The OSU Pesticide Safety Education Program will conduct the next test help session in August. The workshop will be held August 5th at the Tulsa CountyExtension Center 4116 E. 15th in Tulsa.

This testing session will focus on information covered in the core/service tech test. 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 http://pested.okstate.edu/pdf/order.pdf 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 http://pested.okstate.edu/html/practical.htm. 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 will begin at 1:30 pm.

NO CEU’s will be given for this program!
REGISTRATION REVIEW PROPOSED INTERIM DECISIONS FOR NINE PESTICIDES NOW AVAILABLE FOR PUBLIC COMMENT

The EPA is releasing for public review and comment proposed interim Registration Review decisions on nine pesticides.

These proposals reflect the EPA’s progress in moving from the early stage of registration review, in which new dockets are opened and work plans are established for pesticides beginning the process, to the later stage in which human health and ecological risk assessments are updated as needed and risk mitigation decisions are developed, with input from stakeholders and the public.

Through the registration review program, the EPA is reevaluating all registered pesticides to ensure that they continue to satisfy statutory standard for registration – that is, these pesticide registrations are based on current scientific and other knowledge and can still be used without unreasonable adverse effects on human health and the environment.

The EPA may issue the interim decision on a pesticide before completing registration review because the decision may require risk mitigation measures or information needed to complete the review. Where risks are identified and opportunities for early mitigation exist, the agency may pursue those opportunities now, rather than waiting until the registration review is completed. The EPA’s final registration review decision depends on the result of any needed endangered species consultation with the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service and the evaluation of potential endocrine disruptor effects. Issuing proposed interim decisions supports the EPA’s overall program objective of completing registration review for over 700 pesticide cases by October 2022.

The EPA is requesting public comment on the proposed interim registration review decisions for the nine pesticides listed below. This process involves the public in more timely development of registration review decisions. To review supporting documents and comment on the EPA’s proposed interim decisions, visit the following pesticide-specific dockets at www.regulations.gov. The 60-day comment period closes September 22, 2014. Instructions for submitting comments are available in the docket.

For further information, see the Federal Register Notice of Availability in docket EPA-HQ-OPP-2014-0473 at www.regulations.gov.

Registration Review Case Name and Pesticide Docket ID Number:
Acetaminophen (Case 7610) EPA-HQ-OPP-2012-0145
Clofentezine (Case 7602) EPA-HQ-OPP-2006-0240
Cyromazine (Case 7439) EPA-HQ-OPP-2006-0108
Fosthiazate (Case 7604) EPA-HQ-OPP-2009-0267
Hexythiazox (Case 7404) EPA-HQ-OPP-2006-0114
Lactofen (Case 7210) EPA-HQ-OPP-2005-0287
Macleaya Extract (Case 7024) EPA-HQ-OPP-2011-0172
Quizalofop (Case 7215) EPA-HQ-OPP-2007-1089
Trinexapac-ethyl (Case 7228) EPA-HQ-OPP-2008-0657

**GMO CRITICS WARN CONGRESS ABOUT RISKS OF ENLIST HERBICIDE**

Critics of genetically modified crops are urging federal lawmakers to pressure the US EPA to reject Dow AgroSciences’ herbicide, Enlist (2,4-D choline + glyphosate), for use on its GM Enlist maize (DAS40278) and Enlist soybeans (DAS68416). They argue that it poses undue environmental and public health risks. The push by the Environmental Working Group (EWG) and the Center for Food Safety (CFS) comes as the EPA appears poised to approve Dow's herbicide.

The USDA's Animal and Plant Health Inspection Service (APHIS) indicated its intent to approve the Enlist crops in January, concluding that the new lines do not pose a risk to other plants (*Agrow No 680, p13*). The EPA proposed the registration of Enlist Duo in late April, agreeing with Dow that the product can provide farmers a new tool to address the rapid increase in glyphosate-resistant weeds (*Agrow No 687, p 26*). The Agency said that it plans to impose "robust monitoring" and reporting requirements on Dow as well as grower education and remediation as part of its registration. The EPA added that its registration would also allow it to take "swift action" to impose additional restrictions on the manufacturer and the use of the pesticide if resistance develops.

The American Farm Bureau, CropLife America, as well as organisations representing maize and soybean growers, have all weighed in with support for approving the herbicide and deregulating the GM crops, which were approved by Canadian authorities in October 2012 (*Agrow No 651, p 23*).

But the Enlist system has drawn the ire of GMO critics who contend that approval of the herbicide and GM crops will trigger a major surge in the use of 2,4-D, increase weed resistance and offer little benefit to consumers. They also cite worries about the possible health impacts from 2,4-D, including links to cancer, reproductive toxicity and endocrine disruption.

