Pro-Ag Consulting®, LLC

Pro-Ag Update

BI-ANNUAL NEWSLETTER SPRING 2008

The Jim Koester Memorial Scholarship



Jim Koester

To date, Pro-Ag Consulting, LLC has awarded over \$24,000 in scholarship money. Applications need to be in our office by May 15, 2008

In 1995, Pro-Ag Consulting, LLC established a

scholarship program for family members of its client base. The scholarship program is meant to help an interested student develop his or her learning skills so they too can enjoy the benefits of a career in agriculture.

The details of the program are as follows:

Pro-Ag Consulting, LLC will award a \$2,000 agricultural scholarship in memory of Jim Koester of Watseka, IL.

This scholarship will be awarded to a college bound high school senior whose parents or immediate family is a client of Pro-Ag. This scholarship will pay \$500 each year for 4 years to the college or university the recipient Corn Yields chooses to attend.





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Remember to Apply Zinc

If you have a field with the Phosphate levels in excess of 70#/acre and/or a pH field average above 7.2, you should consider adding Zinc to your fields going into corn. You don't have a shortage of Zinc in your field, but what is there may not be available to the growing crop.

Why does the Corn Plant need Zinc?

Zinc helps produce a growth regulator in corn that determines yield. The growth regulator determines the height of the stalk, width and length of the leaf, and the length of the ear. Zinc is needed in the first 45 days of a corn plant's life. If Zinc is not available, yields can be reduced as much as 35%.

Why is Zinc not available?

Zinc is in the soil as a positive charged particle. Phosphorus is a negative charge ion. Too much Phosphorus with its

negative charge is attracted to the Zinc which is positive and prohibits the Zinc from entering the corn plant. An alkaline reading on your soil test in excess of 7.2 will tie-up the available Zinc and prohibit it from entering the plant. What is the Solution?

Add one pint of Chelated Zinc to the row at planting time or Broadcast[®] 1 qt. preferable before you plant. Use a Chelated form manufactured by the process of (EDTA). This is best for soil application. It needs to be added preplant because the corn plant needs the Zinc during its first 45 days after planting. Adding Zinc is a Preventative

Shortage or tie-up of Zinc under a stressful period for corn can reduce yields 35%. Adding Zinc under high Phosphate or high pH prevents this from happening. If you do not have high Phosphate readings or a high pH, adding Zinc will do nothing for you.

What is the Cost of Zinc?

Be sure you buy a Chelated form and preferably registered in Florida or California. If registered in either one of those states, the Zinc will be 100% available. Cost is about \$7-\$10 per gallon. It mixes easily with fertilizers and chemicals.

If you have any questions, call our office or consult with your Regional Manager.



Adding One Pint of Manganese when Spraying Round-up[®] on Beans Pay Big Dividends

RoundUp[®] applied to soybeans ties up Manganese and as a result stops chlorophyll production for ten days or more. During this period, beans stop growing, turn light green to yellowish in color. Adding one pint of Manganese to your application of RoundUp[®] supplies necessary Manganese to continue chlorophyll production in plant growth. Many farmers in Illinois and Indiana have seen improved yields with this application. Cost for Manganese is less than two dollars per acre. Application of Manganese has been more effective on the later application or the start of pod set. Below is a chart for 2006 showing yield responses. Any questions, contact your Pro-Ag Regional Manager.

				2000 111		ATTON TAT		and the second sec		
NAME & ADDRESS	PLANTING DATE	HARVEST	DATE APPLIED	SEED VARIETY	ROW WIDTH	TILLAGE SYSTEM	EST. POP.	CHECK	MANG. YIELD	INCREASE
Don Villwock Edwardsport, IN	5/21/06	10/12/06	8/7/06	Stine 4282	7.5*	No-Til	180,000	64	77	13
Don Villwock Edwardsport, IN	5/21/06	10/12/06	8/7/06	Stine 4282	7.5″	No-Til	180,000	65	76	11
Downen Farms Ridgway, IL	5/9/06	10/10/06	7/28/06	Crows 3915	15"	No-Til	200,000	62	70	8
Downen Farms Ridgway, IL	5/22/06	10/11/06	7/28/06	Asgro 3905	15″	No-Til	200,000	49	52	3
Downen Farms Ridgway, IL	5/18/06	10/10/06	7/28/06	Mycogen 58430	15"	No-Til	200,000	60	65	5
Mark Rothrock Parkersburg, IL	5/6/06	10/25/06	6/6/06	Greatheart 434	15"	Conv.	182,000	44	48	4

