

# Keys to Agronomy

JAN '24

In this issue: ● Meeting Recap ● Irrigation Methods ● Cocktail Cover Crops  
● Ag Masterminds ● Applicator Trainings ● Olton Ag Conference ● Other Happenings

## WOW!! YALL SHOWED UP!

I hope you didn't miss the producer meetings hosted in the three counties! If you did, you missed out on some delicious meals, great speakers, and generous sponsors!

Over 140 producers, 18 speakers, and 20 sponsors attended or supported the Lamb County Crops Conference (December 19), Castro County Crops Conference (January 9), and Mid-Plains Ag Expo (January 18) and a grand total of 17 CEUs were offered between the 3 events.



Contact Me!

Got an idea, question, or  
comment?

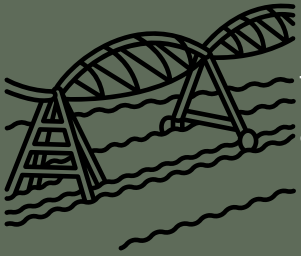
Kristie Keys  
kristie.keys@ag.tamu.edu  
325-665-8790

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# IRRIGATION METHODS

The greatest water-consuming sector in Texas is irrigated agriculture according to the Texas Water Development Board Report 378. Irrigation of crops uses an impressive 9 million acre-feet of water annually. Applying that water using the most efficient irrigation methods and at the correct timing (coming to the newsletter soon) for the crop is important to reduce waste and runoff. I recently attended a conference where the presenter showed the historical decline of the aquifer and the outlook for the future if we continue down the same path... it was eye-opening. I think it's important to understand your irrigation system and make improvements and adaptations to continue to keep it efficient and effective. Let's dive into each system.

## Center Pivot



The “Zybach Self-Propelled Sprinkling Apparatus” was invented in 1949 by a Nebraskan farmer after the 10-year drought that led to the Dust Bowl to mitigate the effects of drought. Later, this would be known as the center pivot irrigation system. Within a center pivot system, you have options of application types with varying efficiencies.



LEPA, LESA, MDI



MESA (mid elevation sprinkler application) - 78% efficient  
Drops typically installed 3-6 feet above the soil surface



LEPA (low energy precision application) - 95% efficient  
Drops typically installed 1-2 feet above the soil surface



LESA (low elevation spray application) - 88% efficient  
Drops typically installed 1-3.5 feet above the soil surface

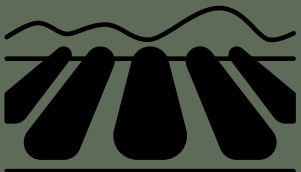


MDI (mobile drip irrigation) - 97% efficient  
Drip tubing attached to drops being pulled by the pivot

# 19%

**LESS WATER LOSS TO  
EVAPORATION AND WIND  
DRIFT THAN MESA**

RESOURCE: UTAH STATE UNIVERSITY



## Drip Irrigation

Developed in the 1960s, subsurface drip irrigation delivers slow, even irrigation in an arid or windy region at low pressure through plastic tubing directly to the plant root zone. Sounds all too good but it has its disadvantages as well.



Water applied to the root zone reduces the incidence of weeds and diseases

- CON: tillage types are limited



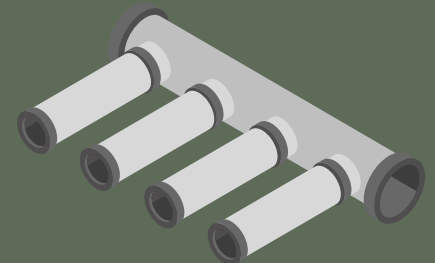
Tubing installed 6-24 inches below the soil surface

- CON: repairing tubes can be difficult and cumbersome



Emitters can vary from 4 to 24 inch spacing

- CON: plugged emitters are not noticeable until plants are wilted



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# COCKTAIL COVER CROPS

Previously, I have discussed legume and non-legume cover crops but what if you want to get the benefit of both of them? You make a cromptail, aka mixture of multiple species of cover crops with varying growth characteristics to fit your specific needs. Choosing a cover crop all goes back to the reason why you want to plant it in the first place.

