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## Yellow Soybeans

The same soybean cultivar planted early in the typical planting window will develop nearly 50% more productive nodes than when planted in late June. In other words, the 19-25 nodes we typically see when planted early, will likely be reduced to 13-16 nodes when planted late. Our late planting window this year means we need good growing conditions to provide as much yield potential as possible - so let's hope we avoid the dreaded yellow soybean!

Yellow soybeans may be caused by multiple factors. Nitrogen deficiency is often blamed, and may well be true when saturated soils reduce rhizobial nodule development (symptoms should subside when soils dry). Symptoms show in lower leaves first. Hail damage can also be a factor if foliage is severely damaged, inhibiting feeding of rhizobia bacteria.

Wet soils may also result in iron chlorosis, where the top most leaves turn yellow with veins remaining green. High pH and/or high soil nitrate soils are generally the worst. Soybean varieties do exhibit differences in iron chlorosis tolerance.

Later in the season, Potassium (K) deficiency can be an issue. It manifests itself as irregular yellow mottling around leaflet margins with yellow areas coalescing to form a more or less continuous, irregular yellow border. Symptoms typically fade with improved soil conditions that allow good root growth, unless the field is truly deficient in K. Potassium deficiency can also be caused by soil compaction, which limits root growth and development.

Be on the lookout for yellow soybeans, then determine the cause before making any decisions. Wet planting conditions that restrict root movement, as well continually saturated soils, are likely culprits this year, but actual nutrient deficiencies need to be considered as well.

## Grub Control

Have you made plans to apply your grub preventer? The first half of July is a good target date for most products. Get prepared now!

Traditional grub insecticides (Dylox, carbaryl, etc...) are normally applied in late July after grubs are present or as a rescue treatment once damage is seen. Products that contain imidacloprid (Merit) are considered grub preventers (they don't actually prevent grubs, but instead kill them when very small). Another advantage is their increased safety around pets and humans over traditional grub killers.

A second product with the active ingredient chlorantraniliprole (GrubEx) is also an option – with good effectiveness! It is less water soluble than imidacloprid containing formulations, and needs to go on sooner than later. April or May is preferred, but applications through June should still show good effectiveness. All grub products should be watered in soon after application.

As with any pesticide product, be sure to read and follow all label directions