

# GROWMARK FS Seedlings



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## Ruminations By Ron Wilston, Dairy Nutrition Seed Specialist

The Northeast has long been known as a prime dairy region in the United States. New York and Pennsylvania both rank in the top five nationally for milk production. These states rank high for good reasons. One of which is that both states are located near high populations of people, making the marketing of a perishable product like fluid milk more economical. Another is the topic of this article – ample forage grasses and alfalfa. The Northeast's cool temperate climate, along with ample rain fall make it ideal to grow non irrigated forage crops – mainly alfalfa, forage grasses and corn. Together these three crops form the backbone of dairy rations in the Northeast. I want to talk about alfalfa and forage grasses and assessing their quality.

For most of you, your first cutting hay or haylage has already been harvested. Now is the time to assess the quality of that forage - before you start feeding it. The quality of any crop is ultimately going to be determined by the end user. In this case, your dairy cows and young stock. With that said, "quality" encompasses many factors. Some are measurable and others are subjective. Before you start feeding out this years first cutting consider the following quality assessments: odor and color; nutrient content; digestibility; and anti-quality factors such as molds and mycotoxins.

**Odor and Color:** Although not an exact science, odor and color can be your first assessment of quality. Does the silage have a sweet smell or does it smell like baby vomit or a dead woodchuck? These

bad smells are associated with butyric acid formation – enemy number one in hay crop silage. Alfalfa has more of a tendency to go through a butyric fermentation than grass haylage because alfalfa has a high buffering capacity. In other words alfalfa contains a lot of organic acids and nitrogen that prevents the pH from dropping quickly. This allows clostridia spores to grow as long as the pH stays above 4.8. The clostridia spores produce butyric acid as their by-product.

The dry matter content also plays a big role in butyric acid production. Generally speaking, the lower the dry matter or the higher the moisture, the greater the chances of having a butyric fermentation. According Dr. Keith Bolsen, professor emeritus at Kansas State University, putting in low dry matter haylage doesn't always guarantee that you won't have butyric acid, but it sure lowers your risk.

If you do have a bunk, tower silo or bag that has gone through a butyric acid fermentation and you have to feed it, sooner is better. Bad silage, unlike wine, does not get better with age.

If the haylage has the smell of burnt tobacco and is brown or even in extreme cases black, the silage has caramelized. Caramelization generally occurs when temperatures stay hot too long. Dry matters of 55% or higher are more susceptible to carmelization. In extreme cases, silo fires can occur with this low moisture haylage.

**Nutrient Content:** Testing your silage for nutrient content should be done before actually starting to feed out your silage.

This allows ration adjustments to be made ahead of time. In silo bags, slits can be cut in the side in an X pattern so that it is easy to seal back up with tape. Sampling in a couple of different spots will give you a better representative sample. In bunk silos, samples can be taken simply by pulling back the plastic from the area you intend on feeding and digging down to get a good representative sample. Make sure to take samples from at least seven or eight spots to get a better representative sample. Again, cut slits in an X pattern in the plastic part way up the slope to gain access to better samples. These samples will give you a starting point for putting together a ration. The silage should be sampled again once you start feeding it. You can do this by sampling from your TMR mixer or wagon. Bunk silos over six or seven feet high are too unstable to sample. Every year farmers and consultants are seriously hurt or killed from cave offs of bunk silo faces. Don't be another statistic, play it safe and get your samples out of the mixer or wagon (while it's shut off of course).

Tower silos don't give you a lot of opportunity to sample ahead of time because once you let down the loader and clean off the top you will have to continue to feed down in order to keep ahead of the spoilage, especially in the summer. In this case, take the samples as soon as possible after you starting feeding it out. The samples should be sent to a reliable forage lab. When you or your nutritionist gets the samples back, be sensible. If the results reveal lower than

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# Precision Planting... the latest HOT investment TIP!!!

By Steve Carr, Territory Sales Manager, Western NY



We are all looking for that hot investment tip. The one that hopefully is a sure bet; doesn't take too much up front capital; gives us a quick return on our money; and one that pays dividends over a long period of time. Too good to be true you say? 'We don't see those kinds of opportunities in farming'; 'opportunities like that always carry too much risk'.

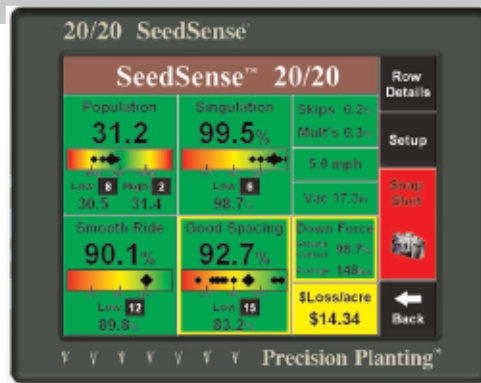
Well here is some of the common feedback we hear from our customers about their investment in Precision Planting with GROWMARK FS.

