

# Push corn yields up using narrow rows

By RICHARD DAVIS

**T**OP producers vying for corn championship yields share a few practices in common. It would pay corn producers to consider some of these practices to see if they would work for them on their farms.

First, they pick the right hybrid for the weather, says Ron Heiniger, North Carolina State University professor and cropping systems specialist. Heiniger considers another practice most top producers have in common, however, to be the best one for increasing yields among those who have the equipment capability — narrow rows.

"Narrow rows are the common thread that stands out as we look at the difference in practices between the average grower and what I call the top-10 growers," Heiniger says. "And the difference is striking."

## Competitors focus on varieties

Each year, the top corn contest competitors will choose to plant medium- or late-maturing types of hybrids, Heiniger notes. This year, it was primarily medium-maturing varieties which fit weather conditions best.

At first glance, that may look like a bit of luck on the winners part, but Heiniger points out most of them hedged their bets, planting some medium-category hybrids and some late-category hybrid corn.

For the average grower, this strategy should be looked at as a risk-management tool. Growers can try to guess what the weather will be and bank on it with their variety decision, or they can plant more than one class of variety with the knowledge that no matter which weather prevails, they'll have the bases covered.

"Planting two or three different hybrids is something we recommend all growers do because you never know how the weather is going to treat you," Heiniger says. "Instead of putting all your eggs in, say, a late hybrid or a medium hybrid or early, you try to spread your risks a little. That is always a good plan."

## Pulling out the stops

But the use of narrow rows is the common thread that really stands out as the difference between the average grower and what Heiniger calls the top-10 growers.

## Key Points

- Corn contest winners share some similar practices.
- Top yielders hedge their bets with both medium- and late-maturing corn hybrids.
- Narrow rows enhance yields and allow higher seeding rates.

Heiniger notes the average row width was about 30 to 31 inches among all the contest entrants this year. The top winner grew his corn in 24-inch rows.

But it is the additional practices that go with narrow-row corn production that can really make a difference.

"First of all, you can increase your seeding rate," says Heiniger. "Narrow row allows you to take advantage of the returns from higher populations. At 36-inch rows, you are really restricted in terms of seed population because you can't plant corn any closer than 4 inches apart — if you do it is a sure way to get barren stalk. With a 36-inch row, you quickly run out of top end on the population when you begin calculating the mathematics."

## Which variety for narrow row?

A particular variety or variety type does not leap forward as better for narrow rows per se versus wide rows, Heiniger notes.

"But we are seeing data now that some varieties do better at higher populations than others," he adds, "and some of that is beginning to find its way into these top-yield contest entries. The variety that yielded 335 bushels this past year was Pioneer B3496, and it is one we've tested that has shown a good response to increasing populations on up to 38,000 to 40,000 seeds per acre. So they [the top-yield growers] are identifying some of these hybrids that allow them to plant higher populations. And that has been a positive in increasing their yields year to year."

## Time: the stuff yields are made of

Growers who go to narrow or ultranarrow rows will need to change their fertility and layby herbicide programs.

"With narrow rows, you are going to get quicker canopy and that is going to restrict the time you have to apply a layby material, whether it is a fertilizer or herbicide," Heiniger says. "Most of the guys who go into ultranarrow row — what I call 20- to 24-inch rows



**NARROW-ROW OPTIONS:** Going to narrow- or ultranarrow-row corn gives growers options for associated practices they wouldn't otherwise have, says North Carolina State University cropping systems specialist Ron Heiniger. Narrow-row lets them push populations higher than wide-row systems, for example, and that can enhance yields.

— really need to put most of their fertilizer up front. You still have a little window — about 14 days after emergence — that you can get fertilizer or herbicide in there, but you have to be really timely to do that."

Time is precious, particularly for farmers growing a lot of cotton or soybeans. Those choosing to go to ultranarrow-row corn need to rethink how they are going to use a herbicide program.

"They need to put most of their fertil-

izer up front and then come in quickly after that crop emerges with a layby herbicide," Heiniger says.

Farmers with billbugs, wireworms or cutworms will need a seed insecticide treatment. Several years ago, narrow-row growers found out it was very difficult to use Counter at the recommended rate because they had to put on such a high rate per acre to match the narrow row.

Now, fortunately, they have the option to use seed treatments instead.

# Equipment cost is downside of narrow-row corn

**T**HERE are a lot of upsides to narrow-row corn. But there is a downside, too: the expense of the equipment. Figure on adding more units to your planter and changing your corn heads so you can harvest narrow rows. Oftentimes growers have to change tractor tires and spacings. When you calculate it out, it typically comes out to about a \$15,000 to \$20,000 investment.

"When you start to amortize that out over 10 years, which is the life

expectancy of most of this field equipment, you begin to realize you have to grow enough acres of corn for it to pay," says Ron Heiniger, North Carolina State University cropping systems specialist.

Heiniger notes most farmers will realize about a 10% increase in yield by going to narrower rows.

"If a producer is growing about 200 acres [and attains that enhancement in yield], it will typically take him about three years for the equipment to pay back the investment," Heiniger says.

But corn prices are soaring right now. If you believe the prices will stay up for some time, you might want to look at this equipment. It could be a winning strategy to capitalize on that corn while the price is high.

"It could make sense because obviously the grower is going to use that equipment for more than a couple of years," Heiniger says. "Within a few years, a grower could have the equipment paid off and be making pure profit."

Of course, there's always a risk in-

involved. The prices could fall, too.

And the equipment has to be a fit for your operation.

"You have to grow enough acres of corn to justify that investment," Heiniger says. "For some of the smaller farmers that has been hard to do. It has been particularly difficult for these guys over the years who were just using corn as a rotation crop. They just weren't growing enough corn to make that a good decision economically."