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Choosing Which Silage

Silage, this fermented feedstuff, is incredibly common in other parts of the country but less so in the forage lands and cow/calf operations of southeast Kansas and the surrounding area. There can, however, be a real place for it in all sorts of livestock operations. It does take some extra work, the right setup, and an understanding of what silage is.

Types of Silage

While nearly anything can be made into silage, there are three most common types of silage: corn, sorghum, and small grain (wheat/triticale/barley/rye). Corn silage is the most common and is likely to be the most digestible, with 7 to 9% protein. There are certain varieties of corn that are better for silage, but nearly any corn variety can be made into silage. Corn has a high starch content and, therefore, a high energy content, and it makes for a very palatable silage that cattle take to right away. However, the varieties of silage sorghum are very different than those of our field grain sorghum (often called milo around here). Silage sorghum can get 10 to 15 feet tall before making a seed head. Some varieties, like photosensitive sorghum, make a seed head very late, if at all, and because of this, has a high sugar content and is low in starch. Many farmers might prefer certain varieties that are lower in lignin content for digestibility but still make a seed head for higher starch content. Very different from the other two, small grain silage can have much higher protein levels, from 10 to 15%, but the total digestible nutrients and energy content is much lower at around 50% to corn's 70%. The ending protein, energy, and digestible nutrient levels are very dependent on what stage, from boot to dough; it is when silaged.

The advantages of sorghum silage over corn are partly that the cost of production is lower in seed and fertilizer costs. Sorghum is also more drought-resistant, and while it takes a good year to get higher yields, even in drier years, it will make something. It also is more tolerant to heat. The advantages of small grain silage are largely based on timing. Small grains are silaged between pollination to soft dough, leaving a longer season to plant the double-cropped soybeans or sorghum. However, whether it's corn, sorghum, or small grain, the timing and quality of silage will most often be at the mercy of getting the right moisture content. It's easy to underestimate the actual moisture content of a crop, and getting the right moisture content is paramount to getting a good silage.

Types of Storage

Long ago, all our silage used to be stored in those crumbling cement silos that still dot the landscape, but no one wants to shovel those out anymore. Silage now days is packed into three-sided silage pits with walls of cement or stacked hay bales, packed in open piles on the ground, or into long plastic silage bags. Silage pits are common for those who want to invest in the infrastructure of a pit and have a heavy tractor to pack the silage down. Ideally, these pits, and especially the packed open piles, will be covered with plastic to preserve more of the silage from spoilage. The long plastic silage bags are a great way to start with silage when hiring a custom cutting crew. The bag filling machine packs the silage as it fills, and since the whole thing is wrapped up tight in a big bag, there is not much the farmer needs to do. Silage can keep for a couple years if properly covered or bagged, but keeping the rodents from tearing up the plastic will be a challenge.

Feeding Silage

Silage isn't going to be a complete forage source for any operation, but it can be a major portion. Usually, silage needs to be balanced with a higher protein source, possibly supplemental hay, and a balance of minerals. Also, keep in mind that silage is 60% or more water, so it takes a lot of overall poundage. Still, corn or sorghum silage can easily be 15 wet tons per acre, even around here. That's a lot of feedstuffs. From an agronomic standpoint, remember that silage is a complete removal of soil nutrients from the field. It's a lot of phosphorus and even more potassium that will be carried in a good silage crop. If you have any questions about growing silage, give me a call at any Wildcat Extension office. The number for Girard is 620-724-8233. If you have any questions about actually feeding that silage, then you'd better ask for our livestock agent, Wendie.

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