

Agricultural & Environmental Safety unit - http://www-aes.tamu.edu

December 2002

Thanks For All You Do!! Don L. Renchie, Ph.D.

As we bring 2002 to a close (where did it go?), I'd like to thank each of you and your staffs for giving Texans your best efforts in helping them sustain their agricultural operations. Our customers constantly express their appreciation for the responsiveness they receive from you as they embark on the journey to pesticide applicator licensure and maintenance.

As we prepare for another year of facilitating applicator certification and recertification, you should be better prepared to conduct high quality private applicator certification programs with the aid of the new **Private Applicator Certification Teachers Guide** (released in October 2002) and the new **private applicator manual** (B-1648, released in May 2002). In conducting your private applicator certification programs, you can still use **either** the slide set or the VHS 960 tape to cover the required material.

Remember to encourage license candidates to order and review their study materials in advance of your scheduled training activity. Each participant should order the private applicator manual and the TDA laws and regulations book (B-5056). The TDA Laws and Regulations book costs \$5.00 to you and/or your customers. If you do not have any of the required instructional material(s), contact Margaret Havens @ (979) 845-1099 or <u>M-Havens@tamu.edu.</u>.

Also, CEAs and other TCE employees involved in conducting private applicator certification programs can purchase the private applicator manual for \$5.00 and sell it to license candidates for the regular price of \$20.00. The manual should not be sold for less than \$20.00, as that is the retail price! The difference should be used to facilitate applicator training activities in your county, or the purchase of needed AV equipment.

Due to procedural changes by the Texas Department of Agriculture in September 2002, effective January 1, 2003 Agricultural and Environmental Safety will no longer be allowed to pay the \$10.00 license fee for TCE employees (CEAs or specialists) in a single lump sum payment. CEAs can use the funds generated from their private applicator certification activities to pay the fee. Specialists can use nonstate funds to pay their \$10.00 license fee. It is important to return the renewal notice promptly to avoid late fees and the possibility of having to retest because of failure to renew during the abeyance period.

Our team is preparing to start 2003 off with the same pace we ended 2002. We will release a new Ornamental & Turf category manual (B-5066) January 02, 2003. By mid summer, we should have a new Fruit, Nut & Vegetable category manual (B-5061). In the fall, we plan to publish a new Right of Way category manual (B-5068). The A&ES specialists are dedicated to improving the quality and standards of pesticide safety education materials and programs in Texas!

We are attaching a schedule of AES Conducted Structural Pest Control Board (SPCB) required non commercial applicator and technician training dates and locations. Also, we are including information about SPCB testing dates and locations. If you have any questions, don't hesitate to contact us.

Have a safe holiday season, and thanks for helping make the TCE Pesticide Safety Education Program a valuable asset to the citizens of Texas!!!

Texas Pest Management Center

A Texas Pest Management Center has been established in cooperation with the Southern Region Pest Management Center at the University of Florida and Texas A&M University as a cooperating institution. Funded by the USDA from redirected Pesticide Impact Assessment Funds, objectives provide for a statewide pest management advisory committee, the development of pest management decision support documents such as crop profiles and pest management strategies, a plan to strengthen the connection between pest management stakeholders in the region and ideas on how to involve Texas commodity interests in pest management center activities. Texas Contacts are Rodney L. Holloway and Dudley T. Smith (979-845-3849)

IR-4

The crop protection industry is generally not inclined to pursue registrations on specialty crops because low acreage means low return on investment. Recognizing this, the state land grant universities and the USDA organized IR-4 (short for Interregional Research Project No. 4) in 1963 to address the chronic shortage of pest control options for minor crops. IR-4 has evolved as a bridge to registration by generating and supplying research data needed by EPA in order to register compounds for use on specialty crops. IR4 works to establish tolerances in the registration process, paving the way for company action on establishing a product label.

< <u>http://pestdata.ncsu.edu/ir-4/></u>

Recent EPA Tolerances resulting from IR-4 Petition include:

Halosulfuron – Asparagus, dry bean, snap bean Clopyralid – Strawberry, hop, canola, flax, spinach, sweet corn, cranberry, beet, mustard greens, turnip (root and top)

Dimethomorph – lettuce, cucurbit crop group 9, bulb vegetable crop group 3

Cyfluthrin – Mustard greens, lettuce, southern pea, dry pea

Spinosad - fig, raisin, peanut, sugar beet

Phosmet (Imidan)

Final decision on phosmet (Imidan) on 28 Nov 2001. Highlights are:

5-year time limited registration: peaches, apples, apricots, blueberries (highbush), crab apples, grapes, nectarines, pears and plums/prunes. These nine will be allowed to be used for the next 5-years but will be re-evaluated during this time and could be canceled if suitable replacement chemistries appear by then.

