OKLAHOMA COOPERATIVE EXTENSION SERVICE

PESTICIDE REPORTS

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

May, 2015

- 1 NEW LOCATION FOR OKLAHOMA COUNTY EXTENSION OFFICE
- 2 MAY TEST HELP SESSION
- 2 DISTRIBUTION OF CERTAIN MOUSE AND RAT CONTROL PRODUCTS ENDS
- 2 NEW RESISTANCE TO 2,4-D DISCOVERED IN AUSTRALIA
- 3 FAMILY BELIEVED TO BE SICKENED BY PESTICIDE AT VIRGIN ISLANDS RESORT
- 4 U.S. REGULATORS MAY START TESTING FOOD FOR GLYPHOSATE RESIDUES
- 4 COURT QUESTIONS US EPA'S ANALYSIS OF BEE RISKS FROM SULFOXAFLOR
- 6 SURVEY: CLOSE TO 90% OF GROWERS BATTLE WEED RESISTANCE
- 7 US ENVIROS TARGET EXPANDED APPROVAL OF DOW'S ENLIST DUO
- 8 US EPA WILL NOT OK STATE POLLINATOR PLANS
- 9 MAN BURNED TRYING TO KILL BED BUGS INSIDE RENTAL CAR
- 10 CEU Meetings
- 10 Online CEU Links
- 10 ODAFF Test Session Information

CHEM

NEW LOCATION FOR OKLAHOMA COUNTY EXTENSION OFFICE

The Oklahoma County Extension Office has officially moved into their new location at 2500 NE 63rd St., OKC, OK 73111. This location is just north of Remington Park on NE 63rd St. Applicators can exit off Interstate 44 to Martin Luther King Ave then go east on NE 63rd St for the most direct route.

The Oklahoma County Extension office will still carry the Applying Pesticide Correctly book for the core and service tech tests as well as the Ornamental and Turf (Category 3A) study material in the office for OKC metro applicators to purchase. The phone number will stay the same at 405-713-1125.

All pesticide applicator manuals can also be purchased through the OSU Pesticide Safety Education Program in Stillwater. Please see our website for the order form at <u>www.pested.okstate.edu</u> or you can call 405-744-5385.

Applicator testing in Oklahoma City for 2015 will continue to be held at OSU-OKC at 400 N Portland Room ARC 196.



MAY TEST HELP SESSION

The OSU Pesticide Safety Education Program will conduct the next test help sessions for Oklahoma City in May 19.

The Oklahoma City Test help session is in a new location for 2015. The test help session will now be held at the OSU-OKC Agriculture Resource Center (ARC) 400 N Portland.

The help sessions will focus on information covered in the core and service tech tests. OSU PSEP will answer any questions over other category tests during this session.

Applicators should acquire and study the manuals before coming to the help session for optimum success. Study manuals can be purchased by using the manual order form available at our website <u>http://pested.okstate.edu/pdf/order.pdf</u> or by calling University Mailing at 405-744-5385.

ODAFF Testing fees are not included in the registration fee and must be paid separately.

Register online at the Pesticide Safety Education Program (PSEP) website at <u>http://pested.okstate.edu/html/practical.htm</u>. Registration forms can also be downloaded from the website.

Registration will start at 8:45 and the program will run from 9:00 am to 12:30 pm. Testing is scheduled to begin a 1:30 pm.

NO CEU's will be given for this program!

More Test Help Workshop dates are scheduled for 2015. Please go to the website below for more 2015 dates.

http://pested.okstate.edu/html/practical.htm

DISTRIBUTION OF CERTAIN MOUSE AND RAT CONTROL PRODUCTS ENDS

On April 1, 2015, Reckitt Benckiser ceased all distribution of 12 d-CON products that do not meet EPA's current safety standards. EPA reached an agreement with Reckitt, the manufacturer, to cancel these products because they are sold without a protective bait station and pose risks to children and pets. Additionally, eight of the 12 products pose unacceptable risks to certain wildlife. Retailers may sell and consumers may buy these products according to the label until stocks are exhausted. Users of these d-CON products must read and follow the product label instructions.

