April, 2014

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**ELEVATOR WORKSHOPS**

Four elevator workshops have been scheduled for the month of April. The workshops will be held in Shawnee, Enid, Clinton, and Woodward. The workshops have been approved for 2 CEU’s for categories 7C and 10 and 1 CEU for category 7A.

The dates are April 9th Shawnee (morning) and Enid (evening), April 10th in Clinton, and April 22nd in Woodward. Registration cost is $75 for early registration and $100 regular registration. Registration can be done by using the paper form at this link [http://sted.okstate.edu/pdf/Elevator%20Workshops%202014%20Registration%20Form.pdf](http://sted.okstate.edu/pdf/Elevator%20Workshops%202014%20Registration%20Form.pdf) or by using the online registration here [https://secure.touchnet.com/C20271_ustores/web/store_cat.jsp?STOREID=15&CATID=267](https://secure.touchnet.com/C20271_ustores/web/store_cat.jsp?STOREID=15&CATID=267)

For more information please contact Edmond Bonjour at 405-744-8134 or Dr. Carol Jones 405-744-6667

**MAY TEST HELP SESSION**

The OSU Pesticide Safety Education Program will conduct the next test help session in May. The workshop will be held May 20th at the Oklahoma County Extension Center 930 N Portland in Oklahoma City.
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 for both locations. Testing will begin at 1:30 pm for both locations.

**NO CEU's will be given for this program!**

All of the 2014 Test Help Workshop dates for 2014 are listed on our website.

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

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**EPA, SERGEANT’S PET CARE AND WELLMARK INTERNATIONAL REACH AGREEMENT TO CANCEL POTENTIALLY HARMFUL INSECTICIDE PRODUCTS**

The U.S. Environmental Protection Agency has reached agreement with Sergeant's Pet Care Products, Inc. and Wellmark International to cancel flea and tick pet collars containing propoxur marketed under the trade names including Bansect, Sentry, Zodiac and Biospot.

“This action is another example of EPA’s efforts to protect children from pesticide risks,” said Jim Jones, assistant administrator of the EPA’s Office of Chemical Safety and Pollution Prevention. This voluntary move will get to an expedient result that protects people’s health.”

This decision was reached between EPA and Sergeant's and Wellmark as a result of EPA’s risk assessment showing risks to children from exposure to pet collars containing propoxur. Propoxur is an insecticide registered for use to control ticks, fleas and a variety of insects and is used in industrial, commercial and residential facilities. The agreement represents the solution to most quickly remove the pet collars from the market.

EPA completed the propoxur pet collar risk assessment in fall 2013 in response to a Natural Resources Defense Council petition to cancel the uses. EPA’s risk assessment found, in some but not all use scenarios, unacceptable risks to children from exposure to propoxur pet collars on the first day following application. Because the manufacturers could not find a way to eliminate unacceptable risk under all scenarios, EPA encouraged them to cancel these products and they subsequently agreed.

EPA announced the voluntary cancellation on January 22, 2014. Under the cancellation agreement, manufacturers are allowed to produce the pet collars until April 1, 2015, and will not be allowed to distribute the products after April 1, 2016. EPA will continue to watch for incidents from the use of these collars and is prepared to take further action if necessary.

Flea and tick collars work by leaving a pesticide residue on dogs' and cats' fur, which can be transferred to people by hugging, petting or coming into contact with the pets. The major source of exposure to these chemicals is from absorption through the skin after directly touching the treated pet. Small children may ingest pesticide residues when they touch a treated cat or dog and subsequently put their hands in their mouth.

If you purchase a propoxur pet collar, read the label
carefully and follow all directions on the label to protect your family from exposure. Do not allow children to play with the collar, and wash your hands thoroughly with soap and water after handling.

For more information about the voluntary cancellation:

http://www2.epa.gov/safepestcontrol/companies-agree-stop-selling-pet-collars-containing-pesticide-protect-children

(EPA March 14, 2014)
http://yosemite.epa.gov/opa/admpress.nsf/bd4379a92ceeeec88525735900400c27/04d96e6211e3c9ef85257c9b005950c91OpenDocument

NEW PLAYERS MAY MAKE PEST HEADLINES IN CORN, SOYBEAN

One word that’s been offered to describe last season’s insect pressure is “mellow.” That from Christian Krupke, Extension entomologist with Purdue University, who adds: “It was as good a season as we’ve seen in a quite some time.” The same could be said for disease problems in the Midwest, particularly later-season infestations. But the season ahead is uncertain, and extension specialists are raising a few red flags for growers and dealers.

