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The Growers Solution

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Projected Fertilizer Mess for 2009

By Jim Halbeisen

As our Growers Winter Meeting season winds down here in early March, agriculture's fertilizer price and supply mess is definitely still with us, and the near future appears to offer very little resolution.

Fertilizer Availability

Information coming into us from our Growers Mineral Solutions (GMS) Sales Representatives indicates farmers continue to wait for a fertilizer price decline before spending any more money on their 2009 crops. This is an understandable business decision,

however, producers need to realize North America's present infrastructure can not ensure timely delivery of fertilizer to all regions at the same time. So, as the clock ticks closer to spring planting, the problem's size will grow to larger proportions.

And should large demands come to the table shortly before spring planting, availability problems could become a very serious issue. Available fertilizer supplies will fall way short of demand. We realize some in the livestock industry don't see a large demand happening, but, the vegetable and row crop people do. Already many are very concerned about potential supply problems.

Fertilizer Prices

Our GMS sales reps. report fertilizer prices, depending on the various suppliers' inventories, are all over the board around North America. Nitrogen and phosphorus prices have lowered to some degree from their highest levels, however, the phosphorus reduction is smaller and is very dependent on the type of product. Dry product prices have dropped to a larger degree than liquid products, because of demand. More farmers are realizing the efficiencies of dry products are low compared to liquids, plus handling of liquid products is much more convenient.

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Record Corn Yield

By David Kaschak

My sister Theresa and I have a 153 acre farm near Waterford in northwest Pennsylvania. We raise corn, oats, hay, 13 Hereford beef cows, and we milk 40

Holstein Dairy cows. We also breed Registered English Shepherd pups which are sold throughout the U.S. Our web site is: <http://kaschak-kennels.tripod.com/>

I started testing Growers Mineral Solution in 1991 and since then, have benefited from help given us by Growers District Manager Terry Hoffman and his wife Rose.

Our first Growers test was on Alfalfa in 1991: Half the field got dry 0-13-39 fertilizer with boron. The other half only got a Growers foliage spray.

The Growers half, at first cutting was greener, taller and less insect damage, it grew back faster and the Protein was also higher.

Our first Growers test on Corn was in 1991: Half the field got 400 lb. of 10-20-20 dry fertilizer in the row. Half the field got 200 lb. of 10-20-20 dry fertilizer in the row plus a foliage spray of Growers when the corn came up.

The Growers half turned darker green after the first spray of 3 gallons per acre. My neighbor asked, "Why does half the field looked so different?" At harvest the grain dried down faster and I had about 50 Bu. per acre more ear corn.

In the Fall 1994 issue and the Summer 2001 issue of the *The Growers Solution* are reports of our earlier winnings. Also, in the 1994 Growers Yield Results Book on pages 16 and 17 shows Growers' all time yield record holders; we were in Third place with 258 BPA.

In 1997 we went all Growers. No more bags to handle. I also tried Growers Nutritional Additive (GNA). The 1997 Growers Yield Results Book on pages 5 and 17 shows 258.3 BPA. Since then I have tried various test plots with different corn, different planting populations, different results. I have had over 300 Bu. per acre many times, but they did not count in the Growers 100 BPA Contest because they were on less than 5 acres.

Our 2008 Record Corn Yield

History: In the fall of 2006 we sprayed Round-up® on sod, applied manure from our dairy cows and fall plowed. We planted corn May 11, 2007, and we had a very dry summer - May 1 to Nov. 1 - 20.8 inches of rain. The September 30, 2007, yield check was only 202.75 Bu. per acre. We applied 2 tons per acre calcium lime

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Calcium is King

By Alton Stephens

In the beginning when God created the Earth, God saw that it was good. Throughout the history of mankind, man has become greedy. At the end of W.W.II the ag universities could have made recommendations of high calcium lime, but, instead, the dry fertilizer companies gave a lot of money to have research showing their dry fertilizer products work. High calcium lime would be more economical and healthful than dry fertilizers.

