

PESTICIDE REPORTS

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



JUNE 2009

CHEM

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EPA REJECTS STATE CONCERNS

At a recent SFIREG POM meeting, state pesticide regulatory agencies strongly objected to proposed label wording on pyrethroid insecticides used for termite pretreatments.

The proposed wording was “The applicator must insure the treatment site is covered. The applicator can cover the soil him/herself or notify the contractor on the site that: 1) if the concrete slab cannot be poured over the treated soil within 24 hours of application the treated soil should be covered with a waterproof covering (such as

polyethylene sheeting), and 2) that the contractor should cover the treated soil if precipitation occurs before the concrete slab is poured.” The state regulatory agencies said this was unenforceable. EPA replied that due to a court decision this was enforceable language and that the proposed wording would be on all pyrethroid Pretreat termiticides.

Another proposed wording was also opposed by the state regulatory agencies. This wording was “Do not apply within 10 feet of storm drains. Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish ponds).” This wording includes applications where French drains exist or other types of drains or where these drains empty within 10 feet of a storm drain. This also includes applications to commercial sites.

For both of these proposed statements EPA informed the states that the statements would be on all pyrethroid termite pretreatment labels. (OSU PSEP)

CARBOFURAN TOLERANCES

EPA has revoked all tolerances for carbofuran (Furadan) as of December 31, 2009.

Residues found on food after December 31, 2009 will be considered adulterated unless applications can be documented to be made in 2009 or earlier. (Federal Register, May 15, 2009) **Note:** This is interesting since EPA has revoked the tolerances for carbofuran but the registrations still exists. When questioned why EPA did not suspend or cancel, EPA replied that EPA is required to “coordinate” action under FIFRA and FFDCA “to the extent practicable and consistent with the review deadlines.” EPA stated neither FIFRA or FFDCA required EPA to determine that a pesticide presents an “imminent hazard,” as that term is defined in FIFRA, prior to taking action to resolve dietary risks under FFDCA.

ARSENICALS

EPA has finalized its decision on the arsenicals (MSMA, DSMA, CAMA, and cacodylic acid).

For cotton, applications are:

- Limited to 1 postemergent application at 2 lbs ai/A with a second application at 2 lbs ai/A only if needed as a salvage operation (i.e. if pigweed escapes the first application)
- A 50-foot buffer zone must be maintained around permanent water bodies, such as rivers, streams and lakes
- Pre-plant cotton use must be deleted

Uses on golf courses, sod farms and highway rights-of-way will be canceled December 31, 2012, with the use of existing stocks allowed until December 31, 2013.

The labels must have the following:

- Golf course use is limited to spot treatments only (100 square feet per spot), not to exceed 25% of total golf course acreage per year. One broadcast application is allowed for newly constructed golf courses only.
- Sod farm use is limited to 1-2 broadcast applications per season. A 25-foot buffer zone must be maintained around permanent water bodies.
- Two broadcast applications per year are allowed for use on highway rights-of-way only. A 100-foot buffer zone must be maintained around permanent water bodies. Other rights-of-way uses must be deleted.

All other uses of MSMA and currently registered uses of DSMA, CAMA, DMA (cacodylic acid and its sodium salt) must be deleted effective December 31, 2009. In addition, MSMA product registrations must be amended to delete the following uses:

- Residential turf
- Forestry
- Non-bearing fruit and nuts
- Citrus, bearing and non-bearing
- Bluegrass, fescue and ryegrass grown for seed
- Drainage ditch banks, railroad, pipeline, and utility rights-of-way, fence rows, storage yard and similar non-crop areas.

Existing stocks of these uses may be used until December 31, 2010.

After the end dates for existing stocks, uses of these products will be illegal. (EPA May 6, 2009; OSU PSEP)

DIMETHOATE LABEL CHANGES

Applicators should be aware that dimethoate label changes should be appearing.

Among these changes is the requirement that mixers/loaders supporting aerial application to alfalfa, cotton, soybeans, corn, safflower, sorghum, and wheat must use a closed system. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to no more than 2 ml per (< ¼ oz) disconnect.

There are other label changes including reduced number of applications, rate changes and REI changes. (EPA Memorandum, October 30, 2008)

EPA & ENDANGERED SPECIES

EPA is still working to implement their Endangered Species bulletins for the web. They keep getting sued by advocacy groups which further delays EPA's efforts because EPA has to stop what they were doing and reply to the courts.

One example of this is EPA made over 50 determinations regarding the 26 Pacific salmonids. A law suit overturned these efforts and EPA has to "start over".

