Corn Stalk Integrity And Lodging Are Important Issues

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Many farmers have made good progress on corn harvest. Quite a few of the producers have reported good but variable yields. Corn standability and lodging have been an important issue in some locations.

Corn stalk integrity is an interesting subject. Growers want as much yield as possible, and good hybrids remobilize nutrients and move those nutrients from the stalk and leaves into the grain. Those same growers also want that corn hybrid to stand well into harvest. As is often the case, a compromise is usually necessary.

If corn lodging is significant, it is important to identify the reason or reasons. The first assessment should be the location of the problem. Did the corn lodge because of stalk breakage, or did roots give way and the plant lodged intact? If the stalk broke, where did it break – near ground level, below the ear, or above the ear? What are the clues that help you solve the problem?

Stalk rot pathogens are certainly to blame for some problems. Examine the stalks for rot, decay and discoloration. Early examination of fields can help prevent most harvest losses. Inspection prior to harvest by pushing laterally on stalks and squeezing stalks with your fingertips provides useful information. Always select hybrids with good stalk rot resistance that perform well in your area.

Corn borers can create serious stalk strength issues. Both the European corn borer and the Southwestern corn borer are potential problems in most of Southern Illinois. Most growers have used corn borer resistant hybrids (Bt) to minimize this insect problem.

Soil fertility, especially nutrient balance and potassium nutrition, affect corn standability. An imbalance of high N and P and low K may be the worst case scenario for corn lodging. Always try to keep nutrients both balanced and at the recommended or maintenance levels.

Late planting also has implications on corn standability. Late corn is generally taller and greener corn that will intercept more wind. High ear placement on some hybrids also creates a higher center of gravity that is more difficult to support in stress situations.

Finally, we must admit that certain weather events may be more than our crops can endure. If Hurricane Ike brought 5 inches of rain and 70 mph winds to your farm, you probably observed some corn lodging. Change and improve the lodging factors that are under your control. Δ

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