- ☑ Control Erosion
- ☑ Suppress Weeds
- ☑ Reduce Soil Compaction
- ☑ Increase Moisture & Nutrient Content
- ☑ Improve Yield Potential
- ☑ Provide Habitat for Beneficial Insects & Wildlife



Winter Pea Demonstration in Castro County

When choosing a cover crop mixture it is important to understand the specific features that each species is going to contribute. Keep in mind the time of year as well as the cost. Do a little bit of research using SARE bulletins. Certain covers will help capture N and others are going to mine for it and use it. It's likely your choices will have different seed sizes; some may need to be broadcast and others may need to be drilled.

Of course, with any advantage comes a disadvantage but it is dependent on your operation and management practice. A few disadvantages to keep in mind:

## High Seed Cost

- choose 2-3 species is a good starting point

## Too Much Residue

- difficult seeding cash crop

## Complicated Management

- limited herbicide options
- termination timing

## Dominating

- single species suffocates others out

As with all cover crops, make sure planting and termination times of the cover mix are in line with recommendations by NRCS, RMA, and crop insurance.

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# AG MASTERMINDS

## TREE PRUNING TECHNIQUES

**PRESENTED BY:  
DR. CYNTHIA MCKENNEY**

2.16.24

9am

Texas A&M AgriLife Extension  
Hale County  
225 Broadway St Ste 6  
Plainview, Texas 79072



Snack Sponsorships  
Available

# AG MASTERMINDS

RSVP not required but encouraged! Contact Kristie Keys at 325-665-8790.

## What do you want to see?

Some ideas for upcoming Ag Mastermind programs are:

- USDA programs
- Rotations with cover crops
- Irrigation budgets
- Innoculants
- Producer panel (get your nominations ready!)

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# APPLICATOR TRAININGS



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## Private Applicator Training



- FEB 1 @ HALE CO 8:30 AM
- FEB 21 @ LAMB CO 8:30 AM
- MARCH 8 @ CASTRO CO 1 PM

**\$100 FEE**



RSVP to Kristie Keys at  
(325) 665-8790 for more  
information

- Training is approximately 3.5 hours
- Includes study material & spray log



Each training is held at the respective Extension office

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

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# OLTON AG CONFERENCE

## OLTON CROPS CONFERENCE

February 28, 2024

7 CEUs  
Pending TDA Approval  
7 CCA CEUs

**RSVP**

**by February 23rd**

**at Olton AG Pavilion**

110 2nd St, Olton, TX 79064



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RSVP BY CALLING  
**(806) 485-9135**



RSVP ONLINE  
[ashlee.walker@ag.tamu.edu](mailto:ashlee.walker@ag.tamu.edu)

### 8:30 Registration

• 8:55 Welcome by **Skyland Grain**

• 9:00 **Calvin Trostle**

◦ Professor and Extension Specialist @ Texas A&M AgriLife Research and Extension Center in Lubbock  
▪ Timing & Top Dressing of N on Wheat & Wheat Varieties

• 10:00 **Tim Davis**

◦ Texas Department of Agriculture Inspector  
▪ TDA Laws & Regulations Update

• 11:00 **Ken Lege**

◦ Assistant Professor and Extension Specialist @ Texas A&M AgriLife Research and Extension Center in Lubbock  
▪ Planting Considerations in Cotton and Cotton Varieties

• 12:00 **Lunch**

• 1:00 **Joseph Burke**

◦ Assistant Professor of Weed Science/Agronomy @ Texas A&M AgriLife Research and Extension Center in Lubbock  
▪ Cover Crop Termination Timing and Water Dynamics

• 2:00 **Juan Pineiro**

◦ Assistant Professor and Extension Specialist @ Texas A&M AgriLife Research and Extension Center in Amarillo  
▪ Increasing Sorghum Silage Digestibility

• 3:00 **Pete Dotray**

◦ Professor Weeds and Herbicides @ Texas A&M AgriLife Research and Extension Center in Lubbock  
▪ Update on Herbicide Resistant Weeds

