

DOUBLING DOWN IN FOWLER

We have added a second blender to our Agronomy Center and Dry Fertilizer Facility in Fowler.

The additional high-speed blender is the same model as our original which can unload 3.5 tons of your custom blend in just a minute.

Now we will be able to load out faster because when one blender is unloading, we can start mixing the next load in the other unit.

For more information about our dry fertilizer offerings, please contact Bob Pung at rpung@gaps-seed.com.



20/20 GROWER MEETING

Thank you to Jason Koning from 20/20 and all our growers who came out for our SeedSense training in late March in Middleton.



WESTVELD JOINS CONKLIN OFFICE

One of the key building blocks of the new Conklin office is recent addition Randy Westveld. He works in sales and operations for the company's new base on the west side of the state.



"Erecting a new location for GAPS has been a big adventure," he said. "Every day something new comes up and we just roll with the punches to get the job done."

Originally from Coopersville, Westveld spent 10 years in the agriculture field as a sprayer and then worked in precision

agriculture before becoming a location manager.

After spending a brief time in sales for an equipment company, Westveld made the move to GAPS.

Randy and his wife, Abby, live in Ravenna. They have four children — Kyle, who is an applicator at GAPS, Nate (18), Jessica (15) and Lindsay (13).

In his free time, Westveld enjoys camping with his family and taking their Four Winns boat to Silver Lake and as many other little lakes in the state as they can discover.

RASCH LEADS GAPS INTO FRUIT

With the addition of a GAPS location in Conklin, the company has added Madison Rasch to the team to assist with sales in the fruit industry.

She joined GAPS in March after working in quality assurance and food safety in the apple industry. Prior to that she worked with apples on "Fruit Ridge" alongside Ken Hubert.

She spent the last three years scouting orchards for an agriculture company.



A Conklin native, Madison attended both Muskegon Community College and Davenport University.

In her free time, she enjoys working for her parents at local farm markets in Grand Haven and

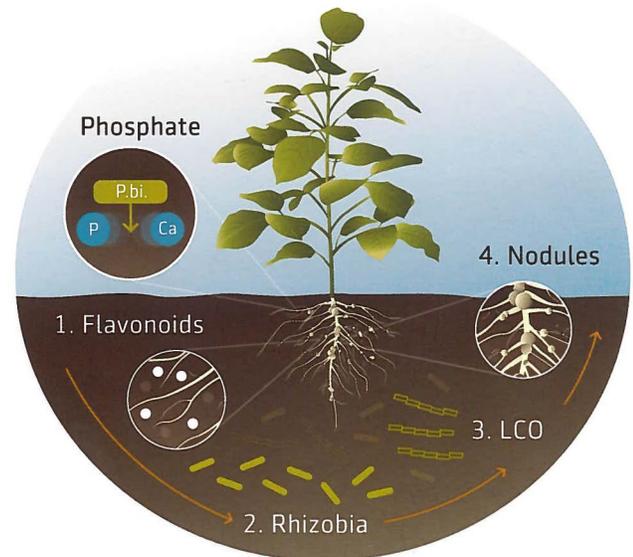
Holland and also being outdoors, especially hunting and fishing.

TAGTEAM LCO XC LIQUID SOYBEAN FROM MONSANTO

TagTeam LCO XC Liquid Soybean combined a specially selected rhizobia inoculant with the proven performance of the LCA (lipo-chitooligosaccharide) molecules, and the phosphate-solubilizing benefits of *Penicillium bilaiae*. Together, they can work to help improve access to nutrients and maximize yield potential for your soybeans.

The benefits of using TagTeam LCO XC Liquid Soybean include:

- Increased nitrogen fixation through nodule formation
- Greater availability of soil and fertilizer phosphate
- Improves phosphate availability which supports root and shoot growth
- Greater Opportunity for the development of nitrogen-fixing nodules
- 120 days on-seed life (with many seed treatments)



How TagTeam LCO XC Liquid Soybean Works

1. Freeing Phosphate

Penicillium bilaiae

releases bound mineral forms of soil and fertilizer phosphate, making it more available to the plant.

