OKLAHOMA COOPERATIVE EXTENSION SERVICE

PESTICIDE REPORTS

Division of Agricultural Sciences and Natural Resources • Oklahoma State University
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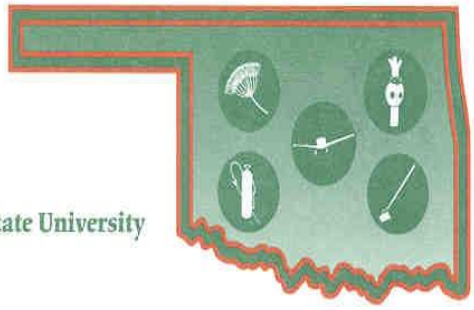

NOVEMBER 2009 CHEM

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CHANGES ON MSMA

EPA issued a notice on the cancellation of the organic arsenicals on September 30, 2009. There were some changes to their previous cancellation time schedules and uses of existing stocks.

For residential lawns, registrants are prohibited from selling or distributing existing stocks after December 31, 2009. After December 31, 2010 persons other than the registrants are prohibited from selling MSMA. This would be your local stores and dealers.

Applicators (commercial, non-commercial, private, and homeowners) can use existing MSMA products on residential lawns until those stocks are exhausted.

For sod farms, golf courses and right-of-way sites registrants are to stop selling these products on December 31, 2012. After December 31, 2013 persons other than the registrants are to stop selling MSMA.

Applicators (commercial, non-commercial, private) can use existing stocks for sod farms, golf courses and right-of-way until December 31, 2013. After December 31, 2013, uses on these sites will be illegal.

EPA is requesting data from the registrants for sod farms, golf courses and right-of-way uses. ***If*** the data provides new information in support of MSMA, EPA will revise their risk determination for these three uses.

We do not encourage applicators to expect an extension of the stop use date for these three sites. If there should be an extension of use, we and others will notify applicators. (OSU PSEP, Federal Register, September 30, 2009)

PESTICIDES LINKED TO LYMPHOBLASTIC LEUKEMIA

A study conduced by the Northern California Cancer Center suggest that exposure to certain pesticides may increase the incident of lymphoblastic leukemia.

They selected known cases of lymphoblastic leukemia patients and matched them with children who did not have the disease. The researchers used the California Department of Pesticide Regulations recordkeeping data to compare the two groups to exposure to pesticides.

For pesticide exposure they used the CDPR data from 1990 through 2002. The researches used the total pounds treated from that period divided by the total acres treated.

Children with moderate exposure (1-72 lb/mi^2) showed an increase likelihood of having the disease when exposed to insecticides and fumigants. Interestingly, high exposure levels did not show a correlation. The researchers stated this may be due to the sites being saturated by the pesticides and thus their effects were blocked.

Moderate exposure to triazole fungicides, chlorinated phenols (2,4-D), organophosphate insecticides, and triazine herbicides increased the likelihood. (Environmental Research 109: 891-899)

MORE ON NPDES

The *Pesticide & Toxic Chemical News* interviewed Steve Owens, Assistant Administrator; Office of Prevention, Pesticides & Toxic Substances, on several items. One was the 6^{th} Circuit Court NPDES ruling.

Owens expressed concern over all parties interests. He said the Office of Water and the Office of Pesticide Programs were working closely on this issue, but it is an Office of Water issue.

EPA's general permit will be for the five states that do not have NPDES permitting authority. Presently, Oklahoma's permitting will be with DEQ.

From the EPA, State, CES, Tribal meeting, EPA Headquarters personnel stated the OW was considering mandatory calibration and education for those obtaining a permit. They also stated a Notice of Intent would be required but did not know who would be required to submit a NOI. EPA had not defined what "near water" means and stated that monitoring would be required but only visual monitoring would be required. They said annual reporting would be required but did not know at this time who will do the reporting or how it would be done and who would keep the reports.

State lead agency personnel on the committee did not support the mandatory calibration because it would be impossible to enforce and document.

The Agency favors a narrative approach – rather than numeric limits – for the technology and water quality-based effluent limits in the Clean Water Act general permit.

According to EPA, "the intent of technology-based effluent limits in NPDES permits is to require a minimum level of treatment of pollutants…while allowing the discharger to use any available control technique to meet the limits."

