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Late Soybean Planting: Switch Maturity Groups?

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Indiana soybean planting started fast with approximately 20% by the beginning of May and nearly 50% by the middle of May. Then, field work slowed as the temperatures cooled and the rainy days followed. Planting progress over the past two weeks has mirrored the 5-year average (though two of those five included very wet springs). As of June 6th, 81% of Indiana's soybean acres were planted. However, a few areas of the state have saturated fields that received rain over the past couple of days with a potential for more in the coming week. The question for these areas is: "Do we need to switch maturity groups?"

Soybeans planted at this point will probably yield ~90% of the yield of soybeans planted at a normal date. In another 10 days, this yield potential reduces to 78% of a normal yield (Table 1). The full-season varieties of soybean should still be planted until June 15th in the northern one-fourth of the Indiana, June 20th for the central one-half of Indiana, and June 25th in the southern one-fourth of Indiana. Full-season variety of soybean should be switched to mid-season variety after June 15, 20, and 25 for the northern, central, and southern regions of Indiana, respectively. In other words, decrease the maturity by one-half assuming that the variety being grown is a full-season variety for that area of the state.

Table 1. Yield Effects from Delayed Planting (Uniform Stands).

Planting Date	Yield as a % of Normal for	
	Mid-season Variety	Full-season Variety
May 20	100	100
May 30	96	94
June 10	92	90
June 20	82	78
June 30	70	Not Recommended
July 10	60 ¹	Not Recommended

¹ In Indiana, south of Interstate 70 only.

Seeding rates should be increased by 15 to 20% to promote canopy closure to capture sunlight for photosynthate production, while shading out competing weeds. Additionally, the soybean-to-soybean competition will promote taller plants and subsequently the first reproductive node will be set higher to aid in harvest efficiency. Increased seeding rate will also increase the number of nodes per acre and increase the opportunity to maximize yields for the delayed planting.