Individuals with disabilities, who require an auxiliary aid, service or accommodations in order to participate in any of the above mentioned activities, are encouraged to contact the County Extension Office eight days before all programs for assistance.

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Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status.

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

For more information contact:

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County Extension Agent -
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Refugio County
107 East Roca Street, Refugio, TX 78377
Phone: (361) 526-2825
Fax: (361) 526-4340

TEXAS A&M AGRILIFE EXTENSION

Refugio County
107 East Roca Street
Refugio, Texas 78377

«OrganizationName»
«FirstName» «LastName»
«Address»
«City», «State» «Zipcode»

TEXAS A&M AGRILIFE EXTENSION

THE REFUGIO COUNTY

AGRICULTURE CONNECTION

http://refugio.agrilife.org/ SEPTMEBER-OCTOBER 2014

A West Texas sunflower basks in a field as its namesake star provides August heat and light. Look closely, and you'll see a bumblebee pollinating its flower.

If you think that's a pretty sight, there's good news — there's more where it came from.

Sunflower acreage is up statewide, according to the U.S. Department of Agriculture's National Agriculture Statistics Service. In Texas, 84,000 acres of the crop were harvested in 2013.

— Jose Musico

Lubbock Avalanche-Journal

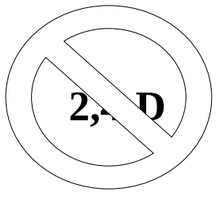
Reminder

Texas Department of Agriculture restricts the use of products with **2,4-D** in Refugio County between

March 1

And

September 15



TDA Private Applicator Training

November 7, 2014

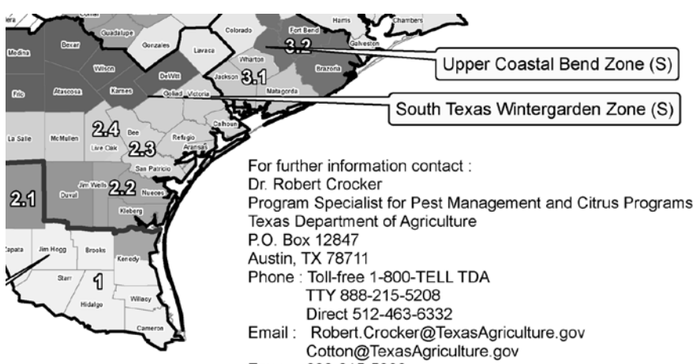
Please call 361-526-2825 to reserve your seat today.

Crops Committee Meeting

September 9, 2014 8:30am

Extension Office

Texas Department of Agriculture Pest Management Zones and Boll Weevil Eradication Zones



For further information contact :
Dr. Robert Crocker
Program Specialist for Pest Management and Citrus Programs
Texas Department of Agriculture
P.O. Box 12847
Austin, TX 78711
Phone : Toll-free 1-800-TELL TDA
TTY 888-215-5208
Direct 512-463-6332
Email : Robert.Crocker@TexasAgriculture.gov
Cotton@TexasAgriculture.gov
Fax : 888-215-5208

Map Color	Pest Mgmt. Zone	Earliest Planting Date	Destruction Deadline	End Date for Destruction Requirements
	Zone 1	Feb. 1	Sep. 1	Mar. 1
	Zone 2 Area 1	Feb. 1	Sep. 1	Mar. 1
	Zone 2 Area 2	Feb. 1	Sep. 1	Mar. 1
	Zone 2 Area 3	Feb. 1	Sep. 15	Mar. 1
	Zone 2 Area 4	Feb. 1	Oct. 1	Mar. 1
	Zone 3 Area 1	Feb. 1	Oct. 1	New Cotton Crop Emerg.
	Zone 3 Area 2	Feb. 1	Oct. 15	New Cotton Crop Emerg.
	Zone 3 Area 3	Feb. 1	Oct. 20	New Cotton Crop Emerg.
	Zone 4	Feb. 1	Oct. 10	New Cotton Crop Emerg.
	Zone 6	Feb. 1	Oct. 31	New Cotton Crop Emerg.
	Zone 7 Area 1	Feb. 1	Nov. 20	New Cotton Crop Emerg.
	Zone 7 Area 2	Feb. 1	Oct. 31	New Cotton Crop Emerg.
	Zone 8 Area 1	Feb. 1	Oct. 31	New Cotton Crop Emerg.
	Zone 8 Area 2	Feb. 1	Nov. 20	New Cotton Crop Emerg.
	Zone 9	Apr. 1	Mar. 1	May 1
	Zone 10	Mar. 1	Feb. 1	Mar. 25

I'll bet the beef is good.

It had better be. The Texas Beef Quality Producer program is all about the food.