"EPA believes that the worker risks for these nine uses would outweigh the benefits if the benefits changed appreciably, and that the current benefits are likely to diminish over time as new, safer alternatives become available and are adopted by growers," said the EPA release.

During the next 5 years the registrant agreed to the following:

- 1) Perform biomonitoring study of workers blood cholinesterase levels.
- Provide updated usage and benefits information and investigate the feasibility of developing additional protective equipment, specifically gloves for reentry workers.

The following labels were canceled for Imidan with this decision: household fruit trees, household ornamentals, and domestic pets. Several other labels remain intact such as: cotton, blueberries (lowbush), sweet potatoes, ornamental nursery stock, peas and pecans.

The rates for Imidan for peaches are as follows in the wake of this decision:

- 2 1/8 4 ¼ lbs./A or (¾ 1 lb./100 gals not to exceed 4/14 lbs./A).
- Do not apply more than 17 lbs./A/crop season (8 applications/season at low rate; 4 applications/season at high rate).
- Pre-harvest interval is 14 days.
- REI is now 3 days.

Guthion

EPA issued an interim reregistration eligibility decision on 28 Nov 2002 and initiated the 60-day comment period.

In 1999 EPA found that the lowering of residue tolerances for apples, pears, quinces, and crab apples mitigated the human risk associated with the use of azinphos-methyl (AZM). For peaches, the amount of active ingredient (AI) used was decreased.

Now, the occupational risk assessment has been completed and this has EPA really concerned. The "risk to field workers who reenter AZM-treated sites to harvest, thin, prune and perform other post-application activities [remains] of particular concern," the IRED says.

In addition, EPA has some ecological risks associated with AZM use especially. Particular freshwater and marine fish and invertebrates. EPA also found or claims that AZM is not essential for many crops and only a small group of crops benefits from an economical standpoint. Also, EPA says there are alternative controls available. EPA now has an agreement with the registrant to do the following:

- Phase out period: peaches and cotton will occur in 4 years. (cotton was removed east of Mississippi in 1999).
- 2 Cancellations: beans, broccoli, cabbage, blackberries, cucumbers, melons, pecans, strawberries, and tomatoes.
- 3) Time-limited registration: the following will be allowed to be used for the next 4 years and could be extended if mitigation of worker risks are completed. Apples, blueberries, nursery stock, southern pine seed orchards.

For peaches it should be noted that Guthion can only be applied 3 times/season at the full rate.

<u>Alabama Pesticide Information.</u> <<u>http://www.aces.edu/department/ent/></u>

Release of USDA's Organic Standards Brings Forth Claims and Debate (Chemically Speaking December 2002 < http://pested.ifas.ufl.edu/>

Now that the USDA's long awaited new organic standards have been implemented as of October 21, we have seen news releases and product advertising extolling the benefits of organically grown food. Some of the claims include: "Organic food is certainly safer and better than the chemical-doused, genetically contaminated, or irradiated food typically found on grocery store shelves." - Organic Consumers Association press release, Oct. 1, 2002. "When you eat food that is organically grown, you are taking a pledge to your health, while helping our environment, one bite at a time." Organic Trade Association, Oct. 1, 2002. Lastly, a Seeds of Change television commercial for one of its organic food products sings to the tune of Old McDonald Had a Farm "With no chemicals here and no pesticides there..."

It is interesting to note in Britain, the UK's Advertising Standards Authority recently forbid their organic food industry to make any claims that its products are safer or more nutritious. It says the industry has offered no evidence to justify such claims (the organic industry told a 1999 House of Lords hearing it hadn't had time nor funding to do the tests). In the U.S., James Glickman, the Secretary of Agriculture when USDA proposed the organic standards, said at the time that the standards and organic certification expressed a philosophy of production (quote: "Just because something is labeled as organic, does not mean it is superior, safer or more healthy than conventional food. All foods must meet the same high standards.") The Center for Global Food Issues, a conservative think-tank organization, points out our current population is stronger, taller, and longer-lived than any people in history despite the claims that food produced by conventional agricultural practices is not as healthy or safe as that from organic production methods.