"Precision Planting was one of the best investments we made on the farm"... "the proof is in the stand"... "We know if we get good seed placement and spacing, our yields will be better. There was a clear cut difference"... "Rebuilding my planter meters with Precision parts was an excellent investment"... "At first I thought it was just another sales pitch, but the spacing is definitely more even"... "Installing the Precision 20/20 planter monitor was one of the best investments we've made"... "Sometimes it's hard to see if the differences are directly related to the money you spent to fix something, but with Precision Planting, you can see the difference".

These are the prevailing comments among growers that have opted to upgrade their planters with the Precision Planting parts from GROWMARK FS in their finger and vacuum planters. Because there is a visible and measurable difference in the performance of the Precision components, these differences show up in the field in the form of increased crop performance and more income per acre. Just by fine tuning and doing things a bit better than in the past, growers can increase yields and income due to proper spacing and seed depth of the crop.

## 20/20 SeedSense receives high praise

The new 20/20 SeedSense™ monitor system is now taking us to that next level - a level where we can manage the planter as a whole, not just the meters. We worked with 40 growers in New York this spring, with a variety of Kinze and John Deere



planters ranging from 4 rows to 23 rows. All were amazed with what they thought they knew about their corn planters... and what more they learned. The 20/20 is kind of a wake-up call about how much we can still do to manage our planters to optimize performance, without spending more money on seed and other crop inputs. Now we can measure planter performance beyond meter singulation.

With the 20/20, we now monitor and manage singulation and spacing on the go, not just population like the other planter monitors available today. We are also able to monitor downforce and ground contact which will help maintain a more uniform seed depth. You can see percent of skips and doubles right down to the individual meter so if there is a problem; you can correct it on the spot, in the field and have a higher level of confidence that the seed is in the ground properly spaced. With the 20/20, you can find where there are "drive issues" in chains, sprockets or cables. You may be able to improve singulation just by adjusting ground speed depending on the field conditions. In fact, by having the ability to monitor the various areas of the planter, many growers have been able to increase their ground speed! There is less "hoping" that all is well and less wondering and worrying as you scout your fields the days and weeks following planting. The 20/20 provides planting confidence.

Field mapping software and other new additions are being developed for the 20/20 to keep it the technology leader, keeping the grower ahead of the game.

## Variables that rob yield

Control the variables. That's what it is all about in many business situations to

increase profitability. In farming, we have so many variables to choose from. The most prevalent being Mother Nature. She gives what she wants to in any given year and we need to know how to react and adjust. As the boy scouts say, 'Always be prepared'. Well, if we can get our planters prepared and be ready for that window of opportunity, we have a higher chance for a successful crop.

So where do we start? By controlling seed singulation, seed spacing, and emergence (depth). When we manage these three variables, properly spacing the seed with uniform emergence, we are already ahead of what Mother Nature has to throw at us.

## GROWMARK FS is trained to help

How do we do this? The professional seed and agronomy team at GROWMARK FS will take your meters into our certified Meter Max technicians for a diagnostic check-up at one of our Meter Max test stand locations. The grower is contacted with an estimate (if requested) and approval to perform the work. Precision Planting meter parts are installed and the meters returned to the growers. Most of GROWMARK FS Precision Planting customers are now on an annual maintenance inspection check-up.

## High Interest

Interest is already very high in the 20/20 SeedSense monitor system, with early calls coming in for next year. Growers that are purchasing new planters are ordering them without factory meters, seed tubes, or monitors and will install Precision parts from GROWMARK FS. New Precision Planting products are expected to be announced early this fall, so stay tuned.

Contact your local GROWMARK FS crop specialist or visit our website at [www.growmarkfs.com](http://www.growmarkfs.com) (click Contacts) to discuss this great investment option for your farm. The payback is fast and the returns keep coming year after year in improved corn yields. Yield is in the details.

Steve



# Maximize your Soybean Profits

By Christopher Young, CCA, Territory Sales Manager, Eastern PA

Wow! What a time to be farming. United States soybean planting intentions for 2008 are 74.8 million acres, up 18 percent from last year. Acreage increases are expected in every state except West Virginia. Pennsylvania and New York may have the highest soybean acres ever planted.

This brings several questions to mind. Can I afford to apply fertilizer? Foliar feeding? Control weeds? Insects? Disease? What will I get for my soybeans when I sell them next fall? Let's address the last question first.

Past history would tell us we should see a substantial correction downward in pricing from last year's price of \$10.00+ per bushel with this kind of production increase. When we take a look at the November 2008, soybean future closing price for July 2, 2008, we see that soybeans closed at **\$16.30 Bu in Chicago**. How can this be? What's going on? Why didn't prices drop like we expected? The simple answer is China, India, ethanol, labor issues in South America, ending stocks, carryover, speculation, world demand, flooding in the Midwest, etc. All these things are driving the prices up. In reality, none of this matters because we can not control it! Focus on what you can control which is maximizing yields and profitability of your soybean crop.

The goal for 2008, should be to maximize profit per acre. We need to reevaluate everything from weed control, insect control, foliar feeding, fungicide treatments, etc. At this point, most soybeans are in the ground. Fertility issues should have already been handled. Stands need to be evaluated and soybeans replanted if stands are inadequate.