Another example is not a law suit but FWS rejecting over 45 determinations EPA had made concerning the red-legged frog in CA, the Barton Springs salamander in Austin, TX and atrazine applications nationwide. EPA will now have to go back and respond to FWS concerns.

These activities to thwart EPA delays EPA's efforts to protect federally endangered and threatened species from

pesticide applications. The delays also make applicators more exposed to the possibility of causing harm to one of these species. (OSU PSEP)

EPA ISSUES FIRST ENDANGERED SPECIES BULLETIN

EPA in consultation with the U.S. Fish & Wildlife Service is imposing limitations on the use of methoxyfenozide use on cranberries in Wisconsin because of the insecticide's potential effect on the endangered Karner blue butterfly. The limitations are contained in a series of county-specific Endangered Species Protection Bulletins that are available at www.epa.gov/espp/bulletins.htm.

You may want to take a look at these as this is the format EPA will be using for other bulletins as they are developed. (EPA e-mail May 4, 2009)

COLONY COLLAPSE DISORDER

The Apiary Inspectors of America and USDA-ARS Beltsville Honey Bee Lab conducted a survey between September 2008 and early April 2009 to estimate colony losses across the country. Over 20% of the country's estimated 2.3 million colonies were surveyed. A total loss of 28.6% of managed honey bee colonies was recorded. This compares to losses of 35.8% and 31.8% recorded respectively in the winters of 2007/2008 and 2006/2007. While a decrease in total losses is encouraging, the rate of loss remains unsustainable as the average operational loss increased from 31% in 2007/2008 to 34.2% in 2008/2009 winter.

Colony Collapse Disorder (CCD) is characterized by the complete absence of bees in dead colonies or in apiaries. The survey was not able to differentiate between verifiable cases of CCD and colonies lost as

the result of other causes that share the “absence of dead bees” as a symptom.

Only 15% of all the colonies lost during the 2008/2009 winter died with symptoms of CCD, this compares to a 60% colony loss with CCD-like symptoms in the winter of 2007/2008. (Food Industry Environmental Network, May 19, 2009)

SCHOOL IPM BILL STILL ALIVE

The Pest Management in School bill (H.R. 3290 by Holt (D-NJ) is still alive in Congress.

Gene Harrington with the National Pest Management Association said this topic “probably got more legs than it’s had in several years.” “I think it’s a more viable prospect. A bill passing on school pest management is a very good possibility.”

The bill’s findings state that childhood cancer is continuing to increase at the alarming rate of 1% per year; approximately 6,500,000 children in the U.S. under the age of 16 have asthma; children are more susceptible to hazardous impacts from pesticide than adults; numerous scientific studies have linked both cancer and asthma to pesticide exposure; and that EPA has recommended the use of an integrated pest management system.

The bill defines IPM as “promotes non-chemical” methods of pest prevention and management using least toxic pesticides after all other methods have been exhausted; and requires a notification process by which each student, parent, guardian, staff member, and teacher shall be notified of a pesticide application.

The bill does mention that pest identification, monitoring and evaluation of control techniques part of IPM.

The bill describes least toxic as: boric acid; silica gels; diatomaceous earth; non-volatile insect and rodent baits in tamper resistant container or for crack and crevice

treatment only; microbe-based insecticides; botanical insecticides without toxic synergists; biological, living control agents; and material for which the inert ingredients are non-toxic and disclosed.

Least toxic does not include a pesticide that is determined by EPA to be an acutely or moderately toxic pesticide, carcinogen, mutagen, teratogen, reproductive toxin, developmental neurotoxin, endocrine disrupter, or immune system toxin, and any application of the pesticide using a broadcast spray, dust, tenting, fogging, or baseboard spray application.

Each local educational agency of a school district shall designate a contact person for carrying out an integrated pest management system in schools in the school district.

This is to be funded through fines issued for non-compliance. States will be funded by the proportion of the funds generated in their state. Only 6% of the total funds generated each year will be available for distribution to the states to operate this program. (PCT February 2009 and H.R. 2390)

NY PROPOSES TO PHASE OUT PESTICIDE USE

New York state would phase out the use of most pesticides by state agencies and adopt an integrated pest management program (that does not allow pesticide use – OSU addition) under a bill approved by the state Assembly. The bill now goes to the Senate Environmental Conservation Committee.

The bill would eliminate pesticide use in three phases, beginning in 2010 with those classified as Toxicity Category I. Category II pesticides would be banned in 2011, followed by the remaining pesticides in 2012.

