# NEW PESTICIDE EDUCATION COORDINATOR AT OSU

The OSU Pesticide Safety Education Program welcomes Dr. Jacquelyn (Jackie) Lee as the new Pesticide Education Coordinator. Dr. Lee will be an Extension Specialist as well as Pesticide Education Coordinator at OSU. Dr. Lee will focus on management of insect pests in commercial and small farm production of fruits and nuts in addition to pesticide education.

Dr. Lee received her Bachelor of Science degree in Biology from Arkansas Tech University in Russellville AR, and her M.S. and Ph.D degrees in Entomology from the University of Arkansas in Fayetteville AR.

Dr. Lee comes to OSU from Dow AgroSciences where she worked as a Senior Biologist in Research and Development. (PSEP)

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COMING SOON: THE EPA FEDERAL CERTIFICATION PLAN – A MECHANISM TO CERTIFY APPLICATORS OF RESTRICTED USE PESTICIDES WITHIN INDIAN COUNTRY

Later this year, the EPA will release the *EPA Plan for the Federal Certification of Applicators of Restricted Use Pesticides (RUPs) within Indian Country*. The EPA is taking this step to make RUPs available for use in Indian country where no current certification mechanisms exist. This action will give pesticide applicators who apply or seek to apply in Indian country access to the same pest control tools available elsewhere in the United States and ensure that these applicators have met competency standards.

RUPs are restricted to use by pesticide applicators who are specially trained and certified, or to people under the supervision of a certified applicator. Under the Federal Insecticide, Fungicide, and Rodenticide Act, states or tribes that choose to certify pesticide applicators can submit a state or tribal plan to the EPA. Because most of Indian country is not covered by a plan, the EPA developed a new federal plan in consultation with the tribes. The new *EPA Plan* will serve those areas of Indian country where the tribe has not taken action to establish its own plan.

For instance, currently there are areas of Indian country surrounded by state lands. Growers in Indian country may have the same pesticide needs as growers on surrounding state lands, but they do not have a mechanism to legally apply RUPs unless the tribe already has a plan.

Applicators intending to operate within Indian country and dealers located within Indian country can take several steps to prepare for the release of the *EPA Plan*. The EPA will not charge to obtain the federal certificate; however, states and tribes may have a fee associated with obtaining or updating their certificates.

For more information, see [http://epa.gov/oppfead1/tribes/2013/cert-plan.html](http://epa.gov/oppfead1/tribes/2013/cert-plan.html).

The *EPA Plan* will be effective immediately when it is released, so applicators and dealers need to be ready.

How Applicators Can Prepare for the *EPA Plan*

- If you are an applicator that would like to use RUPs in Indian country, make sure your state certification is up to date. When the *EPA Plan* goes into effect, you will need to show documentation of a valid applicator certification from a state contiguous to the area of Indian country where you intend to apply RUPs. You will need to submit a copy of your certification with an application form to the *EPA Regional office*.
- If you would like to be a private applicator in Indian country, you have another option for obtaining certification that does not require you to have an existing state or tribal certification. Check the [EPA’s website](http://epa.gov/oppfead1/tribes/2013/cert-plan.html) to find out more.
- Check with the tribe where you intend to apply RUPs to determine if there are any additional requirements or restrictions relating to the use of RUPs on their lands.
- Check the [EPA’s website](http://epa.gov/oppfead1/tribes/2013/cert-plan.html) regularly to find out when the *EPA Plan* goes into effect. You will also be able to download the required form from the website once the program is in effect.

What Pesticide Dealers in Indian Country Will Need to Do

- When the *EPA Plan* goes into effect, send your business name and address for each dealership to your EPA Regional office.
You will also have to maintain records of RUP sales.

Look for additional announcements later this year regarding details on the EPA Plan. Check EPA’s website for more information about the EPA Plan and to find out when these requirements go into effect.

