

Tuesday 12/21/10

U-TROUGH

There are many ways to apply fertilizer on corn at planting. Many growers apply a pop-up in furrow at planting. Some inject a band of nutrients below and beside the v-trench at planting. And strip-tillers places a concentrated band of nutrients below the v-trench zone in a separate pass prior to planting.

But how about surrounding the v-trench with nutrients while in turn making the nutrients more available?

Jeff Littrell with Fhr Farms in Rochester, Minn. has coined the phrase u-trough and wants to trademark it. He explained that they put a band of nutrients on both sides of the seed furrow plus a pop-up in furrow. "With diffusions we have nutrients on three sides of the root zone and greater P and K availability. We are seeing an increase in available P and K in the root zone and growers don't have to put on larger amounts of P and K just to build soil test levels." While they have seen increases in P and K levels, via the Morgan test Littrell said he doesn't yet understand the chemistry but can see the results."

Littrell and his coworkers have built planters that allow them to apply three fertilizer products at planting, with one being dry. He said "Growers have to build their own planter and we can show them how to do it." The fertilizer application system includes two fertilizer coulters putting down two 3 x 3 band of nutrients, one on each side of the row plus pop-up in the row.

Through one coulters they blow blended and pelletized 17-8-5-5S-7Ca built from ammonium nitrate, ammonium sulfate, phosphoric acid, potassium sulfate, calcium, carbon (sugars and humates) and soft phosphate rock. Littrell explains that the dry fertilizer is dribbled into the slot and the band extends 3 inches down, from the surface to bottom. They recommend applying about 150 pounds per acre at planting.

Through the second coulters they inject liquid 25-0-0-2S-2Ca built from 28% UAN, calcium nitrate, thiosul, water, organic carbon (sugar and humic acids) and microbes. They recommend applying 25 gallons per acre

Thirdly they apply a pop-up in furrow. The pop-up includes 4 gallons of 8-19-3 (100 percent orthophosphate), 2 gallons of purified water (made using a Pursanova ceramic pack) and a microbial pack with some humic acid and carbon (sugar).

Littrell said they are going to cover the u-trough concept, design and results in detail at the Ramada Inn in Rochester MN in early January (Jan 4 to 6). Go to [http://fhrfarms1.com/...](http://fhrfarms1.com/) to learn more.

Posted at 12:55PM CST 12/21/10 by Dan Davidson

Comments (2)

Hey Dan what company is doing this?...

Posted by Aaron R. Ritchie at 2:31PM CST 12/21/10

Aaron - chuckle chuckle

Posted by Daniel Davidson at 4:19PM CST 12/21/10