

MAKING AND USING ALFALFA SILAGE

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This year was our first attempt to build a feeding program around alfalfa silage. We based our feeding program on alfalfa silage for two main reasons, labor and time.

With the proper equipment, much less labor is needed to feed ensiled alfalfa than is necessary with baled hay.

The one day required to harvest haylage has many benefits. Irrigation can follow immediately and there is less stress on the alfalfa. This not only increases tonnage and quality, but stand life. The weather, though important, becomes much less of a factor in making haylage. It takes only 2 to 6 hours in the middle season cuttings and a maximum of 15-20 hours in the first and last cuttings to reach the proper moisture for haylage. Other benefits of haylage include less hardware disease and no hay insurance for the haylage. However, harvesting costs for haylage are no less than for baled hay when the two are compared on a dry matter basis.

This year we put up three batches of alfalfa silage. None of them were entirely successful.

Alfalfa is low in carbohydrates, which is essential to proper fermentation. Therefore, for insurance, each of the three times we made haylage, we tried a different preservative. We used sodium sulfate, calcium propionate and ammonia. Sodium sulfate and calcium propionate did not seem to do enough good to justify their use. Ammonia cannot be used on alfalfa silage. Palatability problems occur. I have yet to find a preservative supported by scientific data.

In closing, there are some important things I learned this year. Moisture level is critical. One should be as close to 65% moisture as possible. Uniformity is important; a layer of 75% moisture material and a layer of 65% moisture material do not equal 70% moisture silage. It stays in those stratified layers and when you go above 70% moisture and below 65% moisture, your chances of heat damage are very good.

You must stay on top of the harvest at all times, testing the moisture throughout the day. Sometimes the harvest must be speeded up or slowed down to keep within the critical 65-70% moisture range. Alfalfa must be cut at the proper maturity, whether for the bale or silage.

Silage preservatives cannot be put on uniformly unless applied at the chopper.

Your pit should be well packed and immediately covered. Alfalfa silage will spoil much faster in the feed bunks than corn silage and may have to be fed more often in a given period.

Haylage, as with all feeds, should be tested. Loss of nutrients and heat damage cannot always be detected by sight. In an Eastern study, 50% of all haylage sampled and tested showed signs of heat damage; whereas only 5-10% of the high carbohydrate silage showed heat damage.

And, finally, I don't believe it is healthy for cows to be fed all silage. Some baled hay must be fed to keep the dry matter intake in perspective. Next year we intend to continue our silage program.