Insect resistance to Bt traits in corn is suspected in a number of states, including New York, Michigan, Illinois and several states west of Illinois. While Indiana hasn’t experienced the problem yet, Krupke expects to get reports of it this year, as performance issues in Bt hybrids have been confirmed in counties right on Indiana’s doorstep. He encourages dealers and producers to be vigilant especially in late June and early July, watching for possible Bt control breakdowns — usually identified by lodged corn due to heavy root feeding.

He lists the three primary risk factors for resistance development: continuous corn planting, using the same trait over and over again and a history of high rootworm pressure in a grower’s field. “If you were ever inclined to rotate, either to soybeans or other trait technologies, this would be the time to do it,” he says. For instance, if growers have used YieldGard year after year, they should rotate to a non-treated corn — protected with granular liquid insecticides.

Jeff Bradshaw, Extension entomologist with the University of Nebraska-Lincoln, has noticed that many farmers no longer equip their planters with granular insecticide applicators – an indication of how heavily they’ve come to rely on the Bt traits. Unfortunately, in some areas of east-central and northeastern Illinois, the most severe western corn rootworm larval injury took place in rotated corn fields (first-year corn), despite the use of some single-treated Bt hybrids (specifically featuring the Cry3Bb1 protein), reports Michael Gray, professor and assistant dean at the University of Illinois. Corn and soybean fields were infested with very dense populations of western corn rootworm adults. Corn plants had significant root pruning and plants were severely lodged.

Work continues with an assortment of Bt toxins for lepidopteran pests. For example, a new Bt protein that’s recently been added to the trait mix is Vip3A, marketed as Viptera in Syngenta’s product line. “The Vip protein is very active against most caterpillars, and it doesn’t seem to be resistant in any way with the other Cry proteins,” says Galen Dively, IPM consultant and professor emeritus at the University of Maryland.

Another pest to watch in 2014 will be spider mites, especially considering a warmer, drier summer is being predicted. The mites were the biggest challenge Nebraska corn growers faced in 2013. Bradshaw says there’s been a lot of industry interest in newer chemical controls for spider mites, and growers have been particularly paying attention to how Zeal has performed. “But as corn values adjust downward, there may be less use of more expensive products,” he says. “This could lead to greater use of older compounds (such as chlorpyrifos) — some of which are not effective in some areas due to spider mite resistance.”

Stinky Up-And-Comers
The brown marmorated stinkbug hadn’t hit the pages of the farm press until just a few years ago, but the pest is now considered an economic threat in six states, including Delaware, Maryland, New Jersey, West Virginia, Virginia and Pennsylvania. An invasive species from Asia, it was first detected and identified outside Allentown, PA, in soybean fields around 2001, explains Maryland’s Dively. Now the insect has been detected in 41 states and is a potential threat on a wide variety of crops. The bug is an efficient hitchhiker, he says, but it does need trees and wood to complete its life cycle. It overwinters in wood lots and produces a generation there before moving to other plants in mid-July. The insects also can be a real problem in homes, as they seek wood (and warmth in colder temperatures) to overwinter.

“In areas like Iowa where you’ve got field after field, wide open, I don’t think brown marmorated stinkbugs are going to be a problem,” says Dively. He adds that pyrethroids work quite well against them.

