

Soybean Growth Stages Part 2: Reproductive 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 reproductive stages of soybean growth.

What you should know

- **R1 (beginning bloom):** At R1, flowering begins on the 3rd-6th stem and progresses upward and downward from there. Secondary roots and root hairs proliferate from R1 through R5.
- **R2 (full bloom):** The plant has reached half of its mature height and total node number. Dry weight and nutrient accumulation being to occur rapidly.
- **R3 (beginning pod):** Stressful conditions at this stage may affect yield in one of three areas: pods-per-plant, beans-per-pod and per-bean weight. However, other factors may be able to compensate to maintain overall yield. Since 60-75% of flowers produced abort and never contribute to yield, reducing floral and pod abortion will increase yields. Fertilizing, irrigation and weed control are all important from R1-R3.
- **R4 (full pod)-R5 (beginning seed):** Pods grow rapidly and accumulate dry weight. Demand for water, nitrogen, phosphorous and potassium is high and this is a critical time for determining yield.
- **R6 (full seed)-R7 (beginning maturity):** At R6, beans and plants continue to grow quickly. Lodging risk increases with plant height. High plant populations, high seasonal rainfall and irrigation can all contribute to lodging and resulting yield losses.
- **R8 (full maturity):** 95% of pods have reached mature color. Timely harvest, once beans are dry enough, is critical. To reduce harvest losses, drive the proper speed, adjust harvester settings to minimize bean damage and leave a short stubble.



Understanding how plants develop through the reproductive stages can help you maximize yield.



30-Second Summary

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

NOTES:

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

For more information, contact:



www.nutechseed.com
1-888-647-3478