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Capital Area Ag Report
September 12, 2013

“Choice not chance, determines ones destiny.”
— Unknown

Announcements
Thursday, Sept 26 from 10 a.m. to 2 p.m.—Producing and Processing Oilseed Crops for Biofuel—at State Line Bio-Fuels, 601 State Line Road, North Bennington, VT. Sponsored by UVM Extension. Cost is $15 per person and includes lunch. Tour of farm and fuel processing facilities, including seeing John's new glycerin boiler. Topics covered by Heather Darby and her UVM colleagues include:
- agronomic management
- production of oilseed crops in the region
- research on altering planting dates to mitigate bird and insect damage
- 2012 National Sunflower Survey results
- Integrated Pest Management (IPM) in oilseed crops
- 2013 results of sunflower insect monitoring projects across the state. View our detailed brochure and register for the event at: www.uvm.edu/extension/stateline
Please register by September 23, 2013. Call Heather Darby, Hannah Harwood or Susan Brouilette with any questions at (802) 524-6501.

FYI:
FOR ASPIRING OR NEWBIE FARMERS: For rent large barn for a livestock or poultry operation in Fort Ann, NY. Has 38 stall for milking. Good for any livestock, now used for goats. Has feed storage. Pay your own electric. $355 RENT. CALL/TEXT 518-232-5064

The “Ag Report” is prepared by Aaron Gabriel
Corn: Silage harvest is beginning. Most fields I have seen have decent ear development. Having a little bit of the ear tip barren is normal. You can count the number of kernels per row to determine if you should have had better tip fill. Some hybrids have 16 rows of kernels and should have 36 to 40 kernels per row. Hybrids with 20 rows of kernels should have 30 kernels per row. Some fields have short stalks and well-developed ears. This should make for silage with a high starch content. Pricing standing corn silage, that is high in starch (or without ears) can be tricky. Let me know if you need a spreadsheet calculator to determine the price of standing corn silage.

The rainfall before tasseling has an influence on fiber digestibility. In a year like this, where we had lots of rain before tasseling, fiber digestibility is less than normal. A lack of rain before tasseling leads to higher fiber digestibility.

I saw ear molds only where birds or insects had damaged the ear tips.

Alfalfa: Evaluate your stand health from now until fall. At least four to eight crowns are needed for a productive stand that is older. Look for cracked or rotted crowns.

Weather Data—September 12, 2013

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<th>Location</th>
<th>Rain Past Week</th>
<th>Rain This Month</th>
<th>Rain Since April 1st</th>
<th>GDD 86/50 Past Week</th>
<th>GDD 86/50 Since April 1st</th>
<th>GDD 41 Past Week</th>
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**Grasses:** It is okay to harvest grasses in September and October. If you want to frost seed a legume in the late-winter, you should weaken existing grasses by clipping low a couple times in the fall. This will give the legume seedlings less competition in the spring.

**Pasture:** Spring pasture growth will be affected by fall grazing management. Having a lot of foliage left in the fall will insulate the ground and keep it cool longer in the spring. It is good to have some ground cover however to protect against soil erosion and protect plant crowns. Do not apply nitrogen to grasses in the late-summer or fall. You can apply lime anytime the ground is hard and trucks will not leave tire tracks.

**Soybeans:** Plants are starting to senesce in some fields. Keep an eye out for white mold and take not so that these fields can taken out of soybeans for a few years.

**Grain Storage:** Protect your crop with good grain storage facilities and management.

**S.L.A.M.** is the acronym to summarize critical grain storage management practices.

- **Sanitation**— Thoroughly cleaning in and around bins, augers, fans, and screens is critical to prevent problems. Run augers and fans to remove old stuff sitting in them before your put in new grain.
- **Loading**— Design and maintain your grain conveying machinery to be gentle on grain. Do not let grain drop for more of a distance than necessary. Replace augers that have developed sharp edges.
- **Aeration**— When filling bins, keep fans going until the moisture and temperature “front” has moved all the way through the grain. It is best to have fans creating both positive and negative air pressure within the bin. It only takes a 15°C temperature difference to create condensation. When the outside temperature swings, use fans to moderate the temperature inside the bins.
- **Monitoring**—There are lots of ways and tools to monitor your grain while it is in storage. Monitoring the temperature every few days is the simplest and most fundamental method. Having a thermocouple within the bin or a thermometer in a probe that you can insert into the grain are some tools. You can often smell when something is going wrong—but by then you have a problem and have lost money.