2006 MANGANESE REPORT

Adding Sulfur Increases Corn Yields

For many years, Illinois soils have not been deficient in Sulfur and adding Sulfur has never been proven to be cost effective. University of Illinois last test for Sulfur application conducted in the early 1970's showed yield increases in only three of their 51 plots. Since then, we have cleaned up our atmosphere. Power plants burning coal have installed "scrubbers" and we continue to grow crops and remove Sulfur. Recent soil tests are showing Sulfur to be low in most Illinois soils.

Why Do We Need Sulfur?

Sulfur is essential for protein synthesis because it is a major component of Cystine, Methonine, and Cystine amino acids. Sulfur is also necessary for nodule formation in legumes and chlorophyll production. Adding Sulfur gives corn a darker green color, better stay green and increased yields.

How Much Yield Increase?

Recent independent tests show substantial yield increase when one to three gallons of Sulfur was added in the row. One gallon in the row, in Central Illinois, showed a four and eight bushel yield increase. Two and three gallon application in Southern Illinois yielded eight and ten bushel increase. Broadcast rates of three gallons per acre yielded six bushel increase. Average prices of Sulfur being used is about \$2.60 per gallon. With today's corn prices, the economic return is there for using Sulfur. Try it on some of your corn fields this year.

A Money Saving Idea for Soybeans

Recent research has proven we can reduce the number of soybean seeds we plant per acre and not reduce yields.

Remember how tough it was to control weeds before glyphosate-resistant beans came along? Planting more seeds that germinated was one of our ways to shade out the weeds and gain better control. Improved control keyed by glyphosateresistant beans has eliminated that competition need.

Another factor that influenced our tendency to plant more seeds was the use of older drills and planters. Old grain drills used to put one-quarter to one-half the seeds on top, so we added extra seeds to compensate for that problem. Newer drills and high-tech planters have dashed that problem. That said, the old recommended rate of 200,000 – 250,000 seeds per acre no longer applies. Iowa State University Agronomists have stated, "All it takes is 100,000 plants per acre to maximize soybean yields."

Of course, you will still want to plant more than 100,000 seeds per acre.

Disease, insects and environment mortality all reduce soybean stands during the growing season. Still, the recommended starting levels are now lower than before. Palle Pederson, Iowa State Agronomist says, "planting 125,000 – 140,000 seeds per acre is optimum in most cases when using a planter with row units and a little tillage." That's based on 63 ISU population trials across Iowa from 2003 – 2007. Pioneer Seed Company trials in 2006 and 2007 reflected different things. In 2006, Pioneer trials revealed income per acre was optimized at 132,000 for early planting and 123,500 for late planting. In 2007, optimum seeding rates jumped to 176,000 for early seeding and 150,000 for normal or late planting. The difference of \$6 beans in 2006 vs. \$8.50 in 2007, made the economic difference. Today's beans prices could change the rate for 2008.



Looking Back and Looking Ahead by Don Hackerson

We have completed a very successful year at Pro-Ag Consulting, LLC. More new accounts joined the Pro-Ag Program than any other year in our history. Many of those were referrals from you and others, and for that we greatly appreciate your help. High costs of fertilizer have given others the incentive to try our program and have been very pleased with their savings.

This past year, we sampled in excess of 225,000 acres. Those acres were in six different states and represented an 8% increase over 2006. This allowed us to record our highest gross revenue. Expenses continue to be a big challenge for us. With 10 trucks driving an average of 35,000 miles, gasoline costs are a major expense for us.

The sale of the company to our employees is progressing along on schedule. The transition is working out well for all parties concerned. The final phase of the buyout will occur on January 1, 2010; when I sell my controlling interest to the group. I will retain a 10% interest and they have promised me I would be invited to the Christmas Party. We have a fine group of employees who are working very well with each other.

Our Agronomics Information Lab continues to grow with the addition of new customers. It is very impressive how all the information can be put together to provide ideas for improving operations on each and every field. We now have two years data on many fields, which can be reported in many different formats. If you would like to know more about this program, contact your Regional Manager.

Again, we thank you for your support and your business in years past and we look forward to working for you in the years to come.