Weeds need to be sprayed with Roundup® before they are 4" tall. If weed pressure comes on early - spray. If needed, a second spraying is cheaper than the resulting yield loss from a delayed application on the first flush of weeds. Monsanto has redefined the window for spraying Roundup brand agricultural herbicides on soybeans from

'cracking thru R2 growth stage. R3 is defined as 1 pod 5 millimeters (3/16") long on one of the four uppermost nodes on the main stem with a fully developed leaf.' You should not spray once the plant reaches R3.

The threshold established when we had \$5.00 soybeans to control insects does not make sense with \$16.00 soybeans. If you wait for that amount of crop damage from insect feeding using the old threshold, you will incur significant economic loss (profit loss) that is not necessary.

### Example:

At \$5.00 soybeans, it took 4 bushels to breakeven for a \$20.00 treatment. It would only require 1.25 bushel yield loss before you start losing money by not treating at today's bean prices. If you wait for a 4 bushel yield loss based on the old threshold you will have already lost \$64.00 per acre.

This does not mean you should apply unnecessary treatments. Just understand that given today's bean prices, it will take a lower threshold of insect pressure and defoliation to return your spray investment and gain more yield. Soybean Aphid, Potato Leafhopper, Two-spotted Spider Mites, Mexican Bean Beetle are the main insects to watch but you may also have to control Grass Hoppers, Green Clover Worm and Japanese Beetles. Thresholds vary depending on stage of growth and insect. So, if you see feeding, contact your GROWMARK FS sales representative if you are not sure when to spray.

Foliar feeding can generate significant crop response if nutrient deficiencies are present. GROWMARK FS is the regional supplier for Stoller products. X-Tra Power can be applied foliar to provide Magnesium, Manganese, Copper and Zinc. X-Tra power helps the plant maintain a healthy hormone balance and each of these nutrients are important for the functioning of the enzymes responsible for auxin production. Auxin is required for controlled vegetative growth

and increased reproductive growth. SETT Enhanced is a unique chemistry formulated from calcium and boron supported by growth-enhancing co-factors and is designed to be applied during the reproductive stage of growth. Calcium and boron in cell walls are critical for initiation of flowering of plants which results in higher number and quality of soybeans. GROWMARK FS has a complete line of foliar products to correct any nutrient deficiency.

The final area to consider is disease management. Although Soybean Rust has not made it into the Northeast to date, we have many other disease issues that are causing yield loss and may require the application of fungicides. There are two classes of fungicides to consider. Stobilurin fungicides (Quadris and Headline) provide only preventative disease control (Use when no disease is present). Triazole (Tilt and Folicur) provide curative activity if disease has already infected a plant. We also have products which contain both classes (Quilt and Stratego) and provide both preventative and curative disease control. Your GROWMARK FS salesperson can help you decide which is the right product to use in your particular fields.

2008, has provided an opportunity to increase farm revenue and profit. Decisions to make foliar applications of herbicides, insecticides, fungicides and foliar feeding in your soybeans should be made by evaluating the yield retained by the application and the cost of the treatment versus the cost of not treating. Weeds, insects and disease will rob you of the yield potential of your crop. Take the emotion of the cost of inputs out of the decision making process and use sound agronomic decisions to run your business. Your local GROWMARK FS salesmen are an excellent resource to help you make these decisions.

Thank You for your business! We look forward to supplying your seed, fertilizer, and crop protectant needs for years to come.

Chris

desired quality, remember your nutritionist can only do so much. Insisting that he or she puts high levels of poor quality forage in a ration and that you will be able to keep or improve your current level of milk production probably isn't realistic. Remember, grain in ration should compliment good quality forage not replace it.

**Digestibility:** After you have done the first two quality assessments and have made the ration adjustments prior to feeding your first cutting haylage, you should next consider taking samples to have them analyzed for digestibility. Yes, digestibility is the favorite buzz word of the dairy industry. Having samples run for digestibility will help you and your nutritionist fine tune the ration to maximize productivity. "Immature, leafy plant tissues may be 80 to 90% digested, while less than 50% of mature, stemmy material is digested", according to Wisconsin State

University. Keep this in mind when deciding how much haylage to feed. Digestibility analysis can also be a big help in trouble shooting problems on a herd. The analysis can help explain why every thing in the ration looks good on paper but the cows are not performing in a matter consistent with the ration.

**Anti Quality Factors:** The last quality assessment is for anti-quality factors. This assessment can and should be made early and often. Anti-quality factors are compounds such as tannins, nitrates, alkaloids, estrogens (compounds that interfere with reproduction) and molds and mycotoxins. None of these compounds should present at harmful levels in high quality forage. Anti-quality factors cost the dairy industry millions of dollars a year through poor performance, sickness and death. Out of all the factors, these are the most expensive to test for and the hardest to detect. Sampling for mycotoxins for

example, can be tricky because they tend to be in pockets and not necessarily evenly distributed throughout the silo. The result is that a lot of false negative samples come back and the producer looks elsewhere for the problem, costing him or her more money and time without solving the problem.

High quality, home grown forages are an important part of our dairy rations in the Northeast. Take the time to test and evaluate them on a regular basis as part of your overall feed management practices.

*Ron*

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