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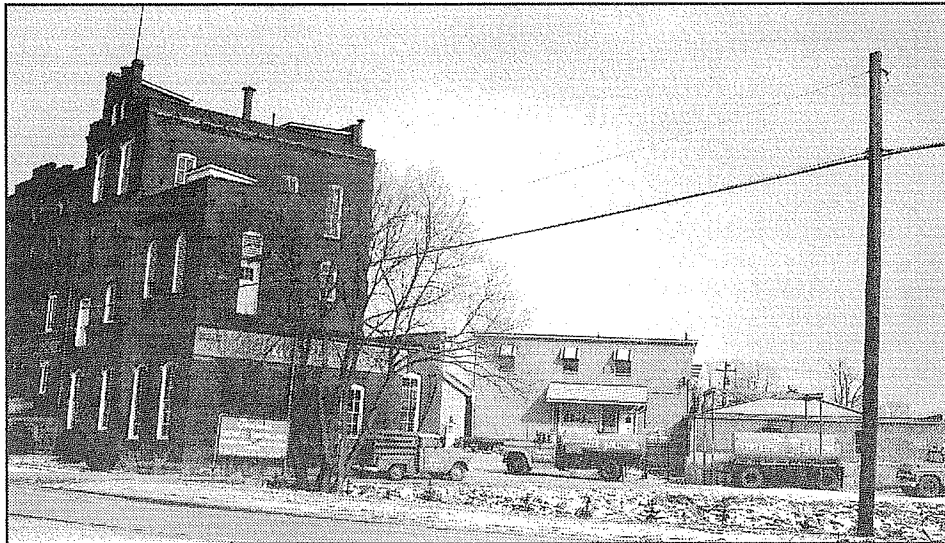
## The Growers Solution

LATE FALL 2004

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VOLUME 17 ISSUE 5

### The Beginning of Growers — 50 Years Ago



The Growers plant and office in the late 1950s.

process showed that they could use one fifth as much nutrient in a liquid form to obtain like results as in a dry form.

He went on from there to what would be known as fundamental research. Questions? What were the availabilities of different forms of minerals? What minerals could be combined? What happened after combining minerals? What about toxic minerals? Where did toxic minerals come from? And last, but not least, what minerals did plants really need to grow, and what was the quantity needed of those minerals? The best answers to these questions came out of the greenhouse growing plants in hydroponic conditions where we knew just what was in the tank.

The next problem was that plants didn't seem to want to mature under hydroponic conditions. Dr. Tiedjens faced this problem with the understanding that something had to be wrong since there was heat, sunlight and other controlled conditions. After a lot of work, some of it trial and error, Dr. Tiedjens returned to his chemistry and remembered that minerals need to be oxidized to be available and used by the plant. The oxygen in water was not enough. The next step was to bubble air through the tank to supply the needed oxygen, a low cost solution with unlimited supply. This opened up a whole new era for growing crops: in hydroponics, out in the field, new ways of producing quality as well as quantity, new farming practices and conservation of minerals.

The Growers Program has always told farmers to get their fields in condition to grow crops before they spend money on fertilizer. A wet field slows mineral oxidation in the root area, and many people interpret this to be a need of more minerals. In years past the need of calcium, limestone, was judged with the pH method and only used to correct an acid soil. We know that soils work best when they have calcium at 85% of base saturation: 85% of the hydrogen ions are replaced with calcium ions.

