

Planter program

JOHN Deere built 50 of the twin-row 20, narrow-row planters for Stine Seed Co. this year. Customers are using some planters, and others are being used by Stine Seed reps to plant demonstration and test plots across the seed firm's marketing area. Their goal is to expose more farmers to Stine's high-population (HP) corn hybrids and see the crop managed properly with good plant spacing.

Stine Seed also unveiled a subsidized planter purchase program to expand commercial adoption of its high-population system in 2015. The company offered Deere twin-row 20-inch planters at a 67% discount over list price with qualifying seed purchases. In this program, growers put 10% down the first year, plus make a two-year seed purchase commitment. After the first year, they can return the planter or pay an additional 23% of the list price to buy it outright. Seed purchase requirements depend on planter size. For example, a 40-foot planter equals a 1,200-bag commitment over two years.

The customer planter program was launched for the 2015 season and aimed squarely at early adopters of the "twin-row 20" system. "We haven't decided whether we will offer this same program next year, or offer a modified version or what. But we will continue to push for grower adoption of twin 20s," says David Thompson, national marketing director for Stine Seed.

also side benefits with narrow-row corn. Narrow rows shade out weeds and limit moisture loss from soil. "Over a five-year average, with our genetics planted at higher populations, you are going to be ahead," says Myron. "Normally, in the Midwest lack of water is the limiting factor. That's where our system excels."

Dealing with weeds

A common question farmers ask about narrow-row corn is how do you spray for weeds without running over corn plants? Fred Eby, longtime farm manager for Stine Seed, says that's no problem with the twin-row 20 system. The planters are set up on tramlines for in-season application flexibility by blocking the row units adjacent to the tractor tires. So there are two wider spaces left per planter pass for sprayers to run.

Harvesting the paired rows with a 20-inch corn head also worked well last fall. "We learned you can harvest twin-20 rows diagonally with a 20-inch head and lose practically no grain," says Eby.

Twin rows aren't a new idea. Some farmers have been planting and harvesting corn in twin rows for 10 years or more, but on 30-inch row spacing so they can harvest with a standard 30-inch corn head. "So, we know twin rows can be used," says Eby. "We're just doing it on a 20-inch system with higher populations."

In 2014, using the specially designed planters, Stine customers tested the HP Twin 20-inch row system in Iowa, Missouri and Indiana. It was the biggest test yet of its kind for Stine, the only U.S. seed company to promote the planting system as a breakthrough to higher yields. In 2015 more farmers are trying twin-row 20s.

Cereal rye goes to seed

By NICK OHDE

IT'S been awhile since small grains have been grown on a large scale in Iowa. A generation ago, they were a staple on nearly every Iowa farm, but today much of the information about how to plant, manage and harvest small-grain crops is new to many farmers. With interest in cover crops on the rise, growing small grains for seed is an area of curiosity.

Mark Peterson and Tim Sieren are two Iowa farmers who have been relearning the art of small-grain production. They farm rolling land in different parts of the state, and holding soil in place has always been an imperative for both of them.

"Cover crops will become more and more popular. We've seen about a three-fold increase in cover crop acreage in our part of the state," says Sieren, who farms with wife Ethel near Keota in southeast Iowa. "Probably about 75% of our county is no-till, and this is a logical progression."

A few years ago Sieren was in a situation where he wanted to plant more acres of cover crops, but seed was unavailable. He thinks growing your own seed is one way to eliminate that concern.

Planting considerations

For farmers who have grown cover crops in the past, planting cereal rye isn't new. However, growing rye for seed brings new considerations. The first two years Peterson grew rye for seed on his farm in southwest Iowa, he aerially seeded it. That worked OK, but he thinks he can improve yields by drilling the rye.

"We drilled the rye seed into soybean ground after harvest last fall to try to get a more even stand for harvest of the rye grain crop this summer," says Peterson.

He'll have to wait until harvest to know for sure, but the rye stand looks more uniform this spring. Just as with planting rye as a cover crop, it's important to "chase the combine" — get the rye planted as soon as possible after soybean harvest.

Sieren agrees: "If you want a good stand with good results, you have to put a little time and effort into it, just like you would your corn or your beans. You can't just go scatter the rye seed and expect it to grow." He thinks a drill is the best way to put it in, if you have the time and patience.