2. More Nitrogen

- a. Needing nitrogen, the plant releases flavonoids to signal rhizobia.
- b. Sensing the flavonoids, the rhizobia signal LCO back to the plant.
- c. The plant can respond to the LCO, allowing the rhizobia to infect its roots.
- d. This infection can create nodules, which help fix atmospheric nitrogen.

For additional information regarding this product, please contact seed manager Phil Schneider at pschneider@gaps-seed.com.

GAPS

Gratiot Agricultural Professional Services

3151 W Fillmore Rd
Ithaca, MI 48847
(989) 875-7661 - phone
(989) 875-7972 - fax
gaps-seed.com

Rob Blackwell, Owner, Sales
(989) 330-3133 - cell

Ingvild Blackwell, Owner, Accountant
Tracy Alexander, Accountant
Travis Becker, Applicator
Zach Becker, Applicator

Michael Boettger, Precision Agriculture Sales
Bruce Bouwman, Warehouse Supervisor
Alyssa Chaffin, Agronomy Specialist
Bill Degrandchamp, Liquid Warehouse Supervisor
Kurt Dufendach, Sales

Russ Huyck, Custom Application Manager
Ashley Jackson, Sales Support Associate
Roman Klein, Applicator & Sales
John Leach, Sales

Ed Nickels, Crop Protection Manager & Sales
Bob Pung, Warehouse Supervisor
Madison Rasch, Sales
Nick Shaull, Applicator

Jon Schmidt, General Laborer
Phil Schneider, Seed Manager & Sales
Robert Townsend, Applicator
Holly Walker, Office Manager
Kirk Walker, Applicator

Kyle Westveld, Applicator/General Labor
Randy Westveld, Sales

GAPS ADDS LOCAL APPLICATOR

Experienced applicator Nick Shaull joined the GAPS team in April.

Born and raised in Ithaca, he has been working in agriculture for



the last 15 years. He interned at Chaffin Farms when he was in high school.

Shaull lives in Ithaca with his fiance, Maria, and their 8-month old son, Cameron.

In his free time, Nick enjoys hanging out with his family and outdoor activities.

PRE-PLANTING SEASON MAINTENANCE TIPS

Before you hit the fields, be sure to complete preventative maintenance to keep your equipment running effectively and efficient. Always refer to the manufacturer's manual before performing any maintenance.

- Unit should be cleaned, inside and out.
- Seed meters or seed drop tubes should be free from anything that interferes with their operation.
- Worn parts should be replaced.
- Coulters and disc openers should be aligned.
- Worn drum seals or vacuum discs should be replaced.
- Finger pick-up back plates should be checked for rust, residue, and worn-down dimples.
- Seed tube should be cleaned and replaced if excessively worn at bottom.
- Monitor sensors should be cleaned.
- Seed conveyor belt should be checked for brittleness and replaced if needed.
- Chains should be lubricated and replaced if worn excessively.
- Tires should be checked for proper inflation and significant wear.

GAPS WELCOMES MSU INTERN



GAPS would like to welcome Neil Ambinder who is doing an internship with us this summer. The Merrill native is a junior at Michigan

State University where he is studying crop and soil science.

CONKLIN OFFICE ADDS SPRAYER

Our Conklin office has added another New Holland sprayer to its fleet. It is the second sprayer purchased from the fine folks at Burnips Equipment.



Get to Know ...

KIRK WALKER

Custom Applicator



Residence: Ithaca

Years at GAPS: Fourth

Responsibilities: Kirk takes care of spreading and transporting fertilizer and also assists with delivering chemicals.

Best thing about working in agriculture: I've been around ag every day of my life. I also help at my family farm. I consider myself fortunate to get to do something I love every day with people I love.

Career Change: Kirk spent time working for his father installing gas pumps. Their coverage area spanned from south of Lansing all the way to Mackinaw City. "One day I told him I was sick of living out of a suitcase and I wanted to get into farming full time," he said. "Soon after I got married, my father-in-law and I combined our land to farm together. It's a big part of our family. My father-in-law has passed away and now my brother-in-law runs the day-to-day operations, my son is still in school but he works there too. My wife takes three to four weeks off of work and pitches in as well."

