



Miller Highlights

Spring 2009

How much nitrogen do I need?

Nitrogen availability near flowering time and during grain fill was one of the most important differences in final yields in 2008. Excess leaching, wash off, and denitrification due to excess rain in June and July last year led to suboptimal yields in many fields, especially on wetter soils and continuous corn situations. Surface applied nitrogen was especially ineffective as the main N source on continuous corn fields. This was magnified in early planted fields. Side dressing of small amounts of N often led to yield increases of 1 bushel per acre or more last year. Early planted fields were especially hurt by deep application of fall applied manure or anhydrous without a stabilizer. This was due partially to the fact that Nitrogen was lost and partially due to the fact that roots stayed shallow due to a lack of Oxygen during the period when roots were actively growing. Later planted corn actually grew a deeper root system and more completely explored the N in the deeper soil profile. What appears as a mystery, was that many fields that looked the best during early growth, ended up the most challenged due to focusing too much root development on the surface and then running low on N, as the surface N was lost due to denitrification. Since Nitrogen is so important to your corn crop, the use of the [Corn Nitrogen Rate Calculator Web tool](#) will help guide you toward maximum profitability as the price of corn and the price of Nitrogen vary, but it only works if the Nitrogen is not lost before the plant gets to it. The table below, which was prepared by John Sawyer, ISU extension agronomist is a quick summary of current results:

Nitrogen rate guidelines in Iowa for different N and corn grain prices.				
Price Ratio ¹	Corn Following Soybean		Corn Following Corn	
	Rate ²	Range ³	Rate ²	Range ³
\$/lb:\$/bu	----- lb N/acre -----			
0.05	145	131 - 162	199	182 - 213
0.10	125	113 - 139	177	164 - 190
0.15	112	101 - 123	159	147 - 172
0.20	99	99 - 111	146	136 - 157

¹ Price per lb N divided by the expected corn price. For example, N at \$0.40/lb N and corn at \$4.00/bu is a 0.10 price ratio. Corn held at \$4.00/bu for all price ratios.

² Rate is the lb N/acre that provides the Maximum Return To N (MRTN). All rates are based on results from the Corn N Rate Calculator as of March 24, 2009 (<http://extension.agron.iastate.edu/soilfertility/nrate.aspx>).

³ Range is the range of profitable N rates that provides a similar economic return to N (within \$1.00/acre of the MRTN).

The ISU extension Ag Decision Maker website is: <http://www.extension.iastate.edu/farmmanagement/> This is a great tool to use with your own costs and to help you put together a marketing plan for the crops or animals you manage, so you remain a profitable and sustainable farming operation. There are many input costs which you can control and the use of these tools emphasizes the need for a good marketing plan that is proactive rather than reactive. The people who did not have a marketing plan and sold after harvest did well for the 2007 crop and so many people abandoned their marketing plan for the 2008 crop and they suffered from that strategy. This year is even a more critical year to have a plan that covers your variable production costs, since there is a lot of downside risk.



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Insects

Black Cutworms are currently cutting plants in the area. Please continue to scout your fields with greater concern paid to weedy areas or late planted corn.

If you have used refuge corn and haven't applied an insecticide on continuous corn, please consider applying liquid Furidan as a part of your post emergence weed program.

Miller Hybrids will again have corn rootworm traps to allow you to see the corn rootworm pressure you have in rotated fields. Contact Miller Hybrids if you would like to participate in this monitoring program.

Weeds

Carefully monitor weed pressure and try to spray corn for weeds before they exceed 4" tall, as weed pressure can have a dramatic impact on potential corn yield.

If you used Glyphosate "GT or RR" tolerant corn last year, spray with Ignite or Liberty **now** to remove it. Volunteer corn can significantly affect yield and rootworm control, even in corn carrying the RW gene.

Stands

Now is a good time to take stand counts. If stands are variable: 1) Use a wheel or tape to measure 52.5 feet, 2) count plants in 2 rows and 3) divide by 6 (if you have 30" rows) and multiply by 1000 to get the actual stand. If stands are uniform, use 17.5 feet (1/1000 of an acre for 30" rows). Another method is to use a wheel and start walking and counting until you reach 150 feet and then calculate the area covered to determine your stand. It is good to represent 2 or more different rows with each sample, and at least 4 random spots in the field, to get a reasonable count. Replanting at this late date requires average stands below 20,000 plants/acre, or large blank areas, to be economically viable. On fertile soil, I like final stands in the 32,000 to 36,000 plants per acre for the highest profit/acre with most hybrids.

Corn Seed and Pallet Returns

Call us to arrange pick up of any pallets which we may have left in your storage sheds, or return them to Gringer AG at 2144 Old Hwy 218 South, Iowa City. If you have any unopened seed bags, we can store them for you in cold storage until next year or credit your account. All unopened seed must be returned by June 19, so it can go in cold storage and be fumigated in a timely fashion, or we cannot accept it. Miller Hybrids' heavy oak pallets not returned by June 30 will be invoiced in July at \$15 each. Please call Miller Hybrids if you have seed or pallets to pick up. Trait fees have again gone up for 2010 and we again will offer seed at 2009 prices with a price guarantee.

New V.P. of Sales for Miller Hybrids

Chad Gillam from Kalona, Iowa, formerly with LG Seeds, has rejoined Miller Hybrids as the new V. P. of Sales. Contact Chad (319-330-8021) for assistance with your field scouting or any other questions.