However, "NPDES regulations allow for best management practices to control or abate the discharge of pollutants when numeric limitations and standards are infeasible."

Under the technology-based effluent limits in the general permit for aquatic pesticide applications, users would not have to meet specific numeric limits, but would be required to reduce discharges using best management practices, for example, integrated pest management, Arnet Jones,

head of OPP's Biological Analysis Branch, explained.

For mosquito control, this could include source reduction and habitat modification, for example, removing standing water. For weeds, this could include mechanical controls, such as removal by hand or machine, or biological controls.

EPA is pushing to have the general permit out so that public comment can be received and considered around April 2010 with a final general permit in December 2010, allowing four months to educate stakeholders on the availability and conditions of the permit before the 6th Circuit's decision goes into effect, and permits are required, in April 2011.

CropLife has appealed the 6th Circuit Court's decision to the Supreme Court. (Pesticide & Toxic Chemical News, Vol.37 No 47, October 5, 2009 & OSU PSEP)

INDIANA REQUIRES GOLF COURSE APPLICATORS TO BE CERTIFIED

The Indiana State Chemist Office (state regulatory agency) now requires certification and licensing of applicators who make pesticide applications to golf course, direct supervision of non-certified pesticide applicators, and maintenance of records of all pesticide applications for two years.

This means any person making an application of any pesticide must have a commercial pesticide applicator licensed or be under the direct supervision of a licensed commercial pesticide applicator.

This action was taken in response to a major fish kill and to inspections of golf courses that showed pesticide applications being made while golfers were on the course and that mixing/loading pads drained into streams. (Indiana State Chemist, September 1, 2009)

METHYL BROMIDE CANCELLATIONS

EPA has received voluntary request to cancel the use of methyl bromide on alfalfa hay and cottonseed.

Unless there is substantive responses to the request by the methyl bromide registrants, EPA will accept this cancellation request.

Persons having labeled methyl bromide can use existing stocks until they are expended. (Federal Register, September 30, 2009)

TEBUTHIURON REREGISTRATION

EPA has begun the reregistration review for Tebuthiuron (Spike).

The Agency had reviewed its registration packet for FQPA but is moving to meet the new legislation that requires all pesticides to be reviewed every 15 years.

EPA identified Oklahoma and Pennsylvania as the primary use sites for Tebuthiuron.

EPA's main concerns are leaching and affect on non-target plants. (EPA Docket EPA-HQ-OPP-2009-0327)

DISCLOSURE OF INERTS

EPA stated in September that it is moving to require the disclosure of the identities of all inert ingredients in pesticides. EPA issued the announcement the same day that it responded to petitions, both dated August 1, 2006 from the Northwest Coalition for Alternatives to Pesticides and the attorneys general of 14 states and the U.S. Virgin Islands calling for disclosure on pesticide labels of more than

350 inert ingredients they claim are hazardous. Those ingredients include naphthalene, ethylbenzene, allyl alcohol, and chloroacetic acid.

The petition by the attorneys general said, "EPA's registration of a pesticide product is not an assurance of safety and thus no substitute for disclosure." The petition said that "absence an assurance of safety, it falls to the general public to assess those risks and their willingness to accept them." The petition was signed by the attorneys general of Alaska, Arizona, California, Connecticut, Illinois, Maine, Maryland, Massachusetts, New Jersey, New Mexico, New York, **Oklahoma**, Rhode Island, Wisconsin, and the U.S. Virgin Islands. (EPA e-mail October 8, 2009)

USDA COMMENT ON GMO's

In a New York Times, report concerning a law suit over the growing of GMO beet seed crops in the Willamette Valley of Oregon, USDA Secretary Vilsack was quoted as saying a drastic rethinking of the country's GM polices has been needed for some time. "You know, I think [GM regulations are] an evolving process, which is why we're doing this and probably should have done it more than 20 years ago," Vilsack said. "We waited 20 years to do it."

This was in response to the suit brought by an organic beet seed grower. Two decisions out of the Northern District of California ruled that the organic grower needed protection from pollen drift. (Food Industry Environmental Network, October 9, 2009; New York Times, October 8, 2009)

DRINKING WATER CONTAMINANT LIST

EPA has expanded its Contaminant Candidate List to include 42 pesticides. The CCL is a list of contaminants that may pose hazards under the Safe Drinking Water Act.