Our 200 plus acres operation has been on the Growers Program for 18 years, using calcium and Growers Mineral Solutions, and no dry fertilizer. During the first three or four years we put 20 tons per acre of water treatment lime on all our fields, which is the equivalent to about 15 tons per acre of dry lime. At the time, we left an acre where we didn't put on any lime so we could see the difference. We found we got our money back within six years, meanwhile the lime is still working.

In one particular field last season we had soybeans. We had just planted them when it started raining every few days. There was much water accumulation in the neighborhood's fields. A farmer down the road replanted some of his soybeans three times. We didn't have to

replant any of ours. They all came up, even on the ground where the water had lain. We foliar fed ours with 2 gallons of Growers. The neighbor said his beans made 28 Bu. to the acre. Ours, which we put in the bin, made approximately 40 Bu. to the acre.

We seldom take soil samples because we depend wholly on Growers and calcium. However, for curiosity's sake, last year, a very wet season, we took a soil sample of our 40 Bu. to the acre bean field. We compared the figures from this soil sample with a sample from a different neighbor's field. This man has been working with a well known soil consultant for many years. His test showed a soil pH of 6.9, a Cation Exchange Capacity of 11.4, potassium at 4.1, magnesium at 24.2, calcium at 70.3, and hydrogen at 1.5. Our test report showed soil pH at 7.5, Cation Exchange Capacity of 13.0, potassium at 1.9, magnesium at 13.7, calcium at 84.3, and no hydrogen.

For 175 Bu. corn on this neighbor's farm, A&L Labs recommends 230 units of nitrogen, 90 units of phosphorus and 45 units of potash. Nitrogen @ \$0.55/lb. x 230 lb./ac. = \$126.50/ac. Phosphorus @ \$0.315/lb. x 90 lb./ac. = \$28.35/ac. Potash @ \$0.44 /lb. x 45 lb./ac. = \$19.80/ac. TOTAL = \$174.65/ac.

What has been recommended for our farm is 189 lb. of nitrogen, 60 lb. of phosphorus and 80 lb. of potash.

Nitrogen @ \$0.55/lb. x 189 lb./ac. = \$103.95/ac.
Phosphorus @ \$0.315/lb. x 60 lb./ac. = \$18.90/ac.
Potash @ \$0.44/lb. x 80 lb./ac. = \$35.20/ac.
TOTAL = \$158.05/ac.

We will not follow the recommendations. What we are going to do is use 6 gallons of Growers; 4 gallons in the row and 2 foliar fed, plus 80 pounds of nitrogen side dressed. This will cost us \$151.70 per acre.

Nitrogen @ \$0.55/ lb. x 80 lb./ac. = \$44.00/ac.
Growers @ \$17.95/gal. x 6 gal/ac. = \$107.70/ac.
TOTAL = \$151.70/ac.

We use a minimal amount of weed spray, and with the Growers Program we have fewer insects and diseases. With no dry fertilizer, the soil is in better condition to resist weeds and pests.

Calcium is #20 on the periodic table of elements. It has an atomic weight of 40.08. It is the fifth most abundant mineral on planet Earth. Calcium is very important to our program because it flocculates the soil, which helps make nutrients more available to the growing plant. If you notice the ground being hard and dense, you need calcium.

As quoted in *Acres USA* magazine, soil microbiologist William Albrecht of the University of Missouri said, "Use lime to feed the plant." He also said, "Insects and diseases are the symptoms of a failing crop. The use of toxic sprays is an act of desperation in a dying agriculture. It is not the overpowering invader we must fear, but the weakened condition of the victim."

Growers Mineral Solutions contains all food or tech grade minerals. Clean minerals are needed to help grow healthier crops for the entire food chain, including the crop being grown, animals that eat the crop, and people who eat either the meat or the crop. Use Growers for a healthier planet. ■

Pennsylvania Hay Contest Winners

By Bev Mast, Growers District Manager

We are very proud of our two hay growers here in Eastern Pennsylvania who each won multiple awards at Penna Ag. Progress Days Hay Judging in August of 2008. Each of them, besides winning first place with their different entries, also won the Grand Champion Award in their respective sections.

