

## Implications of delayed corn planting

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Cool temperatures, and in some cases wet soils, are keeping producers out of the fields and delaying corn planting. There's still plenty of time left to plant corn in Kansas, but where soils are cool and wet, farmers may be starting to ask questions about the issues surrounding later planting: How late is too late to plant corn? Should different hybrids be used after a certain date? What yields can be expected with later planted corn? When should I be thinking about switching crops?

The recommended ranges of corn planting dates for Kansas, as listed in the "Corn Production Handbook" C-560 (<http://www.ksre.ksu.edu/library/crpsl2/samplers/c560.asp>) are:

Zone 1: May 1-20

Zone 2: April 20-May 15

Zone 3: April 10-May 10 (includes the northwest half of Butler County)

Zone 4: March 25-May 1 (includes the southeast half of Butler County)

Although the growing season shortens with later plantings, late-planted corn tends to develop faster than corn planted earlier. Researchers have documented a 10% reduction in heat units required to reach maturity for late-planted corn with a greater adjustment by full-season hybrids than by short-season hybrids. The likelihood of a freeze occurring before corn reaches physiological maturity is relatively low.

When should growers consider changing hybrids? Unless planting is delayed until late May or early June, most growers should probably stick with the hybrids they typically grow. Switch to an earlier maturing hybrid only if you are concerned about running out of growing season in the fall. That is typically a greater problem in north central, northwest, and west central Kansas.

Growers should not give up a good fuller-season hybrid in favor of a short-season hybrid unless they are sure the growing season will not support the fuller-season hybrid. Growers who do not use a Bt hybrid should be aware that later-planted corn is more susceptible to second-generation corn borer.

For most of Kansas, corn yield reductions will not be significant unless planting is delayed until mid- May or later. Typically, the primary causes of yield reductions associated with late planting are high temperatures at pollination and reduced soil moisture during grain fill. If rains are adequate and timely and temperatures are mild, excellent yields can be obtained even with late plantings.

Right now we are a long way from needing to switch crops. However, if planting is delayed until mid- to late-June, be prepared to switch to a crop that can mature in a shorter growing season. Later-planted alternatives to corn include sorghum, several different summer annual forages, soybean, cotton, and sunflower. Be aware of possible rotational restrictions due to herbicide carryover and determine how best to utilize pre-applied fertilizer. There may be crop insurance implications as well, so be sure to clear late planting and crop changes with your crop insurance representative.

Planting a crop at the optimal time into wet soils, simply to avoid planting late, will almost always end up being an unwise decision. While important, planting date is only one of many yield-influencing factors for corn.