The bill would permit the use of: pesticides to maintain safe drinking water; antimicrobials; pesticides contained in rodent control baits; and pesticides that EPA has classified as exempt (25b products).

The bill also allows pesticide use by university research stations and “..at Bethpage Park for activities directly related to the United States Open Golf Championship in 2009.” It also allows the use of rotenone and associated resins as a piscicide for purposes directly related to the reclamation of freshwater bodies to prepare for the reintroduction of native species. (EPA e-mail May 7, 2009 and NY Assembly Bill A. 5848)

PESTICIDE USE ON WHEAT IN OKLAHOMA

USDA-ERS has released its findings from a 2004 survey of pesticide usage.

For wheat in Oklahoma, 47% of the acres received some type of pesticide application. Of this reduced tillage acres had 63.6% of the acres treated compared to 40.2% for conventional tillage. Reduced tillage received two treatments compared to one for conventional tillage.

Regarding insecticides, reduced tillage and conventional tillage acres received comparable coverage – 29.2% to 23.9% respectively. Each system reported one insecticide application per season.

Herbicide treatments were greater on reduced tillage (57.9% of the acres treated) compared to conventional (28.4% of the acres treated). The number of treatments per acre was similar with reduced tillage receiving 1.9 treatments and conventional 1.6 herbicide applications.

Phenoxy herbicides were used more on reduced tillage and sulfonyl urea herbicides more on conventional tillage.

Applications were made almost equally between custom and farmers. Acres treated was greater in reduced tillage by customer

applicators (76.9%) compared to 46.7% of the acres being treated by custom applicators for conventional tillage. (USDA-ERS)

INSECTICIDE USE ON AIRPLANES

A bill has been introduced in the U.S. House of Representatives (H.R. 2881) by Oberstar (D-MN) that would not allow insecticide treatments to airplanes.

The exact wording is “No air carrier, foreign air carrier, or ticket agent may sell in the United States a ticket for air transportation for a flight on which an insecticide has been applied in the aircraft within the last 60 days or on which an insecticide is planned to be used in the aircraft while passengers are on board the aircraft unless the air carrier, foreign air carrier, or ticket agent selling the ticket first informs the person purchasing the ticket of the application, or planned use of the insecticide, including the name of the insecticide.”

Gene Harrington with NPMA says the bill “has tremendous support” from key members of the House.

The airline industry and travel agent industry are very much against this legislation. (U.S. House of Representatives. & PCT, February 2009)

MICHIGAN PESTICIDE POISONING DATA

Michigan has released its pesticide poisoning data for 2007. Michigan has conducted pesticide poisoning surveillance since 2001.

A summary of the results reveal that only 9% of the cases involved agricultural workers; most of the exposed people were adults with ages ranging from 17-70; no kids were reported poisoned; many of the cases are derived from Food Services, Administrative Support & Waste

Management; most common occupational exposures were from housekeeping, structural applicators, and lawncare workers; the greatest pesticide types involved in occupational exposures were disinfectants, followed by insecticides; and no child exposures from schools was reported.

Spring was the most common time for exposures. Also inhalation was the most common route of exposure. This could stem from the fact disinfectants were the primary cause of exposures. However, a number of the insecticide exposures involved inhalation. This was partly due to being downwind and breathing in the fine spray particles during applications to lawns and trees and multiple exposures to bug bombs by non-applicators.

The only death reported was due to exposure to a disinfectant. (Pesticide Illness and Injury Surveillance in Michigan 2007)

GROUPS PUSH EPA TO CONSIDER CLIMATE CHANGE

A collation of six environmental and wildlife advocacy groups is asking EPA to examine how climate change will affect pesticide use and develop recommendations for incorporating such considerations into the agency's pesticide review policy.

While industry contends it is premature to move forward on the issue before Congress explores it, EPA appears receptive.

"It is clear...that climate change will profoundly alter the calculus of pesticide regulation. Unchecked climate-linked impacts could significantly increase human and environmental exposure to pesticides, as well as increasing the damage associated with each exposure," the groups wrote in to EPA Administrator Lisa Jackson and Office of Pesticide Programs Director Debbie

Edwards.

"If EPA does not take climate change into account in its registration and registration review decisions, its decisions will not fulfill FIFRA's mandate that it carefully analyze each pesticide's impacts, and will ultimately be arbitrary, capricious, and not in accordance with law. The result will be a growing class of invalid pesticide registrations, and resulting inadequate protections for the public and the environment," the letter continues.

While industry is critical, EPA appears receptive to exploring the issues raised in the letter.