Soybeans — and now corn — in Ohio are facing threats from a stinkbug complex that includes green stinkbugs, red shouldered stinkbugs and in some fields, brown marmorated stinkbugs. As these insects begin to increase in numbers across the state, soybean growers should be concerned about the potential for yield declines. The bugs damage a crop by using their piercing-sucking mouthparts to feed on the plant seeds. States in the South are also dealing with multiple stinkbugs, including the red banded and southern green species. In fact, a newly discovered stinkbug cousin is making an impact in the South as well. The kudzu bug, an invasive species identified in the U.S. in 2010, has become a “major concern” for soybean growers in the region, reports Jeremy Greene, Extension entomologist with Clemson University. The pest comes out of its overwintering sites and heads straight to early planted soybeans, kudzu or volunteer soybeans (which come up before kudzu greens up). Extension experts have developed threshold guidelines and recommend sweep net sampling in soybeans. The pest can take 60% of yields if not controlled, says Greene, though so far insecticides have been effective against it. He believes the kudzu bug will continue to move into new areas of the country. “I would suspect it’s going to make an orderly push northward, along the Mississippi River, particularly if we start having mild winters the next couple of seasons. There are a lot of soybeans along that corridor.”

In general, Greene notes that lots of rainfall in the spring produces an abundance of natural wild hosts for many problem insects. “That allows them to build their numbers before we really get the crops in place. They ‘stairstep’ through our wild hosts into the cropping season,” he says.

Disease Snapshot

Like insects, diseases went a little easier on Midwest crops in 2013, thanks in great part to drier summer months. Many regions did experience some seedling blights early on because of a wet spring, but little else developed as the season progressed. In Iowa, those early seedling blights reduced stands and in some cases, fields needed to be replanted. “In corn, we had a little bit of root and seedling blights, Physoderma stalk rot and Fusarium stalk rot, but beyond that, I would say it was a fairly light year,” says Daren Mueller, assistant professor of plant pathology at Iowa State University. “A large percentage of growers just kept the fungicides in the shed this year because they planted late or by the time they got to August to spray, it was so dry.” Soybeans did experience some stem canker and charcoal rot late in the season, but not enough to seriously impact yields.

Mueller was surprised at the dramatic increase in soybean viruses last season, including the relatively new soybean vein necrosis (SVN) and tobacco streak virus. He says the problem appeared worst in central Iowa, around Ames, where 30% to 40% of some fields were affected. In Illinois, SVN was fairly prevalent as well. In corn, Carl Bradley, extension specialist with the University of Illinois, saw red root rot in some fields. He says the disease will require a closer look this season to determine how big of a threat it is. Mueller has a word of caution for 2014: Back in 2012, ISU’s nematologist found the highest levels of soybean cyst nematode (SCN) he’d ever seen. If growers are planting soybeans in those fields again this year, high SCN populations might be a problem. He recommends planting resistant varieties or using seed treatments, though the cost of some products is “an investment.” Mueller also warns growers about planting into fields with a history of sudden death syndrome.
(SDS). Like SCN, he recommends farmers select resistant varieties for those fields.

For seedling diseases and emergence problems, Bradley says fungicide seed treatments continue to be helpful. “Many of the new seed treatment products contain new active ingredients that add efficacy to control a broader spectrum of seedling pathogens,” he says. Additional foliar products are also coming out, with more than one active ingredient from different chemistry classes. They are working better in situations where strobilurin fungicide resistance has occurred, such as with frogeye leaf spot in soybeans.

Mueller is also looking forward to seeing how new products perform. Syngenta’s Clariva nematicide/insecticide/fungicide, introduced last year, includes spores of Pasteuria nishizawae to fight SCN. And Bayer CropScience just submitted an EPA registration application for ILeVO, the first seed treatment reported to control SDS.

Any Weather Help?
Most of the U.S. experienced a colder winter than normal, some regions shockingly so. Will the temperatures impact the Class of 2014 pests? Yes and no. Unfortunately, most of the “heavy-hitters” in terms of insects will remain pretty much untouched, says Krupke.

In Indiana, snowcover that continued from late December onward insulated the ground to some extent, so cold penetration wasn’t what it could have been — to knock out overwintering rootworm eggs, for instance. Insects that winter aboveground, even beneath plant debris, such as bean leaf, however, could see lower populations. In Illinois, Gray anticipates lower levels of Japanese beetles in 2014 due to the deep soil freeze this winter. This species spends the winter as grubs within the soil, and they could have been negatively affected.

With corn earworm, Dively says that if a frostline gets below two inches for a period of time, the cold will kill (though earworms could still migrate up from the South). There have been reports of frostlines as deep as 24 inches in Iowa and six to eight feet in Wisconsin.