Household rodenticide products that comply with the Agency's safety criteria are widely available and are required to be sold and used with a bait station in most use scenarios. EPA encourages consumers to use rodenticide products with bait stations, as proper use of a bait station reduces the risk of accidental exposure to children, pets, and non-target wildlife. (EPA April 3, 2015) http://www.epa.gov/oppfead1/cb/csb_page/updates/ 2015/12-d-con-products.html

NEW RESISTANCE TO 2,4-D DISCOVERED IN AUSTRALIA

In a world-first case of herbicide resistance, researchers have confirmed that sowthistle weed in the south east of South Australia is resistant to the popular product 2,4-D, reports Danielle Grindlay of ABC Rural News in Australia.

The Grains Research and Development Corporation (GRDCC) said the localized situation was of national concern because sowthistle is becoming harder to manage in no-till crops and can already tolerate other herbicides.

University of Adelaide's Dr. Chris Preston warned that producers across southern Australia were likely to face the same problem unless they changed practices.

"Most of the spread is going to be fairly localized unless it turns up in hay," he said. "What we will see is farmers in other areas, who are treating the weed with exactly the same herbicides ... they will actually get their own resistance.

"We're good at world-firsts with herbicide resistance in Australia."

It is not the first chemical group sowthistle has built up a resistance to.

Decades ago grain producers relied heavily on 'Group B' herbicides, including chlorsulfuron and metsulfuron, which most of the weed populations are now resistant to.

Researchers have also confirmed three cases of resistance to glyphosate in northern New South Wales, with more testing underway on suspect populations"

"[Group B] herbicides controlled it very well," Dr. Preston said. "It wasn't until it got resistance to those herbicides that it started to come back to be a problem. I think the problem we're going to face, going forward, is that the alternatives are actually far more expensive."

Dr. Preston said sowthistle was of most concern in pulse crops and pasture situations.

"It will use moisture, collects diseases and insects and just generally causes a problem," he said. "If farmers act now and look at their practices around sowthistle control, it probably won't be a major weed. We need to make sure that we do control it because if we do get very large populations it can be troublesome and it's also got seed that blows on the wind, so one farmer's problem can become another farmer's problem because it will simply blow over the fence." Sowthistle has been considered a 'major weed' in northern New South Wales for more than 15 years, as the damage is greater in areas that lack water.

"They rely so heavily on that fallow period for moisture, so if they don't get control of sowthistle in the fallow period it means they really can't grow a crop," Dr. Preston said. "We have just a little bit of extra leeway in the southern region over that but we don't want paddocks getting full of this over summer because it will impact on our winter cropping." (CropLife April 17, 2015) http://www.croplife.com/cropinputs/herbicides/new-resistance-to-24-ddiscovered-in-australia/

FAMILY BELIEVED TO BE SICKENED BY PESTICIDE AT VIRGIN ISLANDS RESORT

A Delaware family is back home and in the hospital after getting sick while on vacation, due to a possible exposure to methyl bromide.

The Environmental Protection Agency suspects Steve Esmond, his wife Dr. Theresa Devine, and their two teenage boys were poisoned by methyl bromide. They were airlifted to the United States mainland for continued treatment. The mother has been released and the father and two teenage sons remain in critical condition.

Use of methyl bromide was confirmed the day after the family became ill, which has helped inform doctors and medical experts on how to treat the family, Judith Enck, the EPA's regional administrator in New York City, which has jurisdiction over the U.S. Virgin Islands, told ABC News.

EPA banned methyl bromide for residential use in 1984 primarily for health concerns. That ban extends to U.S. territories, including the Virgin Islands, Enck told ABC News. So far the investigation has revealed a certified applicator working for Terminix applied the methyl bromide in the complex while targeting an indoor beetle that consumes wood, Enck said. The company is now under a criminal investigation led by the U.S. Justice Department.

A Terminix spokesperson emailed PCT the following statement: "First and foremost, the family is in our thoughts and prayers. We're cooperating with authorities in their investigation, and we're conducting our own thorough internal investigation. We're committed to performing all work we undertake in a way that is safe for our employees, customers and the public."

The National Pest Management Association noted that the United States Environmental Protection Agency, the United States Department of Justice, and U.S.V.I Department of Planning and Natural Resources are investigating. NPMA also released a statement and talking points (click here to read). (PCT Online April 13, 2015) http://www.pctonline.com/methyl-bromidepoisoning-Terminix.aspx

U.S. REGULATORS MAY START TESTING FOOD FOR GLYPHOSATE RESIDUES

U.S. regulators may start testing food products for residues of the world's most widely used herbicide, EPA told Reuters' Carey Gillam on Friday, as public concern rises over possible links to disease.