The TBQP program was developed to assist cattlemen in producing a safer, more wholesome food product. Better beef management practices help deliver a better meal for the all-important consumer. Get ready to participate in an upcoming Texas Beef Quality Producer training near you.

The TBQP program is built upon a proven system of Best Management Practices. This half-day session allows producers to become BQA trained. You should get your seat reserved now because producers are finding the benefits go well beyond the ranch gate… through the livestock market, to the feedyard and most importantly, all the way to the consumer.

Our nation's Beef Quality Assurance (BQA) programs are vital. They help cattlemen give the consumer a wholesome eating experience – even with market cows and bulls. And a good eating experience with beef brings the consumer back for more.

Call or go online to RSVP for your seat.
Stacy Fox, TSCRA, sfox@tscra.org
800-242-7820 • www.texasbeefquality.com

A collaborative effort of:

Texas A&M AgriLife Extension · Texas Beef Council

Next Event: Refugio, TX - September 19, 2014

Refugio County Fairgrounds

1.7 miles north of Refugio on Hwy 183 turn west onto TX-202. After .5 miles, turn left onto Fairgrounds Road. Go .8 miles and the fairgrounds will be on your right. Watch for TSCRA signs

Registration - 9:30 a.m.
Program - 10:00 a.m.
Program should conclude around 3:00 pm
Lunch is included

Please RSVP to:
TSCRA at 800-242-7820 or the Refugio County Extension Office at 361-526-2825

Training programs cover Beef Quality Assurance, industry updates, record keeping, environmental stewardship and proper management practices associated with genetic selection, cattle handling, culling, vaccination, drug use and more.

Can't make the next training?
BQA certification is available online! Visit www.texasbeefquality.com

A SPECIAL THANKS TO OUR SPONSOR

zoetis

Did you miss a program or want to watch a video to learn something new?

Check out the Agriculture Videos on our Website at:

http://refugio.agrilife.org/videos/agriculture-videos/

TEXAS A&M AGRILIFE EXTENSION

AFPC
Agricultural and Food Policy Center
The Texas A&M University System

Texas A&M AFPC Farm Bill Decision Aid Training

Explanation of relevant changes to agricultural policy in the 2014 Farm Bill

Demonstration of the Texas A&M AFPC Decision Aid

Times:
9:00 AM to 11:00 AM
Registration begins at 8:30 AM

Dates and Locations:
Tuesday, October 7
Bay City Civic Center
201 7th Street
Bay City, Tx. 77414

Tuesday, October 14
Knights of Columbus Hall
703 Columbus Street
Wallis, Tx. 77485

Tuesday, October 28
Richard M. Borchard Regional Fairgrounds
1213 Terry Shamise Blvd.
Robstown, Tx. 78380

Also at the South Texas Farm and Ranch Show:
Wednesday, October 22
7:30– 8:30 a.m.
Victoria Community Center
Victoria, Tx. 77901

Nitrate in well water: What is it, and what do you do?

Nitrates are nitrogen-oxygen compounds that serve as essential nutrients for plants, which absorb them from the soil. The largest source of nitrates are fertilizers used on crops. Animal and human waste also contains nitrogen in the form of ammonia.

Nitrate also is generated by:

- Decomposing plant and animal materials
- Sewage
- Septic systems
- Industrial effluent
- Landfills

What are the health risks?

The greatest health concern is "blue baby syndrome" or methemoglobinemia. The syndrome is seen most often in infants exposed to nitrates from drinking water used in baby formula. Infants ages 0 to 3 months are at highest risk. The syndrome affects the ability of the baby's blood to carry oxygen to body tissues.

Other children and adults can withstand higher levels of nitrates than babies. However, exposure to higher levels of nitrates has been associated with increased incidence of cancer and other issues in adults.

How is health risk measured?

The U.S. Environmental Protection Agency has a maximum contaminant level for nitrate of 10 parts per million (milligrams per liter) as nitrogen.

How can nitrates reach my water supply?

Excess nitrates not used by plants can be carried through the soil to groundwater in a process called leaching. Nitrates are very soluble and do not bind with soil.

Is my private well at risk?

Nitrate is tasteless and odorless. The way to know if your well water is at risk is to have it tested for nitrate. You may be at greater risk if:

- Your well system is shallow
- It's near a septic system, agricultural land or animal feedlots
- Nitrates have entered the soil due to heavy rains, flooding, chemical spills or sewage system failures

Why type of treatment solutions are available?