(EPA July 23, 2013)
http://www.epa.gov/oppfed1/cb/csb_page/updates/2013/cert-plan.html

MARKETERS OF UNPROVEN BED BUG AND HEAD LICE TREATMENTS SETTLE FTC CHARGES

Two marketers of unproven cedar oil-based remedies for bed bugs and head lice have agreed to enter into settlements with the Federal Trade Commission that prohibit the allegedly deceptive claims, and require pre-approval from the Food and Drug Administration for any future treatment claims about head lice products.

The settlements resolve deceptive advertising charges the FTC filed last year against Dave Glassel and the companies he controlled, including Chemical Free Solutions, LLC, alleging that they made overhyped claims that their BEST Yet! line of cedar-oil-based liquid products would treat and prevent bed bug and head lice infestations.

According to the FTC, the defendants falsely claimed that their natural, BEST Yet! bed bug and head lice products were invented for the U.S. Army, that their bed bug product was acknowledged by the U.S.D.A. as the #1 choice of bio-based pesticides, and that the Environmental Protection Agency had warned consumers to avoid chemical solutions for treating bed bug infestations.

Under the agreed-upon settlement orders, the defendants are prohibited from claiming that their BEST Yet! products by themselves can stop or prevent a bed bug infestation, or are more effective at doing so than other products, unless they have competent and scientific evidence to make the claims. The defendants also are barred from claiming that their products can effectively treat head lice infestations unless those claims are non-misleading and they obtain FDA approval prior to making those claims. The defendants are further prohibited from misrepresenting the results of scientific tests or studies, and from claiming that a product or service they sell is endorsed by a government agency or by any other third-party entity when it is not.

The orders impose a $4.6 million judgment against Glassel who is facing bankruptcy, and a $185,206 judgment against Chemical Free Solutions, LLC, which will be suspended due to the company’s inability to pay. If it is later determined that the financial information the company provided the FTC was false, the full judgment amount will become due immediately.

The FTC will continue to pursue its case against the remaining three defendants, Springtech 77376, LLC, Cedar Oil Technologies Corp., and Cedarcide Industries, Inc. Consumers concerned about bed bugs also should see the FTC publication, “Battling Bed Bugs,” which urges caution about advertisements that offer quick solutions, and provides other related advice to consumers.

The Commission vote approving the proposed consent decrees with Dave Glassel and Chemical Free Solutions, LLC was 3-1. Chairwoman Ramirez and Commissioner Brill issued a joint

NOTE: The consent decrees are subject to court approval. Consent decrees have the force of law when signed by the District Court judge.


NGOS PRESS US EPA ON PESTICIDE DRIFT

A coalition of US farm worker, public health and environmental groups has filed suit against the US EPA, alleging that the Agency has failed to answer their petition calling for new safety standards to protect children from pesticide drift. The suit aims to force the agency to respond to the petition, filed by the groups in October 2009 (Agrow No 578, p 17). “It is not acceptable that our own government has so little regard for the health of our children,” says Janette Brimmer, an Earthjustice attorney representing the coalition “The government hasn’t even bothered to prepare a response to our requests.”

The suit, filed July 24th with the US Ninth Circuit Court of Appeals, contends that the EPA has a “clear statutory duty” under federal law to respond to the petition and the coalition is entitled to a “timely” response. “[The] EPA has failed in its statutory obligations to assess all children’s exposures to pesticides, including drift, and it has unreasonably delayed in providing a response to the petition,” according to the 42-page suit. The coalition is asking the court to order the EPA to respond to its petition within 60 days of issuing an order.

The 2009 petition calls on the EPA to conduct pesticide-specific drift assessments for all pesticides with the potential to drift, and to impose measures necessary to protect children from harmful drift exposures. It also urges the EPA to immediately impose interim no-spray buffer zones for drift-prone pesticides including organophosphate insecticides and N-methyl carbamate insecticides, around schools and other areas where children congregate.