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By J. P. Henry, President  
and Founder of Growers Nutritional Solutions

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Through the years many people have asked how we got started with the Growers Program. The Growers Program developed over time through fundamental research, observation, and not always being satisfied with the status quo. In other words, just because everyone else was doing it one way, did not mean that it was the best way or the only way. Dr. Tiedjens had a background in chemistry, having taught at Massachusetts State, Harvard and Rutgers Universities. When vegetable growers in New Jersey were not getting profitable results using dry fertilizers, Dr. Tiedjens told them that fertilizer nutrients had to be in a solution before the plant roots could utilize them, so "let's hurry up the process by dissolving the nutrients in water before applying them to the plants." This

## *The Beginning of Growers*

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There has always been a deep concern by some quarry owners of overdoing the liming program, but there is a bit of chemistry that many do not understand. Lime loses its solubility above a pH of 7.2 and then becomes an inert material. This is why some of you who have tried to over-lime your soil have not seen a problem as long as you use ground lime with magnesium not over 8%. Lime does many things in the soil including opening up the soil to drainage, so it helps eliminate compaction and oxygen loss by standing water. Some people call it a catalyst in that it helps other minerals become available to the plant.

With all of the above, other problems arise which many people fail to address. When plants get too much of a mineral, they can get out of balance and thus have a reduced quality. The same is true of too little of a given mineral. In all of agriculture, quality of food stuff should be the name of the game. Napoleon is credited with saying, "Feed the people and they won't revolt." This may or may not be true, but most governments have followed that idea. A high percent of our elected representatives were schooled in law and have little knowledge of agriculture and chemistry, so they have relied on Land Grant State Colleges for information. The fastest and easiest way to raise production in agriculture has been with N, P, and K. The US agricultural community, with the help of subsidies, has done a fantastic job of producing food stuff, producing grain storage capacity, and the means of getting food to the people. In the meantime they have created many problems some of which are; the elimination of the medium size farm, an overload of Nitrogen in the Mississippi River Watershed, problems with the immune system in dairy cattle and, as some say, a human population that is grossly over weight. Who's to say that the person carrying around 40 extra pounds doesn't have a body that is craving a mineral? These are problems we are working on with the Growers Program and the efficient use of minerals.

Growers Nutritional Solutions was formulated as a secret formula to do what we wanted to do and not what others were doing. Early on, in the late 1950's and the 1960's, Dr. Tiedjens wanted to license Growers Nutritional Solutions as a feed supplement. After a lot of discussion with regulators we found that to license Growers in a number of states we would have to change our formula, or give out information that we felt was out of line. We knew that plants and animals need the same minerals and have the same reactions to overdoses of needed minerals and toxicities. We feel that regulation is to protect the masses,

but in some cases there has to be an option or nothing will go forward. Being a little guy on the block, we had to protect ourselves. So we sat back and you fairly well know the answers. At the Marine Corps O.C.S. at Quantico, VA, there has always been a standard answer to all tactical situations, "Sir it all depends on the situation and terrain." That is what President Bush did after 9/11 and that is what is being done in Iraq today, and we did the same.

We knew what the potential was for using Growers as a feed supplement, so we started out by using it on our own animals or peoples' problem animals close to us. We never made a direct recommendation but told what we were doing on our own farm. Through word of mouth and observation of our customers, Growers established some outstanding results.

*After 50 years, people are still trying to shoot us down, but we may have an answer to the high cost of health-care if any one really could be interested.*

In time, the suggestion was made that we license Growers Nutritional Solutions as a phosphate supplement for ruminant animals. As before, our customers took the ball and ran with it. Early on a customer in eastern Pennsylvania corrected hoof-rot and other problems in his dairy cattle with the Growers Program. A Nebraska farm increased their six weeks AI pregnancy percentage; hogs fed only Growers as a mineral lowered their feed cost and obtained premiums for lean finish; chicken farmers lowered their death rate by metering Growers in their drinking water. Champion

*In agriculture the Growers Program has: cut the cost of farming, helped produce high quality, saleable crops, improved the health and life span of animals and made farming more profitable for those willing to be different from the status quo.*

show horses that were on the Growers Program their whole life showed outstanding condition and health with bright eyes and shiny coats and lived to over 30 years of age; A Standardbred mare fed only Growers grown feed winning a check in 27 of 29 races in one season. Sport birds, grouse and quail, fed

Growers in their water in the South were plump, showing more vigor and less death loss; an Amish team after one winter on the Growers Program, walking away from the other farm team pulling a plow. Both teams otherwise received the same feed, water and conditioning. Under normal conditions the recommended amount to use is two ounces of GNS per 1000 lb. of body weight per day, on the feed or in the water.