Glyphosate, the active ingredient in Roundup herbicide, has come under intense scrutiny since a research unit of the World Health Organization reported last month it was classifying glyphosate as "probably carcinogenic to humans."

The herbicide is considered safe by the EPA, as well as many foreign regulatory agencies, including in the European Union. Still, a number of companies, consumer groups and advocacy organizations have been sampling foods, as well as human urine and breast milk, to try to determine the pervasiveness of glyphosate residues.

Glyphosate is used on corn, soybeans, sugar beets and other crops genetically altered to withstand it. It is also used by farmers growing wheat and other crops. Its use has surged with the advancement of genetically engineered crops.

The U.S. government, which annually tests thousands of foods for pesticide residues, does not test for glyphosate, in part because it has been considered safe. (CropLife April 21, 2015) http://www.croplife.com/crop-inputs/herbicides/u-sregulators-may-start-testing-food-for-glyphosateresidues/

COURT QUESTIONS US EPA'S ANALYSIS OF BEE RISKS FROM SULFOXAFLOR

A panel of three US federal judges this week appeared sympathetic to beekeepers seeking to block the EPA's registration of Dow AgroSciences' insecticide, sulfoxaflor, showing scepticism that the Agency had adequately assessed the potential harm the pesticide may cause bees.

The closely watched case could have serious ramifications for the EPA's effort to ensure bees and other pollinators are protected from legal pesticide uses. It is the first challenge of a pesticide registration that relied upon the Agency's new framework for assessing risks to pollinators.

The dispute centres on the EPA's decision in May 2013 to grant Dow an unconditional registration for sulfoxaflor, permitting use on a wide array of crops -- including canola, soybeans, fruits and leafy vegetables -- to control piercing and sucking insects. The EPA said that it had fully evaluated the insecticide's potential impacts on bees and that the

final label included "robust terms" for protecting bees and other pollinators.

The Agency also imposed several mitigation measures intended to ensure that bees are protected from sulfoxaflor, considered part of a new sub-class of neonicotinoid insecticides. Those measures include an overall reduction of the application rate, bloom restrictions, increased application intervals and advisory notices for growers and beekeepers.

But beekeepers are unconvinced and in July 2013 several beekeeping groups and individuals filed suit, asking the US District Court of Appeals for the Ninth Circuit to vacate the registration and remand it back to the EPA. The Agency's decision to register sulfoxaflor was illegal because it had failed to show that use of the insecticide would not have an "unreasonable adverse effect" on honeybees, Earthjustice attorney Greg Loarie told the Court during oral arguments on April 14th.

The EPA initially found a risk to bees at the application rates requested by Dow and concluded additional Tier 2 field studies were needed, he explained, but then reversed course and granted registration at a "mitigated" application rate onethird lower with little explanation. The field studies submitted by Dow and used by the EPA to support its decision were inadequate, Mr Loarie said, and the Agency failed to conduct the required costbenefit analysis needed to justify approval of the insecticide. "The final decision document recrunches the numbers at [the] reduced rate and nothing of significance changes," Mr Loarie said. "The level of concern is still surpassed. At that point they need to do the cost-benefit analysis, which we contend was not done." The plaintiffs recognise that the "EPA pretty much gets to write the rules when it comes to registering pesticides", he told the Court. "But having made those rules, EPA has to live by them."

Tier 2 debate

The three judges honed in on the concerns about the adequacy of the Tier 2 field studies. Two of the studies used the "mitigated rate" that the EPA ultimately approved while the other four were conducted with far lower application rates. Judge

John Kronstadt asked the attorney representing the EPA why the four studies that used lower rates were relevant. "Despite the fact that they may have used a lower application rate, the design of the studies nonetheless allowed EPA to examine whether or not there was going to be a catastrophic failure of the brood," said Department of Justice (DoJ) attorney John Thomas Do said. "At none of those levels did EPA notice a catastrophic event."

