



ADVANCED AG SYSTEMS'S

Crop Soil News

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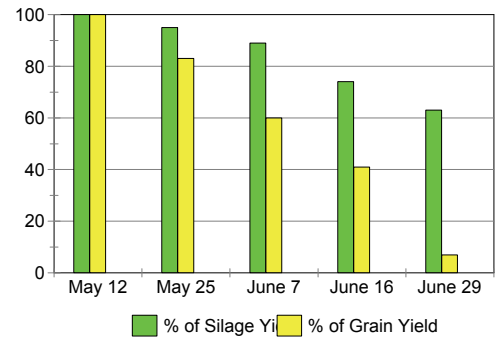
"It is the crops that feed the cows that make the milk which creates the money."

Corn Silage after June 15?

As the graph at right shows, by June 15, there is **little grain produced** on corn silage. Grain that is produced will be wet and very high in sugars, setting marginal rations up for bouts of **acidosis, feet problems, low production**, and abuse of nutritionists. You are harvesting nearly all stover.

The digestibility of that forage becomes critical. At this point, the best switch is to **high forage yielding Brown Mid Rib Sudan-sorghum**.

It will give you the same or more yield/acre than corn but because it is mowed and dried, you can control wetness. More importantly, harvested correctly, it will give you more milk/acre and more digestible forage than any other crop. **Research at Miner Institute found that cows will milk on BMR Sudan-sorghum the same as good corn silage**, and produce higher rumen pH and higher components. We have learned a lot about being successful with this crop since 2000 when most did not harvest it correctly. For further research and farm information go to <http://nmsp.cals.cornell.edu/publications/factsheets/factsheet14.pdf> (Note: BMR is NOT an option for planting and forgetting it. It will grow 3 inches a DAY and quickly get to tall for manageable harvest.) Most farmers mow **when the tallest leaf is at 3 feet** (slightly less than a meter). It is best mowed with intermeshing rollers (tine conditioners are useless) and wide swathed. It is critical that it is round bale wrapped or ensiled the same day you mow it. The crop is very high in sugars which we found allows rapid fermentation even at higher moisture levels. Conversely, mowing and leaving it over night will produce a tremendous amount of butyric and clostridia while removing much of the energy that you grew the crop for. If you are a crop manager that can stay on top of things, then planting BMR sorghum-Sudan would work.



Advanced Ag Systems
Research, Education, Consulting

What about BMR Sorghum?

Most BMR sorghum is designed for southern conditions, and has a tremendous lodging problem. We have planted a trial at the Cornell Valatie Research farm of an 83 day BMR dwarf sorghum (photo at right). This produces a shorter but much fatter stalk that gives the yield without the lodging. We have it drilled in 6, 12,



and 18 inch row spacing. Feed quality from a small test last year was excellent, and because of a special gene, the dry matter at direct cut was great for fermentation.. It is to soon to recommend it as we are learning more about growing it.

Nitrogen on cornfields- is it still there?

April and May and June had a tremendous amount of water through the soil. What about the nitrogen? For first year corn on sod (rotation pays again!) and heavily manured fields (daily spread), the very cold soil temperatures this spring kept the nitrogen from being mobilized from the organic matter. Thus the majority of nitrogen is still in the soil organic matter. Leaching has taken place but only from the little that turned to nitrate. The majority is still available for release this season.

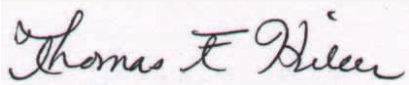
For the farms that put additional nitrogen (other than the 30 lbs in the band) on as urea or especially as solution (both fast release) at planting time, the losses could be significant. In a well-drained soil it quickly leaches the nitrate out or below the root zone. For less than well drained (especially those with standing water) it only takes a couple of days of wet conditions to denitrify the nitrate. Denitrification is when the nitrogen is converted back to nitrogen gas, which is unusable by the plant, and is released into the atmosphere. On well drained soils, you could have **lost 50 lbs or 40% of the total early applied nitrogen. On a somewhat poorly drained soil 60% of the total applied N could have been lost.** Ironically, this year very little somewhat poorly drained was planted simply because it was to wet. **The bottom line is that the corn that received all the N at planting time may need to be sidedressed.** The good news is that you can pull a sample and have a PSNT test run to determine before hand, if you need to sidedress more nitrogen. <http://nmsp.cals.cornell.edu/publications/factsheets/factsheet3.pdf> is a fact sheet that has the information you need to take the samples to determine if you need more N. On the flip side, this is NOT the year to guess and just throw more nitrogen on the field. Excess nitrogen delays maturity and keeps the crop wet. With all the late planted corn this is not what we need. Adding insult to injury, the north east is predicted to be warm and moist for early and mid summer, and then go cold and wet for late summer (don't shoot the messenger). If this does come true, you will not want excess N delaying your crop maturity.

Cool Season Grasses

The cool and wet conditions are perfect for growing tremendous crops of high yielding cool season grasses. Wherever you were able to get early harvest of first cutting grass, the moisture can give you a chance for high yields of top digestible forage in the second cutting. Even where you were late getting the first cut, the second can give you high quality forage. The only way you are going to do this is to feed the crop. The limiting factor for yields of grass is the amount of available nitrogen. Farmers found that under cool wet conditions in 2000, 75-100 lbs of N on re-growth after first harvest, gave tremendous 2nd cutting yields of quality forage. In fact a few reported that this program gave them the same total yield for the year in spite of harvesting half of their acreage. Nitrogen fertilizer on grass has a \$4 to \$1 return on investment. Yes, money is very tight. The flip side is that you will be more than paid back in savings on soybean meal when you feed this well managed forage.

For intensive grass management like this **raise the cutter bar.** The grasses grow mostly from top material. The more you leave the more you get in speed and quantity of second growth.

Sincerely,



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