Our people who used Growers on their hay entries are:

Robert Bieber Farm, Nazareth, Northampton

County, placed first in five different categories plus Grand Champion Section 2 for later cutting Alfalfa Grass Mixed.

Daniel K. Pearson, Hellertown, Northampton County, placed first in two categories and third in another category plus Grand Champion Section 3 for later cutting Alfalfa.

There were 135 entries in 30 classes in the judging. The judge remarked, "I put less emphasis on color. I'm looking more for what will affect the nutritional value such as stage of maturity or leafiness." ■

Lime Doubles Soybean Yield

By Growers Staff

Rick Loll of Campbell in west central Minnesota doubled his soybean yield following a one time lime application. Seems Rick and his three sons who he farms with were liming an 80 acre field in 2006, but about half way through the job, son Charles broke his back in a shop accident. This naturally diverted the family's attention and brought the liming operation to a halt. (Charles is now doing miraculously well.)

Meanwhile, the heavy dense clay, high magnesium field, typical of the area, had 40 acres receiving 3 1/2 tons per acre of high calcium sugar beet lime in 2006 and 40 acres without. The hired man unaware of the liming about three months earlier stated, "That is the strangest field I ever worked, on the east half

you could shift up a gear (limed half) and the west half you had to shift down a gear."

Charles couldn't believe the yields they were getting from the 2008 soybean crop. Seems the east 40 acres that had been limed would fill the hopper extension to the top in just one round, but the west side which didn't drain well and stayed sort of wet during the season would take two rounds to fill. They figure the limed field yielded 70 bushels per acre and the unlimed 35 bushels.

Twelve years ago Rick started liming after reading a book inherited from his "great grandpa" entitled *Soil Structure and Modern Farm Methods*. It was written in about 1915 and apparently came from the John Deere Agronomy Department of the time. In the book on page 96 he says they reported on an experiment where they limed a soil to 2 1/2 %

calcium and a check without liming. Then they put two inches of water on both soils; the one without the lime took 26 days 19 hours to drain and the one with lime took 17 hours.

Rick feels magnesium is an expensive negative in their farming operation and calcium is a beneficial positive which effectively counteracts the negative. The Lolls have two 16 foot lime beds mounted on tandem axle trucks on the farm, and their high calcium sugar beet lime source is fairly convenient, 25 miles away.

Growers District Manager Dave McIver often reminds Rick of Wilbur Franklin saying, "You can't treat a chemical problem with a physical tool," meaning tilling will not permanently break up and make fertile heavy high magnesium soils, they need calcium.

"The Growers Program works," says Rick. ■

Record Corn Yield

Continued from page 1

October 13, 2007, plus manure and fall plowed.

May 21, 2008: Our last snow (ground white—35 degrees.) I was glad to have fall plowed! Planted corn May 24, 2008, with 5 gallons of Growers per acre in the rows. June 15, 2008, sprayed 2 gallons per acre Growers with 4 gallons of water. July 10, 2008, sprayed 3 gallons of Growers and 3 gallons of water plus 8.5 oz. GNA per acre. We had a wet year — May 1 to Nov. 1 — 32.4 inches of rain. Before Rose, Terry and I started the check on October 10, 2008, Terry said, “This field looks like the best you ever had.” Lots of two and three ears

per stock and all the ears were full to the tip, no wind damage and very little raccoon or deer damage.

In the 9 acres of Seedway 2170 corn we checked 3 different places in the field, added them together and divided by three for an average of 298 Bu. per acre. For the 9 acres of the Unity 5980 corn we checked the same way and it averaged out at 312 Bu. per acre. Relative maturity is 81 days. I plant around 35,000 population. At the time of our yield check I had a 34,300 stand. After the picking was done we had real close to one ton per acre more corn in 2008 than in 2007 in the same field. Cost of the Growers was \$69.08 per acre.

I don't feed Growers to the cows, but I apply it to the crops they eat which seems to eliminate any deficiencies. Our milk production is around 23,000 lb. per head per year. Since we started

applying Growers to our crops, per cow per year milk production went up about 4000 lb. Every year I get at least one extra cutting of hay because it grows faster.