Dively believes stinkbugs should survive fine this winter, holed up in dwellings and dead trees under bark. They have the unique ability to reduce their own freezing point by changing the lipid content in their blood — with the result is almost acting like antifreeze.

As for diseases, the winter’s cold will have little adverse effect. “Once the spores get down into dormancy, they’re fine, says Iowa’s Mueller. In fact, with the ground frozen so deep, farmers will see cooler soil temperatures further into the spring — so there could be more seedling diseases and issues at planting, he suggests.

Bradley does wonder if cold temperatures in southern states may have killed off or slowed growth of the alternative hosts of rust pathogens — which may reduce chances in the Midwest of being impacted by the major rust diseases, such as soybean rust. (CropLife.com April 1, 2014) http://www.croplife.com/crop-inputs/new-players-may-make-pest-headlines/

EPA SUED OVER INERT INGREDIENT DISCLOSURE

A trio of US environmental and public health groups has filed suit against the EPA, alleging that the Agency had violated federal law by failing to complete a rulemaking that would require pesticide manufacturers to disclose inert ingredients on pesticide product labels. The EPA's "unreasonable delay continues to leave the public uninformed and unable to protect themselves from the hazardous chemicals they are being exposed to through the use of pesticide products", according to the March 5th complaint filed by law firm Earthjustice on behalf of Beyond Pesticides, the Center for Environmental Health and the Physicians for Social Responsibility.

The complaint continues a long-running effort by the organizations to pressure the EPA on the issue and force the Agency to require increased disclosure of inert ingredients. Although pesticide manufacturers must currently disclose to the EPA the inert ingredients in their products, the Agency
generally does not require those ingredients be listed on the product label.

In 2006, a coalition of 22 public health and environmentalist groups - including the plaintiffs in the new complaint - filed a petition with the EPA seeking greater disclosure of pesticide inerts. A coalition of 15 states filed a similar petition that same year (Agrow No 501, p 16). Both petitions identified more than 350 inert ingredients considered hazardous under environmental laws other than the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), which does contain any definition for hazardous inert ingredients.

The groups argued that inert ingredients could be more toxic than active ingredients and said that revealing inerts on product labels would create more consumer awareness of the potential health and environmental impacts of using pesticides.

In September 2009, the Agency granted the petitions and began a rulemaking effort, proclaiming that it would "effect a sea change" on how inert ingredient information is made available to the public. The EPA outlined two possible approaches in an Advanced Notice of Proposed Rulemaking (ANPR) in December 2009 (Agrow No 583, p 14). The first approach would require registrants to list the identities of all potentially hazardous inert ingredients on product labels and the second would require all or most inert ingredients to be labelled.

The Agency took public comments on the proposals until April 2010, but has taken no further action. One reason may be that the pesticide industry clearly has no time for the concept. CropLife America and other industry interests weighed in with strong opposition to either approach outlined by the Agency, arguing that disclosure of inert ingredients would harm pesticide manufacturers by releasing valuable intellectual property to competitors and do little to help the public make informed choices about the safety of pesticides. Opponents also suggested that the EPA was on shaky legal ground as the FIFRA provides clear provisions for protecting confidential business information (CBI), including inert ingredients.

But the plaintiffs contend that under the FIFRA, the Agency's provisions for protecting CBI do not apply when the Agency has determined a substance is hazardous. They note that the EPA echoed that view in the ANPR.

The complaint, filed in the US District Court for the Northern District of California, argues that the Agency has a legal responsibility to complete the rulemaking because it granted the 2006 petitions. Failure to conclude action "within a reasonable time" is a violation of the Administrative Procedure Act, according to the plaintiffs. The suit asks the Court to compel the EPA to act and to issue a formal proposal within 60 days, followed by a final rule no more than 180 days later. (Pesticide & Chemical Policy/AGROW, March 10, 2014)

THE WEED RESISTANCE PROBLEM: A MATTER OF BILLIONS

To appreciate just how severe the herbicide-resistant weeds problem has become in the U.S., consider this statistic: According to researchers, approximately half of the country’s growers said that hard-to-kill weeds were a “major problem” in their crop fields during the 2013 growing season. In hard numbers, this translated into more than 70 million acres of land infested with herbicide-resistant weeds, a 17% increase from the previous year. Overall, weed scientists now say there are 200 species of weeds with confirmed resistance to one or more widely used herbicides.