While rye could be grown for seed after corn or soybeans, Peterson thinks it fits best into the rotation after soybeans. "You can get out in the field a little earlier to drill the rye. Plus, after harvest of the rye seed crop, it gives you the chance to plant a longer late-summer cover crop mix to fix nitrogen and build soil health ahead of the next year's corn crop."

Harvest, cleaning and storage

Sieren says when it comes to harvest, cereal rye is similar to oats, wheat and other small grains. It's ready to harvest when stems have turned brown and seed heads start to droop over, usually around the first or second week in July. "You can take a hand sample and bite on the seed," he says. "If it's crunchy, it's ready to harvest. If it's still soft and chewy, it still needs a week or so, similar to soybeans."

He says the ideal moisture is 13% for storage. "It can be harvested a little wetter



SEED SECURITY: Raising cereal rye ensures plenty of seed for cover cropping the soil on the rolling slopes of Green Iron Farms in southeast Iowa. "The nice thing about having your own seed is you don't have to skimp on planting," says Tim Sieren.

than that, but must be mechanically dried to 13% or less, or it will heat up and hurt germination. Drying in the field is not usually a problem in Iowa in July when the temperature is usually 85 to 90 degrees F."

Growing cereal rye doesn't take a lot of expensive equipment. "That's one of the advantages of growing rye," says Sieren. "You don't have to have a new, fancy combine." For a combine head, he had been using a John Deere 625F, a 25-foot flex head commonly used for soybeans. One disadvantage, however, is this head has more space between the cutter bar and cross-auger. Because small grains don't feed in as nicely as soybeans, they can pile up on the cutter bar, forming clumps that cause plugging issues as they feed in.

Last summer, Sieren bought a 30-year-old John Deere 218 with a rigid head. While the proximity of the cutter bar to the auger fed the rye more smoothly, he says it can make picking up rye that's lodged difficult because the height can't be adjusted.

Sieren solved this problem by installing an after-market header control that can move from 3 to 15 inches off the ground.

Peterson says making a few adjustments to the combine settings can make harvesting cereal rye more efficient. "I run the rotor a lot faster, tighten the concave tolerance and shut the sieves way down for the smaller seed size."

He says for the last two years, the seed had been fairly clean and he could sell most of it straight off the field, which meant he didn't have to worry about cleaning or storing it. The rye seed was also clean enough that he didn't have any problems drilling the seed in the fall.

Sieren thinks, in his operation, cleaning the seed is essential for planting with a drill, especially when selling. "Buyers want it cleaned," he says. If the seed contains seed heads or beards, they can wedge in the seed tubes and eventually plug them.

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The real benefit of cereal rye

BECAUSE rye is harvested for grain in mid-July, farmers growing it for that purpose have an opportunity to plant cover crops earlier in the summer and to take advantage of the full suite of benefits cover crops offer.

Mark Peterson, who owns Bent Gate Farm near Stanton with wife Melanie, worked with Nebraska-based Green Cover Seed, which helped him design a "12-way mix" of cover crop species tailored to achieve multiple goals. Some plants were included to hold soil, some to scavenge nutrients, some to feed the soil microbial life and others to fix nitrogen. Getting a chance to grow this cover crop mix was a big reason Peterson grew cereal rye for seed. "Having your own cover crop seed to use and sell is great," he says. "But the chance to add diversity to your field is priceless. It's essential to the future of your farm."

Raising cereal rye presents the opportunity to improve overworked fields by adding some much-needed organic matter. "We chose this field because it'd been yielding low in recent years, and growing rye to harvest as grain gave us a chance to plant a multispecies cover crop mix to improve the soil," says Peterson. The mix included sorghum sudangrass, buckwheat, cowpeas, mung beans, forage peas, oilseed radish and oats, among others. His 12-species cover crop mix was successful. By the end of the growing season, it was 6 to 7 feet tall. Using strictly no-till, Peterson says he worried if the crop residue would all break down in time for corn planting. "By fall, I got to thinking, how am I going to no-till into this?"

Peterson turned his problem into an opportunity by finding a neighbor with cattle who grazed that ground over winter. "I made a little unexpected income, was able to help my neighbor get some quality forage at a time of year when there wasn't much available and got a few extra nutrients from the cattle manure on some land that needed it badly. It was a win-win-win for us," he says.

Green Cover Seed in Nebraska and Albert Lea Seed House in Minnesota are two popular dealers of cover crop seeds. You can find other seed dealers, as well as custom planters and sprayers, in Practical Farmers of Iowa's Cover Crop Business Directory at practicalfarmers.org/member-priorities/cover-crops.