Judge N Randy Smith was unconvinced. "I'm left in my analysis saying if EPA has anything, it has two studies," Judge Smith said, adding that he had doubts about the adequacy of those two studies as well. The two studies did not comply with guidance developed by the Organization for Economic Cooperation and Development (OECD) on how to perform bee semi-field tests, said Judge Smith, who questioned why the EPA "changed its mind" about requiring more Tier 2 studies.

The EPA did ask for additional Tier 2 studies when it proposed a conditional registration, Mr Do replied, but those were requested to support the higher application rate that Dow had requested, not the amount the Agency ultimately approved. "Those additional studies EPA found were unnecessary," he said, adding that the OECD guidelines are not binding on the Agency. There is no "golden number" of Tier 2 studies required by the EPA, Mr Do said, and the studies that relied on lower application rates still provided useful information to the Agency.

Judge Smith questioned why the EPA did not receive any studies that provided "competent data" on the long-term effects on brood development and colony health. "This is the thing that most concerns me," the Judge said. The EPA can require "any information" they need for a registration decision, Judge Smith said, and clearly requested more information to justify Dow's requested application level. But the EPA abandoned that plan and relied on the two questionable Tier 2 studies, he said. "All of the problems with those two studies still exist," Judge Smith told Mr Do. "They don't meet the OECD guidance, they don't test the effects of the [pesticide] on brood development, they don't test the long-term colony health effects and yet you are going to rely on them. That is my problem."

The EPA's decision was not "solely" based on the Tier 2 studies, Mr Do replied, adding that the EPA imposed measures to mitigate the risks it found.

Judge Mary Schroeder seemed skeptical of the DoJ attorney's explanation. "There has to be some support for the amount you mitigate and for the assessment of the risk at that level," Ms Schroeder said. "I don't see that here."

Dow response

An attorney representing Dow suggested that there were "some misconceptions" with regards to the Tier 2 studies, calling on the Judges to consider the six studies collectively and defer to the "expertise of the Agency". The six studies together "allowed EPA to conclude that there was no unacceptable impact on the hive", said David Weinberg, a partner with Wiley Rein. "That goes directly to the concern about EPA's evaluation of the impact on the beekeepers because if there is no impact on the bee hives, then there is no impact on the beekeepers."

The EPA balanced that conclusion against the "substantial benefits" of sulfoxaflor, he said, adding that the insecticide is considered far safer for bees than the pesticides it is tipped to replace. "This is a very simple administrative law case," Mr Weinberg concluded. "EPA is required to make a judgment about whether on balance this is a good product. EPA made that judgment."

The panel is under no set timeframe to rule on the case and Judge Smith noted that its decision could be a tricky one. "This is a very difficult case, a very interesting case for all of us," he said at the close of the discussion.. (Pesticide & Chemical Policy/AGROW, April 16, 2015)

SURVEY: CLOSE TO 90% OF GROWERS BATTLE WEED RESISTANCE

Herbicide resistance management continues to be a priority for corn and soybean growers, and they're working together more effectively to slow the spread of resistant weeds, according to a survey sponsored by DuPont Crop Protection at the 2015 Commodity Classic in Phoenix, AZ.

The vast majority of growers surveyed (87%) said they are doing everything they can to prevent weed resistance on their own farms, a dramatic increase from respondents to a 2011 survey conducted at the same trade show, when 70% reported doing everything they could to control weed resistance.

The survey revealed increased confidence in other growers' practices. More than half of growers (52%) surveyed reported they felt growers in their area were doing all they could to prevent weed resistance, a large increase from the 39% who answered that way in 2011.

Reinforcing that growers are serious about taking resistance management to the next level, 61% of growers surveyed in 2015 said they plan to increase their herbicide investment in 2015 and 21% said they would make a large increase in that investment. Only 3% of respondents said they will wait to see how the season unfolds to determine their herbicide investment, despite significantly lower expected commodity prices. One in three (32%) said they don't plan to adjust their herbicide investment this season. For this survey, investment was described as increased time and/or money spent on crop protection.

"Weed resistance management is increasingly complicated, as weeds continue to evolve," said James Hay, business director, North America, DuPont Crop Protection. "A season-long weedcontrol plan including herbicides using multiple modes of action is critical to triumphing over hardto-control weeds and protecting yield."