In recent years the development of a more reliable test for protein has shown great results for the Growers Program on the seed and foliage sprays. High nitrogen recommendations on corn quite often shows protein to be 5.5 to 7% whereas the Growers Program shows up in the 9.5 to 11.5% protein level. Which corn do you want in your feedlot? Alfalfa with the Growers Program at 23% protein in the barn when many farmers would be happy with 16%.

These returns all cut cost of production, help the bottom line and, in time, produce a family estate. The Growers Program has helped a western farmer eliminate a large problem. He says 25 years ago, when he first met the Growers Program, he owed the elevator, the implement shop, the seed house and the

bank. He says his biggest problem now is when he comes home after buying another 80 acres, his wife tells him he doesn't need any more land. Solution! Lease it out for a good return on investment. A potato farmer who told our group last December that he left the dairy farm and moved to potato country with the purchase of enough land to get started. After switching to the Growers Program his potatoes had a better specific gravity which the chippers wanted and he became the 1987 championship potato grower of his state. He also built the farm up to over 1,000 acres, clear. In the last year a firm said they didn't want to purchase his potatoes and outstanding alfalfa; but they wanted to buy the farm that produced them. This thing could go on and on. We have a

farmer producing quality tobacco with only the Growers Program; a sixty-acre farm growing everything you can think of to sell at 12 farm markets and for the last six years having over \$300,000.00 in sales; another produce farmer selling melons 300 miles away in truckload lots, all because of quality and taste from the Growers Program; dairy farmers eliminating their herd problems with the Growers Program.

What is the future? Look around you! In many areas of the country such as western Ohio, it is hard to believe that 50 years ago this land supported a house, barn, and outbuilding on every 120 to 150 acres. The implement shop, the elevator, and the seed house are no longer just down the road. Few businesses in town are owned and managed by the same

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## Notes From Long Time Growers Users

By Jim Halbeisen

Articles presented in The Growers Solution are intended to be of educational value. We realize, as do most of our readers, the farming ideas put forth in the various articles may work for some operations, but not necessarily for all others. Our customers and sales force have always been encouraged to submit articles and they do. Joe Henry and I write some and our editor, Jennie Henry, does many herself. Most are "polished", if necessary, by Jennie before they appear in print.

While discussing possible stories dealing with our upcoming year's planting season, which just happens to be Growers Chemical Corporation's 50th year being in business, Jennie and I had hopes there would be appropriate articles submitted about some of our long time customers. So far it hasn't happened, but it is not too late. If you have any GNS stories for our next few anniversary issues of TGS, especially historical ones, please send them to us.

In the meantime, since many of you have asked about our farm operation, I thought we could get the ball rolling by telling a little about our Halbeisen Farms east of Fremont, Ohio and its history as it relates to Growers.

A year or so ago, my brother Joe and I were going through some of Dad's (Leo Halbeisen) old farm records. Looking back at the bills,

### The Beginning of Growers

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people who were there 50 years ago, such as Growers Chemical Corporation. What does it cost to farm one acre for seed, fertilizer and the rest of the program? Why is it that in a town in Iowa 25 years ago the High School Graduation Class of boys all wanted to farm, and this last year only one boy wanted to farm and his parents were concerned whether he could make it.

Keep looking. Much of the fertilizer, weed killer, and fuel your neighbors use is imported through Baltimore and the Gulf Coast with large costs in the construction of ships, docks, and railroads. If a young farmer wanted to get started in agriculture, what are his chances with the prevailing knowledge of our local people, leasing land, obtaining machinery, bank loans, high cost of fuel and help?

