

WIDMER &
ASSOCIATES, LTD.

**FOR THE
RECORD:**

Data from OARDC Fremont, Matt Hofelich

April Rainfall: 3.04"

Cumulative GDDs: 127

Soil Temperature: 56

Websites of Interest:

www.widmerassoc.com

www.weather.com

<http://vegnet.osu.edu>

<http://corn.osu.edu>

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The W&A Q&A

Dedicated to Excellence in Growing Crops

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Welcome to The W&A Q&A

Welcome to The W&A Q&A. This agricultural newsletter is intended to be a regular publication from Widmer and Associates which highlights timely information aimed at helping you make informed management decisions.

Each issue will discuss pertinent agronomic and horticultural issues faced by growers in our service area. Topics will primarily be looking ahead to what you as a grower should be anticipating.

Articles will cover Vegetable Crops, Cash Grain Crops, Soil Fertility, Insect and Disease Management Issues, Weed Issues, Food Safety and Tractability, along with Precision Agriculture and Business Management Tips.

It is no secret that agriculture is constantly changing. One goal at Widmer and Associates is to look ahead and anticipate those changes in an effort to help our



Widmer & Associates, Ltd.
located at 953 E. Madison
Street in Gibsonburg, Ohio

valued customers best position themselves to take the steps necessary to be successful.

We value long term relationships with those whom we serve.

Feel free to call us at any time with any question you may have at (419) 637-4094.

Our team includes:

Les Widmer, CCA

Rex Marquart, CCA

Mike Netz, CCA

Doug Mitchell, CCA

Dusty Sonnenberg, CCA
Precision Ag

Brian Barnhouse, Precision Ag.
& Warehouse Products Manager

Matt Liskai, Precision Ag.

Arik Witker, Precision Ag.

Wendy Ernsthansen, Office
Manager

Katie Fox, Office Assistant &
Receptionist

W&A On Farm Trials

In an effort to provide the most relevant and up-to-date information on new products in the marketplace, we conduct annual field trials to determine the true reliability and most useful applications for our valued customers. This field research sets Widmer & Associates apart from other organizations who

simply establish plots for sales purposes.

We value the long term relationships we have with our growers and will not recommend products until we feel that they have been proven in a variety of field conditions relevant to our production needs here in Northwest Ohio.



Wheat Scouting:

Now is the time to scout wheat given our recent wet and cool weather. Wheat is in a critical stage for disease development. Look at 30-40 tillers randomly across the field for visual symptoms. Compare your findings to the descriptions to the right.

Website reference:

www.oarde.ohio-state.edu/ohiofieldcropdisease/wheat/wheat1.htm

Compare the pictures to your findings.

What's going on in the Wheat?

Septoria Blotch

- Symptoms = leaf blotches with dark brown borders, gray centers with black fungal bodies
- Environment = wet mid-April to mid-May
Temperature 60-68
Rain 3-4 days weekly
- Survival = overwinters on plant residue
- Treatment = Seed Treatment, Plant less susceptible varieties, crop rotation, balanced fertility, fungicide treatments

Stagnospora

- Symptoms = lens shaped chocolate brown leaf lesions with yellow margins
- Environment = wet mid-May through June
Temperature 60-68
Rain 3-4 days weekly
- Survival = overwinters on residue and seed
- Treatment = Seed Treatment, Plant less susceptible varieties, crop rotation, balanced fertility, fungicide treatments

Powdery Mildew

- Symptoms = powdery white mold growth on leaf surfaces
- Environment = high humidity
Temperature 65-70
High nitrogen fertility and dense stands
- Survival = overwinters on residue
- Treatment = Plant resistant varieties, crop rotation, balanced fertility, fungicide treatments

For more weed control information, check out the following website:

<http://agcrops.osu.edu/weeds/>

The 2009 Ohio & Indiana Weed Control Guide is also available online in pdf form at:

<http://agcrops.osu.edu/weeds/documents/Bulletin789.pdf>

Planting Tips—by Doug Mitchell, CCA

The 2009 planting season has become compressed, and opportunities for applying burndown herbicides ahead of no-till soybean planting have been limited by weather conditions. Going forward, it should still be noted how important including 2,4-D Ester in the soybean burndown is in both glyphosate (Roundup) resistance management and in controlling certain weed species. Weeds such as marehail and dandelion are especially difficult to control without 2,4-D in the burndown program. In addition, adding 2,4-D to glyphosate provides a different mode of action to early emerging summer annuals such as lambsquarter, common ragweed, and giant ragweed that are known to produce glyphosate resistant populations in Ohio.

