

WIDMER &
ASSOCIATES, LTD.

**FOR THE
RECORD:**

Data from OARDC
Fremont, Matt Hofelich

Total '09 Rainfall: 25.83"

Cumulative GDDs:
3,081

Soil Temperature: 32.2

Websites of Interest:

www.widmerassoc.com

www.weather.com

<http://vegnet.osu.edu>

<http://corn.osu.edu>

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*Wishing You A
Merry Christmas!
From Everyone at
Widmer &
Associates, Ltd.*

The W&A Q&A

Dedicated to Excellence in Growing Crops



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W&A 2009 Field Research Results - Dusty Sonnenberg, CCA

One of the greatest values an independent certified crop advisor can provide to a farmer is an unbiased approach to making crop recommendations. Here at Widmer and Associates, we pride ourselves on thoroughly evaluating all the products we recommend to our growers. We conduct multiple field trials on an annual basis. These range from statistically randomized block design, to strip-trials and split field checks.

Enclosed in this Issue of The W&A Q&A you will find results from some of the 2009 field trials for products such as Widmer and Associates Soybean Foliar Mix, Green Yields, AcceleGro, BioForge, and various combinations.



While no year seems to be

“normal” anymore, the growing conditions varied a great deal throughout Northwest Ohio in 2009. Some areas had near ideal moisture, while some were dryer than normal during July and August. As a whole, the temperature was cooler than normal. These factors along with the wide range of planting dates this spring contributed to some of the variability you will see in our results. Mike Netz has an article on page 3 further explaining why plants performed the way they did in 2009.

Food Safety and Tracability - Rex Marquart, CCA

For Northwest Ohio the fresh market growing and packing season of vegetables is complete. It is time to start planning for the 2010 season. We need to decide on the varieties of vegetables that we are going to grow and order the seed. We should be taking soil samples and determining the fertility needs of the selected fields that we are going to plant our higher value crops in. We can attend some excellent meetings and conventions to talk with

other growers and extension personal to learn what new production methods are being used.



THIS IS THE TIME TO LOOK AT YOUR FOOD SAFETY and TRACEABILITY PROGRAMS. FDA and USDA have been given

the task to update and implement standards for inspection, auditing and developing a traceability process for all foods to include fruits and vegetables. By September 2010 all retail packages are to be labeled so that if a recall is issued the product can be traced back to the production field within 24 hours. Now is the time to be planning for this so that a program can be thought out and developed for your operation.

Nutrients & Natural Plant Hormones

The consultants who work for Widmer & Associates, have many years of experience with the foliar application of nutrients & natural plant hormone type products. That is the basis of our business & has been for many years! We specialize in carrying many different forms of all nutrients made especially for foliar feeding. We carry a variety of mixes, packaged in jugs & bulk shuttles to fit the need of any foliar application. We also have the ability to custom blend any nutrient combination you may want to fit a specific need or use. We also specialize in handling fertilizers that work well in drip or overhead fertigation applications. Talk to your Widmer consultant about any nutrient needs you may have, we would be happy to help you!



W&A Farm By Phone Dusty Sonnenberg,

Of all the jobs on a farm, the one that often times is the least favorite and most neglected is record keeping. Having accurate records for both production purposes and financial matters has become an essential part of managing a sound farm. Keeping timely and accurate production and financial records often takes a back seat to other production tasks during the growing season due to time constraints. Unfortunately due to outside forces impacting the financial industry, the

information you will be required to provide to your lender and timeline in which it will be required is rapidly changing.

To help fill a need in this area, Widmer and Associates, in conjunction with Ag. Connections, will be offering a "Farm by Phone" service as new option in our portfolio of agronomy products. With "Farm by Phone", you simply "call" in your operations and application for the day and leave a message as to what, when and where you did.

One of our consultants will meet with you prior to the growing season to "setup" you farm in terms of inputs purchased and existing inventory. Fields are mapped and cropping plans are developed. You then simply phone in what you have done as the season goes on, providing the necessary information, and are able to view any reports at the touch of a button via the internet.



W&A 2009 Field Research Results

W&A Soybean Foliar Mix (SBF) was applied to over 42,500 acres in 2009. This is the 4th year that the SBF has been applied foliar on soybeans, mainly added with a glyphosate application. Field test trials ran again this year were very consistent with past years results. The 2009 yield checks showed an average of 2.57 bushels increase over the control.

Some interesting trials ran with the SBF this year had it mixed with other products. One result showed when used with Leverage insecticide, a 14.5 bu/ac increase over the control. Some positive results showed also where the SBF was applied foliar to corn in combination with other products.

In corn trials, the product PowerPlus, an additive to 28% nitrogen when being sidedressed, showed some positive results over a number of fields for an average of 9.21 bu/ac increase. This represents a 2:1 rate of return.

Widmer and Associates has continued to run field tests on evaluating different products in 2009. Our purpose is to be able to offer or clients current assessments of product results in their growing area.

