

# Pioneer Talks Crops

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The upper mid-South had an unusually long, warm corn-planting window last month, and many area growers anticipated a rapid change in weather patterns. They were right. The area received cooler, wetter weather the latter half of April that continued into May and

brought record flooding to some parts. Damage from these late-April and early-May storms was very severe with replants in abundance. As growers replanted corn, they began to transition into planting full-season soybeans.

Growers should plan to apply nitrogen (N) on time, especially on replanted corn. Corn planted now, or just recently, will grow much faster than earlier-planted corn. A field of foot-tall corn will not be far from rapid N uptake. N deficiency during this rapid growth stage will reduce the number of rows of kernels per ear, thus reducing yields. Corn will take up 40 percent of its N requirement within the first 50 days after emergence, so timing is important on side-dress applications. Also, growers can consider applying 40 to 60 units of N pretassel on a portion of irrigated acres especially on very light or very heavy soils.

Herbicide timing in these replanted fields also will be very important. Corn will be growing rapidly so the herbicide application window may be shorter than normal. Weeds need to be controlled three to five weeks after planting to prevent competition. This is when corn is in the V2 to V3 growth stage (four to five leaves showing),

or about 6 to 8 inches tall. Severe weed pressure, especially from grasses, during that period can significantly impact corn yield potential. Most postemerge herbicides have height or collar restrictions. Growers should be sure to count leaf collars on several plants in the field to determine the correct growth stage for herbicide timing.

To achieve high soybean yields, start with strong fertility. Soybeans need a significant amount of potassium (K) and a 60-bushel-per-acre soybean crop will utilize:

- 320 pounds of nitrogen
- 64 pounds of phosphorus
- 142 pounds of potassium
- 27 pounds of magnesium
- 25 pounds of sulfur

Some of this will return to the soil in the stover, but it is important to note that high yields require a lot of good plant food. When K in the topsoil is deficient, soybean plants will try

to obtain K needs from the subsoil (only as adult plants). Potassium deficiency first appears as white speckling of the leaves. Later, interveinal chlorosis will occur near the leaf margins.

Finally, chlorosis and necrosis (dead tissue) will be visible along the outer leaf margins. The deficiency symptoms appear on mature leaves first, while young leaves often are symptom-free. Potassium deficiency may occur when soil K levels are low, pH is very low, root restriction occurs or when nematodes are a problem. Test soils to determine the proper amount of fertilizer to apply to achieve high soybean yields. Δ

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