The coalition acknowledges that its request for aggregate risk assessments cannot be completed in weeks or even months, but it is keen to see the EPA correct the alleged violations of the Food Quality Protection Act and the Executive Orders more quickly than the current set of pesticide registration reviews, which are not scheduled to be completed until 2022.

(Pesticide & Chemical Policy, July 30, 2013)

OREGON RESTRICTS USE OF CERTAIN DINOTEFURAN PESTICIDES

The Oregon Department of Agriculture is restricting the use of 18 pesticide products containing the active ingredient dinotefuran while it continues the investigation of a large kill of bumblebees in Wilsonville and Hillsboro this month. By adopting a temporary rule, ODA is taking action, in an abundance of caution, to avoid the potential of similar large bee kills this summer due to specific pesticide applications.

The ODA restriction focuses on ornamental, turf, and agricultural pesticide products that are used by both professional applicators and homeowners. Products with the active ingredient dinotefuran registered in Oregon for other uses, such as flea and tick control on pets or home ant and roach control, are not affected by the restriction. ODA’s concern is focused on those uses that may impact pollinators.

By statute, ODA has legal authority to establish limitations and procedures deemed necessary and
proper for the protection of bees and other pollinating insects. The temporary rule, which goes into effect immediately, will be enforced for 180 days, by which time ODA is expected to complete its pesticide use investigations of the Wilsonville and Hillsboro incidents. Those investigations will determine if the pesticide applications were in violation of state and federal pesticide regulations, and will assist ODA in addressing any potential future actions.

ODA’s Pesticide Program has established a website with more information on the dinotefuran restriction, including a list of specific products affected as well as instructions for those who may have purchased these products. (PCT Online July 2, 2013) http://www.pctonline.com/Oregon-Dinotefuran-restrictions.aspx

US LAWMAKER CALLS FOR NEONICOTINOID SUSPENSION TO PROTECT BEES

A US Congressman plans to introduce legislation that would suspend some uses of neonicotinoid insecticides until the EPA reviews the pesticides and makes a new determination about their proper application and safe use. The proposal by Representative Earl Blumenauer would also require the EPA and the Department of Interior to conduct a study of native bees and investigate the causes of any declines in population levels.

The proposed legislation comes amid growing controversy over the possible impacts of neonicotinoids on US commercial and wild bee populations. Last month, an application of the neonicotinoid insecticide, dinotefuran, caused the death of some 50,000 bumble bees in Wilsonville, Oregon. The incident prompted the Oregon Department of Agriculture to temporarily suspend the use of 18 dinotefuran products (Agrow No 667, p 10). In April, the EU voted to impose a two-year ban on three neonicotinoids because of concerns about bee health, and there have been calls for the US to follow suit (Agrow No 668, p 15).

The proposed bill would force the EPA to take action, requiring the agency to suspend “the most bee-toxic neonicotinoids” for use in seed treatment, soil application or foliar treatment on bee attractive plants. “When incidents like the alarming bee die-off in Wilsonville occur, it is imperative that we take a step back to make sure we understand all the factors involved and move swiftly to prevent similar tragedies from happening in the future,” said Congressman Blumenauer, an Oregon Democrat party politician. The lawmaker told reporters that although the bill is unlikely to pass, it should serve as a vehicle to help inform the public and pressure the EPA to accelerate its review of neonicotinoids.

The measure drew swift support from US environmental groups, including the Center for Food Safety, the Xerces Society and the Northwest Center for Alternatives to Pesticides. “It is time for the EPA to take a stronger stance on pollinator protection,” says Scott Hoffman Black, executive director of the Xerces Society. “The EU has put restrictions in place on several neonicotinoids - we need a similar response here.”