(**Staff Note:** David sent us a clipping from the December 2008 issue of *Successful Farming* showing the winners and their yields in the National Corn Growers Assoc. 2008 Corn Yield Contest. Seems their contestants play by different rules in that they take their yields from “plots” and they are from the best plots from the best fields, not averages over the whole field, and they plant 111 to 131 day corn. Regardless, David's yields for the non-irrigated corn were 16 Bu. per acre better than the NCG's winner. We think it is of special interest that, other than some manure, no commercial nitrogen, phosphorous or potash has been used on the Kaschak's farm for many years.) ■

On The Road Again

SPRING — 2009

Growers Mineral Solutions is scheduled to set up and staff booths at the following upcoming farm shows and conventions this spring and summer. It's a great time to stop in and review your plant food and animal nutrition needs, hear about new developments at Growers or just chat with the folks who make it all happen—your friends and neighbors.

March 11-13	Western Fair Farm Show London, Ont.
March 31-April 2	Wisconsin Public Service Farm Show Oshkosh, WI
July 3-4	Horse Progress Days Oden, IN
July 21-23	Wisconsin Farm Technology Days Waterloo, WI
July 21-23	Michigan Ag Expo Lansing, MI
August 4-6	Farmfest 2009 Redwood Co, MN
August 11-13	Empire Farm Days Seneca Falls, NY
August 18-20	Pennsylvania Ag Progress Days Rock Springs, PA
September 9-11	Outdoor Farm Show Woodstock, Ont
September 22-24	Ohio Farm Science Review London, OH

Hope To See You!

Fertilizer Mess

Continued from page 1

Late winter or early spring price reductions are seen as “pump priming” efforts to get fertilizer moving earlier and to prevent clogging of the distribution system during the spring planting season. However, some distributors believe if fertilizer demand escalates high enough to cause short term shortages, resulting price increases could be very significant and may even exceed the 2008 higher price levels.

As far as potassium or potash fertilizer is concerned, prices have not changed at all in any part of North America. Potash raw material producers have their product under very strict output controls and plan to dictate prices to farmers.

Waste Products in Fertilizer

Growers Chemical Corporation necessarily competes against low cost liquid products which use other industries' contaminated waste products in their product formulations. It is a well known fact these products contain toxicities and are unacceptable as livestock mineral supplements, regardless, some firms advocate feeding livestock (with poor results) while even bypassing the required registration processes.

However, with high cost fertilizer raw materials, even more industrial waste products are being examined as possible fertilizer sources. Farmer producers must be aware of the instability of heavy metals present in waste products being used in fertilizers today. For example, liquid solutions, normally acid in nature, will tend to have their heavy metals present in the liquid, so gloves, protective clothing, and goggles are needed to keep the toxic metals from entering the farmer's body. The same holds true for the dusty waste being used in dry fertilizers. Respirators and other protections should be used to prevent the entry of toxic dust into the system. The biggest problem with these waste products is the long term effect on the soil's biological system and the health of the human system. In either case

the toxicities in the waste may not result in immediate problems production-wise or health-wise to the farmer, but future problems following ever increasing input applications are definite possibilities.

How to Approach the Problem

Most GMS sales representatives have done an excellent job helping their long standing GMS clients deal with current extremely high fertility pricing, and the flexibility of the Growers Program has been a big help.

Number One. Farmers who have concentrated on applying calcium to their soils are finding the improved biological activity helps carry the crop with very small fertility input needs. Most GMS customers know the two stress points in the plant's growth cycle, germination and reproduction, are the key times for fertility demand. Target Fertility.

Number Two. Because Growers Chemical Corporation is the only company in North America advocating the use of foliar fertilization as a main component in the total fertility program, it has an unique advantage in being able to help GMS users contain fertility costs for the 2009 season.