There is an answer, but it is probably beyond the scope of 99 of the next 100 people who would like to farm. In this day and age there are a lot of people concerned about what they are eating; the pills their friends and relatives are taking, the 285 pound football linemen at all of our schools, the athletic injuries, the poor

receipts, etc., some dating back to the early 1950's, we came across a canceled check from September, 1955 written to Growers Chemical Corporation. Dad had met Dr. V. A. Tiedjens in the early 1950's, and when Doc started his own company with Joe Henry and George Ward, Dad became one of Growers' first customers.

And every year since, our farming operation has purchased Growers Nutritional Solutions (GNS). We have also faithfully followed the Growers Program by planting and foliar spraying with GNS, all the while liming the soil with high calcium limestone. Joe and I use the same basic approach now as Dad did in the beginning.

Through the years we have experimented with various products and ideas we felt might possibly supplement the Growers Program, but, other than various forms of nitrogen for grass crops, very few worked out and are in use today.

Currently ours is a straight corn and soybean rotation grain farm utilizing the ridge till system. Before ridge till, we used the mold board plow along with the chisel plow and subsoiler. Since 1955, we had 8 years of raising beef cattle and 21 years of raising hogs in a farrowing to finish system.

Our corn crops are always planted on the previous season's soybean ground. We typically plant about 28,000 plants per acre with about 3 3/4 to 4 gallons of GNS per acre in the row. We usually apply a total of 4 gallons

grass on the athletic fields, the high cost of fuel and the future high cost of transportation. Where does your family food come from and how long can it be cheap?

The answer is: locally grown food stuff, produce grown by a family with children in 4-H showing at the county fair and the children working on the farm for dollars to put into a savings account for their education and future. It is a whole new learning program, a way of life with the Growers Program. After 50 years, people are still trying to shoot us down, but we may have an answer to the high cost of health-care if any one really could be interested.

In agriculture the Growers Program has: cut the cost of farming, helped produce high quality, saleable crops, improved the health and life span of animals and made farming more profitable for those willing to be different from the status quo.

What is the future? Of course no one knows, but Growers Nutritional Solutions with its Growers Program does look forward to serving its good customers for another 50 years, or so. ■

of GNS per acre to the foliage in two or three applications with at least one with Growers Nutritional Additive (GNA). Typically, we use 60 to 90 pounds of supplemental nitrogen per acre on our corn crop. This is to supplement the nitrogen created by the previous season's soybeans. Experience has shown us that one year's legume crop (soybeans) does not

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### On The Road Again Late Fall, 2004

Growers Nutritional Solutions is scheduled to set up and staff booths at the following upcoming farm shows and conventions this winter. 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.

- |                |   |
|----------------|---|
| Jan. 4-6, 2005 | Keystone Farm Show<br>York, PA                          |
| Jan. 5-6       | Northern Illinois Farm Show<br>DeKalb, IL               |
| Jan. 5-7       | Delaware Veg. & Potato Mtg.<br>Harrington, DE           |
| Jan. 8-15      | Pennsylvania Farm Show<br>Harrisburg, PA                |
| Jan. 11-13     | New Jersey Vegetable<br>Marketing<br>Atlantic City, NJ  |
| Jan. 11-13     | Ontario Landscape Congress<br>Toronto, Ontario, Canada  |
| Jan. 11-13     | Le Salon De L'Agriculture<br>St. Hyacinthe, Que, Canada |
| Jan. 18-20     | Fort Wayne Farm Show<br>Fort Wayne, IN                  |
| Jan. 18-20     | Virginia Farm Show<br>Fishersville, VA                  |
| Jan. 19-20     | NFO National Convention<br>Grand Rapids, MI             |
| Jan. 19-21     | Ohio Fruit & Vegetable Show<br>Toledo, OH               |
| Jan. 20-21     | Long Island Ag Forum<br>Riverhead, NY                   |

*Hope To See You!*

# Growers NUTRITIONAL SOLUTIONS

Milan, OH 44846 • (419) 499-2508

*Our Research is Your Profit*



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### Long Time Users

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provided quite enough nitrogen for our corn crops.