(Pesticide & Chemical Policy, July 16, 2013)

HERBICIDES LINKED TO DEPRESSION AMONG FARMERS

A new study published in the American Journal of Epidemiology concludes that farmers using herbicides are nearly two and a half times as likely to be treated for depression as those who did not use herbicides. Furthermore, farmers who are exposed for greater periods of time are also afflicted with greater risk of developing depression, raising concerns of the harm chemicals can cause to mental health. Building on substantial research supporting the link between pesticide exposure and
neurological damage, this study examines the role that pesticides play in the overall health of farmers, and gives further weight to the importance of choosing organic food.

Researchers surveyed 567 farmers from France, questioning them on the frequency of their use of fungicides, insecticides, and herbicides, to determine how pesticide exposures were linked to the risk of developing clinical depression. Lead researchers and associate professor at the Harvard School of Public Health, Marc Weisskopf, PhD, said while the results are unclear, they “suggest we should not be ignoring herbicides just because they’re targeting plants.”

Previous research has already suggested that pesticides, particularly organophosphates, cause a variety of serious neurological health problems, including Parkinson’s disease. This is not surprising, as organophosphates are known to be extremely toxic to nerve cells and deadly at large doses. Recently, organophosphate pesticides caused the deaths of 25 children in India from contaminated school lunches.

To determine chemical exposures, researchers conducted interviews, surveyed old pesticide containers, and even examined records for pesticide purchases. Beyond those measures, researchers also asked whether farmers had ever been treated for depression. The results of the study showed that of 567 farmers 83 of them self-reported treatment or hospitalization for depression, almost 15 percent. After adjusting for age and health factors like smoking, the study found that farmers that use herbicides were more than twice as likely to have been treated for depression. Similarly, those farmers who were exposed to herbicides for a greater length of time—either more hours of exposure or for a greater number of years—were also more likely to be treated for depression than those with less exposure.

Interestingly, the study found no difference in the risk of developing depression between farmers that had fungicides or insecticides compared to those that had not. Dr. Weisskopf posited that this may be because farmers are more aware of the harm fungicides and insecticides have on human health.

“If (herbicides) are considered in general safer and people take fewer precautions because people think they’re not as bad, then that poses a problem,” he told Reuters.

While the study provides important insight into the effect of pesticides on mental health, it does not definitively prove cause and effect. Researchers accounted for age and cigarette smoking in their correlation, however there may be other health conditions or external circumstances not accounted for in the study that changed work conditions and/or made them susceptible to depression.

However, scientists not involved in the study, such as Cheryl Beseler, PhD. and researcher at Colorado State University, have supported the work and stand behind the strength of the study’s methodology. Dr. Weisskopf confirmed that “This still has to be considered a relatively first, small study. There’s more work to do, but it raises concerns that need to be looked into more fully.” (Beyond Pesticides, August, 2, 2013)

US FARMWORKERS SEEK STRONGER PROTECTIONS FROM PESTICIDES

The US EPA is not doing enough to protect farmworkers from dangerous pesticides, asserts a report by non-profit advocacy group Farmworker Justice. The report is part of a concerted effort by the group and other NGOs to press the Agency and Congress to strengthen federal agricultural worker safety regulations. The advocates plan to take their message to Capitol Hill this week, with a dozen farmworkers set to meet with federal lawmakers in the next few days.

"Farmworkers are routinely exposed to pesticides, yet the safety training and information they receive is wholly inadequate,” says Farmworker Justice’s director of occupational and environmental health,
Virginia Ruiz. “The EPA needs to revise current regulations without further delay to increase safeguards and to prevent undue harm to workers and their families from pesticide exposure."

At issue is the EPA’s Worker Protection Standard (WPS), the primary set of federal regulations intended to protect farmworkers from pesticides. The WPS requires workers to receive basic pesticide safety training, restricts worker access to treated fields, mandates that protective equipment is used and calls for medical assistance to be provided in case of emergency. The EPA is expected to begin revising the rules later this year. The regulations have not been updated in nearly 20 years and critics argue that they fall far short of providing adequate protection to farmworkers.

