

Dairy Pipeline

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...cess of NPN and soluble protein can be toxic to the cow. So, the trick is to work closely with your nutrition and make other ration adjustments so as to arrive at the right balance.

When using ammonia, corn should be ensiled at 60 to 70 percent moisture, and ammonia should be applied uniformly at the rate of about seven pounds per ton of 35 percent DM silage. Test the silage frequently for protein content. Switch the herd to ammonia treated silage gradually over a period of about 2 to 3 weeks.

Testing

Many of you will soon be harvesting the majority of the feed that will carry you through the winter and to next year's harvesting season. The quality of feed you put up now is the quality your herd will have to put up with for a long period of time. Hopefully it's of good enough quality to entice good production.

One thing that affects quality is moisture at time of harvest. It would probably be wise to check the moisture content at harvest time occasionally. Moisture testers used for this purpose don't need to be real accurate, since the moisture content of the crop is changing rapidly. The main thing you are interested in is getting a quick estimate of moisture.

The time when accuracy of moisture readings is important is at feeding time; it's necessary for the proper balancing of rations.

Because of the importance of moisture to forage and feed quality and to ration balancing, a moisture tester is one tool every good dairyman should have.

This is a year to be testing forages frequently. In Lancaster, we've had a rather unusual growing season — a dry spring and lots of rain in July. The quality of forages grown under drouthy conditions is generally higher than that grown under wet conditions. Because of the rain delays, some of our hay crop was overmature when harvested. Some of the hay may be musty or moldy because it was too wet.

The fermentation of some of our rain-pelted, dirt-splashed, and hail-damaged crops may be different than normal due to a change in the microorganism population on the crop being ensiled.

Because of some short stalks, the ear to stalk ratio on some corn crops may be different. Poor pollination and ear development in other fields may have the same effect.

The point is, you may have a lot of variation in the quality of feeds you'll be using, and the quality this year may be different from that of last year. To be more sure, test

frequently — as needed.

Dessiccants and Preservatives

As we look back into the rainy month of July think about how much hay you might have been able to save if you could have gotten it harvested one day earlier or if you could have safely baled it at a slightly higher moisture level. Would a chemical drying agent, dessiccant, or a hay preservative have helped you: 1. avoid some crop losses? 2. to harvest the crop at a more desirable maturity for better quality feed? 3. or permitted you to get the crop off in time to make an additional cutting possible without jeopardizing the stand? If you put up some off quality feed as a result of the rainy season, how much will this affect production, and what will be the cost of this? How much will it cost you to purchase feed to replace what you did not get harvested?

These are difficult questions to answer. Nevertheless, I think we need to reflect on them as we try to evaluate whether dessiccants and preservatives have a place in our management program. The costs have to be weighed against the benefits, and we have to be careful

not to let one bad month affect our decisions; consider how often you experience inclement weather at harvest time.

Fall Alfalfa Management

The question is often asked "when should I take off the last cutting of alfalfa?" The old guideline was no closer than 45 days to the first expected killing frost — whenever that is. If the first killing frost was October 15, that means not cutting after September 1. However, recent research has resulted in revised guidelines.

If fertility is good, if the more modern resistant varieties of alfalfa are grown, and if the stand has not been stressed by insect injury, weed competition, poor growing conditions or too frequent cutting, then, the date of the last cutting is of little importance, especially if one or more cuttings have been allowed to come into bloom. If the stand has been stressed and if you really want to save the stand, then comply with the old guideline.

Another question asked is, "can I remove a cutting after a killing (Turn to Page D17)"

Preventing Johnsongrass

Johnsongrass is a very competitive, very costly noxious weed that is gaining a foothold in Pennsylvania. Once established it can spread rapidly from seed and from rhizomes. It can really bite into crop yields. It is very difficult and very costly to control. Therefore, preventive efforts are very worthwhile!

One way Johnsongrass spreads from farm to farm and from field to field is from seeds carried by harvesting equipment. Because of this, choose carefully who you hire to do your harvesting for you. Preferably it should be someone who does not harvest Johnsongrass infested fields.

Johnsongrass seeds are very hard. They can lie in the soil for several years, waiting for the opportune time to germinate. Thus, it is necessary to be persistent in control efforts.

There is some belief that some of the seeds survive fermentation and digestion, and that some of the infestations may have been spread by "contaminated" manure; perhaps some of these seeds can spread when Johnsongrass infested feeds get into the bedding and bypass the digestion process. Nevertheless, it is a good idea not to purchase Johnsongrass infested feeds if it can be avoided.

Feeding Uncured Silage

Corn ensiling time is close at hand. This is a time of the year when many dairymen experience cows going off feed as they start feeding newly-ensiled, but, uncured silage.

Cows can experience digestive upsets, and declines in fat tests and production. It is difficult to get cows to recover fully from these setbacks, and the problem can be very costly to dairymen.

One way to prevent the problem is to feed only cured silage. You

will need a supply of cured silage to feed from while the silo is being filled and while the silage is going through its curing process. Curing will take about two weeks. To accomplish this, you may need an additional silo, a stack or a bag. It requires some planning plus a little extra effort and cost, but the benefits will probably far outweigh the costs.

Ammoniated Corn Silage

Penn State Dairy Specialist, Jud Heinrichs, points out that "ammonia treatment of corn silage has proven to be an effective and the most economical means of preserving corn silage while supplementing the crude protein value of corn silage." It is something worth considering by dairymen who pay attention to details.

Used at the rate of about seven pounds per ton of silage it can elevate the crude protein level of the silage from 8 or 9 percent, up to about 13 or 14 percent. It can reduce silage dry matter losses 4 to 6 percent and energy losses by 6 to 10 percent. It helps protect the natural protein in corn silage from degradation by an estimated 20 to 40 percent; in untreated silage, about half of the natural protein is degraded to non-protein nitrogen, NPN, during fermentation. Lactic acid levels in silage increase about 20 to 30 percent. In the bunk, ammonia inhibits the growth of molds and yeast and helps prevent silage from heating when exposed to air.

Ammonia has some advantages, but it also has some risks. Anhydrous ammonia is a toxic gas that must be handled with care. Ammonia is a non-protein nitrogen.

The cow's rumen microflora need a supply of readily available protein from sources such as NPN and soluble protein, however

If you're particular about your mow'n



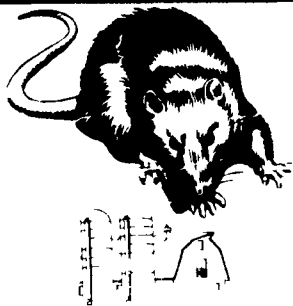
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