Herbicide-tolerant crops have been a "false promise" and led to massive overuse of glyphosate, says Dr Doug Gurian-Sherman, a senior scientist with the CFS. "Most scientists realise that when you have a situation like this, you overuse a chemical or pesticide or antibiotic, you encourage resistance from whatever you are trying to control," he told attendees at a congressional briefing. "And that is exactly what has happened."

There are roughly two dozen glyphosate-resistant weeds across the globe, including 12-14 in the US that effect some 60 million acres (24 million ha) of cropland, Dr Gurian-Sherman said. "The extent of these resistant weeds is unprecedented," he said. "The biotech industry is about to repeat the same mistakes that got us into this predicament - their solution is more of the same … and to go back to older chemicals developed 60, 70 years ago."

Approval of the Enlist herbicide could lead to a doubling or tripling of the use of 2,4-D in the US, according to John Wargo, a Yale University professor of risk analysis and political science. The EPA has not considered these multiple uses - and the potential for multiple exposures - in its risk assessment for Enlist Duo, professor Wargo added, and has failed to include the protections required for children that are required by the Food Quality Protection Act.

**needless alarm**

Dow contends that the EWG is leading a campaign of "alarmist claims that have been rejected by experts for many years" and is ignoring ample evidence that 2,4-D can be used safely without posing risks to human health or the environment. 2,4-D is "one of the most extensively studied herbicides in existence", the company told Agrow. "Authorised uses are based on extensive regulatory evaluations of a health and safety database that today exceeds 4,000 publications."
Dow notes that the chemical has been used for more than 60 years and is approved for use in more than 70 countries worldwide - among them Canada, the UK, Germany, France, Japan, Australia and the US. "There is tremendous demand among America’s farmers for new weed control technologies like Enlist Duo to maintain their productivity, keep their costs down, and conserve resources," according to Dow. "The latest state of the science continues to support the use of 2,4-D."

Dow is keen to have the Enlist herbicide and crops commercially available to US farmers by next year, but opponents may seek legal action if the products are approved as expected. The CFS has warned the APHIS that it would sue if the agency approved the Enlist GM crops (Agrow No 639, p 12).

(Pesticide & Chemical Policy/AGROW, July 30, 2014)

HERBICIDE-RESISTENT KOCHIA A THREAT TO NO-TILL FARMING

K-State Research and Extension

Known by the name tumbleweed, it’s been romanticized in story and song. And when it’s called summer-cypress, it sounds downright exotic. No matter what you call it, the weed kochia cuts into crop yields and farmers’ profits. And it’s become harder to control.

kochia

With roots that grow deep into the soil – as much as 16 feet during drought – the kochia plant (Kochia scoparia) can grow up to 7 feet tall, with thousands of small, individual flowers. And it saps much-needed moisture from crop land across the High Plains.

For 25 years, however, kochia along with other weeds was successfully controlled by glyphosate, a broad-spectrum herbicide, initially sold under the brand name Roundup and now available under a variety of names.

In 2007, however, Kansas State University weed scientists confirmed resistance to glyphosate in four separate kochia populations in western Kansas, according to Phil Stahlman, a weed scientist, based at K-State’s Agricultural Research Center in Hays.

“The problem really blew up and got out of control in 2010,” said Stahlman, who noted that testing of several populations by his graduate student, Amar Godar, “determined that resistance had become widespread in western Kansas and colleagues in Colorado, Nebraska, and South Dakota had found resistance in those states.

“By 2013, that the problem had developed from the Texas High Plains, all the way into the prairie provinces of Canada.”

Stahlman and Godar rated 1,500 wheat stubble fields throughout western Kansas in fall 2010, and found that about 30 percent were tilled in an effort to control the weed.

“That was higher than I expected,” he said, adding that there was evidence that the kochia in several fields had been sprayed first – unsuccessfully. “It was eye opening; they felt that they had to resort to tillage.”

The practice is counter to the common practice of no-till or minimum tillage. Leaving the soil mostly undisturbed leaves a layer of residue from previous crops, which boost soil fertility, helps conserve soil moisture and makes it less prone to erosion from wind and rain. Many studies have shown that crop yields from no-till fields are higher than when fields are tilled.

In 2010, Stahlman and researchers in other states launched a regional effort to investigate alternatives to glyphosate for kochia control. They found that if an herbicide with residual properties was applied before the weed emerged in early spring, it cut emergence by at least 70 to 80 percent, often more than 90 percent. Then, the kochia that did emerge
during the growing season was more easily managed.

In fall 2012, Stahlman and Godar asked crop consultants in western Kansas several questions to determine the impact of glyphosate-resistant kochia, evaluate growers’ response to the problem and measure their success in managing it.

Fifty-two crop consultants completed the survey, which covered 46 of Kansas’ 105 counties.