It is also claimed that organic foods have lower pesticide residues. In reality nobody knows. Neither the government nor industry tests for organic-approved pesticides that organic farmers use. Consumers Union reported that 25 percent of organic fruits and vegetables carry detectable residues of synthetic pesticides, and one third of the 25% had residue levels higher than conventionally-grown produce. But all residues were within allowable federal limits. The Food and Drug Administration's widespread annual testing finds that U.S. foods carry less than one percent of the synthetic pesticide residues allowable, which are 1/100th or 1/1000th of the "no-effect" level in animal tests.

Claims that organic farming is better for the environment also generate debate. In Europe the Scottish Crop Research Institute stated: "The balance of environmental advantages and disadvantages in the organic system is not clear." A Danish government committee concluded in 1999 that organic farming would slash human food production by 47 percent. Most of Denmark's farmland would be forced into cattle forage so cattle manure could produce enough organic nitrogen to maintain the fertility of the soil. A Cornell University report concluded that sulfur and copper sometimes used as fungicides in organic production are permanent soil contaminants.

Proponents of organic farming make claims that the new standards will help to save more small farms. The reality, according to a New York Times article, is as organic food becomes big business, the farms that supply it become big businesses. Unfortunately, many small farmers who have sold fresh produce and livestock products locally as organically-produced may be left out of the Organic Certification Program, unable to afford the increased costs of the paperwork associated with the Standards. Thus, they may revert to such nonregulated terminology as "home grown," "grown without pesticides," or "free of antibiotics." As an example, in California, five huge farms supply half of that state's \$400 million per year worth of organic produce. Horizon Dairy, a multinational corporation, supplies 70 percent of America's organic milk, mostly from two huge feedlot dairies with thousands of cows apiece. Other large multinational corporations are also getting on the organic bandwagon. Candy maker Mars owns Seeds of Change and major carrot grower Grimmway Farms has bought Cal-Organic.

The fact that the USDA requirements set standards for persons producing and selling products with the term organic on the label may be a benefit to the consumer. Now there are defined standards for the term organic when used in sale of produce and other food products. For growers it appears the standards may benefit those who are able to accommodate the increased paperwork required of them. Information about the National Organic Program can be found at http://ams.usda.gov/nop/. (Center for Global Food Issues, via AgNet, 10/18/02 & New York Times).

Food Quality Protection Act of 1996

The Food Quality Protection Act (FQPA), passed by Congress in 1996, amends prior pesticide legislation to establish a more consistent, protective regulatory scheme, based on sound science. It mandates a single, health-based standard for all pesticides in all foods; provides special protections for infants and children; expedites approval of safer pesticides, and creates incentives for the development and maintenance of effective crop protection tools for American farmers. It also requires periodic re-evaluation of pesticide registrations and tolerances to ensure that the scientific data supporting pesticide registrations will remain up to date in the future.

<u>Key Resources</u> - Crop Profiles. Crop profiles are detailed documents describing the production of a specific commodity, including cultural practices, insect, disease, and weed pests, chemical and non-chemical controls, and alternatives to current controls. State-specific crop profiles can be reviewed at:

<http://pestdata.ncsu.edu/cropprofiles/>

Web-based Weed Information Sites by Fred Fishel, University of Missouri-Columbia

As technology transfer continues to grow exponentially, informational weed identification resources available over the World Wide Web are increasing tremendously in both quantity and quality. As an example, I recently consulted a major search engine to identify weed identification sites. The result--26,800 sites were listed. What do I even consider a starting point? Of course, not all of these sites are necessarily useful for our purposes or pertain to this area of the United States. I have several web-based resources that I find particularly helpful that I thought that I'd share with you, perhaps at least saving you some of the frustration of sorting through the myriad of links. For weed identification purposes on a practical basis, check out the following:

http://ag.fmc.com/ag/weedbug/. FMC's site provides clear images of not only weeds, but other pests as well.

http://www.rce.rutgers.edu/weeds/. Rutgers University's site has a wide collection of weed images that may be sorted by common or scientific name.

http://www.ppws.vt.edu/weedindex.htm. Virginia Tech's weed identification site may be the most useful in the United States. It includes a very nice grass-seedling taxonomic key with top quality images that allow the user to easily navigate the identification dilemma and find an answer. Species of weeds may also easily be sorted, and each species page contains at least several images along with well-written descriptions.

http://www.psu.missouri.edu/fishel/. Missouri's site has the vast majority of weeds that we will encounter in agronomic settings in our state. This site also contains several simple-to-use taxonomic keys to assist the user in narrowing down an identification.

