

CONSERVATION Showcase

Deming Producer Sold On Subsurface Drip Irrigation

Kevin Penn may not be a driven man, but you can bet he is driven to installation of subsurface drip irrigation systems where he is using 30 to 40 percent less water on his crops.

Penn is a second-generation farmer in the Deming area where he grows chile, cotton, watermelon, corn silage, small grains, and onions. He started experimenting with drip irrigation systems in 1996, and was so impressed he is currently installing such a system on the last parcel of his property that does not have one.

"The advantages subsurface drip irrigation farmers look for are flexibility in irrigating and increased yields and quality," said Elmer Veeder, Deming district conservationist.

Flexibility in the irrigation process may be realized because it generally takes less time to irrigate and such systems allow for better targeting of water. Because subsurface drip irrigation systems provide for greater control of the water; in many crops, chile for example, the plants are less stressed during the growing season. This makes for a better quality crop and stronger defenses against such maladies as fungi and viruses.

"We have had examples of fields that yield 12 tons per acre, go to 20 tons and more per acre with the introduction of subsurface drip irrigation," said Veeder.

Another advantage of subsurface irrigation drip is the amount of fertilizers and water applied chemicals used. Because they are applied through the subsurface drip irrigation system they go right to the roots of the plants and, thus, can be applied in smaller quantities.

Penn is using subsurface drip irrigation for all his crops, including the first seed bed irrigation. While some producers will flood for their first irrigation, Penn says he is not having a problem getting his crops up.



Penn plans to start some alfalfa to determine how that might work for him, and will continue to monitor the weeds in his watermelons. He is noticing weeds in his watermelon but has been told this will decrease as the system is further used. He does know he has to make fewer passes with the tractor.

The drawback to subsurface drip irrigation systems is the high investment, but their popularity continues to grow and benefit producers like Kevin Penn.

For more information about subsurface drip irrigation systems and other irrigation water conservation measures, contact the local NRCS Field Office nearest you.