Once the majority of soil applied fertilizer is completed, we expect lesser demand for fertility nutrients will follow and force major element suppliers to drop their current excessive prices. If this occurs, Growers Chemical Corporation should then be able to manufacture GMS at a lower price. This, in turn, should allow GMS clientele to more economically apply additional foliar applied GMS to their crops and bring their fertility levels up to more normal rates. Of course we have no guarantee this scenario will occur in 2009, but it has some good possibilities, so Growers Chemical Corporation is telling customers to be ready for an aggressive foliar feeding season and as the crop heads toward the foliar spraying season to keep in close contact with the GMS rep.. The Summer issue of *The Growers Solution* will discuss foliar spraying GMS in detail to help our clients utilize GMS maximum beneficial results. ■

Growers MINERAL SOLUTIONS

SPRING 2009

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Crops and Soils Seminar — Conference Call

Growers customers and prospective customers are invited to join in on our Conference Calls which are designed to further explain the use and benefits of Growers Mineral Solutions and the Growers Soil Program.

Jim Halbeisen, Growers Director of Research, will give a short introduction which will include an update on product pricing and availability, then he will open the call to questions. Be prepared to ask your questions during the conference call, or, if you wish,

submit them to the Growers' office, 800-437-4769, before hand. Your questions will determine the calls' subjects and will last one hour.

The Growers Crops and Soils Seminar Conference Call

**Tuesday, March 24, 8 PM, EDT
and**

Thursday, March 26, 12:30 PM, EDT

At the scheduled time, please dial **1-712-429-0690**. You will then be asked for your

conference security code or participant PIN number. On your telephone key pad, enter **637573 #** (you must add the # following the 637573.) Until you want to talk or ask a question, you should have the **"Mute" button** on, or, if no mute button, press ***6**, this will mute and eliminate extraneous background noise from your end of the conference call. When you want to ask a question, press **"Mute"** or ***6** again and you will be heard, then when finished with your question or comment, go back to the mute mode. ■

By Elvin Hursh, Growers District Manager

I have been using Growers on my Lititz, PA, farm since the early 1960's, and two of my brothers have been on the Program the same amount of time.

Now in the spring of 2008 my other brother Lester and his son Leonard from Mt. Joy, PA,

Fast Acting Lime

started using it in their fields. They plowed one field in the fall of '07 and seeded a grass hay. In the spring of '08, after taking 1st cutting off they applied lime (high calcium) in strips of no-lime, 3 ton per acre, 6 ton per acre and 9 ton per acre. This field had had little calcium applied before hand, but had had generous amounts of chicken manure and pen pack manure. Four or five weeks after the lime application they took off 2nd cutting. Lester could see the sickle bar all the while when mowing the no lime and 3 ton strips, but when he got to the 6 and 9 ton strips he could no longer see it because the grass there was so thick and lush and of a softer, finer texture. They had foliar fed all the hay strips with Growers at 2 gpa after each of the 4 cuttings they took off. For the season of 2009 we plan to take forage samples to check feeding values.

Another of my customers is Marlin Oberholtzer from Ephrata, PA. Where his consultant advised using high mag lime, instead he put 1 1/2 ton of high calcium lime per acre on his fields and 3 ton per acre on the knobs. About three months later while chisel plowing,

Marlin noticed it plowed lots easier where he had applied the lime, and the field's hard knobs were softer and yielded much better than in former years.

For his '07 silage corn Marlin applied 1 gal of Growers in the row at planting and foliar fed once with 2 gpa of GMS. We figure his well limed soils helped carry the crop through. Then, that fall, as he filled silo, he sprayed it with Growers. He hadn't used any silage inoculants the last few years, but this was the first time in all his years of farming that he had no heated silage when he started feeding it to his steers.

In the fall of '08 while filling silo Marlin was in a hurry and didn't bother to put anything on his silage. Later on when opening the silo his neighbor helping him asked, "What silage inoculant did you use?" He was surprised that it was so cool. Even after he had been feeding a few weeks, when Marlin dug down 8 inches it was still cool. He had foliar fed his '08 crop once with Growers at 2 gallons per acre, but, again, the well limed soils were a factor. Anyway, now the neighbor is a Growers customer. ■

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