Choosing a Corn Silage Variety

COOPERATIVE EXTENSION SERVICE

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Choosing a corn silage variety is vital for the success of your farm in terms of providing an adequate amount of forage and to optimize milk production. Difference in quality of silage hybrids can lead to 300 to 600 pounds of milk per ton of silage differences. When factoring in yield differences, significant increases in the number of pounds of milk produced per acre can potentially occur.

Key factors to consider when choosing silage varieties:

Corn Silage Trials: Keeping an eye out for university corn silage trials as they can be a predictor of how silage varieties can thrive on your farm. Most corn silage trials will have multiple locations and plant the variety multiple times at each location, accounting for several different soil types and weather conditions. Producers can use the unbiased trial data to compare yield and quality for future harvests. These trials also include the lowest, highest and average temperatures of each month to account for adverse weather conditions. For example, the University of Kentucky routinely conducts tests with various corn silage varieties.

Type of Variety:

- Brown Mid-Rib (BMR): BMR corn contains lower levels of lignin in the stalks and leaves of the plant. Lignin is indigestible, giving BMR corn a leg up on digestibility and therefore, dry matter intake by dairy cows. However, BMR has a stigma for bringing lower yields and unpredictable standability. BMR is typically a better fit for farms that have the extra acreage needed for silage production, higher producing cows producing over 75 lbs of milk, summer time feeding when intake may decrease, or in combination with conventional varieties. Researchers from the University of Wisconsin compared milk yield between BMR and conventional corn silage varieties and found a 3.3 lb increase when summarized across 52 university research trials.
- Conventional “Field” Corn: Conventional varieties set the bar in terms of yield and digestibility. BMR corn has anywhere from 5 to 20% lower yields than conventional corn. Conventional or non-BMR corn has higher yields, and milk/acre values when compared with BMR.
- Leafy: These corn silage varieties tend to be the most visually appealing corn plant for producers. They produce higher yields, but a low nutrient content when compared with conventional and BMR. Fiber digestibility in leafy varieties is similar to non-BMR, conventional. Leafy varieties tend to have 10 to 15% less

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grain content than conventional hybrids. Leafy varieties also have about twice the amount of leaves, and can sometimes have a longer harvest window. Leafy varieties make up about 15% of the corn silage market. However, when researchers from the University of Wisconsin compared trials using leafy versus conventional corn silage varieties, no significant difference in milk yield or intake were seen.

Quality: The quality of your corn silage variety is very important; especially when grain prices are high. Looking at factors such, as Neutral Detergent Fiber digestibility (NDFd) and starch digestibility are especially important for getting the most out of your forage. Starch or grain yield is also a key factor, as it contributes 55 to 60 percent of total corn silage yields and around 90 percent of the digestible nutrients.

Tonnage: Total tonnage is an important factor for yearly feed requirements for your herd. One of the most devastating problems on a dairy farm is to run out of forage and not having funds to purchase additional forage. Weather impacts on yield are not controllable, but planting a higher yielding variety is under your control. Acreage, number of cows and dry matter intake should all be considered when calculating acreage needed.

Standability: Standability of the plant can also impact yields. Weather, as we know, is anything but predictable. This is important when considering high winds or heavy rains that could potentially damage the plant. Standability of the plant is also a concern when selecting hybrids, such as BMR.

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