

Today's split N

This grower is intent on using the Y-Drop unit — and making it better

Yesterday's hopes for a one-pass application that would solve all your problems with a single pass across the field are rapidly fading away, especially on farms that are driving higher yields. With herbicide resistance in more weed species, the days of the single-pass, single-formulation weed management system have practically vanished. And the same thing is beginning to happen, however slowly, with nitrogen.

Last year saw the introduction of the Y-Drop application unit in Ontario, and Good Crop Services, near New Hamburg, Ont., and The Farm Office, based in Tavistock were two of the dealers involved.

Buyers included corn grower Mike Strang, who farms 1,500 acres just north of Exeter, Ont. In the past few years, Strang has invested in a strip till unit called a SoilWarrior, plus an RTK GPS unit for auto steer.

Now, Strang is learning more about how to use the Y-Drop while wearing two hats — one as a farmer, and the other as a service provider.

The Y-Drop is arriving at the same time that interest is growing around split nitrogen applications. There's plenty of chatter at farm shows, but according to Strang, there's been little happening in the field, partly because of the lack of suitable hardware.

Now with the Y-Drop applying nitrogen to the base of the corn plants — and especially when the Y-Drop is used in conjunction with the available GreenSeeker technology — that hurdle may be being cleared, and a trend may be taking shape.

"The idea of late-season nitrogen goes hand in hand with GreenSeeker technology very nicely because the GreenSeeker works much better when you have more biomass there," says Strang. "So if you can leave the corn to grow later, it gets nice and big and tall, and you can get a better reading for late-season nitrogen."

For Strang, one of the drivers for using a Y-Drop is his goal, wherever possible, of getting multiple uses from each piece of machinery. So he has a sprayer, which he says consists of a tank, a pump and a rate control. And from his perspective, a side-dress applicator is mainly a tank, a pump and a rate controller, so he set about attaching Y-Drop booms to his sprayer to see how best to get his nitrogen on the ground.

"This late-season nitrogen is based on a lot of things, but one of them for me is planting efficiency," says Strang, who strip tills his corn. "We've taken fertilizer off the planter other than a little bit of liquid starter, and then we put a dry starter on with the strip-till



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machine, and come back and put the rest of the nitrogen on with the Y-Drop."

Strang comes from a background of side dressing anhydrous. For as long as he can remember, his dad and his uncle always side dressed. But once he started farming, he found it caused too much soil disturbance in a minimum-till system, and it was difficult to vary or cut rates in the field.

"The other thing that happened in dry years is that we're putting this band of nitrogen right between the corn rows. We're 15 inches away from the corn, and we've seen in dry years where we get the nitrogen in but we don't get any rain and the nitrogen doesn't move," says Strang. "And we'd see nitrogen deficiency in corn until we got a shot of rain. The idea of using the Y-Drop and putting the nitrogen really close to the base of the stems seemed like a better approach.

"We'd love to be able to throw the nitrogen on and be done with it," says Strang. "But if you were to take the adviser's hat off and not have to worry about the logistics and just look at pure agronomics, then late-season side dressing has to be the way to go."

There are days when he says he's tempted by the allure of doing other things in the middle of summer rather than splitting his nitrogen applications. But he knows the advantages of doing things the way they should be done versus the easy way.

To say it's been an easy process to adapt the Y-Drop isn't quite true. The applicator works very well on flat ground, but Strang found on his rolling hills there was a little too much bounce in the arm. His sprayer hydraulics also strained to lift the unit.

Fortunately, Mike's brother Geoff, an engineer by trade, has returned to the farm, adding metal tubing at the end of the hoses to weigh them down and prevent them from swaying or swinging in the rows. Geoff also added some rubber hosing, as a sleeve at the top of the unit where it connects to the boom, again, to limit any bouncing of the unit. And together, they've added a second hydraulic unit, to ensure there's enough lift.

"We are changing the things we do," Strang says. "It's first of all an economic thing, but it's also an environmental thing, too. I don't want to be putting nitrogen out there that's going to end up in the waterways. So if we can find a way to increase the efficiency of the plant using it, then that's where the variable rate comes in and where spoon feeding comes in and late season. It's all about increasing the efficiency." **CG**