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Considerations for Baleage with First Crop Alfalfa

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Abstract
Earlier this spring, we discussed using the PEAQ method (Predictive Equations for Alfalfa Quality) to help determine when to harvest first crop alfalfa. Looking at the PEAQ measurements made around the state, we are getting close to taking the first crop alfalfa. However, the wet conditions could present some challenges with putting up the first cutting of alfalfa in a timely fashion and maintaining feed quality.

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Earlier this spring, we discussed using the PEAQ method (Predictive Equations for Alfalfa Quality) to help determine when to harvest first crop alfalfa. Looking at the PEAQ measurements made around the state, we are getting close to taking the first crop alfalfa. However, the wet conditions could present some challenges with putting up the first cutting of alfalfa in a timely fashion and maintaining feed quality.

With likely having a short window to put up the first cutting of alfalfa, one potential option for harvesting the first cutting is to make baleage. Like anything, there are pros and cons to consider with baleage. Some considerations with baleage include proper timing of harvesting and storing of the forage. Target bales to be 50%-60% moisture. Generally, most baleage can be made within 24 hours of cutting and will need to be wrapped within 12 hours of baling. Like corn silage, baleage put up too dry will slow fermentation and result in unwanted bacterial growth, mold, or heat damage. If put up too wet, a cold fermentation may occur leading to “stinky” baleage from the presence of butyric acid along with the degradation of proteins into some unfavorable metabolites and a slimy texture. These unwanted consequences will likely lead to compromised feed intake, reduced nutrient quality, and in some situations, animal health issues.
Because plant sugar is a requirement for ensiling, utilizing good quality standing forage is best. Forage that has been rained on after cutting, as well as excessively mature standing forage will not optimize the ensiling process. In addition, bale weight and forage density should be considered. Oxygen is the enemy when it comes to ensiling and too “loose” of a bale can lead to mold among other problems. Thus, the tighter the bale the better. A minimum of 30 days is needed for the bales to fully ensile. Another consideration with baleage is that while it does offer many advantages, it is an expensive investment and can result in poor return on investment if not done right.

For more information on baleage considerations and what is best for your operation, consult with your beef extension specialist and see “Making the Switch to Baleage” IBCR 202.

Category:  Crop Production

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Crop:
Biomass and Forage

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