Among the pesticides listed are: acephate, acetochlor, alachlor, bensulide, captan, clethodim, dicrotophos, dimethipin, dimethoate, disulfoton, diuron, ethoprop, fenamiphos, methamidiphos, methyl bromide, metolachlor, oxydemeton-methyl, oxyfluorfen, permethrin, profenofos, tebuconazole, tebufenozide, terbufos, thiodicarb, thiophanate-methyl, terbufos, triphenyltin-hydroxide, vinclozolin, and ziram.

EPA will now gather data on these pesticides to determine if regulatory standards need to be established for drinking water. (Federal Register, October 8, 2009)

GLYPHOSATE REVIEW

EPA is reviewing glyphosate's registration status.

Previous reviews have found it to have minimal effects on the health of terrestrial and aquatic animals, and to exhibit "low toxicity" for humans via oral, dermal and inhalation routes. EPA has also classified glyphosate as a "Group E" chemical with no evidence for carcinogenicity for humans.

In the latest review, the focus is not only on the environmental and human health effects of glyphosate, but also a degradation product of glyphosate called amino methyl phosphonic acid (AMPA) and "inert" substances added to glyphosate formulations that some studies suggest are toxic.

EPA has previously determined that drinking glyphosate-contaminated water can lead to various short-and long-term health effects, including congestion of the lungs, increased breathing rates, kidney damage and reproductive effects.

"An increasing number of studies have found that formulated glyphosate products are more toxic than the active ingredient glyphosate alone," said groups led by Beyond Pesticides. (Pesticide & Toxic

Chemical News, September 28, 2009, Vol. 37, No. 46)

USDA TO RESUME PESTICIDE USE SURVEYS

USDA has resumed its pesticide use surveys. The first survey is of agricultural chemical usage on 23 types of fruit in 12 states.

This is the resumption of a program started in the early 1990s but suspended in recent years due to budget constraints.

Data from the survey "are a vital resource used to evaluate the FQPA, which has an impact on pesticide registrations, re-registrations and product alternatives," a USDA news release notes.

These surveys are used by EPA in EPA's risk assessments. Without the data from these surveys, EPA uses the defaults of all the acres on the pesticide label are treated at the highest rate at the maximum number of applications allowed. (Pesticide & Toxic Chemical News, Vol. 37 No 47, October 5, 2009)

GROUPS FRUSTRATED WITH USDA

With USDA's Office of Pest Management Policy (OPMP) still lacking a permanent director nine months into the Obama administration, farm groups and agribusinesses say they're in the dark about the administration's intentions and are prodding Agriculture Secretary Tom Vilsack to fill the position.

OPMP was created by law in 1997 and was reauthorized through 2012 by the 2008 farm bill. It's charged with the development and coordination of department policy and activities on pest management and pesticides as well as assisting other parts of the department in fulfilling their responsibilities under FQPA, FIFRA and other applicable laws. The law calls for OPMP to have a director, appointed by the agriculture secretary. Teung F. Chin, a biological scientist and 19-year veteran of the federal government, has been acting director since January.

The farm groups and agribusiness say OPMP has been an invaluable resource in the development of data and statistics used to help make their case for crop protection products before other government agencies.

Tyler Wegmeyer, director of congressional relations for the American Farm Bureau, said, "It's an office that stands up for America's farmers. It goes before EPA and it says, 'Here are the data and the facts, and the research that we've done at USDA to back up specific policies or projects.' Or as it relates to a specific chemical that [is] going through the regulatory process, it can advocate on behalf of farmers of the vital importance of that product."

Thirty-five organizations signed a letter to Vilsack, asking that the office be adequately funded and fully staffed. In addition to the permanent director, the groups want Vilsack to name an OPMP special assistant who would ensure the agriculture secretary "has access to real-time information on regulation and policies that can impact the viability of American agriculture." They say that position has traditionally been part of OPMP.

In a weekly newsletter to its members the National Cotton Council said, "Agricultural organizations are concerned that under the current administration and its emphasis on organic production, the OPMP would be downgraded."