“Several important points came out,” he said. “The percentage of fields infested with kochia increased from 47 percent in 2007 to 70 percent in 2012. Over the same period of time, the average use rate of glyphosate went up from 0.75 pound per acre to 1.25 pound per acre. That in itself indicates that producers were having trouble controlling kochia.”

Many producers indicated that they had increased applications of glyphosate from two to three.

Stahlman and other scientists have been spreading the word at field days and other ways that applying herbicide prior to kochia emergence early in the spring can make a difference.

The good news, he said, was, in 2011-2012, the use of pre-emergent herbicide in addition to normal management began to be used effectively. Observations and reports from retailers indicate that many growers are now using a pre-emergent herbicide in early spring prior to kochia emergence and many more – perhaps a majority – are using a pre-emergent herbicide in addition to glyphosate in Roundup Ready corn and soybeans.

“If we till the soil to manage kochia, we’ve lost the conservation gains we made in the last decade or more of using no-till,” Stahlman said.

The researcher is optimistic that kochia is manageable by applying pre-emergent herbicide and dealing with what still comes up later in the growing season.

“Fortunately, the seed life of kochia is relatively short, not more than two to three years. But with uncontrolled kochia on roadsides and fence rows, and if we have one grower in an area who is not on board with how to manage it, it could be a problem.”

Stahlman and other researchers are studying the kochia plant’s mechanism of resistance as they look for even better ways to manage the weed and protect crops.

(HaysPost.com June 27, 2014)

BED BUGS TURN UP IN SENATE OFFICE BUILDING

Bed bugs were found on the sixth floor of the Dirksen building last week, causing officials to take emergency measures such as closing off a restroom for a couple of days with yellow police tape, the Daily Caller reports.

A female in line—one of the placeholders—had bedbugs. Sources tell The Mirror she was physically removed from the scene after one of her fellow line sitters noticed bugs crawling all over her. Apparently the bugs were also found in a women’s restroom. (PCT Online, July 28, 2014)
http://www.pctonline.com/bed-bugs-Senate-building.aspx

US HOUSE DENIES BID TO KILL CWA PESTICIDE PERMIT

The US House of Representatives has rejected a bill that would eliminate a US EPA requirement that some pesticide users obtain Clean Water Act (CWA) permits. The final tally was 253 to 148 in favor of the legislation, but proponents needed 280 votes, or two-thirds of the House, for the measure to advance.
The vote is a blow for the pesticide industry, farm groups and other opponents of the permitting requirements, which were imposed by the EPA in response to a 2009 ruling by the US Circuit Court of Appeals for the Sixth Circuit. The ruling vacated the Agency's 2006 aquatic pesticides rule, concluding that pesticide residues and biological pesticides are pollutants subject to the CWA’s National Pollutant Discharge Elimination System (NPDES) programme (Agrow No 559, p14).

In response to the Court ruling, the EPA developed an NPDES general permit in November 2011 to cover four specific types of pesticide applications "to, over or near waters of the United States" - those aimed at controlling mosquitoes and other flying insects, aquatic weeds and algae, aquatic nuisance animals, and forest canopy pests (Agrow No 628, p 15).

Only six states directly adopted the EPA permit. The remaining 44 states have the authority to implement the CWA’s NPDES programme and have adopted similar permits. The EPA has repeatedly said that the permit does not affect farmers and ranchers, noting that the NPDES programme specifically exempts agricultural storm water runoff and irrigation return flows. But that has not assuaged critics’ concerns that the permitting programme is unwarranted and sympathetic lawmakers contend it is interfering with legal pesticide uses, notably efforts to control mosquitoes and other pests.

The vote may mark a shift in lawmakers' view of the issue. Past attempts have drawn deeper bipartisan support in both chambers and one bill passed the House in 2011 (Agrow No 613, p 13). But the Senate appears to have little appetite for the concern, with several Democrats adamant they will block any effort to eliminate the permitting requirement. (Pesticide & Chemical Policy/AGROW, July 30, 2014)

**US AG INTERESTS URGE ENLIST HERBICIDE APPROVAL**

Farm groups are pressing the US EPA to quickly approve Dow AgroSciences’ herbicide, Enlist (2,4-D choline + glyphosate), for use on its genetically modified Enlist maize (DAS40278) and Enlist soybeans (DAS68416). The company claims that the herbicide and GM crops are vital new tools for farmers struggling to combat growing weed resistance to glyphosate and other herbicides. It
hopes to have the new seeds and herbicide available for US farmers by 2015.

The EPA released its proposed registration of the Enlist herbicide in late April (Agrow No 687, p 26), agreeing with Dow that the product can provide farmers a new tool to address the rapid increase in glyphosate-tolerant weeds. The Agency said that it plans to impose "robust monitoring" and reporting requirements on Dow, as well as grower education and remediation as part of its registration. The EPA added that its registration would also allow it to take "swift action to impose additional restrictions" on the manufacturer and the use of the pesticide if resistance develops.

