Logan Ag News

March 2016

Liquid Starter Application Techniques Expanding

Benefits of in-furrow or "pop-up" starter fertilizer are widely recognized and supported by producers and agronomists. Providing nearly immediate access to phosphorus upon germination of the corn seed is the primary reason use of starter fertilizer is once again strongly considered by many growers. Other beneficial factors include more even emergence of plants, increased yield, reduced harvest moisture, and stronger stalks.

Starter fertilizer application techniques have changed over time as producers looked to reduce rates to mate acres of fertilizer and seed on the planter. Previous starter recommendations utilized high volumes of fertilizer, often 10-15 gallons per acre, placed in a 2x2 band (2" to the side and 2" below the seed). Research has shown comparable benefits with reduced volume of fertilizer placed in-furrow with the seed. Many current recommendations call for rates as low as 2 to 3 gallons per acre of low salt formulations applied in-furrow above or below the seed.

Several methods can be utilized for starter application. The easiest and most readily available system is with the seed firmer. Most planters already have seed firmers to provide better seed-to-soil contact. Starter fertilizer

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LOCATIONS

* Griggsville, IL 217-833-2375; 1-800-LOGAN AG
* Pitsburg, OH 937-692-5181 (JACK BAKER)
* Paris, MO 573-406-8579 (DEAN) 217-491-1787 (HEIDI)

www.LOGANAG.com

NH3 Application Safety

Farmers will begin pre-plant application of anhydrous ammonia (NH3) soon. Safety measures for handling have been discussed many times previously in *Logan Ag News*, but bear mention again.

Be prepared for emergencies by planning and thinking ahead. The term anhydrous means "free from water". To be effective in the soil as a form of nitrogen, anhydrous ammonia seeks moisture to attach to soil particles. In the same manner, anhydrous ammonia seeks any available moisture above ground, and causes instant burn to exposed skin, eyes, and membranes. Here are a few safety tips when working with NH3.

- ***Wear unlined rubber gloves, long-sleeved shirt or jacket, and unvented goggles***
- ***Keep water available – make certain the safety water container on the nurse wagon is full at all times, and keep fresh water available in the tractor cab as well***
- ***Stay upwind***
- ***Always assume there is pressure on valves, hoses, and metering devices. Use bleeders, open valves slowly, and fully tighten valves before disconnecting***
- ***If contact with NH3 occurs, flush the area immediately with water for 15 minutes or more***
- ***Do not use salve or ointment on affected skin***
- ***Call for emergency help immediately***

Helpful courses for anhydrous ammonia safety are available online through the Illinois Fertilizer and Chemical Association. Visit www.ifca.com, select the Online Training icon, and then select Farmer Training for valuable information.

Produce Good Foam Marker

Herbicide application season is just around the corner. Most spraying systems still utilize foam markers even if equipped with GPS guidance. The following tips are helpful to produce dense, shaving cream consistency foam.

- ✓ Thoroughly clean the foam tank with tank cleaner before use, as well as when changing foam marker concentrate
- ✓ Maintain tank air pressure between 15 and 25 psi

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is applied through a tube attached to the seed firmer as shown in the picture. The fertilizer is placed above the seed and requires rain to move nutrient down into the root zone. In the absence of rain, early season benefits from the starter application are delayed until nodal roots are formed.

The Totally Tubular system shown in the picture to the right provides a much more efficient means of applying starter. Liquid fertilizer is delivered to the bottom of the seed trench below the seed, allowing the radicle (the first root of corn) immediate access to nutrient. Used in conjunction with regular seed firmers (no fertilizer tubes), this system provides a superior process of application with greatest benefit to the crop.

Precision Planting will introduce a combination of the systems above, possibly by the 2017 season. FurrowJet is a two-stage starter attachment that applies liquid fertilizer and firms seed simultaneously. Several adaptations of FurrowJet will be available, including Tri-Band that splits the application of starter fertilizer ¾" on each side of the seed, as well as directly in furrow below the seed for pop-up benefit. Tri-Band, in theory, provides application of fertilizer in a similar manner to T-banded insecticide, with some of the product applied at each side of the seed and some below the seed.

Certified Crop Adviser Edward Logan favors application of starter below the seed for best early season results. Logan further believes that if starter application provides a visual early season response, yield benefits will follow. Logan Ag presently utilizes the Totally Tubular system along with seed firmers in its farming operation. Contact your crop specialist for additional information on starter fertilizers available from Logan Ag.

The Importance Of Soybean Seed Treatments In A Wet Spring

Heidi Martin, Sales Agronomist – Paris, MO

Soybean seed treatments may prove profitable in the spring of 2016 with lingering El Niño effects. The National Weather Service's Climate Prediction Center forecasts that the strong El Niño we have experienced will begin to weaken over the next several months. In the coming months, El Niño may further impact temperature and precipitation patterns.

High moistures conditions may delay germination and establishment of soybean seeds, therefore making them more vulnerable to attack by soil-borne seed and seedling pathogens. Cool, wet conditions favor pathogens such as *Pythium, Phytophthora,* and *Fusarium.* Warm (above 60°F), wet soil environments favor *Rhizoctonia.* Pathogens can cause tissue decay, pre-emergence damping off, and early post-emergent seedling death. Fungicide seed treatments protect germinating and emerging seedlings from these early-season pathogens.

Some of the top reasons for implementing a seed treatment program are:

- *The field has a history of poor drainage/temporary flooding*
- *Planting occurring in late April through early May when weather conditions are likely cool and west*
- *Decreased seeding rate – a fungicide treatment will increase the probability of achieving a satisfactory stand*
- *Fungicide treatments showed an average yield increase of 2.5 bushels per acre over an eight-year period (Kansas State University Research and Extension)*

In addition to fungicide seed treatments, insecticide seed treatment products are available to defend against early-season insects. Fungicide and insecticide seed treatment can also be paired with a Sudden Death Syndrome (SDS)/nematode seed treatment to lessen early-season SDS and nematode presence. Check with Logan Agri-Service for a full product list and recommendations.