The Obama administration is seen as friendlier to organic framing in part due to its appointment of Kathleen Merrigan as deputy secretary of agriculture. Merrigan helped to both write USDA's Organic Program in 1990 as a congressional aide, and to launch its implementation 10 years

later as director of USDA's Agricultural Marketing Service.

Steve Hensley, senior director of regulatory affairs for the USA Rice Federation, said there have been rumors the administration intends to change or reduce OPMP's functions, rumors denied by USDA spokesperson Caleb Weaver.

Bill Taylor, director of legislative affairs for the Chemical Producers and Distributors Association, also said the lack of a permanent director was a "signal" that change was forthcoming. "When they don't fill positions nine months into it, I think that's usually a bad sign," Taylor said. (Pesticide & Toxic Chemical News, Vol. 37 No 48, October 12, 2009) **Note:** OPMP is the USDA office that EPA goes to for pesticide information during EPA's risk assessment. Without USDA's pesticide use surveys and OPMP most of the support data for pesticides would be lost.

PESTICIDES & HEART RISKS

As part of the Agricultural Health Study, between 1993 and 1997, researchers asked more than 54,000 male farmers what pesticides they used regularly, how much time they spent using tractors and other farm equipment, and whether they raised poultry or other livestock.

Dr. Jane A. Hoppin, of the National Institute of Environmental Health Sciences in Research Triangle Park, North Carolina, and colleagues surveyed roughly 32,000 of these men five years later and discovered 839 non-fatal heart attacks.

They also followed the entire study population for nearly 12 years on average and found that a total of 476 farmers died from heart attack.

In analyses adjusted for factors that might increase heart attack risk, such as older age, smoking and being overweight, the researchers found some suggestion of an increased risk of heart attack with exposure to six specific pesticides, although the link was not statistically significant.

These pesticides were the organochlorines aldrin and DDT, the herbicide 2, 4, 5-T, the fumigant ethylene dibromide, and the fungicides maneb and ziram.

By contrast, five other pesticides – carbaryl, terbufos, imazethapyr, pendimethalin, and petroleum oil – seemed to be associated with a somewhat reduced risk of death from heart attack.

However, none of the 49 pesticides were statistically associated with heart attack, nor did the investigators note similar risk due to other farm-related "exposures." (Reuters, October 21, 2009)

NJ TOWN ADOPTS POLICY TO SIGNIFICANTLY REDUCE PESTICIDE USE

Hamilton Township joins other municipalities in New Jersey that have made their parks pesticide-free zones and have adopted an Integrated Pest Management program for managing town property. Responding to the request of local members of the New Jersey Environmental Federation, Hamilton Township passed a resolution adopting the Federation's model pesticide reduction policy.

The policy establishes Pesticide Free Zones for 50 feet surrounding township playgrounds, picnic grounds, pavilions and rest areas, dog parks and ball fields, as well as 300 feet from any stream bank, pound, lake or natural wetland. It also requires the implementation of an IPM program for all township buildings and grounds.

"It is easy to manage a lawn without harmful chemical pesticides," said Jane Nogaki, program coordinator for the

Federation. Cost-effective and environmental friendly alternatives to pesticides include mechanical pulling of weeds, mulching areas properly to prevent weeds, planting native plants that do not attract insects, and reducing or eliminating lawns to cut down on the need for watering, fertilizing and mowing.

"The Township's IPM Policy incorporates focusing on long-term prevention and will give non-chemical methods first consideration when selecting appropriate pest control techniques. The Township will strive to ultimately eliminate the use of chemical controls," states the policy. "Integrated Pest Management activities will consist principally of using native plant species and biological controls to encourage natural land management. Manual/mechanical controls, such as pulling weeds by hand or mowing, will be the first choice for management of invasive or undesirable plant species when and where most feasible. Other low impact pest management tools are also available for use when manual or mechanical controls are impractical. The use of pesticides should be reviewed and limited so that they are not applied unnecessarily or as a matter of routine. Where plant, fungal or insect pests become otherwise unmanageable by various low impact pest management methods, pesticides may be used as a control method of "last resort."

