

Eco-Drip puts down roots

By J.T. SMITH

FROM its meager start in the melon patch where Hubert and Annette Frerich tried drip irrigation at Garden City, Texas, the Eco-Drip Subsurface Drip Irrigation business expanded into several states and put down roots for cotton.

"Probably 95% of our customers in Texas are cotton people," says Eco-Drip President Brian Frerich.

In addition, there's a corn clientele in the Texas Panhandle, along with alfalfa and melon producers.

Eco-Drip also is growing in adoption by cotton growers in Oklahoma in the Altus cotton growing region.

In western Nebraska, subsurface drip irrigation is being used on all sorts of crop rotations — everything from wheat and dry beans to beets.

Time to show its muscle

If ever there was a year for drip to prove itself in Texas, it was 2011, with its record drought and heat.

"The fact you don't have any evaporation losses was huge in 2011 with the winds and heat," says Craig Hoelscher, Eco-Drip branch manager, who is based at Levelland-Lubbock. "Drip irrigation was the salvation this past season for those that made cotton."

Typically, the drip tape is buried from 12 to 14 inches deep to average about 13 inches.

"But I think the trend with drip tape now is every row instead of every other row," says Brian.

"It took awhile to get over the idea of drip being too expensive," adds his father, Hubert, a consultant and Texas-licensed irrigator.

Brian says using GPS with RTK for drip has become an extremely important tool. "It is very common now," he notes. "You can plant right on top of the drip line; it just puts your cotton closer to the water."

"The first thing we do is GPS-map a field," says Hoelscher. "We sell a design and system package. We have the package

Key Points

- Cotton has become one of the big users of drip irrigation.
- Eco-Drip irrigation is linking itself more with agronomics.
- Drip fits nicely with no-till, but the system needs proper installation.

ready to go, where producers can either install it themselves, or we can have a contractor do it. But we hold the responsibility at the end of the day."

Eco-Drip typically has 10 to 15 contractors working at any one time, or about a dozen consistently.

Darren Hillger, Eco-Drip design consultant, stays busy seeing those opting for drip get what fits their farming operation. For Hillger, that means allowing design flexibility for any shaped field.

Drip has the advantage of avoiding power poles, railroad tracks, trees, creeks and other obstacles.

Agronomics' big part

Eco-Drip has become far more than just putting water down efficiently and economically to where a plant like cotton can utilize it.

Agronomics has become a much greater part of their business, helping a crop also get its fertility needs.

"We're now moving into remote sensing and monitoring, moving the fertilizer into the drip system," Hoelscher says.

For example, phosphorus stays where it is placed, so drip irrigation lets cotton or other crops make use of the P. It's also important with nitrogen and potassium.

"But it's not just N-P-K," Hubert says, "but trace elements and minerals, too."

"Cotton is a living plant," he emphasizes. "It needs good nutrition just like we do."

It's attention to details, and timing is everything.

"I think petiole testing is beneficial," Hubert says. "It tells you what the plant needs. You're not putting your stuff [fertilizer] down earlier than needed, where you can lose a lot of it."

Considering fertilizer costs, this can save big dollars.

ECO-DRIP TEAM:

Some of the nucleus of the Eco-Drip team includes Pat Marse (left), Lubbock; Darren Hillger, Garden City; Brian Frerich, president, Garden City; and Craig Hoelscher, Levelland-Lubbock and Hastings, Neb.



WHERE CREDIT IS DUE: Hubert Frerich credits Annette, his wife of 55 years, for helping start and grow the Eco-Drip irrigation business from its base at the Garden City, Texas, family farm to multistate success: "She stuck with me on the drip business — all the way."

Pat Marse, who heads the Lubbock office for Eco-Drip Crop Management Technologies, works in agronomic services, including crop monitoring and system marketing.

"We're looking at what maximizes economic yield that will go through the drip line," Marse says.

"You don't want to throw just anything into drip," Hubert says. "You could have a disaster if you do that."

Helping growers in agronomic services has kept Marse on the highways as if he were a truck driver. He got a new pickup truck in July — the middle of the cotton growing season. By the end of the season in the fall, he had put 28,000 miles on his vehicle.

Fits with no-till

Hubert, with his many years of experience, says subsurface drip irrigation fits no-till or reduced-till farming like a glove.

"This means less trips over the field," he notes.

And field operations that do need to be done can be performed while drip is supplying water uninterrupted underground.

He compares drip to what you see after a big snow and freeze, followed by a slow melting of moisture into the soil. Drip helps to not compact the soil — letting

the moisture get into the ground steadily and evenly.

With the good soil porosity and structure, planting or plowing is easier.

"They used to think you had to plow 12 inches deep," Hubert says. "Now, with no-till, some are plowing 3 or 4 inches deep."

Beyond that cost savings and mellowing of the soil, drip also helps in weed control, since cotton or other crops get the water underground at their roots, denying the weeds access.

"Since you're not wetting the top of the ground, you are not wetting the weed seeds for germination," Hubert says.

All of this means it's a good idea to consult with experienced people when considering installing your subsurface drip irrigation system.

"The drip system has to be right the first time — below the ground — being a permanent system," Hoelscher says.

He credits Hubert for being a pioneer in recognizing early on how changing water tables would affect the proper operation of a drip system.

But Hubert cringes at being called an expert. He says he learns something new just about every day.

"I turned 79 in November," Hubert says. "But I hope I still have a few more years, just so I can keep learning."