When asked about plans to control damage from disease or insects, growers indicated they value maintaining a strong crop protection plan year over year, as about 40% said they don't plan to change their fungicide (39%) or insecticide (41%) investments this year. Only 5% of respondents said they will wait to see what happens this season before adjusting their fungicide and insecticide plans None of the growers surveyed said they will significantly decrease their crop protection inputs in 2015.

"Growers are aware of the increasing populations of resistant weeds and diseases spreading across the country and are doing what they can to protect profitability and sustainability of their operations by taking action against resistance," said Hay. "Understanding those weed and disease pressures, local DuPont experts are helping growers find sustainable, integrated crop protection strategies to maximize their profits, minimize risk and protect yield potential." (CropLife, April 14, 2015) http://www.croplife.com/cropinputs/herbicides/survey-close-to-90-of-growersbattle-weed-resistance/

US ENVIROS TARGET EXPANDED APPROVAL OF DOW'S ENLIST DUO

A coalition of environmental and food safety groups want a federal court to block the US EPA's recent decision to approve the use of Dow AgroSciences' herbicide, Enlist Duo (2,4-D choline + glyphosate), in an additional nine states. The groups filed a motion on April 20th with the US District Court of Appeals for the Ninth Circuit asking the Court to add the challenge to its ongoing lawsuit that aims to overturn the EPA's registration of Enlist Duo.

The EPA originally approved the herbicide in October for use in six Mid-West states. The product is intended for use on Dow's Enlist crops comprising genetically modified herbicide-tolerant DAS40278 maize and DAS68416 and DAS44406 soybeans. Earlier this month, the Agency expanded its approval to nine additional states: Arkansas, Kansas, Louisiana, Minnesota, Missouri, Mississippi, Nebraska, Oklahoma and North Dakota. Environmentalist and food safety groups filed two separate lawsuits in October challenging the EPA's decision to register Dow's herbicide. Those two cases have been consolidated before the Court of Appeals. The coalition of plaintiffs led by the Center for Food Safety (CFS) contends that it is practical and appropriate for the Court to add the amended registration to its complaint.

The new authorization is "based on virtually the same administrative record, and is therefore the same order for purposes of judicial review", the groups write in their motion to amend their petition. The CFS-led coalition contends that the EPA's registration of Enlist, as well as its decision to expand its use, violated federal pesticide law and the Endangered Species Act (ESA).

The court is considering whether to delay commercialization of the herbicide while the case is pending. The CFS plaintiffs contend that a stay is warranted based on its allegation that the EPA failed to consult with federal wildlife agencies on the potential impacts of Enlist on the whooping crane and the Indiana bat. Both species are protected under the ESA.

The Natural Resources Defense Council has also filed its own motion for a stay, arguing that the EPA failed to consider the impacts of increased glyphosate use on monarch butterflies and did not fully analyze the potential human health effects from the 2,4-D component of the pesticide.

The EPA and Dow have both called on the Court to reject the requests for a stay, calling such a move unnecessary and unjustified.

The Court is under no set timetable to rule on the motions.

Dow intends to introduce Enlist Duo this year along with a stewarded introduction of Enlist maize and seed production of Enlist soybeans. (Pesticide & Chemical Policy/AGROW, April 21, 2015)

US EPA WILL NOT OK STATE POLLINATOR PLANS

The US EPA has abandoned its effort to develop a framework for reviewing and approving state pollinator protection plans, agency officials confirmed last week at a meeting held by CropLife America (CLA).

The Agency is still, however, keen for states to develop pollinator protection plans and "if states want our input, we will be there", said Rick Keigwin, director of the EPA Office of Pesticide Programs' pesticide re-evaluation division.

The policy shift has been welcomed by state pesticide officials, who worried that an EPA approval process could actually discourage some states from pursuing new efforts to protect commercial honeybees and other managed pollinators from legal pesticides uses.

The idea of an EPA review and approval process was "causing a lot of headaches," said Steve Dwinell, assistant director of Florida's Division of Agricultural Environmental Sciences.

The EPA began discussing the concept with state pesticide officials last year after the White House formed a federal task force to develop a new federal strategy to improve pollinator protections, a plan likely to be released in the next few weeks. As part of that broader effort, the EPA has been encouraging states to develop their own pollinator protection plans, recognizing that states may have greater ability to work directly with growers and beekeepers to improve co-operation and communication. Five states (California, Colorado, Florida, Mississippi and North Dakota) have state pollinator protection plans in place and at least 30 are exploring similar initiatives.

