

ALFALFA SILAGE

by

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At RuAnn Dairy we strongly believe that quality roughage is the key to efficient, high milk production. Our goal is to make the highest quality roughage irregardless of weather conditions. Due to the weather, alfalfa silage has worked very well for us with our first and last cuttings. Also, first cutting alfalfa silage is a good choice when the alfalfa stand is infested with weeds and/or grass, making hay quality below average even in good drying conditions. However, when weather does permit and we have clean fields, we always try to make dry hay with our regular stands of alfalfa.

Our harvesting procedure is to swath the hay, allow it to wilt to about 70-75% moisture, rake two windrows together, and chop. In March and April, normally this means cutting one day and chopping the next. In warmer weather, we cut this time interval to one-half day. Our poorest quality silage resulted from allowing the moisture to drop below 70% when putting it in the pit. Dry alfalfa is difficult to pack and a high percentage of spoilage is the result. Proper harvesting and packing of any silage is important, but it becomes critical with alfalfa. A fine cut, the proper moisture, good packing and a plastic cover are all essential for good quality. A preservative may not be required, but our best alfalfa silage has always been the silage where preservative was applied.

Analysis of silage is very comparable on a dry matter basis to dry hay. However, making silage from your alfalfa does not improve the quality of the original product. It is only a method of harvesting your crop that we feel is advantageous in certain situations and weather conditions. We have tried alfalfa silage several times in mid-summer. Our results have not been favorable, and we strongly recommend making hay when weather permits. Probably our best results with alfalfa silage have been from first cutting on seed alfalfa. The quality of this silage has been excellent with protein analysis exceeding 27% on a dry matter basis. The highest milk flow per cow at our dairy was when we were feeding 25 pounds of seed alfalfa silage per cow. This also works very well for the seed alfalfa farmer; once over with the chopper and the field is harvested. However, wet weather in March and April on the heavy and clay soil where most seed alfalfa is grown, sometime makes it difficult to pass over with a heavy machine. Also, harvesting costs are double that of cutting silage in a regular hay field. Since most seed hay is on beds and in rows, it has to be cut direct without the benefit of a wilt. The moisture content is 80-85% and makes it imperative to use a preservative. Yields normally run three to four tons per acre (as is) and with hauling to the dairy or feed lot (which usually are not in the vicinity of the seed farm) costs add up. In spite of these problems and the increased costs, we are quite enthusiastic about the increased use of seed alfalfa silage in our feeding program.

Alfalfa silage does present some problems in feeding. Any type of mold is considered dangerous to cattle health. We have had numerous abortions over the years that we have attributed to moldy silage, whether it be corn, oat, or alfalfa. Also, its odor seems to limit palatability and intake per cow. We have had the best results when we mixed about 50% alfalfa silage and 50% corn or oat silage. The result of mixing the silages seems to increase the palatability and protein of the alfalfa silage and corn or oat silage mix.

We feed silage on a year around basis (about 50% silage and 50% baled hay). One problem we have had with year around silage feeding with heavy concentrate intake (25-30 lbs. per cow average in our herd) is a lower PH, resulting in a higher percentage of ulcerated Rumen. To counteract Acidosis in the Rumen, we feed four ounces of Bi-Carbonate of Soda per day per cow. The result seems to be a healthier cow and a higher butterfat test while maintaining a high milk flow.

In summary, we have found alfalfa silage to be a very acceptable method of utilizing our first and last cuttings of seed alfalfa. It has also been beneficial in adding protein to our dairy ration at an economical cost. Alfalfa does require special handling both in harvesting and in feeding, but in certain weather conditions and situations, probably is the most logical and efficient source of quality roughage.