Twin Row Wheat Takes Off For Kansas Farmer

By Bill Spiegel

Kansas farmer Charles Dugan believes using a planter rather than a grain drill to sow winter wheat will pay off in improved seed placement, thus boosting wheat yields. That he uses just one machine to do all his planting is a nice bonus.

Dugan, who farms northwest of Riley, will sow his second crop of wheat in 30-in. "twin rows" using a Great Plains Yield Pro planter this fall. His first crop, harvested in July, averaged 58 bu. per acre—very good considering they were planted into soybean stubble last fall.

"Fifteen years ago, we used to raise 60-plus bushel per acre wheat, but our yields seem to be declining," he explains. "Now, about 55 bu. per acre is the best most area farmers can do."

Dugan's crop rotation includes soybeans and wheat. Soybean yields are improving consistently. However, rather than accept poorer wheat yields, he studied ways to improve seeding operations and get more

consistent stands. Seed placement is more precise, planters are built tough to penetrate hard ground and lots of residue, and using the same planter for both crops are a few of the benefits. Few farmers use a planter for wheat, but Dugan talked to researchers and equipment companies to learn more. Many of them advised against it because of increased weed growth in wider rows.

But Dugan has his own self-propelled sprayer, so if weeds do become an issue—a good bet most years—he can run the sprayer through the wider rows.

The planter, he reasons, does a more effective job than a grain drill of cutting through residue and placing the seed in the furrow.

"We had used a no-till drill, but it didn't cover the seed as well as I would have liked. I had been disappointed using it to plant wheat. I don't care what kind of no-till drill it is, it will not penetrate green soybean stubble,"



he says.

Dugan planted 98 lbs. of seed per acre, the same that would be planted with a grain drill.

The planter, a Great Plains 1225 Yield Pro that he bought used, fits nicely in his wheat/ soybean crop rotation. In the twin row set up, two rows are just 6 in. apart; the next row is 24 in. away.

This planter has a single seed hopper and liquid fertilizer system. Its row units are staggered, improving the drill's ability to cope with crop residue. Individual rows can Wheat seeded with a twin-row planter has 2 rows that are 7-in. apart; with 24-in. of spacing between the next set of twin rows.

be locked up, in case he wants to plant in conventional 30-in. rows.

With the first year of planting twin rows under his belt, Dugan is considering buying a newer model of twin row planter. He's convinced that this system would work well for other farmers, particularly those who typically plant wheat in 10 or 12-in. rows. There's no going back to his grain drill.

"I'm pleased enough that I don't own a grain drill anymore," he says. "I've already sold it."

Twin Rows Made Simple With Conversion Kit

Illinois farmer Mark Burrow wanted to grow twin-row corn and soybeans, but the cost of buying a special twin-row planter was difficult to justify. After a few months of winter work in his farm shop in 2010, he came up with a more economical solution.

Burrow's conversion kit turned his Deere 1790 12/24-row interplant machine into a 30-in. twin-row planter.

"I didn't have to make any modifications to the planter frame or the row units," Burrow says. "Basically I made adapter brackets that moved the trailing interplant units from 15 in. on center to just a 7.5 in. offset from the main rows." Even with the modification the rear row units can be raised so the machine can plant 30-in. rows. He planted both corn and soybeans the first year and was very satisfied with the results.

Burrow increased his corn population by 15 to 20 percent and reduced his beans by about 15 percent from what he planted previously. In the process he achieved better plant spacing. Instead of 5 to 6-in. corn spacing in 30-in. rows, the plants were 10 to 12 in. apart in the twin rows. He harvested the crop with his 608C Deere corn head equipped with stalk stompers. Even with the 7.5-in. distance between the twin rows the corn harvested well at 5 to 5.5 mph field speed.

In addition to the adapter brackets for his conversion, Burrow's setup required a longer flex drive cable for each rear row, wiring harness extensions, a warning light extension bracket and a different vac plate and hose fitting. He uses a 14-tooth sprocket on the ground drive planter to deliver the desired population.

Burrow made a few modifications on his machine after the first season, then he traded 1790 planters and put the kit on his new 16/32 planter. Word spread about his setup and in the past two years he has sold 10 kits around Illinois and other states. About half of those he's installed himself and the others were done by the farmers purchasing them. Most are going on 16/32 row machines, with a few slated for 12/24 row models.

"Making the conversion on a 16/32 planter takes about 24 man hours," Burrow says. "If there's 3 or 4 people doing the work, a planter can easily be set up in one day." Burrow has orders from farmers in Iowa, Kansas, Nebraska and Wisconsin for 2014 delivery.

The 12-row kit sells for \$9,000 and the 16-row model is \$10,000. All materials are shipped in a single crate, including a special 3-position crossbar that centers the planter hitch for 30-in., twin row or 15-in. row spacings. "Using the 3P Crossbar lets the operator avoid the awkward and difficult job of jacking up the planter hitch, removing the pivot bolt and re-positioning the crossbar," says Burrow. "With my crossbar you simply place the planter on its jack stands, then hook up the tractor's quick hitch connectors in the new location. Decals on the crossbar identify each row spacing.

"With more emphasis on higher population to get higher yields, I think twin row spacing is a good route to go," says Burrow. "Plants have more room to expand their root systems,



Mark Burrow's conversion kit turned his Deere 1790 12/24-row interplant machine into a 30-in. twin-row planter. He has also used the kit on his new 16/32 planter.

take up nutrients placed in the row and get more sunlight. On our farm we're getting a 5 to 10 bushel yield bump on twin row corn and a 4 bushel bump on soybeans. In a good year it might be more, but we definitely haven't taken a loss yet in poor conditions. Fields look very good in 2013."

Contact: FARM SHOW Followup, Burrow Farms, 11221 N. 100 St., Altamont, Ill. 62411 (ph 618 483-5598; cell 618 553-7063; www.ezoffset. com).



Kits are available for both 12 and 16-row planters. All materials are shipped in a single crate.

Multi-Purpose Strip Till Machine

A new strip tillage machine from MK Martin in Canada is designed to work in conventional tillage, minimum tillage and no tillage situations. The company says its new Strip Cat, available in a 3-pt. hitch or pull-type configuration, can also be set up for either dry or liquid fertilizer application.

The Strip Cat has 5 distinct features that set it apart from other machines on the market. At the front of the row unit, a large 20-in. notched coulter is paired with a gauge wheel to slice residue and create a V-shaped slot for liquid or dry fertilizer. Behind the coulter are two trash wheels that remove trash from the center of the row, creating a clean seedbed.

The third tool on the row unit is a mole knife with hydraulic down pressure and automatic reset if the knife encounters a rock or other obstruction in the row. Notched coulters on both sides of the mole knife are springmounted with adjustable depth control to create a soil berm from 1 to 3 in. high. At the rear of the row unit, two fingered pack wheels with adjustable down force gently press the soil berm and create an ideal seedbed for planting.

The Strip Cat is available in 4, 6, 8, 12 and 16-row sizes with standard 30-in. row spacing. Optional 22-in. row spacing is also available. Lubrication maintenance



Strip Cat is available in 3-pt. mounted or pull-type models and can be set up for either dry or liquid fertilizer application.

is minimal with the Strip Cat because all flexible joints have dry lube bushings. Contact: FARM SHOW Followup, Strip

Cat, MK Martin Enterprises, Inc., 3950 Steffler Rd., Elmira, Ont., Canada N3B 2Z3 (ph 519 664-2752; www.mkmartin.ca).