The EPA was working with the State FIFRA Issues Research and Evaluation Group (SFIREG) as well as the Association of American Pest Control Officials (AAPCO) to help develop guidance for states, with the intent of providing recommendations for specific measures the Agency could review and approve. At a meeting in December, Agency officials suggested that they might eventually revise some pesticide label restrictions for states that have adequate pollinator protection plans. But state pesticide officials repeatedly raised concerns about what criteria the EPA would use to assess pollinator protection plans, deadlines for implementation and how success would be measured.

Given that the plans are intended to focus on voluntary co-operation among stakeholders, there appeared little need for the EPA to review or approve the state efforts, said Mr Dwinell, a SFIREG member and co-chair of the AAPCO's pollinator protection committee.

The SFIREG's guidance is focused on managed pollinators not under contract, Mr Dwinell added, whereas much of the EPA's interest is on contracted pollinators, particularly commercial honeybees brought in by growers to pollinate specific crops. "The whole idea of having [the] EPA approve [the state plans] didn't make a lot of sense," he said during a session on pollinators at the CLA conference.

It is critical to make state plans "as localised and specific to a state and crop as possible", Mr Dwinell added. "[The] EPA can't write labels for every potential situation. It is better to have a system developed among the stakeholders at the local level to mitigate risk."

The SFIREG is removing references to the EPA review and approval from its guidance for states interested in developing pollinator protection plans, Mr Dwinell said, and intends to formally adopt the guidance at its next meeting in June.

There are clear signs that existing state pollinator protection plans are working, Mr Dwinell said, but states still need better ways to quantify success. "The biggest issue is figuring out how to measure their effectiveness," he said. "Right now all we have is anecdotal. That information shows that bee numbers are up in states that have these plans, beekeepers are happy, and growers are happy ... but we don't have the hard quantitative data to back that up." (Pesticide & Chemical Policy/AGROW, April 28, 2015)

MAN BURNED TRYING TO KILL BED BUGS INSIDE RENTAL CAR

Police say a Long Island man set his rental car ablaze while trying to kill bed bugs inside the vehicle, ABC News reports.

Scott Kemery suffered first- and second-degree burns in the incident Tuesday outside an Eastport supermarket.

Police say the Bridgehampton resident poured alcohol over the insects, then sat in the car and lit a cigarette, setting off the blaze.

(PCT Online, April 23, 2015) http://www.pctonline.com/man-burned-car-bedbugs.aspx

In-State and Neighboring State CEU Meetings

No meetings to report for May.

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://ctnedu.com/oklahoma_ | applicator_ | <u>enroll.</u> |
|-----------------------------|-------------|----------------|
| 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 <u>http://www.pentonag.com/mrl</u>

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: <u>http://www.state.ok.us/~okag/cps-ceuhome.htm</u>

ODAFF Test Information

Pesticide applicator test sessions dates and locations for May/June 2015 are as follows:

| Enid | | | |
|-------|--------------|--------------|----------------------|
| Linu | 2 | Goodwell | |
| Tulsa | 11 | Tulsa | |
| OKC | 12 | OKC | |
| Tulsa | 25 | Tulsa | |
| OKC | 26 | OKC | |
| | | | |
| | | | |
| | | | |
| | | | |
| | OKC Tulsa | OKC12Tulsa25 | OKC12OKCTulsa25Tulsa |

| SW Research & Extension Center 16721 US HWY 283 |
|---|
| KIAMICHI TECH CENTER 1301 W Liberty Rd, Seminar Center |
| Garfield County Extension Office, 316 E. Oxford. |
| Okla. Panhandle Research & Extension Center, Rt. 1 Box 86M |
| Kiowa County Extension Center Courthouse Annex, 302 N. Lincoln |
| Great Plains Coliseum, 920 S. Sheridan Road. |
| Kiamichi Tech Center on Highway 270 W of HWY 69 |
| OSU OKC Room ARC 196, 400 N. Portland. (New Location) |
| NE Campus of Tulsa Community College, (Apache & Harvard) Large Auditorium |
| |

Pesticide Safety Education Program