According to Damon Palmer, U.S. commercial leader, Enlist, Dow AgroSciences, this uptick in infested acreage is all the more impressive when you consider that the weather conditions in 2013...
didn’t necessarily favor weed growth as in prior years. “As you look across the country, there definitely hasn’t been a decrease in the number of acres being affected by herbicide-resistant weeds,” says Palmer. “With all the cooler and wetter conditions that much of the country experienced during 2013, they should have been a little easier to control than in the hotter weather years we’ve been having. But that wasn’t the case and their numbers still increased.”

The toll these herbicide-resistant weeds can have on growers is staggering. Some varieties can reach 8- to 10-feet in height, with strong stems that can damage farm equipment they encounter. Furthermore, some plants can produce hundreds of thousands of seeds, some of which can remain viable in soil for up to 50 years (as in the case of velvetleaf).

Even worse is the impact these weeds have on the crops themselves. According to a 2009-11 study conducted by the University of Minnesota Extension on corn, when a weed reaches a height of 3 to 4 inches (normally when corn is around the V3 to V4 growth stage), the crop loses approximately 12 to 13 bushels per acre within the first week. During the second week the weed is present, this loss increases to 27 to 29 bushels per acre. By their nature, weeds can exhibit a “luxury consumption” of certain crop inputs such as nitrogen. Furthermore, dense infestations of weeds can lead to allelopathy, a suppression of plant growth due to the release of natural-plant derived substances.

For growers, herbicide-resistant weeds have become a costly problem. At the very least, they are being forced to add additional herbicide applications to protect their investments. At worst, some are going back to hiring crews to hand weed their fields. In both cases, estimates University of Wisconsin researcher Vince Davis, this is adding approximately $2 billion to growers’ annual crop production bills.

And this isn’t the only time billions come up when discussing the impact of herbicide-resistant weeds. “Weed resistance is something we all have to deal with in agriculture,” says David Hollinrake, vice president, agricultural commercial operations marketing for Bayer CropScience. “Today, when you consider the losses in crop yields, weeds around the globe eat the food to feed about one billion people.”

How Resistance Starts

By their nature, many weeds have a natural ability to develop resistance. Recently, a computer model was developed by the University of Arkansas that analyzed the evolution of resistance to herbicides using the Mississippi Delta region of eastern Arkansas as its test case. Looking at 1,000 hypothetical rice fields, this model took into account three stages of growth for the crops and extended it over a 30-year period.

The findings from this computer model were eye-opening, to say the least. Based upon the model, if a certain herbicide is used alone in three annual applications, weed resistance can develop in as little as four years. More interestingly, the model showed that if a grower does not stop using a herbicide soon after resistance takes place, resistance can be accelerated for the next herbicide alternative used, even if it provides a different mode of action.

A similar study was conducted by the University of Missouri on one of the major Midwestern weeds to show resistance, waterhemp. According to the latest data, glyphosate-resistant waterhemp has been confirmed in 12 states. More telling, more than two-thirds of the waterhemp population sampled in the state of Missouri was found to be resistant to the popular herbicide.

For the study, the University of Missouri researchers collected waterhemp seed samples from 144 soybean fields in 54 Missouri counties during 2008 and 2009. Based upon their findings, 94% of the glyphosate-resistant waterhemp populations had three aspects in common:

- Soybeans were the only crop planted in these fields in consecutive years.
- Glyphosate was the only herbicide used in these fields for three or more years.
The fields contained waterhemp showing signs of having survived the previous herbicide application.

“It isn’t herbicides that create herbicide-resistant weeds,” says Dr. Bryan Young, a professor at Southern Illinois University. “Instead, the culprit is how we use herbicides in an overall weed management strategy. To preserve the effectiveness of herbicides, it is imperative that we become better stewards of their use. Minor changes made today can avoid costly problems in the future.”

Further south, the problem child of herbicide-resistant weeds is Palmer amaranth (or pigweed, as it sometimes known). A native to the southwestern U.S., Palmer amaranth first started showing signs of herbicide resistance in the late 1980s. According to researchers, the weed showed confirmed resistance to glyphosate in 2006 in Macon County Georgia. Since then, glyphosate-resistant Palmer amaranth — which can produce more than 600,000 seeds per female plant — has spread across 13 states, including Texas, Virginia and Indiana.

