

# AGRONOMY PROFILE

## Corn Seedling Problems

**OVERVIEW.** Early-season seedling damage can significantly reduce yield. Scout cornfields regularly and diagnose problems before economic losses occur, and consider replanting if necessary.

### WHAT YOU SHOULD KNOW.

- Corn may take up to four weeks to emerge when soil conditions are unfavorable. As long as stands are not seriously reduced, delayed emergence won't have a major impact on yield. However, if delayed emergence is associated with uneven plant development, yield potential can suffer.
- To diagnose poor seedling emergence, start by looking for patterns. A uniform pattern of skips suggests a planter issue. Uniform poor emergence patterns can be caused by soil surface crusting. If the pattern is uneven, you'll have to do some digging to find the reason (see action steps below).

### ACTION STEPS.

- 1. Scout fields:** Uneven emergence can have many causes, including soil moisture, temperature variability, poor seed-to-soil contact and soil insects. Examine your fields and seed carefully to determine the cause.
- 2. Check for germination:** If seed is sitting in dry or cloddy soils, germination will happen very slowly, or not at all. Cooler soils also slow germination and can predispose seedlings to fungal infection. Injury from anhydrous ammonia, or excessive fertilizer or pesticide application, also can prevent germination. Shallow planting may cause seeds to swell but not germinate.
- 3. Observe seed appearance:** Seeds that are brown in color and are soft or fall apart easily likely have been subjected to rot and will die.
- 4. Consider replanting:** For severely damaged stands, you may want to replant. Look for hybrids with shorter relative maturities appropriate for your area.

### NOTES:

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Delayed emergence plus uneven plant development can threaten yield.

### 30 SECOND SUMMARY

- Delayed emergence can have many causes and won't always impact yield.
- However, a delay plus uneven plant development often hurts yield.
- Scout fields to determine the causes of uneven development, and check seeds for germination and overall appearance.
- If stands are significantly damaged, replanting may be necessary.