The report notes that the EPA acknowledged in 2000 that risks to workers still exceeded the agency’s level of concern even when there was full compliance with the WPS. The Agency estimates that some 10,000 to 20,000 farmworkers suffer from injuries and illness related to pesticide exposure every year, a figure advocates suggest likely understates the number of acute poisonings since many affected farmworkers may not seek care from a physician.

The Government Accountability Office ¾ an independent US government watchdog ¾ also found the standard wanting in a 2000 report, criticising the EPA for failing to assess the effectiveness of its regulations.

The report contends that the EPA should revise the WPS to require more frequent safety training and safety precautions limiting farmworkers’ contact with pesticides, particularly neurotoxic pesticides. It also calls for stricter rules that ensure that workers receive information about the specific pesticides used in their work and require Spanish translations of pesticide labels. In addition, the report recommends that the EPA require buffer zones around schools and residential areas to protect farmworker families from pesticide drift and to improve reporting of pesticide uses and poisonings.

Pesticide & Chemical Policy, July 17, 2013)

TERMINIX LISTS CITIES WITH HIGHEST INCREASES IN BED BUG ACTIVITY

Thought to be eradicated since World War II, in recent years, bed bugs have been making a comeback throughout the United States. Beyond their annoying bites and welts, research indicates bed bugs can pose physical and psychological health concerns as well. Additionally, reports of bed bugs are increasing in some areas of the country not previously prone to outbreaks, indicating they are on the move.

Terminix released its list of cities experiencing the largest increases in bed bug activity, with Sacramento, Calif. taking the top spot with a 54% jump in bed bug customer calls compared to this same time last year.

The 2013 list of cities with the highest increases in bed bug infestations include:

<table>
<thead>
<tr>
<th>Rank</th>
<th>City</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sacramento, Calif.</td>
<td>54%</td>
</tr>
<tr>
<td>2</td>
<td>Milwaukee, Wis.</td>
<td>53%</td>
</tr>
<tr>
<td>3</td>
<td>Las Vegas, Nev.</td>
<td>50%</td>
</tr>
<tr>
<td>4</td>
<td>Columbus, Ohio</td>
<td>47%</td>
</tr>
<tr>
<td>5</td>
<td>Baltimore, Md.</td>
<td>46%</td>
</tr>
<tr>
<td>6</td>
<td>Riverside-San Bernardino, Calif.</td>
<td>41%</td>
</tr>
<tr>
<td>7</td>
<td>St. Louis, Mo.</td>
<td>40%</td>
</tr>
<tr>
<td>8</td>
<td>Cleveland, Ohio</td>
<td>36%</td>
</tr>
<tr>
<td>9</td>
<td>Louisville, Ky.</td>
<td>31%</td>
</tr>
<tr>
<td>10</td>
<td>Denver, Colo.</td>
<td>28%</td>
</tr>
<tr>
<td>11</td>
<td>Los Angeles, Calif.</td>
<td>27%</td>
</tr>
<tr>
<td>12</td>
<td>San Francisco, Calif.</td>
<td>26%</td>
</tr>
<tr>
<td>13</td>
<td>Dallas/Ft. Worth, Texas</td>
<td>25%</td>
</tr>
<tr>
<td>14</td>
<td>Nashville, Tenn.</td>
<td>17%</td>
</tr>
<tr>
<td>15</td>
<td>Houston, Texas</td>
<td>15%</td>
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</tbody>
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“Bed bugs continue to have a significant presence across the country, in cities large and small, and pose concern for public health,” said Stan Cope, PhD and entomologist with Terminix. “There is now evidence that suggests that severe bed bug infestations may be associated with anemia. Also, bed bug bites can result in secondary infections due to excessive scratching. Bed bug infestations are also known to have a psychological impact and can cause emotional stress and irritability, so if you think you have an issue with bed bugs you should immediately contact a professional to treat your home or business,” added Cope.

