



Tracking Growing Degree Units

Growing Degree Units (GDU) is a measurement of the amount of heat needed for a corn plant to reach various stages such as tassel or maturity. Tracking GDUs is important for corn because they are not daylight determined (like soybeans) so daily temperature drives how fast or slow a corn plant grows and matures each year. Since the temperatures vary from year to year, this can be a valuable calculation to know if a summer is unusually warm or cool. Your GDUs will help determine when fields will be ready for harvest. In the Legend Seeds product guide we include a GDU number for each hybrid. This number is much more accurate than looking at the maturity of a corn hybrid, because some corn hybrids may get to maturity fast and then dry down slowly. This explains how you could have both a 95 Day RM corn and a 100 Day RM corn that each need 2,400 GDUs to reach maturity.

Low-Tech Tracking: Keeping track of GDUs for your fields or farm is very simple. You can do this calculation all on your own, the only numbers you have to know are the high and low temperature of each given day in the growing season. Here are some rules:

- Start tracking the day the corn is planted. It should take about 125 GDUs for the corn plants to emerge. This is greatly dependent on a number of variables such as, residue on the soil, moisture, planting date, and depth of planting.
- To calculate use the following equation: $GDU = (Daily\ High\ Temperature + Daily\ Low\ Temperature) / 2 - 50$
- If the high temperature is above 86, still use 86. Never use a number greater than 86. If the low temperature is below 50, still use 50. Never use a number lower than 50.
- Example 1: If the daily high for April 29th was 75° F and the low was 55° F the equation would look like this: $75 + 55 = 130 / 2 = 65 - 50 = 15\ GDU\ for\ April\ 29$
- Example 2: If the daily high on July 10th was 90° F and our low was 49° F the equation would look like this: $86 + 50 = 136 / 2 = 68 - 50 = 18\ GDU\ for\ July\ 10$
- Add up all the daily GDUs to track the cumulative GDUs for the growing season thus far.

High-Tech Tracking: The Legend Edge is our precision ag platform that offers hybrid placement solutions, field mapping and many other features. It also tracks the daily and cumulative GDU for you on each field. With this option, the work is done for you! Secondly, you can also purchase special thermometers that track the calculation for you wherever the thermometer is located.

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Growing Degree Unit Tracking Worksheet

Hybrid Number: _____ GDUs Needed for Hybrid: _____

Days Since Planting	Date	Daily GDUs	Cumulative GDUs
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