

Burrus Buzz

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Questions and Answers

Last week's Burrus Buzz addressed the dangers of applying Roundup (Glyphosate) and Ignite (glufosinate) to corn exceeding labeled size.

Many growers are still asking if out-of-label corn (48" with drops from Roundup and 36" corn with drops for Ignite) can safely be sprayed. The answer is NO!

In addition to the active ingredients, surfactants in the formulations can enter the ear leaf axle and damage the tiny developing ear. This can occur even with drops.

Another question being asked is "How much yield loss has occurred in soybeans because of weed competition?"

Weeds compete with soybeans for sunlight, nutrients and moisture. There should be abundant moisture for both soybeans and weeds. Research has been inconclusive, depending on the type, size and density of the weeds. In general, it's believed that soybeans can compete better than corn with early season weeds. Also, narrow row soybeans may have an advantage over 30" rows. The Illinois Agronomy handbook states, "As a general guideline, many studies tend to show that a moderate population of weeds can remain growing with the crop for up to 3 to 6 weeks after planting, and once removed, cause little or no crop yield loss.

Green Snap Syndrome~by Don Rhoads

Storms rolling through the Midwest have caused green snap in some fields. Although some hybrids are more susceptible to green snap than others, the biggest key to green snap is timing. Corn is most susceptible to green snap in the five to eight leaf stage and again from about the 12th leaf stage to shortly after tasseling. Rapidly growing corn is most susceptible to green snap. New cell walls are extremely fragile and need time to harden. At this time cells have higher water content than later in the season. After tasseling and plant elongation stops, cells form a "cement" called lignin around their walls, allowing the plant to become less brittle and more flexible.

Night time or early morning storms cause more green snap damage than late afternoon winds. Water content in the cells increases at night, causing more brittleness in the plant. By mid-afternoon, water content decreases, lowering the risk of green snap. Strong-rooted hybrids with less give at the base will have more green snap tendencies than shallow-rooted hybrids that might root lodge instead.

Sometimes the lushest, best looking corn in the neighborhood suffers the most damage from green snap. That's because anything that contributes to rapid growth and high yields can increase the chances for green snap. Some factors are:

- Plant growth regulator (PGR) herbicides such as 2,4-D, Clarity, and Status can increase brittleness.
- Adequate nitrogen, starter fertilizers, good soil moisture and warm temperatures can increase growth rate and green snap susceptibility.
- Conventional or strip-till will usually grow faster than no-till corn early in the growing season, but could have more green snap from early season storms.
- Small differences in planting dates can result in huge differences in green snap susceptibility.

There are differences in hybrids. For late season intactness from stalk rots, rigid stalks might also be more brittle and conducive to green snap but could have standability issues later in the season.. Less rigid stalks are less susceptible to green snap.

