



Top 10 Reasons for Patchy Emergence

1. **Soil Moisture:** Dry topsoil conditions.
2. **Flea beetles.** If emergence and plant growth are slow, flea beetle seed treatments effect can expire and flea beetles can quickly cause extensive damage.
3. **Residue**—unevenly chopped residue, large corn stalk pieces can inhibit seed to soil contact and emergence.
4. **Frost:** Plant losses from frost can occur in patches, often influenced by elevation and by residue.
5. **Seeding Placement:** Speed, seed depth and seed rate are all factors that strongly influence seed placement, emergence and plant populations.
6. **The Seeding Tool:** Old worn openers can make for inconsistent seed depth, poor seed placement or poor seed-fertilizer separation. New drills can also cause issues with seeding rates, fertilizer rates, seeding depth and packing pressure as growers learning how to set them. Repeatable patterns through the field are often clear signs of a machinery problem.
7. **Too Much Fertilizer With the Seed:** Dry conditions increase the damage risk from seed placed fertilizer. Moisture helps dilute and diffuse fertilizer throughout the seed zone.
8. **Soil Moisture Holding Capacity:** Some fields have highly variable soil types, with clay patches holding moisture better than sandy and loamy patches. This variable moisture holding capacity will show up as patches in fields short of moisture. Note that fields with variable soil types can also have patches that result from nutrient deficiencies, salinity and other factors specific to soil condition.
9. **Seedling diseases:** Variable soil moisture and seeding depth, for examples, can influence the severity of seedling disease damage within a field.
10. **Tillage:** Tillage can improve residue management and create a warmer seedbed early in the season, but it also makes topsoil much drier.