According to the policy, low impact management tools include native plantings, hand weeding, cutting and mulching, and products containing vinegar or citric acid, corn gluten, neem, horticultural oil, potassium soaps of fatty acids, boric acid, diatomaceous earth, microbe based insecticides (Bt), non-pesticide pest traps and biological controls (predator species). (Beyond Pesticides, October 19, 2009)

Bt CONSIDERED TOXIC TO HUMANS

A French scientists Gilles-Eric Seralini questions India's approval of genetically Bt eggplant.

Seralini states that his studies found that the Bt protein induces antibiotic resistance which is a recognized as a major health problem. He also found that eggplant with Bt had 15% less calories and different alkaloid content compared with non-GM eggplant.

When fed to livestock he found various differences with detrimental affects when livestock were fed Bt eggplant.

There are also claims of sheep dying after feeding on harvested field of Bt cotton. (Institute of Science in Society, September 9, 2009)

Jim T Criswell
Pesticide Coordinator

PESTICIDE APPLICATOR TEST SESSIONS
2009

All 23 exams will be available at each session. PLEASE MAKE SURE you know in advance which specific exam(s) you need to take (e.g. Service Tech, Ornamental & Turf, Core, Right-of-way, General Pest, etc.).

RESERVATIONS ARE NOT REQUIRED FOR THESE TEST SESSIONS; they are all open to anyone wishing to test for certification. Tests are $50.00 each; please bring check, money order or the exact amount of cash needed for testing, along with a form of photo ID. There is no fee for government employees in the discharge of their official duties.

Unless otherwise noted, sessions are located as follows:

ALTUS	**WESTERN OK STATE COLLEGE 2801 N MAIN, RM A23**
ENID	**GARFIELD CO. EXT OFFICE 316 E. Oxford**
GOODWELL	**OKLA PANHANDLE RESEARCH & EXT CENTER Rt. 1 Box 86M**
HOBART	**KIOWA CO. 302 N. Lincoln**
LAWTON	**GREAT PLAINS COLISEUM Annex Rm 920 S. Sheridan Rd.**
McALESTER	**KIAMICHI TECH CENTER on HWY 270 W of HWY 69**
OKC	**OKLA CO. EXT 930 N. Portland, Auditorium - Park & enter from the North side**
TULSA	**NE CAMPUS OF TCC 3727 E. Apache (Apache & Harvard) Large Auditorium**

If you have any questions, please call (405) 522-5950 or e-mail eva.landeros@oda.state.ok.us

Testing will begin at 9:00 am. NO NEW APPLICANTS WILL BE ACCEPTED AFTER 11 AM.

ALL TESTS must be completed by 1:00 pm

2009 Test Sessions

November			December	
3	Goodwell		3	Tulsa
5	Tulsa		7	OKC
5	Hobart		8	Goodwell
5	OKC		10	Enid
12	Lawton		17	Tulsa
19	Tulsa		17	McAlester
23	OKC		28	OKC
30	McAlester			

OPPORTUNITIES TO EARN CEU'S

NOVEMBER 4-5, 2009

CATEGORY:	1a – AGRICULTURAL PLANT
CEU'S:	8
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	8
SPONSOR:	OARA
TOPIC:	AGEXPO
PLACE:	CLARION CONVENTION CENTER 737 S MERIDIAN OKLAHOMA CITY, OK
CONTACT:	TAMMY MILLER 580.233.9516
FEE:	YES

NOVEMBER 11, 2009

CATEGORY:	3a – ORNAMENTAL & TUF
CEU'S:	3
CATEGORY:	7a – GENERAL PEST
CEU'S:	2
CATEGORY:	7b – STRUCTURAL
CEU'S:	2
CATEGORY:	8 – PUBLIC HEALTH
CEU'S:	2
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	3
SPONSOR:	ESTES
TOPIC:	RECERTIFICATION PROGRAM
PLACE:	MPEC CENTER 1000 5TH STREET WICHITICA FALLS, TX
CONTACT:	AMY McDONALD 254.445.4359
FEE:	YES

NOVEMBER 18-20, 2009	
CATEGORY:	11 – BIRD & PREDATORY ANIMAL
CEU'S:	2
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	2
SPONSOR:	NPMA
TOPIC:	NUISANCE BIRD & WILDLIFE MANAGEMENT CONFERENCE
PLACE:	INIDANAPOLIS, IN
CONTACT:	CINDY KENNEDY 703.352.6762
FEE:	YES

