

# Logan Ag News

January 2016

## Is Fall Applied Nitrogen Still Available Following December Rains

Record rainfall in late December across much of the region resulted in high river levels, localized flooding, and further financial burden on cash-strapped drainage districts. Farmers facing saturated soils and fields with ponded water are concerned about the availability of fall applied nitrogen for 2016 crops.

Logan Ag President and Certified Crop Adviser Edward Logan expresses his opinion on the status of nitrogen in the paragraphs below.

*"Keep in mind that opposites attract (think of a magnet). Fall applied anhydrous went into soil in the ammonium  $NH_4^+$  form (positively charged).  $NH_4^+$  attached itself to negatively charged soil particles. The nitrification process (conversion of ammonium  $NH_4^+$  to nitrate  $NO_3^-$ ) occurs when soil bacteria are active at soil temperatures above 50 degrees. Soil temperature is below 50 degrees now. As such, the soil bacteria are not active, and there should be no nitrification occurring. Nitrogen should still be in the ammonium  $NH_4^+$  form and attached to soil particles.*

*Nitrate nitrogen  $NO_3^-$  (negatively charged) is subject to leaching in saturated soil conditions. If the water conditions we have now occurred in late March/early April when soil temperatures are warmer, we would*

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## LOCATIONS

- \* Griggsville, IL (217) 833-2375; 1-800-LOGAN AG
- \* Pittsburg, OH (937) 692-5181 (JACK BAKER)
- \* Paris, MO (573) 406-8579 (DEAN OSBORN)

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## Manufacturer Financing Programs For 2016

Crop protection chemical manufacturers offer low rate or 0% financing programs to aid growers' cash flow in 2016. These financing programs enable participants to take advantage of early season discounts and finance the payment until the end of the year following harvest. Below is a list of available offers.

**Monsanto:** Prime-1% due November 2016 through John Deere. Minimum \$5000 purchase required.

**FMC:** Fixed 0% APR due December 2016 through John Deere. \$10,000 minimum purchase required.

**Bayer:** (1) Fixed 0% APR due December 2016 through John Deere. Purchase of two separate Bayer herbicides or fungicides required at \$5000 minimum each product. (2) Prime-1% due December 2016. Purchase of one Bayer product at \$10,000 minimum.

**BASF:** Fixed 0% APR due December 2016 through John Deere. Purchase minimum \$10,000 of two BASF products that are greater than \$2000 each. If making \$2000 minimum purchase of BASF fungicide, then custom application (aerial and ground) can also be financed.

**Syngenta:** (1) Fixed 0% due December 2016 if financed by 3/19/16 through John Deere. Minimum \$10,000 purchase required. (2) Prime+1% due December 2016 if financed after 3/20/16. Minimum \$10,000 purchase required.

**Dow:** (1) Prime-1% through Rabo if financed by 2/29/16. Minimum \$10,000 purchase required. Durango herbicide does not qualify for financing. (2) Prime+1% if financed after 3/1/16.

**DuPont:** 0% financing through TruChoice program, and is contingent upon Pioneer seed purchase.

Contact your Logan Ag crop specialist or Sales Manager Josh Schaver for additional information on available financing programs. Many growers already have John Deere "multi-use" accounts, and can easily access available funds.

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certainly be subject to leaching nitrogen. This is why N-Serve® is so important in all nitrogen applications. N-Serve delays the nitrification process in warmer soils (above 50 degrees) by essentially putting the bacteria involved into a “coma” for a period of time. Applied nitrogen is then able to remain in the ammonium form NH<sub>4</sub><sup>+</sup> for a longer timeframe, and be available when needed by the corn plant.

*We should be OK on fall applied nitrogen at this time.”*

N-Serve is a trademark of Dow AgroSciences.

## Input Prices Lower

Current and projected grain prices for 2016 force producers to lower production costs considerably. Thankfully, many 2016 crop inputs are lower.

|           |               |
|-----------|---------------|
| NH3       | ↓\$125/ton    |
| Urea      | ↓\$95/ton     |
| 32%       | ↓\$57/ton     |
| DAP       | ↓\$80/ton     |
| Potash    | ↓\$125/ton    |
| 10-34-0   | ↓\$10/ton     |
| #2 Diesel | ↓\$.65/gallon |



2016 crop inputs are lower compared to year-ago levels.