One product that continued to show good results on both corn and soybean is BioForge. This product also has a considerable amount of university trials across the mid-west including Ohio that is showing significant improvement in crop yields.

Other products looked at this past season were Acelegro and GreenYields. If you are interested in any of these results, please contact one of our agronomy specialists for more information.

2009 Corn & Soybean Recap - Mike Netz, CCA

Growers in our “four county” area are all talking about how surprisingly good corn & soybean yields were this year. Many are saying that some of their better yields are coming from some of their “wetter / poorer” ground.

The majority of the growing season in this area was so very dry thru July, August & September. There was a lot of concern about how well grain crops would yield. We had relatively good conditions early in plant establishment that allowed our crops to take off & grow normally with good plant populations. Also remember, that along with the cooler day time temperatures all growing season, we had an unusual amount of bright sunny days this year as well. The additional sunlight, created an increased amount of photosynthesis during day light hours, this helped the plant make more sugars.

The following is an explanation of how these conditions effect the hormone balance in plants. It is the natural rhythms of the hormone balances in a plant that most greatly effects the grain crops yield outcome. During years of high grain yields; the proper balance of the good hormones (GA - Gibberillic acid, IAA - Auxin & Cy - Cytokinin) remain dominant longer & our plants do not early die. When the “bad or terminator” hormones (Eth - Ethylene & ABA – abscisic acid) over take the good hormones, our plants roots die early & so does the plants above ground parts. When this happens we loose our crops maximum yield potential. Remember we can gain a great bit of yield for every day we can extend our crops life at the end of the growing season. We must remember that it is a plants roots that are the brains of the plant & have a significant impact on our final yields.

The first thing to remember is the following: "Seed filling is always better during periods when atmospheric (air) temperatures are lower." When atmospheric temperatures are lower, GA (gibberillic acid) has less dominance over new cell formation and functioning. This allows IAA (auxin) to maintain cell dominance over a longer period of time. When IAA maintains cell dominance, ABA levels in the cells tend to be up regulated. This causes transfer of photosynthates (sugars) out of the cells to other parts of the plant that have stronger sinks, i.e. the grains or seeds. When IAA and ABA are more dominant in the plant cells and GA is less dominant in plant cells, the sugars move out of the cells more quickly and the cells can remake more sugar with higher rates of photosynthesis. This supplies more total sugar to the plants since the sugar in the cells are empty and can refill during the next 24 hours.

The reasons why the corn & soybeans on the poorer soils yielded so much higher, was that their root systems were under stress and stress causes an increase in the ABA levels in the plant cell tissues above ground. The poorer & wetter soils also held more water longer which helped to keep the plants roots alive longer! When this situation occurs, the inner nodes of the plant stems will usually be shorter. The number of pods on a plant & kernels on an ear will usually be greater. The seed will also usually have a larger size.

During normal season of growth, GA will always dominate the new cells. The cells will tend to hold more sugars and transfer fewer sugars. The increased levels of ABA from the root system will always cause the plants to die more quickly. This is what happens in a lot of our growing years. This is also why our crops moisture levels stayed wetter than normal, longer into the fall.

I hope that the above observation clarifies what happened this year! “This is The Language of The Plant”



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Dedicated to Excellence in Growing Crops

Widmer & Associates provides growers with a unique partnership that provides a complete crop nutrient management system that results in improved cropping profitability.

Our mission is to provide a team of experienced and professional agronomists that partner with individual farmers to help pull together information and technologies that will positively impact their total crop production profitability.

The true worth of information and technology is determined by the value received by the client.



Technology Tips - What happened to my GPS signal this fall?

Several farmers utilizing GPS RTK Technology for Autopilot Systems experienced challenges this fall as the number of available satellites on the horizon would drop to 4 or less during the mid-day and they were forced to either steer manually or switch to using WAAS.

Unfortunately the federal government chose this fall as the time to relocate some of the GPS satellites that were covering our part of the country. Other satellites were undergoing regular maintenance, and some were decommissioned.

The end result was that the total number of satellites available for our use was reduced, and during the mid-day hours the number

visible satellites on the horizon would drop for 30-45 minutes at a time. This difficulty was experienced by all users of GPS technology including Trimble, John Deere, and all the other players. The only RTK users not experiencing these challenges were RTK GLONASS subscribers. GLONASS technology allows the



system to utilize both the U.S. and Russian satellite constellations, thus providing more potential satellites visible to the rover units. As a result, even when the number of GPS satellites available drops below the critical level, the number of GLONASS satellites makes up the difference, and allows the RTK system to keep running. For more information on being able to access the GLONASS technology with your RTK system, contact the Widmer and Associates Precision Ag. Team. While the GPS impact this fall has been extremely unfortunate and frustrating to say the least, please be assured our team is at work to find cost effective solutions for you.