The U.S. EPA has approved certain methods for removing nitrates, including:

- Reverse osmosis: This works best on point-of-use systems, which generally are used in places such as the kitchen sink where water is used mostly for drinking and cooking.
- Ion exchange: Along with a water softening system, an ion exchange system can provide a whole-house solution for nitrate contamination

Weed blaster shows promise as alternative to herbicides

- Article by: TOM MEERSMAN , Star Tribune

Frank Forcella is tackling the problem of weeds head-on.

A U.S. Department of Agriculture research agronomist in Morris, Minn., Forcella doesn't spray pigweed and foxtail with herbicides to shrivel them.

He blasts them to smithereens with corncob grit.

The tactic is gaining attention from organic farmers who don't use chemicals and from food companies seeking to market pesticide-free snacks and other products.

Forcella said the technology is experimental but shows promise. It uses an air compressor to spray gritty material on both sides of a crop that kills young weeds without harming corn or soybeans.

"It obliterates the weed, especially if it's a small broad-leaved weed like Lamb's quarters or pigweed that's one to 3 inches high," Forcella said. "The corn plants growing next to them are taller and thicker and can withstand the grit blast, but the weeds just disappear."

Forcella uses mainly dried corncob bits but has had similar success with other gritty textures such as ground walnut shells, corn gluten meal and soybean meal. He and others from USDA's Agricultural Research Service have been working on organically certified plots owned by the University of Minnesota at its West Central Research and Outreach Center in Morris.

Initially, Forcella used an air compressor mounted on an all-terrain vehicle and sprayed the rows by hand. Collaboration with an engineer at South Dakota State University has now yielded a unit mounted on a tractor that blasts the weeds four rows at a time from eight nozzles. High-speed particles of grit shred the weeds at 100 pounds per square inch of compressed air.

"We point the nozzles at either side of a corn row and blast about a 4-inch band on either side of the row and within the row," he said. Field trials typically hit the weeds twice: once when the corn is 4 to 6 inches high, and again when it's about a foot tall. The technique is called "propelled abrasive grit management."

"We've been getting season-long weed control of about 80 to 90 percent, which isn't perfect, but most organic farmers would be happy with that amount of weed control," Forcella said.

The "back of the envelope" cost is about five times what spraying an herbicide would cost per acre, Forcella said, but that price differential could shrink if the technology takes off.

Sam Wortman, assistant professor at the University of Illinois Department of Crop Sciences, said that abrasive weeding or blasting might have greater potential for other row crops that have higher value, such as fruits and vegetables. He heard Forcella present the idea at a conference in 2011.

Wortman used the technique on tomatoes last year and on peppers this season, and may expand to sweet corn, kale and broccoli in the future.

"In our initial work [with tomatoes], we were able to reduce the density of weeds by about 75 percent with just one application," he said. "And the weeds that we didn't kill we were able to reduce the overall height so that they wouldn't become competitive with the crop."

Wortman said tomatoes and peppers are often grown with plastic film or mulch, with seedlings planted into 4-inch square holes. So the weed blasting involves driving along rows and spot spraying the weeds that emerge in the "crop hole" next to the plants, he said, and that would otherwise probably need to be hand-pulled.

The process for tomatoes uses much less grit than the continuous spraying along corn and soybean rows.

"Some grit does hit the stem of the tomato plant, but as long as we're not hitting the growing part at the top of the plant, then we don't see any unacceptable levels of damage," he said. One member of the research team is a plant pathologist who is monitoring any potential infections of the plants from soil-borne pathogens, he said.

Cost-effective treatment

Organic and smaller farmers are excited about the possibilities, Wortman said, because they could make their own blasting kits with an air compressor, applicator and cart for $2,000 to $3,000.

What's most exciting to Wortman is the potential to piggyback weed blasting with fertilizing.

Organic farmers could use granular forms of fertilizer, such as corn gluten meal or soybean meal, to nourish their plants at the same time they're blasting weeds, Wortman said. Those materials contain about 7 to 9 percent nitrogen, he said, whereas corncob and other grit are essentially inert.

The weed-and-feed treatment would also be cost-effective, Forcella said. "If we start using fertilizers that organic farmers are putting on those fields anyway, there's really no added costs except for the machinery."

Companies including PepsiCo are following the research closely, Forcella said, for the potential to make and market pesticide-free snack foods. Farmers often sign contracts with food processors, especially for organic products, he said, so the industry has a vested interest in new technology that can improve productivity and profitability on specific farms.

Forcella said there may be potential international interest as well. He hosted a researcher from Spain recently who is planning to test the technology in vineyards and olive orchards where weeds have become resistant to conventional herbicides.

Wortman and Forcella said the technology is still in its infancy, and that a huge amount of work needs to be done to determine whether it has potential to be deployed on farms.

"It's not anything that's wide-scale yet for sure, but we're hoping," Forcella said. "We never thought it would work, but it did work."