Grow Rural Education With Monsanto Funding

It's back! For the 5th year, the Monsanto Fund will invest up to $2.3 million to strengthen math and science programs in rural public school districts. School districts have the opportunity to compete for grants of $10,000 or $25,000. But, your help is needed to receive the grants!

Farmers can nominate a local public school district by visiting the web site www.GrowRuralEducation.com or by calling 1-877-267-3332. Once nominated, school districts may submit their application for a grant. A school's application is aided by community support. The nomination period ends April 1, 2016.

Several school districts in the Logan Ag trade area have received grants previously, including Griggsville-Perry (IL) which was awarded $25,000 in 2013. Support your local school district, and complete the nomination form today.

Time For Buffalo Gnats

If you live in an area in the Midwest where annoying buffalo gnats (black flies) populate the landscape in early spring, get ready. If you are fortunate to escape buffalo gnats where you reside, don't move!

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Females of certain species of gnats bite, causing pain, itching, inflammation, and swelling. Some species are multi-generational, with hatch occurring in as little as 4 days. In west-central Illinois, it's difficult to find a safe haven from the onslaught of gnats outside during early morning and late afternoon hours on calm days. Some people report success using a variety of home remedy repellents such as vanilla extract and dryer sheets. Many lean to using over-the-counter products such as Buggins® which is available in nearly every grocery or farm supply store, and seems to very effective in repelling gnats.

Buffalo gnats often move up to 15 miles from their breeding area near running water. Once gnats begin to hatch in late March or early April, we can expect them to be around until water temperature rises above 70°.

Final Comments

Edward L. Logan, Logan Ag President

Anhydrous ammonia application season arrived in west-central Illinois during the last week of February. Many are taking advantage of this early opportunity to apply nitrogen. Don't overlook the benefit of N-Serve® in spring applied N. Nitrogen loss occurs in early spring as soil temperature warms above 50°, and bacteria involved in the nitrification process become active. Consistent yield response is obtained with the addition of N-Serve to the ammonia application, as well as reduced grain moisture at harvest. Plus, I feel this product plays an extremely important role in reducing the amount of nitrates in our groundwater and streams. For UAN (32%) or urea applications, Instinct® II provides the same benefits as N-Serve.

Roundup Ready 2 Xtend™ soybeans are now readily available for 2016 planting following approval for export to China. This new technology provides growers fighting glyphosate resistant weeds another tool to control tough weeds such as waterhemp, palmer amaranth, and more. However, Dale Plumer, grain merchandiser with JBS United, cautions that these beans are not yet approved by the European Union. While EU approval is anticipated very soon, growers planting the new technology may need to be prepared to store beans into late 2016 or early 2017.

We are excited to bring Kent Mullinix into the Logan Ag family. Kent's professionalism and management experience will help provide focus and direction to our sales team, and enable us to better fulfill the needs of our customers in precision ag services. Previous Sales Manager Josh Schaver volunteered to relinquish his position after sitting in during Kent's interview process. Josh hopes to gain expertise from Kent, and will devote more time to overall management of Logan Ag.

Your Logan Ag crop specialist has a full lineup of top yielding corn hybrids and soybean varieties available. Be certain to request soybean seed treatment when you order.

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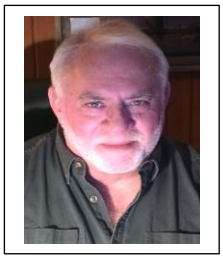
- ✓ Avoid mixing types or brands of foam marker concentrate
- ✓ If adding dye, use higher concentration of foam marker
- ✓ Use 1" hose from foam generator to end of boom
- ✓ Drop hose should be 2-1/2" diameter, with hose end or boot 12" above ground level
- ✓ Use high quality foam marker for best results at the rate of 1 gallon per 80-100 gallon water

Mullinix Joins Logan Ag



Logan Ag is pleased to announce Kent Mullinix as the newest addition to our team. Mullinix has a long history in the ag industry, working most recently in the area of precision ag. At Logan Ag, Kent will serve as Sales Manager for the Illinois and Missouri sales group.

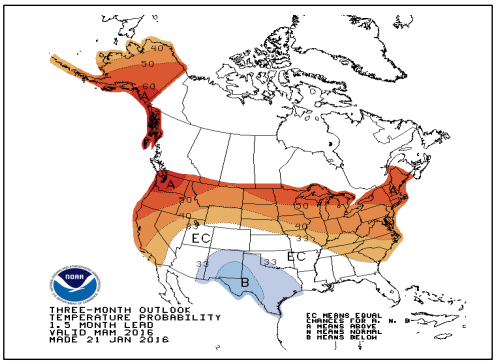
Mullinix, a graduate of Illinois State University, resides in Jacksonville, IL, and has been married to his wife, Deborah, for more than 40 years. They have two adult children, as well as two grandchildren. Kent's hobbies include duck hunting.

Please join us in extending a warm welcome to Kent. He will work primarily from the Griggsville office, and looks forward to meeting clients in Illinois and Missouri.

March Weather Outlook

National Weather Service forecasts for March may be conducive for early planting. The Cornbelt region should be warmer and drier than normal as shown on the maps.

The northern region of the U.S. will be above to well above normal temperature, while the lower half of MO is expected to experience normal temperature in March.



Much of the U.S. Cornbelt can expect drier than normal conditions in March, while western regions of MO and IA will see more normal precipitation levels.