Hobbies: As a year-round outdoorsman, Kirk and his family can be found snowmobiling in the UP, camping, trail riding and hunting. But most often he can be found near the water. He enjoys visiting the Lake Michigan shoreline, specifically Frankfort and Point Betsie, walleye fishing in Houghton Lake and other inland lakes, and even slalom and barefoot waterskiing (although he doesn't do that as often as he did in his 20s).

Family: Wife, Amy; children Holly and Breven; Holly is the GAPS office manager.

STARTING THE CROP OFF ON THE RIGHT FOOT

Here are some tips for planting corn this season.

Optimal planting depth: range from 1.5 to 2 inches

- Depths that are too shallow result in poor root development, increased root lodging and stunted growth.
- Early corn planted deeper than 2 inches can result in delayed emergence and lower populations.
- Shoot for 1.75 inches, as some seeds may be at 1.5 inches and some at 2 inches.

Emergence is the time required from planting to one fully expanded leaf above ground

- Corn requires 100-120 GDUs from planting to emergence.
- Corn will germinate and emerge slowly and unevenly when soil temperatures are less than 50° F.

Beginning to middle of May is the optimum corn planting period

- There are no agronomic or economic advantages to planting corn before April 20.
- Because of the shortness of this window, most growers plant before and after the optimal window.
- It is usually an advantage to error on the early side compared to the late side because late planting can result in 1 to 2 bu/acre/day past the optimum planting window.



USING SOIL TESTS TO BUILD PROPER NUTRIENTS

- When formulating a nutrient package for high yield and sustainability, consider soil test data, the soil type, the crop to be planted, and the field's fertility history including the form of fertilizer and application methods.
- Soil tests, realistic yield goals, and nutrient removal rates can help to determine the amount of fertilizer needed.
- Tools and technologies, such as seed treatment products and nitrogen monitoring software, can help to improve nutrient availability and fertility management.

Interpreting and Using Soil Test Results

Soil tests measure plant-available soil nutrients. However, they do not measure the total amounts of nutrients in the soil because plants can access only a small portion of the nutrients in the soil, nor can they measure inputs of nitrogen and other nutrients from the mineralization (breakdown and release of nutrients) of organic matter. A soil test can measure phosphorus (P), potassium (K), and soil pH, and may also include nitrogen (N), secondary and micronutrients as well.

Soil Test Precautions

Soil test values should not deviate significantly from year to year. Drastic changes may indicate an unrepresentative soil sample or improper sampling techniques. Be sure to follow soil sampling recommendations specific to your region for each type of test and take soil samples that are representative of the field. Use caution when taking soil samples if P was previously applied in a fertilizer band. Flooded or saturated soils can be at risk for significant nutrient loss, particularly nitrate levels. Nitrogen application

rates may need to be reevaluated if flooding occurred after a soil nitrate test was taken.

Other Yield Limiting Factors

Having soils with sufficient levels of nutrients does not guarantee that crops will be able to fully utilize them or that yield goals will be reached. Many factors can affect the availability of soil nutrients and crop uptake, and consequently, yields. These factors include: weather and climate; soil and field characteristics; weed management; and insect and disease management.

Realistic Yield Goals

Yields can vary from year to year due to yield limiting factors other than fertilizer application rates, so applying more fertilizer likely will not improve yield above 10-20%. Thus, a realistic yield goal should not exceed 10-20% of the average yield from the last 3-5 years.

Tools and Technologies to Improve Nutrient Availability and Fertility Management

Some of the products and software that we recommend include:

Agricultural biological products, such as seed or soil inoculants. Visit www.monsantobioag.com for a list of products.

Seed treatment products maximize yield by protecting plant roots. Visit www.acceleronSAS.com to learn more.

Nitrogen monitoring software tracks N supplies in your field. Climate Fieldview Pro includes a tool called Nitrogen Advisor. Visit www.climate.com/fieldview-pro-for-your-farm/ for more info.