Terminix created the list by compiling and analyzing bed bug-specific call volume to its more than 300 branches throughout the country. The rankings represent cities with the biggest percentage gains in bed bug customer calls from Jan-May 2013 compared to the same time period in 2012. Eight of the cities – Columbus, Los Angeles, Dallas/Ft. Worth, Houston, Baltimore, Louisville, Cleveland and San Francisco – are also among the top 15 cities in total number of bed bug customer calls year-to-date for 2013. Once relegated to primarily major cities, bed bugs are good travelers and have been reported by nearly all of the Terminix branches throughout the country.

Bed bugs are usually transported from one location to another as people travel. They can travel in the seams of luggage, carry-on bags, folded clothing and furniture. Because bed bugs can go several months without a blood meal, it’s a good idea to thoroughly inspect luggage and mattresses when traveling. When bed bugs bite, they inject an anesthetic and anticoagulant that prevents a person from feeling the bite. Because these bites generally occur while people are sleeping, they don’t realize they’ve been bitten until small marks appear which are generally slightly swollen, red and may itch.

Terminix offers the following tips to mitigate the risk of being bitten or transporting bed bugs:

- Check hotel headboards, mattresses and box springs for live bed bugs, their exoskeletons and/or dark blood spots.
- Hang all clothing. Leave nothing lying on the bed or furniture.
- Avoid storing clothing in a hotel’s furniture drawers.
- Store suitcases on a luggage rack as far away from the bed as possible.
- Vacuum suitcases when returning home, and immediately wash clothing in hot water.
- Between trips, store luggage in a sealed plastic bag in a garage or basement, away from bedrooms.
- If you suspect you have bed bugs, have your home inspected by a trained professional. Bed bugs cannot be controlled by over-the-counter treatments.


BUG BOMBS A POSSIBLE CAUSE IN NYC BUILDING COLLAPSE

A New York office building that housed several apartments collapsed in Chinatown on Thursday night after an explosion led to a fire and the subsequent folding of the structure, IB Times reports. Reports from the scene of the collapse indicate that dozens were injured, including firefighters. Three of those injured were hospitalized in serious condition.

According to fire officials, several pesticide canisters, or "bug bombs," were found in the first floor rear apartment and may have exploded, but the cause of the blaze hadn't been determined. Investigators were also looking into a possible gas leak. (PCT Online July 15, 2013) http://www.pctonline.com/bed-bug-bomb-nyc-building-collapse.aspx
In-State CEU Meetings

Date: August 14, 2013
Title: CTN Educational Workshop
Location: Courtyard Marriott 4301 Highline Park Blvd, Oklahoma City OK
Contact: Tommy Kezar (512)-829-5114
Course #: OK-13-019
www.ctnedu.com
CEU's: Category(s):
1 1A
3 3A
1 6
1 7A
2 7B

Date: September 16-18, 2013
Title: OKVMA Fall Conference
Location: Hard Rock Hotel & Convention Center Catoosa OK
Contact: Kathy Markham (918)-256-9302
Course #: OK-13-054
www.okvma.com
CEU's: Category(s):
2 A
6 3A
6 5
6 6
6 10

Date: October 25, 2013
Title: Asmark Professional Applicator Training-Hydraulic Sprayers
Location: Chisholm Trail Expo Center Enid OK
Contact: Dustin Warder (270)-926-4600 ext. 203
Course #: OK-13-
www.asmark.org/TrainingCourses/PATCourse.cgi
CEU's: Category(s):
5 1A
5 6
5 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 2013 are as follows:

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<th>September</th>
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<tbody>
<tr>
<td>5</td>
<td>OKC 4</td>
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<tr>
<td>8</td>
<td>Tulsa 9</td>
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<tr>
<td>15</td>
<td>Enid 12</td>
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<tr>
<td>19</td>
<td>OKC 23</td>
</tr>
<tr>
<td>22</td>
<td>Tulsa 26</td>
</tr>
</tbody>
</table>

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.

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

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

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

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**Pesticide Safety Education Program**