Due to its rapid proliferation ability, the cost to control Palmer amaranth for growers has grown considerably over the past few years. In fact, for the cotton industry, herbicide costs for Palmer amaranth control have increased from $23 per acre in 2004 to $100 per acre in 2012.

“The current model simply isn’t sustainable,” says Dr. Stanley Culpepper, a professor in crop and soil science at the University of Georgia. “Growers have gone to war, and they are making progress from a weed management perspective, but not from an economic or environmental perspective. We need to figure out a way to get the same results far more cost-effectively and in a way that better protects our natural resources.”

The Race For Alternatives

Naturally, crop protection product suppliers have been working on the problem of herbicide-resistant weeds for years and several have potential solutions either just ready to enter the marketplace or coming out in time for the 2015 planting season.

For 2014, the options include Cobra from Valent U.S.A. Containing the active ingredient lactofen, Cobra can be used on such problem weeds as Palmer amaranth and waterhemp in soybeans.

Meanwhile, SePRO Corp. and Nichino America have partnered to launch Brake F2 for Palmer amaranth control in cotton. Containing the active ingredients fluridone and fomesafen, Brake 2F has been granted a Section 18 emergency exemption for 2014 in approved counties in Georgia, South Carolina, North Carolina and Tennessee. According to Dr. Tyler Koschnick, vice president of research and regulatory for SePRO, fomesafen requires low moisture for activation, but provides shorter residual control. Meanwhile, fluridone requires more moisture for activation, but has longer residual control. “The combination of the two complementary active ingredients has shown a tremendous advantage with crop safety with growers reporting extended control of up to six to 10 weeks or longer, depending upon soil type and conditions,” says Koschnick.

Then there’s Engenia, described as a “technologically advanced” dicamba formulation by developer BASF. Expected to have its commercial launch for soybeans in 2014, Engenia has demonstrated “effective control of key broadleaf weeds, including glyphosate-resistant Palmer amaranth, waterhemp, marestail and common/giant ragweed,” says Luke Bozeman, technical market manager, BASF.

In 2015, Dow AgroSciences expects to receive approval for its Enlist Weed Control system. A version of 2,4-D using the company’s Colex-D technology, Enlist has achieved greater than 95% control of several glyphosate-resistant weed types, according to Mike Peterson, global biology leader for the Enlist system at Dow. “Herbicides have been shown to be a key part of efficient, sustainable weed management systems that maximize production while preserving soil and water resources,” says Peterson. “It is important to note that herbicide-tolerant crops have enabled great advances in soil conservation and carbon sequestration. Having farmers go back to widespread tillage to control weeds will negate those environmental advances.”
Also expected to hit the market in 2015 is Acuron from Syngenta Crop Protection. Containing four active ingredients including bicyclopyrene, Acuron employs three modes of action to tackle more than 70 broadleaf weeds including Palmer amaranth and waterhemp, says Dr. Gordon Vail, technical product lead for herbicides at the company.

No matter what options are available in the future for combating herbicide-resistant weeds, the University of Wisconsin’s Davis says the more, the better. “Diversification is the most important thing farmers can do to manage these weeds,” he says. “This includes diversification of effective herbicide modes of action, diversified weed management practices and also utilizing non-herbicide control options such as judicious tillage, cleaning equipment of weed seed and diversified crop rotations. Weeds develop resistance more quickly when production systems remain static.”

(CropLife Online, April 1, 2014)

US BEEKEEPERS UPSET WITH NEW NEONICOTINOID LABELS

US commercial beekeepers are frustrated with the EPA’s new labels for neonicotinoid insecticides, saying that the revised language undermines existing protections for bees and should be abandoned. Speaking at a meeting with EPA staff last week in California, beekeepers took the Agency to task for limiting the new label language to foliar applications, in effect ignoring the concern about dust from maize seed treated with neonicotinoids, and for including an array of exemptions that allow spraying while crops are in bloom and when bees are foraging. Dust from treated seed is the "major delivery system of the neonicotinoids," said a beekeeper, adding that the new language effectively "disregards seed treatments on 242 million acres [98 million ha] of land."