The 2,4-D label states that applications up to 0.5 lb active ingredient (16 oz of a 4 lb gallon or 10 oz of a 5 lb gallon) must be applied at least 7 days prior to planting soy-

beans. If a particular field has a history of weeds such as marehail and dandelion, it might pay to target that field for a burndown that includes 2,4-D 7 days prior to planting and plant other fields first.

The Ester formulation is preferred because it is less water soluble and less likely to be leached into the seed zone with rainfall than Amine formulations. Also, fields that have had 2,4-D applied to them should not be tilled prior to planting because of the tillage moving 2,4-D into the seed zone and possibly causing soybean injury. If it is impossible to use 2,4-D in the burndown and wait the required interval between application and planting, then including a chlorimuron containing herbicide with glyphosate in the burndown can be effective if weeds are not ALS resistant. Also, products that contain cloransulam (FirstRate, Gangster, Authority First) could help on ragweeds that are not

ALS-resistant.

Regardless of burndown strategy used, the success of any weed control program in no-till soybeans hinges on starting out with a weed-free field. This is especially true with Non-GMO soybeans, but it also applies to Roundup Resistant soybeans as well.



“Any weed control program in no-till soybeans hinges on starting out with a weed-free field.”

Food Safety & Traceability—by Rex Marquart, CCA

Rex Marquart has been an Affiliated Auditor with PrimusLabs.com since 2003. The E Coli on spinach and tomatoes/peppers and salmonella on peanuts or pistachios, has made Food Safety and Traceability of all farm products a Consumer issue in the past two years.

Where to start? The first thing to do is develop a GAP (Good Agricultural Practices) Manual, GMP (Good Manufacturing Practices) or GHP (Good Handling Practices) and Traceability Manual.

Guidelines for these manuals can be found on the following online resources:

FDA's Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits & Vegetables at www.foodsafety.gov
www.cfsan.fda.gov
 USDA AMS audit services and verification checklist: www.ams.usda.gov/gaphp or www.usda.gov/ams

Free internet tools to help you implement a food safety program. In the document development section you can develop a "GAP Manual", "GMP Manual" (Packinghouse), and Traceability Manual. www.primuslabs.com
www.gaps.cornell.edu provides educational materials on Good Agricultural Practices.
 Once you get your manuals setup you will be able to start implementing and documenting your "Food Safety Programs".

Fertility & Genetic Potential - by Mike Nelz, CCA

Corn growers who are looking for another way to maximize their crops genetic potential & increase yield may want to consider using an in-furrow or pop-up fertility program. One of the most important times in a corn plants life, is the time between when you plant it & what happens in its first 30 days of its growth, scientist have proven this. The number of kernel rows per ear is determined by the time a corn plant reaches growth stage V-5-V-6. What you do at planting & what happens to your corn plants early on has a huge impact on what your final yield will be. Plant your seed at the proper depth in good soil conditions, & fertilize properly can pay you huge dividends! In order for this increased genetic improvement to be carried thru harvest; we need some other factors to come into play. Those include optimum fertility, adequate soil moisture & moderate temperatures, with hopefully that million dollar rain at pollination. Low disease & insect pressure is necessary also. We have not seen these later conditions for the last 2 years!

We at Widmer's have been conducting field research plots with in-furrow fertilizers for the last 10 years. Our trials have shown that yield increases from our program average 8-10 bushels per acre. What we have learned is that the rate of product applied in-furrow per acre, needs to be a minimum of 5 gallons. This rate shows the best consistency of increased yields year after year. We feel that it takes this volume to give you a good consistent stream of product down the row so that every seed gets some on it, or very near it. We trialed lower rates from 2-2.5 gallon & saw that we lost the consistency of our yield increase.