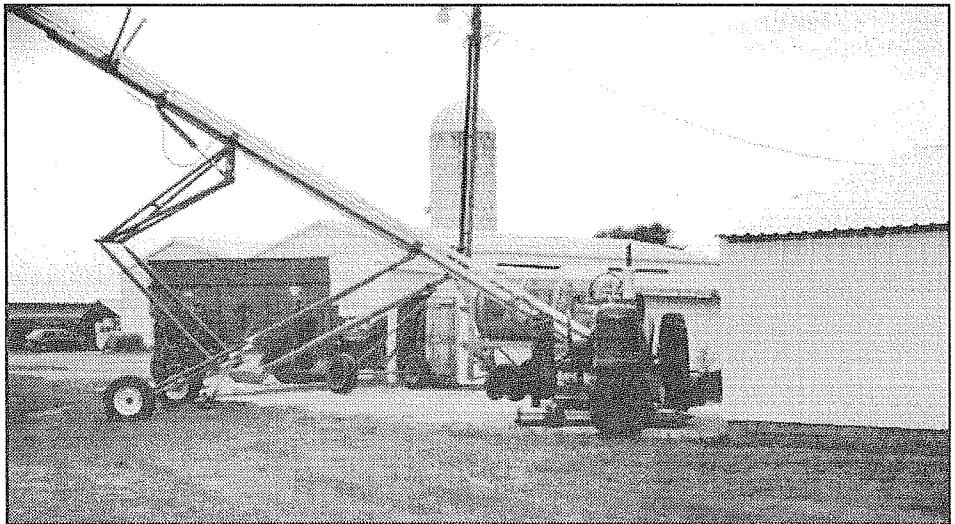
Our corn herbicide program controls grass with pre-emerge herbicides and controls broad leaves with post emerge herbicides. Also, we use Regent® insecticide on part of our corn acres.

Soybeans are planted in 30" rows and they receive some GNS then, but for the season, we usually end up with a total of between 5 and 6 gallons of GNS per acre, most of which is applied to the foliage.

When we use genetically modified organisms (soybeans only, no GMO corn), we usually mix GNS in with the herbicide spray application.

We don't pretend to be producing larger yields, but we feel our crop production is very comparable with that of the neighboring farmers'. However, our lower input costs result in very competitive profits per acre.

Also, over the years there have been many very beneficial side results. Using a fertility



Halbeisen Farms, east of Fremont, Ohio.

product (GNS) low in heavy metal concentrations and not being corrosive, results in many advantages. Excellent early crop dry-down in the field allows us to use lower corn drying temperatures which results in crop quality that earns us some price premiums. We always felt that low temperature corn drying gave us the best feed quality for our hogs.

For half a century GNS and the Growers

Program have served our family farm very well, especially during those times when we changed our operation's directions.

And through it all, we never have seen any of the "worn out soil" conditions we were warned would occur by not using the recommended large dry fertilizer applications.

### The Growers Solution

Editor: Jennie Henry

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### More About Growers

We hope you will find this newsletter helpful and interesting and we welcome your input. Please send letters-to-the-editor, comments, suggestions, etc. to: Growers, P.O. Box 1750, Milan, OH 44846, call 1-800-437-4769, fax 419-499-2178, email to: [growers@hmcld.net](mailto:growers@hmcld.net) or see our website: [www.growersnutritional.com](http://www.growersnutritional.com)

### Purchase Discount — Early Order Discount

November 1, 2004, starts our new 2005 fiscal year. The early order Cash In Advance of Delivery Discounts (CIAD) will remain the same as in previous years: 10% for November order payments, 8% for December, January 6%, February 4% and March 2%.

NOTE: Call your Growers representative for an explanation of the early order discounts, quantity pricing, and delivery of Grower Nutritional Solutions.