Agency representatives did not suggest they would move quickly to address the concerns raised by the beekeepers, but acknowledged that the neonicotinoid labels might have fallen short. In part because of the response from beekeepers, the EPA has decided not to use the new neonicotinoid language for other pesticides, said Richard Keigwin, director of the pesticide rReevaluation division at EPA’s Office of Pesticide Programs. "We now realise we may not have hit the proverbial nail on the head as we thought we did," he said.

Mr Keigwin did not offer any opinions as to how the Agency may revamp the labels, suggesting the decision ultimately rests with Jim Jones, the EPA’s assistant administrator for the Office of Chemical Safety and Pollution Prevention. "We will take back [your insights] so when we are deciding what the next step is, we do a far better job," he said. "We will take this information back to Jim. He will be the decision maker and he needs to hear … what your suggestions are."

The disappointment of beekeepers with the new labels is a blow to the EPA's effort to bolster pollinator protection, an issue of growing importance to the Agency. The EPA announced the new label language for neonicotinoids last August. It was the first direct step the Agency has taken to try and address the decline of honeybees across the US in recent years (Agrow No 671, p 16).

(Pesticide & Chemical Policy/AGROW, March 31, 2014)

GREENS CHALLENGE US EPA'S CYANTRANILIPROLE REGISTRATION

Environmental groups are threatening to sue the US EPA for allegedly failing to ensure that endangered species are adequately protected from legal uses of DuPont's recently registered insecticide, cyantraniliprole (trade-marked as Cyazypyr). A trio of groups sent the EPA the notice of intent to sue on March 24th, detailing their argument that the
Agency’s approval of the insecticide puts listed species at risk and violates the Endangered Species Act (ESA).

"Once again the EPA has approved a harmful pesticide without adequate conservation measures to protect endangered species," says the notice filed by the environmental groups, the Center for Biological Diversity, the Center for Food Safety and Defenders of Wildlife. “This reckless approval of cyantraniliprole really undermines recent efforts to reform the EPA’s dangerous policy of ignoring the disastrous effects pesticides are having on wildlife across the country."

The EPA formally registered cyantraniliprole in February, permitting use of the insecticide for a wide array of agricultural and residential applications. The Agency said it evaluated cyantraniliprole in collaboration with colleagues in Australia, Canada, France and the UK - all told more than 800 studies were reviewed and analyzed. The EPA proposed the unconditional approval of 14 cyantraniliprole-based insecticides last year, classifying the insecticide as a reduced-risk compound (Agrow No 666, p 25).

The risks from the pesticide "were found not to be unreasonable when weighed against the benefits it provides", the EPA said in February. The Agency noted that cyantraniliprole is expected to be an alternative to a number of insecticide classes, including organophosphates, carbamates, pyrethroids and some neonicotinoids. "Compared to these alternatives, cyantraniliprole generally presented a more favourable environmental fate profile including its low volatility, low accumulation and leaching potential in addition to microbial-mediated and abiotic dissipation pathways", the EPA notes. "Additionally, it is generally less toxic towards mammals, birds and fish than the leading alternatives, and also honey bees."

But the environmental groups argue that the EPA fell short of its responsibility to ensure approved uses of cyantraniliprole do not pose undue harm to a wide array of endangered species. The groups contend that the EPA has thus failed with its consultation obligations under Section 7 of the ESA. The statute requires that the Agency consult with either the US Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) if it determines a pesticide "may affect" a listed species. The EPA and the wildlife agencies are then supposed to work together to determine if a pesticide under registration review will put a listed species in jeopardy and develop mitigation measures or pesticide use restrictions if needed.