A Letter from our Agronomists...

Last year, a record 3-4 million acres of corn was sprayed with a corn fungicide in Illinois alone. In University trials last year, a fungicide application was profitable only 27% of the time. This does not suggest we should give up on fungicide applications, but we need to manage when and where we apply. University data has proven significant disease pressure prior to tassel results in a positive response to a fungicide application. However, when low disease pressure is present, there is no economic advantage to fungicide applications. This data shows the importance of scouting. When scouting the primary disease, we are looking for is gray leaf spot. The threshold for gray leaf spot is when lesions appear

on the third leaf below ear on half the plants at tassel.

The environment is one factor that affects the severity of disease pressure. Rainfall, humidity, dews, and fog all increase the chances of disease pressure. Southern Illinois, Indiana and areas to the south saw little benefit to fungicides due to very dry conditions in 2007.

Previous crop and tillage also factor into disease presence. Corn following corn fields are more likely to respond to fungicide applications. The fungal pathogens that cause foliar disease winter over in corn crop residue. The first place to scout would be a corn following corn field planted in a no-till or strip-till situation. Hybrid disease

susceptibility is another factor

one should consider. Ask your seed representatives which hybrids you should be concerned with so you can scout those specific hybrids. Many hybrids have good resistance to foliar diseases and probably will not respond to a fungicide application. However, others like many white corn hybrids are very susceptible to foliar diseases.

The three major fungicides used are Headline® (BASF), Quilt® (Syngenta®) and Stratego® (Bayer®). One thing to keep in mind is that the Headline® is a preventative fungicide, while Quilt and Stratego® are both preventative and curative fungicides. If you are scouting and significant disease is already established you would want to use Quilt or Stratego®. You cannot



Jason Boerngen

make the disease disappear, but the curative will interrupt the development of the established infection.

In conclusion, always scout first. The purpose of a fungicide is to control disease so spray only when disease conditions are imminent or disease is present. Wishing everyone a safe and prosperous growing season in 2008.

Jason Boerngen Montrose, IL

Agronomic Information Lab

Our Information Lab is working on second year data for several customers and informative new reports are being developed.

Comments by our Users:

"This is a whole lot better than just a Yield Mapping Program."

"I like the different types of reports that are available to me."

The program has some amazing features and benefits that will help you manage your operation.

Management Reports

The most popular report everyone wants is the Hybrid by Soil Type report. This report shows all the hybrids you have planted and also all of the various soil types you have on each of your fields. The data is analyzed and produces yield average for each hybrid number planted and that shows how that hybrid produced on each soil type on which it was planted. Very useful while buying next years seed. It is helpful to have that information when ordering seed for next year's planting. If a given hybrid did not perform well when placed on a certain soil type, and the field you are planning to plant that seed has the same soil type, you will

probably want to change hybrid number. In the report below, Hybrid A6455BTRR did not perform well on 154A & 51A soil types, but it did well on 152A, 68A and 818 A. Using the soil type maps and planning maps provided by our Agronomics Info Lab and your planning sheets for next year, you have information at your finger tips to make good sound decisions. These reports can be archived and referred to in future years. Years of data can be accumulated and referred to in making your management decisions. Pro-Ag can also make

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this information available for you to store on your own computer.

Correlation Tables

Correlating factors that you select, we can measure the impact anyone of these factors may have

recording from your yield monitor. For a correlation value to be a factor, it needs to have a value of .20 or better. From the example on the left, Organic Matter was not a factor. pH, P and K values were not factors either, bu increased so did yie

ung one of these i
on yield either
good or bad.
Lets say you
wanted to
compare Organic
Matter, Potash,
Phosphorus, pH
test values from
your soil test
data and the
elevation

Variable Dry Bushel/Acre Dry Bushel/Acre 1.00 O.M. .03 Κ -0.06Р 0.18 pН 0.10 Elevation 0.24

but as alavation	152A	Ι
, but as elevation violds. The	154A	F
higher better	171B	(
drained ground	295B	N
nraducad battar	375A	F
violda This may	375B	F
be a factor to	388B2	V
be a factor to	435A	S
desiding to tile on	43A	I
deciding to the or	51A	ľ
drain a neid.	541B2	(
	68A	Ş
	818A	F

