

Derek DeSpain, a student at Illinois State University, has joined the Logan Ag staff as a summer intern. Derek's major at ISU is Agricultural

# LOGAN AG NEWS

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## Farmer's Share Of Retail Food Dollar

The National Farmers Union recently compiled information showing that farmers receive only 20 cents of every food dollar that consumers spend.

Meats such as bacon (farmer receives \$.44 per LB or about 15% of retail) and sirloin steak (farmer receives \$.83 per LB or about 14% of retail) are obvious to many in agriculture. Less well-known is that farmers receive about \$.12 for a one-pound loaf of bread, \$.09 for an 18-ounce box of cereal, \$1.13 per one pound cheddar cheese, \$.92 per one dozen eggs, \$.97 per one gallon milk, \$.09 per 13.5 ounce bag potato chips, \$.06 per 2-liter bottle soda and only \$.12 per 6-pack beer.

Off-farm costs including marketing, processing, wholesaling, distribution and retailing account for 80 cents of each food dollar spent in the United States as of April 30, 2009.

## Collar System For Staging Growth In Corn

The leaf collar system of corn staging is commonly used to identify various stages of growth in corn. A collar appears as a distinctive discolored line between the leaf blade and sheath, and the collar count includes the last fully emerged leaf that has a collar showing. At the V6 stage of growth, the plant may have portions of the seventh and eighth leaves showing but only six leaves have distinct collars. Most post-emergence herbicide treatment applications are based on leaf

collar stages, and not on physical height of the plant. A quick review of the vegetative stages of corn, based on the leaf collar system, is outlined here.

V2 – V3 (9-12 days after emergence): Typically, the plant has two or 3 leaves completely open. Additional leaves are emerged. The growing point is below the ground, meaning that hail or frost damage has little impact on final yield. Plants that are flooded for a few days at this stage where the growing point is covered will likely die. Weeds compete greatly with the plant at this stage for available moisture, nutrients and light. Weed control at this stage of growth is imperative.



V2 Growth Stage

V4 – V5 (14-21 days after emergence): At this stage of growth, the potential number of kernels per ear is determined, and tassel growth begins. Stress on the plant hinders yield. If dry soil conditions exist and irrigation is available, this is the time frame to begin adding water.

V6 – V7: This is the critical stage for post-applied herbicides as the growing point rises above the soil surface. After the V6 stage, many herbicides must be applied as directed sprays with drop nozzles.

The V6 – V7 stage is difficult to determine as the growing stalk forces the plant to drop the lower leaves, yet the dropped leaves must be counted. Nutrient deficiencies may appear, and sidedress nitrogen should be applied. This is also the time to assess the plant for European

corn borer infestations.



V6 Growth Stage

V8 – V9: These are the last growth stages where post-emergence herbicides may be applied with directed sprays. Ear shoots begin to grow from each node of the plant. Through the V9 growth stage, a new leaf develops every three to four days under normal growing conditions.

V10 – V11: At V10, the corn plant enters the “grand period of growth”, and new leaves develop in as little as two to three days. Uptake of phosphorus and potash near the roots is high. V12 – V13 (42-49 days after emergence): Brace roots appear to support the stalk and ear. These roots access nutrients and moisture in upper soil levels. Lack of moisture and/or excessive heat at V12 can impact kernel set on the ear. V14 – V15: The tassel is nearly full-size but not yet visible. The number of silks on the ear that can be pollinated is determined. Adequate moisture is favorable to final yield, but not yet critical. V16 – V17 (56 days after emergence): Moisture availability is critical as the upper tip of the tassel becomes visible. New leaves develop in as little as one day, and ear shoots become visible through the surrounding leaf sheaths.

## World Population Growth May Help US Growers

**G**lobal population today is 6.8 billion. A study commissioned by the United Nations in 2006 projects another 1 billion people

by 2020, and potentially 9.2 billion by 2050. 9.2 billion population represents a 35% increase over the present level, and is the mid-range population growth estimate of the study. At any rate of population growth, there will be new mouths requiring food and many will expect better diets. With better diets, the need for grains and meat become greater. Boosted demand generally leads to better grain prices and more profits for producers.

## Concerns About Early Season Nitrogen Loss

**H**igher than normal moisture totals during April and May have many concerned about nitrogen loss. Combine possible nitrogen loss with reduced rates of applied nitrogen, and concerns may be valid. Nitrogen applied without the benefit of a nitrification inhibitor in saturated soils is most subject to losses due to leaching. Research from Illinois estimates 4% to 5% loss of nitrogen per day in saturated ground where soil temperature reaches 65°F. Loss is more prevalent in heavy soils or bottoms with higher Cation Exchange Capacity (CEC) and organic matter content.

Supplemental nitrogen can be supplied to the growing crop in several ways. Nitrogen solutions (28% or 32%) are easily applied with sidedress application units. Solutions may also be applied with high-clearance sprayers utilizing drop hoses to dribble nitrogen on the soil surface. N loss from surface volatilization may be prevented in this application method by adding a urease inhibitor such as Agrotain®.

Another efficient means to supplement nitrogen is to foliar apply controlled release liquid

nitrogen products such as CoRoN®. The controlled release portion of the nitrogen extends the timeframe nitrogen is available to the plant by 4 to 6 weeks, and improves the efficiency of the applied nitrogen by as much as 5x. While product labeling suggests application of CoRoN® at early growth stages, Logan Ag recommends the product be applied after row closure to maximize the effectiveness of the product (foliar products should be applied to leaves and not to soil). The most advantageous application is at tasseling with fungicide when nitrogen uptake is critical.

Discuss supplemental nitrogen with your Logan Ag crop specialist today.

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**CoRoN** is a registered trademark of Helena Chemical Company.

## Benefits Of Soybean Inoculation

**D**oes soybean inoculation pay? The debate centers around the cost of inoculation and the time required to adequately mix dry inoculants on the seed in the planter box. Research across the Midwest supports the use of inoculation to improve soybean yield and provide great return on investment.

At the Griggsville warehouse, Logan Ag stocks **Nitrastik “S”**, a dry inoculation that contains a “sticker” to add excellent seed adhesion compared to powdered peat products. Nitrastik “S” is available in bags that treat 1500 pounds of soybeans.

Get results with Nitrastik “S”. Talk to your Logan Ag seed specialist when you pick up soybean seed this spring