In a response to the group, EPA OPP Director Debbie Edwards wrote, "I suggest that we meet at your earliest convenience to review the issues identified in your letter and begin exchanging ideas about potential ways to integrate climate change into the pesticide regulatory process." (Pesticide & Toxic Chemical News, Vol. 37 No 27 May 11, 2009)

NAFTA PESTICIDE LABEL PROGRAM

Some of the conflicts that led to the creation of a NAFTA pesticide labeling program have receded, but the pace of approvals has slowed down. Stakeholders see benefits both to users of chemicals and to manufacturers, but one company that took years to get its product approved says the process is a deterrent to some.

Seven pesticides and one antimicrobial product have received approved NAFTA labels. Thirteen more are under consideration, and two have been approved under the U.S. Own Use Import (OUI) program, which allows a farmer to buy a Canadian product, have EPA affix a U.S. label to it, and bring it

back for personal use.

Both the NAFTA label and own use programs were launched in part because U.S. growers complained about inequitable pricing of the same product on different sides of the border. However, after being mired for years at 65-70 cents of the U.S. dollar, the Canadian dollar rose throughout the latter part of this decade, and was actually worth more than the U.S. dollar in late 2007. Jim Gray, North Dakota Department of Agriculture, said he used to get “deluged with calls” in February and March by growers who wanted to cross the border and buy Canadian pesticides. Now, the calls have dropped way off.

According to Gray, just having the program has caused prices to equalize on both sides of the border. (Pesticide & Toxic Chemical News, Vol. 37 No 24, May 11, 2009)

MONSANTO SUES DuPONT OVER USE OF RR GENES

Monsanto is suing DuPont in an effort to block new Pioneer Hi-Bred corn and soybean varieties that would combine Monsanto’s Roundup Ready technology with DuPont’s own.

DuPont has said since 2005 that its GAT technology would be an alternative to RR varieties, which tolerate glyphosate herbicide. GAT stands for “glyphosate ALS tolerant” because the seeds tolerate glyphosate and ALS herbicides, including sulfonylurea.

Roundup Ready seeds resist only glyphosate. DuPont last year decided to include RR technology in its Optimum GAT soybeans, which are scheduled for marketing in 2011.

DuPont “is misusing the Roundup

Ready trait to mask problems”, with its Optimum GAT technology, Monsanto claims.

DuPont counters that Monsanto is trying to stifle competition at the expense of improved crop yields for farmers.

Oklahoma’s Attorney General Drew Edmondson said his office is concerned about the ramifications of the lawsuit. He says the state’s farmers could suffer if the lawsuit succeeds in stopping the introduction of DuPont’s new soybean variety. (Pesticide & Toxic Chemical News, Vol. 37 No 27, May 11, 2009) **Note:** It is interesting that the attorney general is concerned about the soybean farmers in Northeastern Oklahoma.

POOL CHEMICAL EXPOSURE

The Center for Disease Control released a report on exposures due to pool chemical usage.

They reported on the New York State Department of Health reporting from 1983-2006 and the National Electronic Injury surveillance System (NEISS) from 1998-2007.

Over 23 years NY reported 36 incidents. Thirty-six percent occurred at schools or colleges, 28% at membership clubs, 17% in housing complexes or hotels, and 14% in community aquatic facilities, and 6% at institutions.

Fourteen percent involved direct exposure to either chlorine bleach or acid, 86% resulted from exposure to chlorine gas and 87% of these were caused by exposure to chlorine gas generated by mixing incompatible pool chemicals, most frequently chlorine bleach and acid.

The NEISS reported the cause of exposure was 33% inhaled chemical fumes when opening pool chemical

containers and 19% was due to eye injuries from pool chemicals splashing. The NEISS report had an exposure rate of 1.5 per 100,000 population. (CDC Mortality & Morbidly, May 15, 2009)

A handwritten signature in black ink that reads "Jim T. Criswell". The signature is written in a cursive style with a large initial "J" and a distinct "T" before the last name.