We all receive questions regarding **plant toxicity**, so here are a couple of sites that I find to be very helpful with information in regards to livestock and/or humans:

http://www.ces.ncsu.edu/depts/hort/consumer/poiso n/poison.htm. N.C. State University has a comprehensive listing of toxic plants that may be sorted in several ways with information on the toxic chemicals found within the plant and symptoms that the animal may display. Image quality is outstanding.

http://www.vet.purdue.edu/depts/addl/toxic/cover1. htm. In addition to an alphabetical plant listing, Purdue University's site allows the user to sort plants by toxicity rating or animal species affected.

http://www.vth.colostate.edu/poisonous_plants/repo rt/search.cfm. Colorado State University's site has a search feature that the user can input clinical signs of poisoning and obtain a list of possible plant suspects. As with many other sites, plants may be sorted by common or scientific name.

Many of these Weed Identification sites and others can be accessed through Agriculture & Environmental Safety at

< <u>http://agenvsafety.tamu.edu/mary/mary.htm</u> > then scroll down to Plant Identification. For a list of Weed ID reference books, send your e-mail address along with the request to Mary Ketchersid at < <u>m-ketchersid@tamu.edu</u> >.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Extension is implied. Educational programs of Extension are open to all citizens without regard to race, color, sex, disability, age or national origin.

Rodney L. Holloway, Ph.D. Associate Professor and Extension Pesticide Assessment Specialist 101 Agronomy Field Lab 2488 TAMU College Station, TX 77843-2488 979/845-3849; fax 979/845-6251



Structural Pesticide Applicator Training 2003 Course Dates



Listed below are the locations, dates and registration deadlines for applicator certification training (commercial, noncommercial and technician). All registration fees must be included with the registration form. A separate application to take a license exam must be forwarded to the Structural Pest Control Board. Please contact the Structural Pest Control Board at (512) 305-8250 at least 30 days in advance of the *EXAM* date you wish to attend to register for the *EXAM*. Training classes with less than 10 attendees may be canceled.

Training Date	Registration Deadline
January 22, 2003	January 15, 2003
March 5, 2003	February 26, 2003
March 12, 2003	March 5, 2003
March 26, 2003	March 19, 2003
April 30, 2003	April 23, 2003
May 28, 2003	May 21, 2003
June 11, 2003	June 4, 2003
June 26, 2003	June 19, 2003
July 2, 2003	June 25, 2003
July 23, 2003	July 16, 2003
August 27, 2003	August 20, 2003
October 1, 2003	September 24, 2003
October 29, 2003	October 22, 2003
November 21, 2003	November 14, 2003
	Training Date January 22, 2003 March 5, 2003 March 12, 2003 March 26, 2003 April 30, 2003 May 28, 2003 June 11, 2003 June 26, 2003 July 2, 2003 July 23, 2003 August 27, 2003 October 1, 2003 October 29, 2003 November 21, 2003

Registration Form

To register, complete the section below. Mail payment(s) and this form to: **Extension Training Registration, P.O. Drawer FS, College Station, TX 77841**, Fax to (979) 845-6251, or call (979) 845-3849 to register by telephone using Master Card or Visa. We can not register with American Express or Discover. Registration forms and payment(s) must be received 1 week before the date of the course you plan to attend. Refunds will only be given with cancellation being made 4 days before the date of the course you plan to attend. Rescheduling the course attendance date is possible with notice prior to the course. The class is 8:00 a.m. to 5:00 p.m. with an hour lunch *(lunch is not provided)*. If you have additional questions, please contact Denise at (979) 845-3849.

Trainee Name:	Social Security Number:		
Business Name:		– Telephone:()	
Business Address:		— Fax Number:()	
City:	— State:——	——————————————————————————————————————	
E-mail address (if any):			
Location & Date of Training you wish to attend:			

Registration Fee: \$70.00/person X _____ person(s) = \$_____ Total enclosed. Make check or money order payable to the Texas Cooperative Extension. Please make separate payment if ordering additional manuals. (Fee includes study manual, #B-5073, and other materials).

Educational programs of the Texas Cooperative Extension are open to all people without regard to race, color, sex, disability, religion, age or national origin. Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended and June 30, 1914, in cooperation with the United States Department of Agriculture. Texas Cooperative Extension, the Texas A&M University System.



As an education agency, the Cooperative Extension may have programs that meet your certification training and continuing education needs, particularly for agricultural applicators. Check your county government telephone listings to find the local Extension county office. To learn of other approved training organizations, contact the agency through which you are licensed.