Soil Types for Table Below

Soil	
Number	SOIL TYPE
148B	Proctor Silt Loam
152A	Drummer Silty Clay Loam
154A	Flanagan Silt Loam
171B	Catlin Silt Loam
295B	Mokena Silt Loam
375A	Rutland Silt Loam
375B	Rutland Silt Loam
388B2	Wenona Silt Loam
435A	Streator Silty Clay Loam
43A	Ipava Silt Loam
51A	Muscatune Silt Loam
541B2	Graymont Silt Loam
68A	Sable Silty Clay Loam
818A	Hennepin-Vanmeter Complex
86B	Osco Silt Loam

Yield Dry	Soll Type			1.1.1.1.1	China Providence		-	2010010	115			1000	10000	100/100		Contra de la factoria
VARIETY	148B	152A	154A	171B	295B	375A	375B	388B2	435A	43A	51A	541B2	68A	818A	86B	Grand Total
A6394RRRW	195	192			080	193	190	The set	190	1200	1	1.800		13.08	1117	19/1
A6395BtRR	212	204				201	200		197					12		201
A6395RR	2152	201			199	203	195	-	191				12.2			197
A6395RRRW	184	186				187			1882	Sort R					1-1-5	185
A6395RRYGPL	219	204				215	194		198		100			1	-	201
A6455BTRR		201	169				120						195	202		201
A6455BTRWRR					Mar Mark	207		210	210				1	2007		208
A6495BTRRRW			192		-	191	24.		192		-	175	198			190
A6594RRYGPL		190	176		7				1	Nº C	189	2	186	192	1	198
A6608RRYGPL	REAL R	10230	212	230		207			217	205	ES IT.	196	220	1922	207	213
A6608RWRR			204		A Starting	204	200	211	203	-			191	all and	No.	203
A6633RRRW		1			10 77 10	206	10-5-0-	209	128	1000			1. 1. 1.			206
A6633VT3						196			189	190				-		192
Grand Total	200	197	208	230	195	201	192	210	198	194	188	181	191	197	207	199

Record Keeping

Offered within our information lab is a service of record keeping for each and every field you farm. This service is a compliment to your soil test and yield mapping information. It can include information on all of your field inputs and costs, planting, tillage, machinery used etc. Then, using yield data, additional reports can be included. For example, net profit on any area of any field.

How Do I Get Started?

Just call your Regional Manager and he will set up an appointment for our people to visit you and answer any questions you may have before we start.

Pro-Ag Consulting, LLC

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Phone: 1-800-879-2297 Fax: 217-459-2103 `mail: proagllc@consolidated.net Chris Behl Bloomington, IL 888-879-2297

Ted Huber Oakland. IL 888-305-4411

Jason Boerngen Montrose, IL 888-732-2530

Matt Schilling Dahlgren, IL 618-925-1566

Gary Frye Hull, IL 217-656-3474



New Pro-Ag Employee

Beth Kull

Beth joined Pro-Ag Consulting, LLC in January of 2008 as a full time

assistant in our Mapping

Department. Beth graduated from Lake Land College in May of 2006 with an Associates Degree in Management. Upon graduation, Beth worked at 1st Mid-Illinois Bank for 2 years.

She will be working as the Mapping Assistant in our Windsor, IL office. She will assist in creating and printing field maps for customer accounts as well as general office duties.

Beth's resides in Sullivan, IL with her newlywed husband Chase Kull.



An Employee Owned Company

With over 183 Years of Experience

	1	
Don Hackerson	Owner	23 Years
Gary Frye	Regional Manager	26 Years
Chris Behl	Regional Manager/Co-Owner	19 Years
Jim Molock	Shop Manager	20 Years
Gail Molock	Lab Manager	18 Years
Ted Huber	Regional Manager/Co-Owner	13 Years
Jason Boerngen	Regional Manager/Co-Owner	11 Years
Matt Schilling	Regional Manager/Co-Owner	10 Years
Marilyn Nelson	Lab Assistant	9 Years
Charlotte Newman	Lab Assistant	8 Years
Kurt Storm	Soil Technician	6 Years
Charles Campbell	Controller/Co-Owner	5 Years
Tish Behl	Mapping Manager	4 Years
John Radloff	Soil Technician	4 Years
Penny Stockdale	Lab Assistant	3 Years
Ryan Parker	Soil Technician	3 Years
Beth Kull	Mapping Assistant	1 Year