

# Maximize potential value of seed

## Dakota Crop Adviser

By ADAM SPELHAUG

**P**LANTING season is in full swing. So what should you be most concerned with at this time of year? Corn and soybeans have their highest yield potential while they are still in the bag. That potential is reduced over the season as outside factors — some of which are in your control and some of which are not — affect the crop. And

### Key Points

- Many factors will chip away at yield potential of seeds.
- Measure populations and evaluate spacing once plants emerge.
- Stands that are 5% below targets should be investigated.

let's face it. Seed is expensive. It is important that you maximize the potential value of your seed.

At planting, the seed is met with

challenges: handling, soil temperature, soil moisture, seeding depth, insects, herbicide damage, fertilizer injury and compaction. The more a grower can do to control these variables at planting, the better the chance of maximizing the seed's ultimate potential. Most of these factors will continue to influence yield throughout the growing season.

Corn yields are especially affected during the plant's early-season vegetative stage. The corn plant is very hardy from VE to V5, but competition from weeds and moisture can harm

the plant. Leaf and ear shoot initiation have begun and will be complete by V6, roughly three to four weeks after emergence. The growing point is also below the ground up until V6, so frost injury will be minimal.

Take the time to evaluate your planting method this spring. Look for uniform emergence and spacing. Corn does not like competition, be it from weeds or another corn plant that is too close. First, evaluate your population. Count the number of plants in 1/1000th of an acre (23 feet, 9 inches for 22-inch rows, 17 feet, 5 inches for 30-inch rows). Do this in six or seven different spots in your field and average that number. Your actual results should be within 5% of what you planted. We get about 5-6 bushels per acre per 1,000 plants. Any reduction from this will dramatically reduce yield.

While you're determining plant population, also check stand uniformity. Take an average spacing in each of the six to seven locations. Ideally, 80% of the plants should be within 2 inches of the target spacing (9.5 inches in 22-inch rows or 7 inches in 30-inch rows with a stand of 30,000 plants).

Now, the final step is analysis of any problems. Be sure to take the time to figure out why problems exist. Was there a metering problem in the planter leading to doubles or skips? Is emergence uneven due to cool soil temperatures or varied planting depths? Corn plants should all germinate within a 48-hour window to be uniform. If a plant emerges outside the 48-hour window and grows one collar or more behind its neighbor, it probably will not produce an ear or will miss pollination.

You may not be able to correct stand problems this year. But take notes. What you learn from this growing season will help you maximize your seed's potential in the future.

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