

Northwest Veterinary Associates

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Considerations for Ensiling Corn

With corn chopping season almost upon us, I thought it might be a good idea to review some basic issues involved in getting the most out of your crop. Stage of maturity to harvest is the most critical step to get right. Silage that is too wet usually results in poor fermentation (often with butyric acid formation), loss of highly digestible nutrients and poor milk production due to decreased dry matter intakes. Silage that is too dry will not pack well, resulting in mold and heating, and is lower in digestibility.

Over the years, location of the kernel milkline has been used to determine when to start corn chopping. Many farmers would start harvesting when the milkline was located about half way down the kernel. Research shows, however, that due to differences among corn hybrids and growing conditions, there is much variation between milkline position and whole plant

moisture content.

Dry matter content of corn, rather, has become the “gold standard” for determining when to start chopping. You can use the milkline location as an indication of when to start testing moisture content. You can start sampling when the milkline is 25% of the way down the kernel for bunker silos and bags, and about 1/3 of the way down for vertical silos. If we assume a constant drydown rate of about 0.6% per day, you can resample again as you get closer to your target. Koster-testers and microwaves can be used to calculate your dry matters, although some suggest using a commercial lab for most accurate results.

What is the optimal moisture for harvesting? Dairy cows seem to perform best at whole-plant moisture content of 65- 70%. These levels achieve good silage preservation in bunkers and bags. For upright silos, a bit