DECEMBER 8, 2009	
CATEGORY:	2 – FORESTRY
CEU'S:	2
CATEGORY:	6 – RIGHT-OF-WAY
CEU'S:	2
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	2
CATEGORY:	AERIAL
CEU'S:	1
SPONSOR:	STEPHEN F. AUSTIN UNIVERSITY
TOPIC:	FOREST HERBICIDES; RESEARCH & DEMONSTRATION VII CONFERENCE
PLACE:	NACOGDOCHES, TX
CONTACT:	FRANK SHOCKLEY 936.468.3301
FEE:	YES

DECEMBER 9, 2009

CATEGORY:	ALL
CEU'S:	2
CATEGORY:	3a – ORNAMENTAL & TUF
CEU'S:	4
CATEGORY:	3b – INTERIORSCAPE
CEU'S:	4
CATEGORY:	3c – NURSERY/GREENHOUSE
CEU'S:	4
CATEGORY:	6 – RIGHT-OF-WAY
CEU'S:	4
CATEGORY:	7a – GENERAL PEST
CEU'S:	4
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	4
SPONSOR:	OSU PESTICIDE SAFETY EDUCATION PROGRAM
TOPIC:	RECERTIFICATION PROGRAM
PLACE:	CLARION CONVENTION CENTER 737 S MERIDIAN OKLAHOMA CITY, OK
CONTACT:	JIM CRISWELL FOR PROGRAM INFORMATION 405.744.5531 AG CONFERENCE FOR REGISTRATION INFORMATION 405.744.6489
FEE:	YES

DECEMBER 15-16, 2009

CATEGORY:	1a – AGRICULTURAL PLANT
CEU'S:	7
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	7
SPONSOR:	OSU EXTENSION
TOPIC:	WINTER CROP SCHOOL
PLACE:	WES WATKINS BUILDING STILLWATER, OK
CONTACT:	JEFF EDWARDS 405.744.6130
FEE:	YES

DECEMBER 17, 2009

CATEGORY:	ALL
CEU'S:	2
CATEGORY:	3a – ORNAMENTAL & TUF
CEU'S:	4
CATEGORY:	3b – INTERIORSCAPE
CEU'S:	4
CATEGORY:	3c – NURSERY/GREENHOUSE
CEU'S:	4
CATEGORY:	6 – RIGHT-OF-WAY
CEU'S:	4
CATEGORY:	7a – GENERAL PEST
CEU'S:	4
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	4
SPONSOR:	OSU PESTICIDE SAFETY EDUCATION PROGRAM
TOPIC:	RECERTIFICATION PROGRAM
PLACE:	MARRIOTT SOUTHERN HILLS 1902 EAST 71ST TULSA, OK
CONTACT:	JIM CRISWELL FOR PROGRAM INFORMATION 405.744.5531 AG CONFERENCE FOR REGISTRATION INFORMATION 405.744.6489
FEE:	YES

JANUARY 18-20, 2010

CATEGORY:	1a – AGRICULTURAL PLANT
CEU'S:	PENDING
CATEGORY:	AERIAL
CEU'S:	PENDING
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	PENDING
SPONSOR:	OAAA
TOPIC:	ANNUAL CONFERENCE
PLACE:	CLARION CONVENTION CENTER 737 S MERIDIAN OKLAHOMA CITY, OK
CONTACT:	SANDY WELLS 405.341.3548
FEE:	YES

ONGOING	
CATEGORY:	3a – ORNAMENTAL & TURF
CEU'S:	4
CATEGORY:	10 - DEMONSTRATION & RESEARCH
CEU'S:	4
SPONSOR:	UNIVERSITY OF GEORGIA
TOPIC:	PRINCIPLES OF TURFGRASS MANAGEMENT
PLACE:	CORRESPONDENCE COURSE
CONTACT:	PHYLISS BREWER
	706.542.6692
FEE:	YES