**Nutsedge:** Nutsedge seems to be very prevalent this year because of excessive rain early on. If you will be using glyphosate this fall to kill weeds, adding crop oil concentrate will enhance its effectiveness against nutsedge.

**BIOFUELS:** If you have any interest in biofuels, I recommend that you attend the September 26th field day at State Line Farm (see “Announcements” in this issue). John Williamson has a very nice set up and lots of experience growing oilseed crops and processing them. He is very open to sharing knowledge and answering questions.
WHAT AFFECTS CORN SILAGE QUALITY THE MOST?

Of all the factors that can affect corn silage quality in a given year, harvest timing is the single most important one to focus on for optimizing quality. Harvesting at the proper moisture range (32 to 35% DM) optimizes energy content and whole-plant digestibility. This moisture range allows for optimal packing densities to be obtained in the bunk, which leads to more efficient fermentation and lower dry matter losses compared to harvesting on the wetter or drier side.

Most of us can appreciate the power that the weather has on crop yields in general. Studies show that well over half of the year-to-year variability in yield can be explained by changes in temperature and moisture. Perhaps less well recognized is the more subtle relationship between quality factors and weather. Research has shown that weather prior to silking influences both yield and quality. Wetter weather before silk emergence generally results in greater yield but at the expense of fiber digestibility. Conversely, drier weather prior to silking tends to increase fiber digestibility (e.g., NDFD) but results in lower overall yield. The amount of moisture after silking is more important for grain fill and starch content.

How much can fiber digestibility of corn change as a result of the weather? A Michigan study showed that the same hybrid grown in the same location can vary in digestibility by up to 6.5 percentage points (24-hr NDFD) depending on yearly rainfall differences (Mahanna and Thomas, 2012). To put this into perspective, this change in digestibility is similar in magnitude when going from a non-BMR to a BMR hybrid.

It’s important to recognize that the growing environment (soil and weather conditions) often has a greater impact on corn silage quality than hybrid selection when considering non-BMR silage hybrids. There is often no more than a few percentage points difference in NDFD when comparing non-BMR hybrids in test plots in the same year.

The 2013 corn silage harvest in NY is about to get underway. Take time now to plan harvest management activities that will optimize the quality of your 2013 crop.

Eric Young, Miner Institute, Farm Report September 2013

CORN SILAGE PROCESSOR ADJUSTMENTS

Whether you own the equipment or have your corn custom harvested it’s important that the silage processor be properly adjusted. A Cumberland Valley Analytical Services summary of over 1000 processed corn silage samples found that only 7% had excellent kernel processing scores, with barely 50% adequate and the rest rated as “poor.” The problem is two-fold: First, processor roll clearance wasn’t correct to begin with, and second, processing effectiveness wasn’t rechecked with changes in hybrid and crop maturity. Just because the corn the custom operator chopped at your neighbor’s farm was processed adequately doesn’t mean that he should come rolling into your fields without anyone checking for proper roll adjustment.

What’s the potential impact of inadequate corn silage processing? One study compared corn silage chopped at 25 mm theoretical length of cut (1” TLC) and processed at 2 vs. 4 mm roll clearance. DMI was the same for both silages, but energy-corrected milk production was 84
lbs for corn processed at 2 mm vs. 75 lbs at the 4 mm setting. The reason for the production difference: Starch digestibility was 87% for silage processed at the 2 mm setting vs. only 75% at 4 mm. Why grow, harvest and ensile corn if you’re going to let so many kernels pass through the cow undigested? Think of what it would take to increase milk production by 9 pounds per cow — or how badly you’d have to screw up to drop it by that much. At $20/cwt, 9 pounds of milk is over $600 per cow per year. Multiply that by the number of cows in your herd: That’s the “opportunity cost” of proper processor adjustment.

— *Ev Thomas*, Miner Institute, Farm Report September 2013