# **Agronomy Profile**



# **Final Irrigation**

#### **Overview**

Managing your irrigation schedule throughout the year includes determining the season's final application. A final application of irrigation water can help corn reach peak yield potential.

## What you should know

- The final irrigation depends on crop stage, soil type, projected water use to maturity, available moisture in the soil profile and amount of water required to finish the crop without further precipitation.
- Overall, corn needs 18-22 inches of soil moisture to reach yield potential. Corn uses less water as it grows—allowing for delayed irrigation—but still needs moisture for the critical grain-filling stage.
- A trusted agronomic adviser can help calculate moisture levels so kernels can reach maximum weight.

## **Action steps**

- 1. **Irrigate to maturity:** At maturity, kernels have finished grain fill and reached maximum dry matter accumulation. At blacklayer stage, kernels should contain 30–32% moisture.
- 2. **Determine irrigation amount needed:** Moisture can come from stored moisture in the lower soil profiles. Calculate if additional water is needed.
- 3. **Don't terminate irrigation early:** This accelerates maturity, keeping kernels from realizing their full potential size and weight and reducing yield potential by up to 15–20%. To determine days remaining until maturity, use this table:

Crop stage	Approximate days to maturity	Water required to maturity (inches)
Blister	45	10.5
Dough	34	7.5
Early dent	24	5
Full dent	13	2.5
Physiological maturity	0	0

4. **Avoid excess irrigation:** Extra irrigation can waste water and fuel, and it raises the risk of soil compaction during harvest and can limit capacity for offseason precipitation.

#### For more information, contact:



www.nutechseed.com 1-888-647-3478



Ensure your crop has enough moisture to reach peak kernel weight potential, irrigating if necessary.



- Supply enough moisture for corn to reach physiological maturity without causing crop stress and yield loss.
- Terminating irrigation early may keep kernels from realizing their full size and weight potential.
- Avoid the waste of excess irrigation and its risk of soil compaction.

#### **NOTES:**