

Tri-County Crop tour draws interest in irrigation practices, weed control, small grains

COLLEGE STATION – The finer points of crop irrigation drew great interest from farmers in Brazos, Burleson and Robertson counties recently at the Tri-County Crops tour, according to organizers.

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As the historic drought continues in Texas, farmers toured the Texas A&M University field laboratory near College Station where both Texas AgriLife Research and the Texas AgriLife Extension Service continue work on several aspects of crop production, including irrigation studies.

Crop irrigation has been critical throughout 2011 as historic drought conditions persist. (Texas AgriLife Extension Service photo by Blair Fannin)

Dr. Guy Fipps, AgriLife Extension irrigation and water engineer, demonstrated low elevation spray application technology and the quad-spray concept, which uses low energy precision application. The advantages of the system, according to Fipps, are less water loss, less energy from the power source and each plant receives frequent irrigation.

“The irrigation head is stationed at a low elevation with both LESA and LEPA,” Fipps told producers. “LEPA has the added benefit of dropping water directly into the furrow. This drops water in every other row and is as efficient as drip irrigation.”

On average, switching to either low elevation spray application technology or low energy precision application will increase irrigation efficiency by 25 percent and will cost approximately \$2,000-\$3,000 to convert a quarter pivot system, Fipps said.

The technology received favorable reviews from Al Nelson, farm superintendent for AgriLife Research and AgriLife Extension, who said they will be converting more of the farm’s irrigation systems to the quad tip.

Fipps recommended two publications, the Center Pivot Irrigation and the Center Pivot Workbook, available at the online AgriLife Bookstore

(<https://agrilifebookstore.org/>) for background.

Another online source is the TexasET website, <http://texaset.tamu.edu>, which helps producers determine irrigation water needs for plants and crops.

Dr. Rob Duncan, AgriLife Extension small grains specialist, discussed disappointing wheat yields this year statewide due to the Texas drought.

“The average yield this year was about 20 bushels per acre due to the historic dry conditions,” he said. “This is going to have some lasting implications going forward into the next growing season with regards to fertility, seed supply and quality. All of this has been affected due to drought.”

Dr. Guy Fipps, Texas AgriLife Extension Service irrigation and water engineer, discusses irrigation



practices at the recent Tri-County Crop tour. (Texas AgriLife Extension Service photo by Blair Fannin)

Duncan recommended that producers use strategies such as reduced tillage, proper variety selection, adequate fertility programs and irrigation management to be better prepared for the next crop season. He said resource materials can also be found at <http://varietytesting.tamu.edu>.

He also discussed some wheat varieties that have performed well over the past three years: TAM 304, 70 bushels per acre; Greer, 61 bushels per acre; TAM 203, 61 bushels per acre; Duster, 60 bushels per acre; Fannin, 60 bushels per acre; TAM 401, 60 bushels per acre; and Jackpot, 59 bushels per acre.

A castor weed control study was also part of the crop tour. Duncan showed producers a volunteer castor study and weed management within a castor crop.

“We are mainly looking at it as a study on how to manage volunteer castor should we produce this oilseed as a crop,” he said. “Anyone who plans to plant this crop must have a solid crop management system to ensure that no castor seed will get into following crops due to the toxin or ricin content in castor seed. We are wanting to see how this could be managed in a case where you might have volunteer castor as part of a bioenergy crop or in a sorghum-type production system.”

Dr. Rob Duncan, Texas AgriLife Extension Service small grains specialist, discusses a castor weed control study. (Texas AgriLife Extension Service photo by Blair Fannin)

Dr. Travis Miller, AgriLife Extension program leader and associate department head for the department of soil and crop sciences at Texas A&M, said during a period of 1938-1972, Texas averaged about 70,000 acres of castor in production.

Castor is part of a weed control study in wheat grown at the Texas AgriLife Extension Service/Texas AgriLife Research field trials near College Station. (Texas AgriLife Extension Service photo by Blair Fannin)

“Prices got low and the crop disappeared,” Miller said.

However, the oil that comes from castor is used in many products and the overseas market is where most of the oil is imported. The current market price for castor oil is approximately \$2 per pound and supplies are limited.

“This price is much higher than normal and reflects inflated prices in many commodities,” Miller said.

“The income potential is there and with sufficient water and good management, a farmer in the Texas High Plains region could produce around 5,000



pounds (per acre), with an oil content of about 50 percent,” he said. “This could be an additional revenue stream for Texas farmers, but we still have a lot of things that need to be worked out with regards to best management practices.”

The Tri-County Field Crop Tour is an annual event providing updates on the latest in crop production practices.

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