Order Form: Study Materials for Pesticide Applicator License Exams

Texas Department of Agriculture License Exams	Order No.	Quantity x Price	= Cost
Private applicator	B-1648	x \$20 =	= \$
Commercial / Noncommercial applicator-General	. B-5060	x \$20 =	= \$
Laws and regulations	B-5056	x \$ 5 =	= \$
Commercial / Noncommercial License Categories:			
Agricultural Pest Control			
Field crop / Fruit, nut and vegetable pest control	B-5061	x \$10 =	= \$
Weed and brush control in pasture and rangeland .	B-6034	x \$10 =	= \$
Predatory animal control.	B-5062	x \$10 =	= \$
Farm storage pest control and fumigation	• • B-5064	x \$40 =	= \$
Animal health pest control	B-5069	x \$10 =	= \$
Citrus pest control	· · E-8620	x \$10 =	= \$
Livestock protection collar application	• • B-1509	x \$10 =	= \$
Forest pest control	B-5065	x \$10 =	= \$
Ornamental and turf	· · · B-5066	x \$20 =	= \$
Greenhouse pest control	• • B-5063	x \$50 =	= \$
Additional copies of "Weeds of the Southern US"		x \$5 =	: \$
Seed treatments	B-5067	x \$10 =	= \$
Right-of-way pest control	• • B-5068	x \$10 =	= \$
Aquatic pest control (plant; animal)	B-5070	x \$10 =	= \$
Aquatic pest control-Antifouling paint	B-5072	x \$10 =	= \$
Aerial application (also for private applicators)	. B-5055	x \$15 =	= \$
Chemigation	• • B-1652	x \$10 =	= \$
Shipping & Handling (s	standard UPS	3-5 day delivery)	\$6.00
UPS Special Delivery Charges: 2nd day - \$10	Vext day - \$20	Add fee	\$
(Large orders subject to additional shipping.)	CEA	GRAND TOTAI	L: \$

Mail this order form and your check or money order, payable to Cooperative Extension, to: Texas Cooperative Extension, P.O. Drawer FS, College Station, TX 77841

Orders are shipped within 2 working days of receipt. Call 979-845-1099 to inquire about your order or to place a telephone order using Master Card or Visa. We can not accept American Express or Discover at this time. We can accept purchase orders from State, Government, and School agencies **only**. To inquire about license requirements and exams, contact the Texas Department of Agriculture (TDA) at 1-800-TELL-TDA (800-835-5832), or for more information about the TDA, try their website at: http://www.agr.state.tx.us/index.htm.

Your name: Company name:			
Physical DELIVERY address	(no P O Boxes	s please): _	
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Billing address for invoicing: _			
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Order Form: Study Materials for Pesticide Applicator License Exams (SPCB & TDH)

Structural Pest Control Board (SPCB) License Exams	Order No.	Quantity	x Price = Cost
General: commercial / noncommercial / technician	B-5073		x \$20 = <u>\$</u>
Categories: Termite control Pest control Lawn and ornamental / Weed control Fumigation (structural and commodity) Wood preservation	B-5075 B-5074 B-5066 B-5064 B-5076		$ \begin{array}{rcl} x & \$15 &= \underline{\$} \\ x & \$20 &= \underline{\$} \\ x & \$20 &= \underline{\$} \\ x & \$20 &= \underline{\$} \\ x & \$40 &= \underline{\$} \\ x & \$10 &= \underline{\$} \\ \end{array} $
For SPCB laws and regulations books, contact the SPCB at 512-3	05-8250.		
For public school IPM coordinator certification (no exam requin "Pest Control in Texas Schools - Adopting IPM"	<i>red):</i> B-6015		x \$10 = <u>\$</u>
General: noncommercial	B-5060 B-5056 B-5071 t control.)		x $\$20 = \frac{\$}{x}$ x $\$5 = \frac{\$}{x}$ x $\$40 = \frac{\$}{x}$
Shipping & Handling (standard UPS	5 3-5 day del	livery) \$6.00
UPS Special Delivery Charges: 2nd day - \$10 Next da (Large orders subject to additional shipping.)	y - \$20	GRA	Add fee \$

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Your name:		Compan	_ Company name:		
Physical DELIVERY add	ress (no P O Box	es please):			
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Billing address for invoicin	ıg:				
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Com Res		For Extension	use only		
SHIPPED: U.S. Mail	_ Carrier	Next Day	2nd Day	By:	ion, age or national origin.

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating