

Corn Silage Timing—Getting the Most Out of Every Acre

Harvest timing is one of the most critical factors in maximizing the feed quality and tonnage of corn silage. Waiting too long or harvesting too early can lead to lost digestibility, reduced starch availability, and challenges in fermentation.



EARLY DENT

Grain Moisture ~50-55%
~400 GDUs to Black Layer



1/4 MILK LINE

Grain Moisture ~45-50%
~300 GDUs to Black Layer



1/2 MILK LINE

Grain Moisture ~40-45%
~200 GDUs to Black Layer

Starchy
Milky
Milk
Line

What to Look For

- **Kernel Milkline:** A quick field check is to look at the milkline on the kernel. Silage is generally optimal when kernels are at $\frac{1}{2}$ to $\frac{3}{4}$ **milkline**—meaning the starch is maturing, but kernels are still soft enough to pack and ferment well.
- **Whole-Plant Moisture:** The gold standard is measuring plant moisture. For bunkers and piles, the target is typically **65-70% whole-plant moisture**. For upright silos, aim for **60-65% moisture**.
- **Plant Appearance:** Don't rely solely on leaf color. Fields can look drier than they actually are, especially in a dry August. Whole-plant samples are still the most reliable method.

How to Determine Moisture

1. **Koster Tester / Forced-Air Dryer** — Chop 5-10 plants, shred them, and dry a subsample until stable weight is achieved.
2. **Microwave Method** — A quick and cost-effective farm method, though careful attention is needed to avoid burning samples.
3. **NIR Feed Labs** — Send fresh-chopped samples to a lab for highly accurate readings.

Takeaway: Harvest timing is a balance. Monitor fields closely, track whole-plant moisture, and schedule harvest by field maturity—not just the calendar—to get the best silage quality for your herd.

References:

- Lauer, J. (2016). *Silage Harvest Guidelines*. University of Wisconsin Agronomy.

Crown Rot & Physoderma in Corn— A Double Threat

Some fields this season are starting to show **premature plant death** caused by **crown rot**. In addition, **Physoderma stalk rot** has re-emerged in Iowa during 2025, bringing added challenges with stalk breakage and lodging.

Crown Rot: The Silent Starter

- **Pathogens:** Fusarium is the primary cause, but Pythium and Rhizoctonia can also contribute.
- **Infection Timing:** Often begins in wet, cool soils at emergence. Plants may look healthy until late stress triggers tissue collapse in the crown.
- **Symptoms:** Split stalks reveal rotted, brown tissue at the crown, reducing nutrient flow and killing plants prematurely.

Physoderma Stalk Rot: Back Again in 2025

- **Cause:** Physoderma maydis, the same fungus that causes Physoderma brown spot.
- **Symptoms:** Dark lesions at lower stalk nodes, with stalks snapping near nodes 1–2. Often occurs without visible leaf symptoms.
- **Impact:** Leads to standability issues and harvest losses, especially in fields with high lodging pressure.

Management Strategies

- **Hybrid Selection** — Some hybrids tolerate crown and stalk rots better.
- **Residue Management & Rotation** — Reduce pathogen buildup with crop rotation and residue breakdown.
- **Drainage & Compaction** — Improve soil health to reduce stress that favors these diseases.
- **Harvest Planning** — Scout and prioritize fields with >10–15% stalk rot to avoid losses.

Takeaway: Crown rot infections often begin in the spring, while Physoderma stalk rot has resurfaced as a serious late-season threat in Iowa. Both demand scouting, hybrid tracking, and management adjustments to maintain yield and standability.

References:

- Robertson, A.E. (2023). *Crown Rot of Corn*. Iowa State University Extension and Outreach.
- Jackson-Ziems, T. (2022). *Physoderma Brown Spot and Stalk Rot of Corn*. University of Nebraska–Lincoln Extension.