Most crop protection chemical prices are slightly higher than last year. However, Logan Ag highly suggests using available manufacturer financing (see page 1 article) and rebate programs (Roundup Ready PLUS, Liberty/Liberty Link Soybean Grower Residual Program, DuPont TruChoice, Dow Grower Rewards, etc.) to reduce overall cost per acre. Ask your local sales rep for details.

## Four Inputs Critical To Profit In 2016

Low corn and soybean prices are on the minds of all growers as we prepare for the upcoming planting season. One of the frequent questions encountered from growers involves how to cut costs and maintain yields.

Four inputs are critical to yield and profit success, and should not be compromised.

- ✓ Fertilizer: *If soil fertility levels are not in the medium to high range, dropping P and K application will likely decrease yield of corn and soybeans. Elimination of fertilizer application requires increased future expenses to rebuild soil fertility levels. Maintenance P and K application (no buildup) for 180 bushel corn will drop by approximately \$12/acre in 2016; maintenance P and K application for 60 bushel soybeans will drop by approximately \$12.50/acre. Nitrogen cost, depending upon the N source, drops approximately 8-9 cents per unit. Application of 160 units nitrogen subsequently drops nearly \$13/acre.*
- ✓ Seed: *In corn, trait packages protect the plant from*

Spring applied NPK for corn may be reduced by as much as \$25/acre

insects. Corn rootworm, European corn borer, and other pests rob yields annually. Keep in mind that saturated soil conditions in 2015 likely kept much of the rootworm feeding in check. A return to more normal soil moisture conditions means that rootworms will return to feed on corn roots in 2016. Bt traits in corn protect against European corn borer feeding and associated yield loss (5% per borer entry on 1<sup>st</sup> generation; 3% per borer entry on 2<sup>nd</sup> generation). Glyphosate tolerant hybrids help reduce the total amount and cost of herbicides required for weed control.

- ✓ Herbicides: *Last year's wet weather prevented some late season applications (or prevented planting), and the result will be increased weed pressure in 2016. Glyphosate resistant weed species such as waterhemp and palmer amaranth are best controlled if not allowed to emerge. Pre-emerge residual herbicides followed by post-emerge residuals (layered residuals) offer the best protection against high weed seed populations that rob yields and cause harvesting issues.*
- ✓ Soybean seed treatment: *2015 proved to non-believers the importance of early season control of soybean diseases. All soybean seed should be protected with a commercial application of fungicide and insecticide. Positive return on investment is gained when inoculation is applied with yield often increasing by 1.7 bushels per acre or more. Remember the damage caused by Sudden Death Syndrome (SDS) in 2014? Many of those 2014 soybean fields will be rotated back to beans in 2016, and the SDS fungus is still present in these fields. Proven commercial seed treatment is available to prevent and/or reduce the effects of Sudden Death Syndrome. Soybean growers are highly encouraged to treat seed for SDS in 2016.*



## Scientists Dispute WHO Report

A panel of scientists, many who previously consulted with or worked for Monsanto, disputes the World Health Organization's report from 2015 that concluded glyphosate is probably carcinogenic to humans. The 16-member panel presented its findings in early December to the Society for Risk Analysis.

The panel said WHO's International Agency for Research on Cancer (IARC) either incorrectly weighted or misinterpreted some of the reviewed data, and ignored other pertinent data when it classified glyphosate as a probable human carcinogen.

Following the IARC report on glyphosate, many so-called experts including Dr. Oz followed suit and

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advised against ingesting foods that had been treated with glyphosate. Glyphosate is the active ingredient in Roundup®, and is the world's most widely used herbicide.

In November 2015, the European Food Safety Authority reported glyphosate was not likely carcinogenic. The U.S. government also considers glyphosate to be safe, and in 2013 the U.S. EPA granted approval for increased tolerance levels of the herbicide in our food supply. Roundup is a trademark of Monsanto.