• 4:00 **Kristie Keys**

◦ Agronomy Agent Castro/Hale/Lamb County @ Texas A&M AgriLife Extension  
▪ Auxin Training

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# OTHER HAPPENINGS



## Agricultural Pesticide Waste Collection Event

Thursday, April 4, 2024 | 8 AM - Noon

Leeroy Colgan Building  
901 S Houston Ave  
Lamesa, TX 79331

Unwanted or Surplus Agricultural Pesticides?  
Dispose of them Free and Anonymously without leaving your Vehicle!

### MATERIALS ACCEPTED

Outdated, Discontinued or Unwanted:

- Pesticides
- Insecticides
- Herbicides
- Fungicides
- Rodenticides
- Nematicides
- Growth Regulators
- Treated Seed

Keep pesticides in original containers. If damaged, place into a larger chemical resistant container.

### MATERIALS NOT ACCEPTED

- Dioxins (2,4-ST, Silvex, TCDD, etc.)
- Empty Totes
- Fertilizers
- Fumigant Canisters
- Household Hazardous Wastes (HHW)
- Methyl-Bromide Cylinders
- Motor Oil
- Paint
- Pesticide Rinsate
- Phostoxins
- Propane or Butane Cylinders
- Radioactive Substances
- Tires

For questions or additional information, contact the Texas Department of Agriculture (TDA) at (512) 463-7622, TDA Lubbock Regional Office at (806) 799-8555, or the Dawson County AgriLife Extension office at (806) 872-3444




CleanEarth



TEXAS DEPARTMENT OF AGRICULTURE  
COMMISSIONER SID MILLER

If you need any of these  
emailed to you, please reach  
out.



**FEBRUARY 22 @ 8:30AM**

## Auxin Training

- Applying Enlist One or Enlist Duo over the top of transgenic 2,4-D tolerant crops?
- Using Engenia, Xtendimax, or Tavium dicamba herbicides?

Annual training is required!

**\$10**  
PER INDIVIDUAL

📍 **Hale County Extension Office**  
225 Broadway, Plainview, Tx 79072

📞 **RSVP: Hale County AgriLife Extension**  
806-291-5267

## GETTING TO KNOW YOUR SOIL

FEBRUARY 15, 2024 | 9 AM - 12 PM CST



This field day will be a general soils and soil health education event with a Q&A session and time in a soil pit. Please RSVP to Jessica Kelton to be counted for lunch.

### SPEAKERS INCLUDE:

**Texas Tech University:**  
Dr. Lindsey Slaughter

**USDA ARS:**  
Dr. Veronica Acosta-Martinez



**TTU Native Rangeland (Erskine)**  
3609 Erskine Street  
Lubbock, TX 79415

**Questions?**  
Jessica Kelton | 334-200-4770  
jkkelton@soilhealthinstitute.org

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# PARAQUAT TRAINING

## HAVE YOU DONE YOUR TRAINING?

### Who?

- Any person who intends to use paraquat must be a certified applicator and is required to take the training. “Use” includes pre-application activities involving mixing and loading the pesticide, applying the pesticide, and other pesticide-related activities, including, but not limited to, transporting or storing opened pesticide containers, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other paraquat-containing materials.

### How often?

- Every 3 years

### Where?

- [npsec.us/paraquat](http://npsec.us/paraquat)

### Then what?

- Keep your certificate for proof of compliance

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# Save the Date



February 1- Applicator Training (Hale Co Extension Office)

February 16- Ag Mastermind (Hale Co Extension Office)

February 21- Applicator Training (Lamb Co Extension Office)

February 28- Olton Ag Conference (Ag Pavillion)

March 4- Castro County TCFF (more info coming soon)

March 8- Applicator Training (Castro Co Extension Office)

April 4- Ag Mastermind (Olton)

April 4- Lamb TCFF (more info coming soon)

April 16- Hale County TCFF (more info coming soon)

**\*\*Stay tuned to social media and newsletters for more events\*\***



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