ONGOING	
CATEGORY:	3a – ORNAMENTAL & TURF
CEU'S:	2
CATEGORY:	7a – GENERAL PEST
CEU'S:	1
CATEGORY:	7b - STRUCTURAL
CEU'S:	1
CATEGORY:	10 - DEMONSTRATION & RESEARCH
CEU'S:	6
CATEGORY:	ALL CATEGORIES
CEU'S:	2
SPONSOR:	CHRYSALIS EDUCATION & CONSULTING
TOPIC:	0&T, GENERAL PEST & STRUCTURAL
PLACE:	HOLIDAY INN
CONTACT:	3101 N. DALLAS PKW
	PLANO, TX
	DENNIS MALONEY
	806.468.8583
FEE:	YES

ELECTRONIC PROGRAMS	
CATEGORY:	VARIOUS
CEU'S:	1
SPONSOR:	UNIVAR
TOPIC:	VARIOUS
PLACE:	INTERNET – WWW.PESTWEB.COM
CONTACT:	JEFF SMITH
	916.371.7602
FEE:	NO

ONGOING

CATEGORY:	3a – ORNAMENTAL & TURF
CEU'S:	1
CATEGORY:	8 – PUBLIC HEALTH
CEU'S:	1
CATEGORY:	10 - DEMONSTRATION & RESEARCH
CEU'S:	1
SPONSOR:	UNIVAR
TOPIC:	A QUIET TICKING
PLACE:	PESTWEB WWW.PESTWEB.COM
CONTACT:	JEFF SMITH
	JEFF.SMITH@UNIVARUSA.COM
FEE:	NO

ELECTRONIC PROGRAMS

CATEGORY:	3a – ORNAMENTAL & TURF
CEU'S:	1
SPONSOR:	UNIVAR
TOPIC:	WEED CONTROL – THE HERBICIDES #604
PLACE:	INTERNET – WWW.PESTWEB.COM
CONTACT:	JEFF SMITH
	916.371.7602
FEE:	NO

ELECTRONIC PROGRAMS

CATEGORY:	7a – GENERAL PEST
CEU'S:	1
SPONSOR:	UNIVAR
TOPIC:	GOING GREEN & ORGANIC #207
PLACE:	INTERNET – WWW.PESTWEB.COM
CONTACT:	JEFF SMITH
	916.371.7602
FEE:	NO

ELECTRONIC PROGRAMS

CATEGORY:	7a – GENERAL PEST
CEU'S:	3
CATEGORY:	7b - STRUCTURAL
CEU'S:	1
SPONSOR:	WHITMIRE MICRO-GEN
TOPIC:	PRESCRIPTION TREATMENT UNIVERSITY
PLACE:	WHITMIRE WEB SITE
CONTACT:	JODI WILSON
	880.777.8570
FEE:	YES

ELECTRONIC PROGRAMS

CATEGORY:	VARIOUS
CEU'S:	VARIOUS
SPONSOR:	PEST NETWORK
TOPIC:	VARIOUS
PLACE:	PESTNETWORK.COM
CONTACT:	MEL YELL 512.626.1645 CELL
FEE:	YES

ELECTRONIC PROGRAMS

CATEGORY:	1a – AGRICULTURAL PLANT
CEU'S:	1
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	1
SPONSOR:	Pest Network
TOPIC:	GREENBUG MANAGEMENT
PLACE:	www.pestnetwork.com
CONTACT:	CHARLES COLE 979.732.0501
FEE:	YES

ELECTRONIC PROGRAMS

CATEGORY:	1a – AGRICULTURAL PLANT
CEU'S:	1
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	1
SPONSOR:	SOUTHWEST FARM PRESS
TOPIC:	WEED RESISTANCE MANAGEMENT IN COTTON
PLACE:	INTERNET – WWW.SOUTHWESTFARMPRESS.COM
CONTACT:	CHERYL OGLE 559.322.6558
FEE:	NO

ELECTRONIC PROGRAMS	
CATEGORY:	1a – AGRICLTURAL PLANT
CEU'S:	1
CATEGORY:	10 – DEMONSTRATION & RESEARCH
CEU'S:	1
SPONSOR:	SOUTHWEST FARM PRESS
TOPIC:	SPRAY DRIFT MANAGEMENT
PLACE:	WWW.SOUTHWESTFARMPRESS.COM
CONTACT:	HARRY CLINE
	512.288.8288
FEE:	YES