But the Agency's proposed registration would only allow use of Dow's Enlist herbicide in six states - Iowa, Illinois, Indiana, Ohio, South Dakota and Wisconsin. Dale Moore, executive director of public policy for the American Farm Bureau Federation, calls the limit "disappointing" - a view shared by an array of state farm groups who filed comments with the Agency last month.

Weed resistance is a major concern that affects farmers across the US "even where it is not yet a significant production challenge, its prevention requires access to weed control tools", Mr Moore wrote in comments submitted to the EPA. "We urge EPA to consider expanding this registration to all US corn and soybean production areas." Mr Moore noted that data collected late last year indicated that more than 86% of maize, soybean and cotton farmers in the south and 61% in the Mid-West have reported issues with herbicide-resistant weeds. "Delaying the availability of this herbicide can only exacerbate this problem," he wrote.

**growing resistance**

The EPA is, however, facing ample pressure from critics of the new herbicide. Environmental groups, led by the Center for Food Safety (CFS), the Environmental Working Group (EWG) and Food & Water Watch, have continued with an aggressive campaign to rally opposition to the Enlist system, convincing more than 500,000 individuals to send the EPA comments calling on the Agency to deny registration.

Critics contend that approval of the Enlist system would trigger a major uptick in the use of 2,4-D, increase weeds resistant to the herbicide and offer little benefit to consumers. They also cite concerns about the possible health impacts from 2,4-D, including links to cancer, reproductive toxicity and endocrine disruption. The CFS also warns that the EPA may be on shaky legal ground if it approves the product. It stops short of threatening legal action, but a court battle over use of the Enlist system in the US looks likely. The advocacy group has warned the USDA's Animal and Plant Health Inspection Service (APHIS) that it would sue if the agency approved the Enlist crops. The APHIS proposed to do so in January (Agrow No 680, p 13).

(Pesticide & Chemical Policy/AGROW, July 9, 2014)

**BED BUGS FORCE NH CAMP TO CLOSE FOR REMAINDER OF SEASON**

CONCORD, N.H. — A New Hampshire summer camp has canceled the remainder of the season because of the discovery of bed bugs, boston.cbslocal.com reports.

Staffers at Camp Spaulding in Penacook found the bugs in two of the boys’ cabins. They moved the boys to other cabins and treated the affected areas with the help of an exterminator.

Upon further consultation and the Concord Health Department, camp managers decided the camp should undergo extensive treatment, which could take several months and include replacing all bed frames, sealing the floors and walls, steam cleaning all surfaces, and installing new mattresses.

**CANADA'S BED BUG PROBLEM WORSENING, EXPERTS SAY**

Bed bugs are multiplying in record numbers in cities and smaller communities across Canada, CTV News reports.

Pest control experts say the frequency of bed bug reports has shot up 20 per cent since last year, as the blood-sucking, rapidly-reproducing insects have continued to spread. Mike Heimbach of Abell Pest Control says that increase has been a steady, "compounding growth" in the last six years. And it shows no sign of letting up. (PCT Online, July 22, 2014) http://www.pctonline.com/Canada-bed-bug-problem-worsening.aspx

**MAN SETS HOUSE ON FIRE WHILE TRYING TO KILL SPIDER**

SEATTLE — A Seattle man set his home on fire while trying to kill a spider with a homemade blowtorch, KIRO reports.

The man was trying to kill a spider in the laundry room using a can of spray paint and a lighter, authorities said. The flames quickly spread throughout the home into the attic. (PCT Online, July 18, 2014) http://www.pctonline.com/Seattle-fire-torch-spider.aspx

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**In-State and Neighboring CEU Meetings**

**Date: September 18-19, 2014**
Title: OPCA Annual Conference
Location: Reed Center Midwest City OK
Contact: Eileen Imwalle (405) 726-8774
Course #: OK-14-113
www.ok-pca.com

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**Date: September 23-25, 2014**
Title: OKVMA Fall Conference
Location: Renaissance Hotel & Convention Center Tulsa OK
Contact: Kathy Markham (918) 256-9302
Course #: OK-14-094
www.okvma.com

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**Date: October 14, 2014**
Title: Red River Rights of Way and Bareground Workshop
Location: Courtyard by Marriott Norman OK
Contact: Phillip Lawrence (580) 235-5194
Course #: OK-14-112
www.rrsi.com

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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_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.state.ok.us/~okag/cps-ceuhome.htm

ODAFF Test Information

Pesticide applicator test sessions dates and locations for August/September 2014 are as follows:

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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

ATOKA                  KIAMICHI TECH CENTER 1301  
W Liberty Rd, Seminar Center

Ardmore                Carter County Extension Center