## Final Comments

### Edward L. Logan, Logan Ag President

Look for additional mergers and acquisitions in the ag sector as well financed companies try to take advantage of more vulnerable companies during agriculture's economic downturn. The Dow/DuPont merger was anticipated primarily because Dow had no effective means to launch its Enlist Weed Control System through its own seed companies, and needed the significant soybean market share enjoyed by DuPont's Pioneer brand. Look for Pioneer brand Enlist soybeans as soon as Chinese approval for the trait is granted.

Is it time to contract diesel fuel? Some "experts" predict crude oil may drop into the mid-\$20 level – a drop of several dollars per barrel from current prices. Keep in mind that each \$1 change in the price of crude oil equates to 2.5-3 cents per gallon change in diesel fuel. With ongoing uncertainty in the Middle East, there may be more upside potential in crude oil. As we have been tracking spring contracts (March-June) over the past two months, prices have dropped more than 30 cents per gallon. I don't feel you can be hurt by contracting gallons now for 2016 delivery. Logan Ag offers spring and fall (September-December) strip contracts to coincide with planting and harvest/tillage.

As we explore means to cut production costs in 2016, don't overlook proven performers that provide substantial return on investment. Soybean inoculation, foliar micronutrients for corn and soybeans, starter fertilizer, soybean fungicide/insecticide, and premium diesel fuel additives are just some of the items that have proven value over the years. Sit down with our staff to discuss some of the do's and don'ts before making drastic cuts to production plans. Logan Ag has "skin in the game" as well, and we want you to be successful this year and in the future.

While most of us prefer to avoid controversy when possible, discussions about cash rent must occur when grain prices are depressed. Land values in Iowa took their first decline in many years (about 12%). Has your cash rent dropped by a similar amount? It's time to have the discussion about rent with your landlord.

Can you imagine the amount of grain that will move from farm bins to the terminal if/when corn and soybean prices rebound a little? Stay in close contact with your professional grain marketer in the upcoming weeks.

## Merger Mania Continues

Dow and DuPont announced they have entered into an agreement to combine the companies as equal partners. The result will be three independent, publicly traded companies under the following headings.

**Agriculture:** The seed and crop protection business units will combine to offer a broad portfolio of solutions and greater choices. Through the combination, Dow gains a prominent platform and market share through DuPont's Pioneer seed brand to launch its Enlist™ Weed Control System upon Chinese approval.

**Material Science:** This group combines Dow's Performance Plastics, Performance Materials and Chemicals, Infrastructure Solutions and Consumer Solutions with DuPont's Performance Materials. These are the groups that brought Styrofoam (Dow) and Teflon (DuPont) to the marketplace years ago.

**Specialty Products:** In this group, DuPont's Nutrition & Health, Industrial Biosciences, Safety & Protection, and Electronics and Communications businesses combine with Dow's Electronic Materials business. DuPont and Dow state the complementary offerings of this group will create a global leader in Electronic Materials.

DuPont is progressing with previously announced cuts in employment, and nearly 10% of DuPont's existing workforce faces job elimination. Dow has yet to announce plans for workforce reduction. The merger forming the new company, DowDuPont, is expected to close during the second half of 2016.

Meanwhile, state-owned China National Chemical Corp. (ChemChina) has offered \$44 billion to acquire Syngenta. Syngenta previously rejected Monsanto's offer of \$47 billion, but incurred the wrath of unhappy shareholders who wanted to sell. As a result, Syngenta now has a new CEO who is reportedly ready to discuss deals with anyone.

## Benefits Of Adding Sulfur To Corn Fertility Programs

Have you noticed early season corn leaves with striping or an overall yellow cast, or even plants with stunted growth? The problem could be caused by sulfur deficiency that hinders crop development and limits productivity.



Sulfur deficiency in corn is more prevalent now due to clean air standards at power plants, as well as increasing corn yields. 200 bu. corn removes about 10 LB sulfur. Other factors including no-till and early planting have been identified as probable causes of sulfur deficiency.

Sulfur deficiency is easily corrected by adding ammonium thiosulfate (ATS) to a pre-emerge weed 'n' feed application of 32% and herbicides. ATS (21-0-0-24S) applied at the rate of 3-4 gallons per acre provides adequate replacement sulfur. Contact your Logan Ag crop specialist to include ATS in your fertility program in 2016.

