AGRONOMY PROFILE

BREVANT™ seeds

Soybean Growth Stages Part 1: Vegetative Stages

OVERVIEW. Understanding the plant growth process opens up opportunities to maximize yield potential. At each stage, soybeans have specific nutrient, environmental and management needs. Knowing developmental goals and stages can help you identify problems more quickly and proactively manage challenges in the field. This piece will explore some basics about the vegetative stages of soybean growth.

WHAT YOU SHOULD KNOW.

- **VE (emergence)-VC (cotyledon):** To germinate, the soybean seed absorbs water equal to about 50% of its weight. In VE, the radicle grows down, anchoring the seed and the hypocotyl begins growing toward the surface. At VC, unifoliolate leaves unfold and expand. In these early stages, band fertilizer along the roots helps their start. Weed pressure threatens soybeans, so look to start with a clean field.

- **V2 (second node):** Plants are 6-8 inches tall and nitrogen fixation begins in the root nodules. Applying nitrogen at this time is not recommended, because it disrupts the formation and function of root nodules. Roots are growing close to the surface, so weed removal needs to be done carefully.

- **V3-V5:** By the end of V5, plants are about 12 inches tall. Axillary buds form and may become branches that eventually produce pods. The branching process makes soybean plants fairly resilient to damage from hail, but new branches can form even if most above-ground foliage is destroyed. Only damage below the cotyledonary node will kill the plant at this stage.

- **V6-V12+:** At V6, plants are 12-14 inches tall and new V stages will appear about every 3 days. Leaf loss at V6 will impact yield (50% leaf loss = about 3% yield loss). The reproductive stage overlaps with vegetative development, starting at V7.

University of Wisconsin Extension. http://corn.agronomy.wisc.edu/Crops/Soybean/L004.aspx.

Understanding the needs of soybeans throughout the vegetative growth stages helps maximize yield potential.

30 SECOND SUMMARY

- Every stage of soybean growth represents an opportunity to maximize yield potential.
- Understanding vegetative growth stages helps you manage the needs of your soybean fields.

NOTES:

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