



TIME OUT! Taking time to ensure your no-till planter is set up and tuned up correctly can boost corn yields by 10%.

Last-minute planter-prep tips

Tough No-till Q&A

By MEECEE BAKER

MASTER Farmer Jim Hershey of Hershey Farms, Elizabethtown, Pa., and Sjoerd Duiker, associate professor at Penn State College of Ag Sciences, provide producer and academic perspectives in this fourth “Tough no-till Q&A” of a five-part series. Visit the PA No-Till Alliance Web site at www.panotill.com for more help. Use the “Ask the Expert” link to receive quick answers to spring-planting problems.

Q: What would be your top five tips for prepping my no-till planter?

Hershey: 1. Replace your double-disk opener blades when there is a quarter-inch or more of wear on any blades. This greatly affects the planting depth of your seed trench.

2. Equip your planter with a good row cleaner. Move all residue away from the planting unit to prevent any trash from hair-pinning in the seed furrow.

3. Check your seed meters for any wear. Make sure there is no dust or talc buildup on the seed disk and monitor sensors.

4. Make sure your depth wheel adjustment is set to put the seed at 2 inches, along with proper down pressure. Always



“A 10% yield reduction is not uncommon due to poor planter setup. That’s a loss you cannot afford.”

SJOERD DUIKER



“Make sure your row cleaners move crop residue far enough away to keep depth wheels from riding over the top of the trash.”

JIM HERSHEY

Key Points

- Worn double-disk openers are an extremely costly mistake.
- Get meters calibrated by a dealer every 300 to 400 acres.
- Double-check planting unit’s alignment and tightness.

recheck when moving to different field environments.

5. Give your corn seedlings a balanced diet. Place a starter fertilizer in the seed furrow with extra micronutrients and an insecticide, especially in a heavy-residue environment where there could be more insect pressure.

Tube ends may wear to the extent that they curl inwards, catching seeds. A hook halfway up often and easily breaks off. Seed tube guards need to be a specific minimum width and fastened correctly, or seed tube damage will likely occur. Replace worn tubes.

3. Avoid uneven depth placement by aligning planter units. They shouldn’t easily lift up or shift sideways. Looking across your planter units from the side, are all at the same height? If not, make adjustments. Common problems include loose bolts or the need for extra bushings. Check alignment of coulters, opener disks and closing wheels. Take a rope and pull it straight from the front coulters to the closing wheels. The firming wheels, seed openers and coulters should all be in line. Closing wheels should not run on top of the seed furrow.

4. As Jim says, double-disk openers must have a specific minimum diameter. Make sure they’re touching for the desired stretch. A “W” slot will ensue instead of the desired “V” if they don’t meet these requirements.

5. Make sure you check planter performance when you start planting and from time to time. Sometimes it helps to have someone with you when you begin planting to help set it up properly.

Baker is a consultant for the Pennsylvania No-till Alliance.

Crop Tech Update

Should you push up corn plant populations?

Teaming up elite genetics with insect-protection traits may help plants better handle stress and tolerate higher plant densities. That’s the bottom-line conclusion from 72 trials conducted on plant populations and row spacings last year across the Corn Belt.

Monsanto’s advanced spacing and row density project compared seed products with YieldGard VT Triple to hybrids featuring no insect-protection traits, explains Marcus Jones, the company’s corn germplasm technology development manager. It looked at planting rates ranging from 23,000 to 43,000 seeds per acre, and plant performance in 20-inch versus 30-inch rows.

Note: All trials were done for grain yield, not silage tonnage. Except for trials in Minnesota and South Dakota, corn planted in 30-inch rows yielded more than 20-inch rows at all plant populations. At every population level, insect-protected hybrids outyielded those without insect protection.

Iowa State data suggests that with current genetic advances, farmers with highly productive fields historically yielding 200 bushels or more per acre should now consider trying populations of at least 32,000 seeds per acre, maybe more, says agronomist Roger Elmore. “Five years ago, 30,000 seeds per acre would have been pushing higher populations,” he notes.

Super-high-yielding environments might call for more than 35,000 seeds per acre, producing a plant population that has to be managed tightly. Note: Seed populations and plant populations aren’t interchangeable terms.

Plant populations have generally been on the rise, even in the eastern Corn Belt. Peter Thomison, Ohio State agronomist, suggests that on highly productive soils consistently yielding 175 bushels or more, “final stands of 30,000 to 33,000 plants per acre or more may be needed to maximize yields.”

Emerson Nafziger, corn agronomist at University of Illinois, adds: “The fact that yields tend to level off and not drop off at plant populations higher than necessary means that it may often be riskier to have too few plants than too many. Populations don’t have to be increased a lot for yields to be higher in good conditions.”