EPA asked for public input on the following:

- In determining aggregate exposure for the purpose of establishing tolerances, can EPA include non-pesticidal substances, "especially when pesticidal exposure is proportionally small compared to exposure to related substances?"
- Given the limited fluorine exposure from pesticides, does the *de minimis* doctrine apply in this case, and what factors should EPA examine in determining whether the *de minimis* criteria apply for any pesticide?
- Can EPA approve a pesticide tolerance considered unsafe under the Federal Food Drug and Cosmetic Act if other statutory obligations favor its approval and rejection would lead to greater net damage to the environment?

The last question refers to the Clean Air Act, which implements U.S. obligations under the Montreal Protocol on Substances that Deplete the Ozone Layer. Use of the fumigant methyl bromide has been phased out under the protocol with a diminishing number of exemptions allowed for critical uses where there are no viable substitutes or alternatives.

One of the substitutes EPA has been pushing, growers note, has been sulfur fluoride. But if that option is taken away too, "treating many post-harvest commodities for pests would be extremely difficult, impractical and much more expensive," Rep. Jeff Duncan (R-S.C.) writes in comments submitted July 24.

The primary sulfur fluoride alternative, aluminum phosphide, is impractical due to its prohibitive costs, extended fumigation times, and resistance, the California Department of Food and Agriculture notes in comments submitted July 27.

But U.S. "obligations under the Montreal Protocol neither excuse nor diminish EPA's obligations under the FQPA," Beyond Pesticides, Environmental Working Group and Fluoride Action Network write in joint comments filed July 30. "Indeed the Clean Air Act provision incorporating the protocol into law supports the proper administration of those and other federal environmental laws," the comments continue.

The groups further argue that pesticidal exposures to fluorine "are clearly not insignificant" and so the Federal Food Drug and Cosmetic Act "does not support application of the *De Minimis* doctrine." (Pesticide & Chemical Policy, July 31 2012)

In-State CEU Meetings

Date: August 15, 2012

Title: CTN Educational Programs

Location: Oklahoma City OK

Contact: Tommy Keezer (512) 829-5114

http://ctnedu.com/index.php?option=com_content&view=article&id=68&Itemid=74

Course #: OK-12-015

CEU's: Category(s):

5 10

2 3A

2 7A

1 7B

Date: September 17-19, 2012

Title: OKVMA Fall Training

Location: Norman OK

Contact: Kathy Markham (918) 256-9302

<http://www.okvma.com/Conferences/tabid/6201/Default.aspx>

Course #: OK-12-081

CEU's: Category(s):

5 6

5 10

4 3A

3 5

1 8

Date: September 26, 2012

Title: OSU Fumigation Workshop

Location: Stillwater OK

Contact: Edmond Bonjour (405) 744-8134

Course #: Pending

CEU's: Category(s):

Pending 7C

Pending 10

Date: September 27, 2012

Title: OSU Fumigation Workshop

Location: Stillwater OK

Contact: Edmond Bonjour (405) 744- 8134

Course #: Pending

CEU's: Category(s):

Pending 7C

Pending 10

ODAFF Approved Online CEU Course Links

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://www.ctnedu.com/oklahoma_applicator.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.state.ok.us/~okag/cps-ceuhome.htm>

ODAFF Test Information

Pesticide applicator test sessions dates and locations for August/September 2012 are as follows:

August		September	
6	OKC	5	Altus
9	Tulsa	10	OKC
16	Enid	13	Tulsa
20	OKC	24	OKC
23	Tulsa	27	Tulsa

Altus: Western OK State College
2801 N Main, Room A23

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, Annex Rm.
920 S. Sheridan Road.

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

OKC: Oklahoma County Extension Office,
930 N. Portland.

Tulsa: NE Campus of Tulsa Community
College, (Apache & Harvard)
Large Auditorium

Pesticide Safety Education Program