



by John Goeser

## This year's silage will vary

**A**S FALL transitions into winter, we begin to have enough forage analysis data available from the laboratory to confidently project what impact the 2024 corn silage crop may have on your dairy herd. Watch the recording of the November 2024 *Hoard's Dairyman* webinar featuring Mike Hutjens and Mike Rankin for a comprehensive crop quality preview and assessment. I'll preview a few high-level projections for this year's corn silage crop and its feeding potential across the U.S. In doing so, we'll compare 2023 crop quality to 2024, where really only one quality attribute carried over into this new crop — an extreme distribution in quality.

### Skewed predictions

In a 2024 harvest-focused podcast with my friend and colleague Todd Schaumberg, he said something to the effect of, "Each of the past few years seems to one-up the prior year." This comment stuck with me and was certainly applicable to the 2024 growing season.

The swings in heat and moisture from year to year have been sizable, profoundly impacting the crop each year. Each of the past few seasons, I've joined *Hoard's Dairyman* and others during the growing season to discuss crop progress and offer some in-season forage quality analysis. Think of my efforts like those of a weatherman, but I'm forecasting forage nutritional value and yield. While I joke with friends about the weatherman's track record, if I'm being honest, I have to admit it's probably better than my own the past two years. The factors behind my misses in projections are due to late-season heat and rainfall. Last year, those farming through drought got rain after pollination and ear fill was better than



**RECENT WEATHER SWINGS** throughout previous years have made silage quality fluctuate.

expected, along with yield and quality. This past year was a contrast.

### A varied growing season

This year, many Midwestern and northeastern U.S. growers started the season farming through wet conditions. Both planting and making haylage proved challenging for many. The haylage crops certainly were affected, and as we reached mid-season, Damon Smith of the University of Wisconsin-Madison and I shared concerns about plant disease and mycotoxins following an extremely wet start to the year for many.

As the script flipped, and before diseases could take hold, conditions dried up. The environmental component to the plant disease triangle disappeared, and disease seemed to be kept in check for the most part. The corn crop came along nicely, while arid conditions coupled with above average heat even equated to whole-plant chopped corn progressing to and past maturity a bit too quickly.

By and large, early forage laboratory data review indicates mold, yeast, and mycotoxin levels in silage do not appear to be a major

concern, even though the wet growing season through Independence Day left an imprint on our corn silage feed quality.

### Focusing on digestibility

Recall that forage quality is classically defined by nutrient content and digestibility. With silage, we focus our attention on fiber and starch content. More grain and less stover equates to more total digestible nutrients as starch carries about twice the caloric value of fiber. The reason for the calorie advantage is due to starch digestion through the cow being around 90%, whereas fiber averages about 45% total-tract fiber digestibility. While on average, starch is better digested than fiber, there's also quite a bit of range in rumen digestibility for both. Hence, nutritionists account for both rumen starch digestibility as well as fiber digestibility.

The growing environment in 2024 clearly affected energy value in silage across the U.S. dairy forage growing regions differently. A wet first half of the growing season appears to correspond to a drop in corn silage total-tract fiber digestibility for Midwestern and Northeastern dairies.

Starch content in silage looks to be similar year over year; however, the fiber is clearly different. I'd expect dry matter intakes and performance to be down a tick in these cases.

Interestingly, rumen starch digestibility in these regions is also widely variable. I'm speculating it is also attributable to the growing environment during ear filling, but we have much yet to learn.

### Weather-related factors

Out West, corn silage starch content and fiber digestibility appears to have risen a bit this past crop year. This is great news, and I expect the feeding quality to be better for new crop silage.

The reasons behind the quality improvement aren't yet as clear. Water has been more readily available for the corn crop in California, but this isn't different from last year. There were numerous extreme heat events in 2024 that may have stressed the plants, perhaps equating to better fiber digestibility. However, a heat stress that induced plants' morphology path toward improved fiber digestibility is unclear. I look forward to discussing this Western silage quality observation with agronomists in the months to come.

Remember that the one constant from 2023 to 2024 corn silage is a wider than usual range in moisture and quality. Be sure to manage your forage quality assessment program accordingly. Think like a weatherman and use trends and patterns to drive your ration decisions. 🐮

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