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. FAIRGROUNDS Exhibit Building
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 - <u>Park & enter</u> from the North side
TULSA	NE CAMPUS OF TCC 3727 E. Apache (Apache & Harvard) Engineering Tech Rm. 127

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

JUNE		SEPTEMBER	
2	GOODWEL	3	ALTUS
11	TULSA	10	TULSA
15	OKC	14	OKC
25	TULSA	17	TULSA
25	ENID	28	OKC
JULY		OCTOBER	
6	OKC	1	HOBART
9	TULSA	8	TULSA
20	OKC	12	OKC
23	TULSA	19	ALTUS
		22	TULSA
		26	OKC
AUGUST		NOVEMBER	
10	OKC	3	GOODWELL
13	TULSA	5	TULSA
27	TULSA	5	HOBART
27	ENID	5	OKC
31	OKC	12	LAWTON
		19	TULSA
		23	OKC
		DECEMBER	
		3	TULSA
		7	OKC
		10	ENID
		17	TULSA
		28	OKC

OPPORTUNITIES TO EARN CEU'S

JULY 11-14, 2009

CATEGORY: 3a – ORNAMENTAL & TURF
CEU'S: 1
CATEGORY: 3b – INTERIOSCAPE
CEU'S: 5
CATEGORY: 3c – NURSERY/GREENHOUSE
CEU'S: 7
CATEGORY: 7a – GENERAL PEST
CEU'S: 1
CATGORY: 10 – DEMONSTRATION & RESEARCH
CEU'S: 7
SPONSOR: OHIO FLORICULTURE ASSOCIATION
TOPIC: GREENHOUSE/INTERIOSCAPE PEST MANAGEMENT
PLACE: COLUMBUS, OH
CONTACT: MICHELLE MAZZA
614.487.1117
FEE: YES

JULY 14, 2009

CATEGORY: 3a – ORNAMENTAL & TURF
CEU'S: 3
CATEGORY: 10 – DEMONSTRATION & RESEARCH
CEU'S: 3
SPONSOR: OSU PSEP
TOPIC: LAWN CARE MANAGEMENT
PLACE: OKLAHOMA COUNTY EXTENSION OFFICE
930 N. PORTLAND
OKLAHOMA CITY, OK
CONTACT: CHARLES LUPER FOR PROGRAM INFORMATION
405.744.5531
AGRICULTURE CONFERENCES FOR REGISTRATION
405.744.6489
FEE: YES

JULY 21, 2009

CATEGORY: 3a – ORNAMENTAL & TURF
CEU'S: 3
CATEGORY: 10 – DEMONSTRATION & RESEARCH
CEU'S: 3
SPONSOR: OSU PSEP
TOPIC: LAWN CARE MANAGEMENT
PLACE: MARRIOTT SOUTHERN HILLS
1902 E. 71ST
TULSA, OK
CONTACT: CHARLES LUPER FOR PROGRAM INFORMATION
405.744.5531
AGRICULTURE CONFERENCES FOR REGISTRATION
405.744.6489
FEE: YES

AUGUST 18, 2009

CATEGORY: 7a – GENERAL PEST
CEU'S: 10
CATEGORY: 7c – FUMIGATION
CEU'S: 5
CATEGORY: 10 – DEMONSTRATION & RESEARCH
CEU'S: 7
SPONSOR: IFC
TOPIC: AIB/FISA RECERTIFICATION SEMINAR
PLACE: KANSAS CITY, KS
CONTACT: PAUL LAUGHLIN

FEE: YES

AUGUST 19, 2009

CATEGORY: 1a – AGRICULTURAL PLANT
CEU'S: PENDING
CATEGORY: 10 – DEMONSTRATION & RESEARCH
CEU'S: PENDING
SPONSOR: OSU EXTENSION
TOPIC: SUMMER CROP TOUR
PLACE: LAHOMA RESEARCH STATION
LAHOMA, OK
CONTACT: JEFF EDWARDS
405.744.6130

FEE: YES

SEPTEMBER 24-25, 2009

CATEGORY: 7a – GENERAL PEST
CEU'S: PENDING
CATEGORY: 7b – STRUCTURAL
CEU'S: PENDING
CATEGORY: 10 – DEMONSTRATION & RESEARCH
CEU'S: PENDING
SPONSOR: OPCA
TOPIC: URBAN PEST MANAGEMENT
PLACE: DOUBLETREE HOTEL DOWNTOWN
616 WEST 7TH STREET
TULSA, OK
CONTACT: ROSA FISK
405.685.2036

FEE: YES

NOVEMBER 4-5, 2009

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

DECEMBER 15-16, 2009

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

ELECTRONIC PROGRAMS

CATEGORY: VARIOUS
CEU'S: VARIOUS
SPONSOR: UNIVAR
TOPIC: VARIOUS – GENERAL PEST CONTROL
PLACE: [HTTP://WWW.PESTWEB.COM](http://WWW.PESTWEB.COM)
CONTACT: VIC PRRALEZ
888.755.5566
FEE: YES

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