## Forage Focus - Guest Column - March 2010

# What Should You Expect When You Open Your Silo in the Next Few Weeks?

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Given the extreme weather conditions in the U.S. during the 2009 corn silage harvest, producers may see silage in early 2010 that is not as clean as expected – even if it was treated. In some cases, if a producer knew they did not have moldy corn/corn silage when it was put into the silo, they may be okay. However, there have been reports of corn silage with high mold and yeast counts. If producers did not know or did not want to know what they were putting in, they may have one of three reactions:

- 1. Oh good, it looks clean. Let's go ahead and start using it.
- 2. Oh my, it doesn't look good. Now what?
- 3. What!!! I treated it last fall and I still see mold.

### WHAT HAPPENED

To understand what to do, it is necessary to know what happened. Controlling molds with an inhibitor is a matter of contact and surface area. A specific amount of product needs to be in direct contact with the mold to inhibit production of spores and further growth. Simply having a mold inhibitor in close proximity is not enough. Traditionally, with "normal" mold counts (<10,000 CFU), 1-2 lb/ton of a mold inhibitor/ton of HM corn/corn silage is used. The 2009 harvest season produced mold counts around the country that were above levels in normal years. Using 1-2 lb/ton may not have been enough to control mold and yeast growth. If higher application rates of an inhibitor were used and mold is still seen, several things may have happened:

- 1. Higher mold counts were present-remember "one to one contact."
- 2. By opening the silo, existing molds and yeasts spores were exposed to oxygen. Oxygen is the catalyst for growth, while temperature and moisture come second.
- 3. The signs of spoilage seen are probably different species of molds of varying colors. Yeast growth may be present but not visible, yet will produce odors that can put animals off feed.

### WHAT TO DO

The following is recommended:

- 1. Test the product coming out of the silo for molds/yeasts -samples are localized so target control can be done.
- 2. Handle the sample correctly to avoid a false reading. A screening for mycotoxins may be a good idea, too.
- 3. If the mold counts are high enough that the final blend is >10,000 CFU for mold and >100,000 CFU for yeast, re-apply a mold and yeast growth inhibitor.
- 4. If the silage is being used in a TMR, the perfect combination of growing conditions in place for mold and yeast counts to explode will be present. CFU counts can double every 20-30 minutes. Using a quality mold inhibitor in a TMR mixer can help prevent the contamination of other ingredients and stop the growth before it hits the bunk.
- 5. Application rates need to be higher than normal depending on the mold/yeast test results.
- 6. If the corn/corn silage will be transferred to a second or temporary unit, treat it as suggested in Item # 3.

#### DON'T FORGET

Have a positive attitude and make the best of it. Kemin has products and programs available to help minimize losses.