



Planting Date Decisions

If you ask ten different farmers for the right time to plant corn, you are likely to get ten different answers. Some wait for a specific date. Some wait for a specific temperature. And some wait to see what their neighbors do. In reality, they may all be right. Every situation is different because of soil type, drainage, tillage practices, number of acres and hybrid maturity. All of these factors need to be evaluated when determining a date for planting corn. That being said, there is a slight advantage to being on the early side.

There are many benefits to planting early, however the primary benefit is that your crop will reach maturity quicker. A corn plant uses the most energy during its reproductive stages. Because the corn plant gets this energy from the sun, it is desirable to have the longest days of the growing season closest to the reproductive stages. June 21st is the longest day of the year; after that date, the days get shorter. Therefore, reaching the reproductive stages as close to this date as possible will give the plant more energy, resulting in the potential for higher yields.

In addition, early planting can help reduce the amount of damage from disease. For example, the amount of yield loss due to corn leaf and ear rot diseases can be reduced if the plant is more mature. Diseases such as Grey Leaf Spot, which occurs later in the growing season, will not cause as much damage in more mature plants.

Planting early will also decrease the chances of having a black cutworm problem. Black cutworms won't start "cutting" until their fourth instar and corn is most susceptible from the spike to V3 stage. So, the sooner you reach the V4 stage, the better off you will be. If circumstances require late planting, protection from black cutworm can be attained via the Herculex trait.

There are also some risks assumed when planting early. The most prominent are disease and frost. The cooler the soil, the longer it takes for the seedling to emerge, which makes it more susceptible to seedling rot and damping off. Cooler soil can also lead to uneven stands. The wetter the soil, the longer it takes to warm. When moisture conditions vary in the field, the temperature will also vary and this is what can cause uneven stands. In case early season problems are encountered, there is more time to make replant decisions if you plant early.

In most cases, planting a week early will mean less yield loss than planting a week late. If conditions are right for planting, but planting is intentionally delayed a week, weather changes may delay planting for another week or more.

Regardless of planting date, it is best to start with your fuller season hybrids on your warmest soils. These soils tend to be in well-drained, upland fields where there is little or no residue cover. Soil temperatures in fields with heavy residue can be as much as four



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degrees cooler than bare soil.

Though reaching maturity early is advantageous, it is important not to sacrifice a fuller season hybrid with an earlier one. According to a University of Missouri study, where normal adapted hybrids were compared to earlier ones, the adapted hybrids showed a 15% yield advantage regardless of planting date.

In the end, it is important to understand one's unique circumstances, evaluate the options and weigh the risks to achieve everyone's desired outcome: timely planting with a good stand.