(Pesticide & Chemical Policy/AGROW, March 27, 2014)

MINNESOTANS TURN UP THE HEAT ON MCDONALD’S OVER PESTICIDE DRIFT

A coalition of rural Minnesota residents and environmental groups has launched an effort to pressure McDonald’s to require its potato suppliers to curb their use of pesticides and publicly disclose which pesticides they are applying to their potato fields. The coalition contends that the fast food giant has failed to live up to promises it made in 2009 to take actions to survey and reduce the pesticide use of its potato suppliers. The new "Toxic Taters" campaign was announced on February 20th - the Minnesota-based coalition contends it has grown frustrated with private efforts to work with state agencies, McDonald's and potato producer RD Offutt Company (RDO). “We have been to the legislature, to the Minnesota Department of Agriculture, to RDO, and very little has changed,” said Bob Shimek, a leader of the Toxic Taters Coalition. “It’s time to move forward. It’s time for McDonald’s to take responsibility for the communities negatively impacted by their business.”
Mr Shimek and other rural Minnesotans have been working with the Pesticide Action Network since 2006 to document pesticide drift from potato fields, highlighting their concerns about drift of the insecticide, chlorpyrifos, the herbicide, 2,4-D, as well as the fungicide, chlorothalonil.

The coalition's effort helped push McDonald's to announce in 2009 that it would reduce pesticide use in the production of its potatoes. McDonald's asked its producers to participate in a survey of IPM, but the coalition contends that the company has done little with the information and fallen short of its promises.

McDonald's is the largest buyer of potatoes in the U.S. and has "incredible influence" over the way potatoes are produced, according to the coalition's petition. The fast food company purchases some 7.5% of the domestic potato market annually, an amount that totals more than 3.4 billion pounds.

The petition calls on McDonald's to require RDO and other suppliers achieve "measurable and significant decrease" in their use of pesticides. It urges the company set a standard requiring their potato producers to release information on the chemicals they apply to their crops and fund "an independently-conducted public health study on impacted communities near potato producers." In addition, the petition asks McDonald's pressure its potato producers to adopt "environmentally sound sustainable agriculture practices."

Organizations backing the coalition include the Indigenous Environmental Network, Food and Water Watch and MPIRG.

In a statement sent to Agrow, McDonald's defended its policies and said it "remains committed to taking steps toward reducing pesticide use in potatoes".

As part of the company's 2009 commitment, McDonald's required a "comprehensive audit" of US potato growers to identify best practices in pesticide reduction, as well as water and fertilizer use, said Mitch Smith, director of quality systems for McDonald's US Supply Chain.

"Our potato suppliers and processors have completed this audit and we've already seen significant progress towards a more diligent approach to the use of all inputs, including pesticides," Mr Smith said. "Together with our suppliers, we will continue to make progress on this journey."

RDO said it takes environmental stewardship "seriously" and will continue to reduce the use of pesticides on its farms. "We are aware of the recent statements by the Toxic Taters Coalition," the company told Agrow. "RD Offutt has participated in discussions with members of the group in the past and welcomes opportunities in the future to discuss the many ways we can continue to pursue environmentally friendly and sustainable growing practices." (Pesticide & Chemical Policy/AGROW, March 6, 2014)
## In-State and Neighboring CEU Meetings

### Date: April 7, 2014
Title: Central States Recertification Seminar  
Location: Salina KS  
Contact: Mindi Carlson (785) 827-8215  
Course #: OK-14-034

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### Date: April 9, 2014
Title: 2014 Oklahoma Elevator Workshops  
Location: Shawnee OK 8:30am to 12:30 pm  
Contact: Edmond Bonjour (405) 744-8134  
Course #: OK-14-057

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### Date: April 9, 2014
Title: 2014 Oklahoma Elevator Workshops  
Location: Enid OK 5:30 pm to 9:30 pm  
Contact: Edmond Bonjour (405) 744-8134  
Course #: OK-14-057

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### Date: April 10, 2014
Title: 2014 Oklahoma Elevator Workshops  
Location: Clinton OK  
Contact: Edmond Bonjour (405) 744-8134  
Course #: OK-14-057

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### Date: April 22, 2014
Title: Adapco Professional Mosquito & Vector Control Workshop  
Location: Southeast Expo Center  
McAlester OK  
Contact: Larry Heller (321) 377-2017  
Course #: OK-14-025  
www.myadapco.com

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### Date: April 24, 2014
Title: Adapco Professional Mosquito & Vector Control Workshop  
Location: James Goodwin Health Center  
Tulsa OK  
Contact: Larry Heller (321) 377-2017  
Course #: OK-14-025  
www.myadapco.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 April/May 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