We have looked at many different nutrient solutions over this time. We have found that a mix with nitrogen, zinc, calcium & magnesium works best. We also see a great benefit from including some of the natural plant hormones;

auxin, cytokinin & gibberillic acid in these mixes. These hormones when present when a seed germinates makes a large aggressive root system that grows downward & outward. An aggressive deep feeding root system is more drought tolerant & is better able to find the inherent fertility in your soil. University researchers have been recently promoting the importance of early nitrogen on a corn crop. They are reporting that when soils have 30 ppm of phosphate or more; you will not see a yield increase from adding more phosphate. Our work with in-furrows has shown this to be true. Some of our early work was with 10-34-0 type mixes with the micronutrients zinc, magnesium & our hormone package. We found that we saw plants growing with this mix had longer roots but fewer roots. The added phosphate in our high phosphate soils also interfered with the uptake & availability of the zinc which is so critical to high corn yields.

These products when applied early have show to have the ability to change the genetic expression of a corn plant. Plants emerging & growing under this program will be able to better resist the stresses brought on by temperature, weather & adverse soil environments, associated with the early spring season conditions. You will see not only a larger more massive deep root system but larger diameter stalks & wider leaves. You should see a more even emergence of plants & more consistent plants size down the row.

Plants growing in a high phosphate soil environment will exhibit a longer more spindly root system with fewer root tips. In digging plants last year this was very evident. The picture on the left shows; the 2 plants growing in a 6-24-6 with Avail & zinc program. Note how long & thin the roots are compared to the 2 plants in the right growing with the Widmer program. These samples were dug from side by side rows in the same field split with the two different programs.

More importantly the benefits of our in-furrow program can be seen all the way thru the crops growth.



The picture on the above shows how this trait carries thru to the later stages of growth. University researchers & seed companies are recommending corn growers to increase their plant populations to 32,000 – 38,000 plants in order to increase yields. These populations will create even more competition between plants for nutrients & water. High populations will need to develop deep vertical aggressive root systems in order to reach their maximum potential. The importance of having plants to emerge early & evenly will be even more important. An in-furrow program will: 1) provide nutrients immediately to germinating seedlings 2) the hormone package will make plants form an aggressive deep root system 3) you will see a quicker more even emergence of plants 4) this early plant enhancement will carry thru the life of the plant & allow it to better reach its maximum genetic potential.





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Dedicated to Excellence in Growing Crops

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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—*excerpt from Trimble StraightTalk Newsletter, Winter '09*

High-priced seed was reason enough for Ames, Iowa, farmer Dennis P. Smith to add Tru Count Air Clutches to his 24-row White planter.

When Tru Count approached him with the opportunity to be among the first farmers to beta test the company's air clutches more than two years ago, he eagerly accepted.

"For farmers who are going to stay in this business, technology is the wave of the future," says Smith. "I use new technology like Tru Count and RTK guidance to save on input expenses including seed and fertilizer. Why waste valuable seed and other inputs if we don't have to?

These technologies pay for themselves quickly." Smith runs the Trimble® AgGPS® Autopilot automated steering system on four Case IH tractors. Vetter Equipment in Nevada, Iowa, provided and installed the systems. "Brett Saddoris, the AMS specialist with Vetter, did a really nice job setting up the RTK guidance systems for us. It was a really smooth process that had us up and running quickly," says Smith.

Smith pairs his Trimble RTK with a Soil Warrior® (www.soilwarrior.com) zone tillage implement that allows him to incorporate phosphorus and potassium at a 9-in depth in the fall, then come back in the spring in the exact same zone to put down liquid or granular nitrogen and

seed in the spring. "To do this kind of zone tillage, I really need sub-inch, repeatable accuracy, and the Trimble RTK has never let me down," says Smith. As for the Tru Count Air Clutches, Smith wouldn't want to farm without them. "It's not just seed I'm saving; time is an important input I think too many farmers underestimate the value of. With this system, I don't have to slow down at the end of the field. That means I get more acres planted in a day, and more of my crop gets planted on time."

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