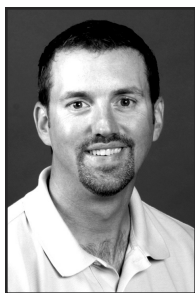


# Pioneer Talks Crops

Welcome to Pioneer Talks Crops. This information is provided by the Pioneer agronomist serving your community.

**GREG PFEFFER**

**DEXTER, MO.**



**T**his spring, cool wet conditions continue to plague the Midsouth. Luckily, it looks like there may be some warmer temperatures in the forecast. Due to all the cold and wet weather we have been having, planting conditions this spring have

been less than ideal and conditions will continue to make it a hectic process.

This season we may have a large part of the upper Midsouth planting at the same time, trying to hit optimal planting windows. I expect to receive several calls from growers asking how well the corn that is planted will handle the cool soil temperatures and wet conditions.

Corn seedlings are most susceptible to damage from cold and flooding stress during the first days after planting. If the seed encounters cold water at this time, it can cause physical damage to the seed and seedling typically called "chilling injury". Corn emergence requires 110 to 130 Growing Degree Units (GDUs) under ideal conditions. That can take from 5 to 20 days or more depending on soil temperature and other conditions.

Optimum temperature for corn emergence is 80-90 degrees and emergence is reduced or halted around 50-55 degrees. We have had reports from several growers where corn has been in the ground longer than 15 days this spring.

The primary concern with corn taking so long to emerge is the potential for stand loss or erratic emergence.

Check corn stands after emergence in order to make replant decisions. Soil insects, seed rots, planter problems, soil compaction and other factors can reduce the number of plants that emerge. You can easily check stand counts by counting the number of plants in 1/1000 of an acre, then multiplying the count by 1,000. Typically, a 75 percent stand is acceptable and anything less is recommended to replant.

It is also important to take into account seed cost, fuel cost, labor costs, machinery costs, etc. A good rule of thumb to remember is to focus on getting your unplanted fields planted first and then look at replanting any other fields second.

Once a stand is established it will be important to evaluate additional herbicide needs. Weeds need to be controlled within three to five weeks after planting to prevent competition.

This is when corn is in the V2/V3 growth stage (four to five leaves showing), or about six to eight inches tall. Severe weed pressure – especially from grasses – during that period can significantly impact corn yield potential.

If rainfall in excessive or insufficient amounts raises concerns about the performance of soil-applied herbicides, scout corn fields regularly to determine if weeds are breaking through and beginning to grow normally. Usually, the most reliable and affective herbicide program across a wide range of conditions is a two-pass program of a pre-emergence herbicide followed by a post-emergence herbicide. Δ

*GREG PFEFFER: Agronomist, Pioneer*

