

TSM[®] Infarmation Newsletter

March
2011

Unlock the Potential
For Higher Yields

TSM Services, Inc is dedicated to providing growers and farmers the absolute best soil fertility programs today. The TSM[®] goal is to provide a program that is agronomically sound, economically justified, and environmentally friendly. Our fertility programs are proven to meet all three standards, with 18 years of research to back all of our claims.

For further information. Feel free to call us during business hours at 1-800-626-3806, or visit us on the web at www.totalsoil.com

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2010 PLOT RESULTS

In this issue of the *TSM[®] Infarmation Newsletter*, I want to report on the highest yielding single plots. Most of the yield data I have given you have been averages of several replicated plots. Some of the data reported have been up to 30 replicated plots averaged together.

One of the areas I want to research is to track some of these plots over the years. For example, in the crop year 2009, plot 502 and plot 206 yielded 320 bushel of No 2 corn per acre. Wouldn't it be interesting to know how these plots performed before 2009? Or even how they performed this past crop year 2010. Are the highest yielding individual plots always the highest yielding plots? If not, you could find out that your highest yielding fields are not the same every year.

I will look into this at a later issue.

Top 10 Highest Yielding Individual Plots

2009 Crop Year				2010 Crop Year			
Plot #	Corn	Plot #	Soybeans	Plot #	Corn	Plot #	Soybeans
502	320	1	78.4	118	297	203	82.0
101	317		77.7	901	295	204	80.6
312*	308	162	77.3	807	292	202	80.4
413	308	502	77.3	904	290	101*	80.1
405	306	501	77.3	406	286	206	79.5
404	300	502	77.2	201	283	302	79.3
202	295	201	75.4	805	283	102	78.5
208	295	203	75.3	906	283	104*	78.0
306	295	101*	72.6	706	282	104*	77.6
312*	295	101*	72.5	106	282	101*	77.4

* Each plot has more than one variety so it may be same plot different variety or we have 6 different individual fields we conduct research on. Each field could have a plot # 101. So if you see the same plot number, it is probably different fields.

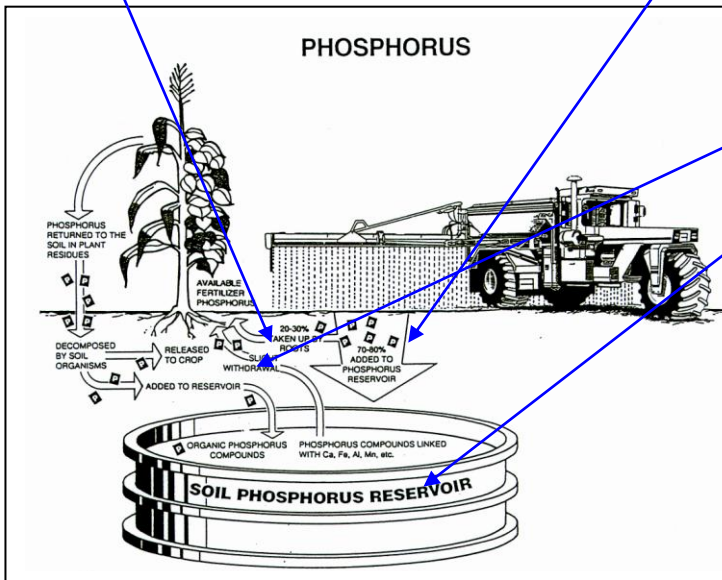
What Makes TSM® Different? Part 3

"Fertilizer Efficiency"

We will cover two basic questions:

1. What is the efficiency of fertilizer?
2. Can we do anything about it?

Many soil fertility textbooks use this illustration to indicate the efficiency of Phosphorus(P). Looking very closely, we see that "20-30%" of the Phosphorus gets into the plant and "70-80%" goes into the soil phosphorus reservoir (unavailable form). So we conclude that the efficiency of Phosphorus(P) is between 20 and 30 percent. Notice that of the 70-80% which goes into



reservoir, only a "slight withdraw" is possible. In earlier additions, the chart had "1% withdraw" so we can assume the recovery (if any) of any of these nutrients is very slow process. If you spend \$100 on fertilizer, the plant will use only \$20 to \$30 worth. The rest (\$70 to \$80) goes into unavailable next to impossible to recover (according to textbook).

My contention is that YOU CAN DO SOMETHING about it!!

Let's look at another textbook example of fertilizer efficiency. The University of Illinois "Agronomy Handbook" indicates that raise the P₁ test score one pound, it takes 9 pounds of P₂O₅. Since P₂O₅ is 43.646% Phosphorus(P), we can convert this formula to read, it takes 3.9 pounds (43.646% times 9) to raise the P₁ score 1 pound of Phosphorus(P). **This equals 26% efficiency.**

Let's look at Potassium(K). The Agronomy Handbook says that it takes 4 pounds of K₂O to raise the Potassium(K) test score one pound of K. K₂O is 83.013% K so we can convert and say it takes 3.3 (83.013% times 4) pounds of K to raise the K test score 1 pound. **This is 30% efficiency.**

Let me close this issue with this. There are many ways we lower the efficiency of fertilizer. This happens more times than we like to think. But **there are also many ways we can increase the efficiency of fertilizer.** Be thinking about what you can do on your farm. It will take several issues to cover them all.

TSM® Micro Boost Foliar

Next Generation Foliar Micronutrients

Minimum Guaranteed Analysis 4-0-0

Nitrogen (N)	4.00%
4.00% Urea Nitrogen	
Sulfur (S)	3.00%
3.00% Combined Sulfur	
Boron (B)	0.25%
0.25% Water Soluble Boron	
Copper (Cu)	0.25%
0.25% Water Soluble Copper	
Manganese (Mn)	3.00%
3.00% Water Soluble Manganese	
Zinc (Zn)	3.00%
3.00% Water Soluble Zinc	

Derived from Urea, Zinc Sulfate, Manganese Sulfate, Boric Acid and Copper Sulfate

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I plan on bringing you many more pieces of information the purpose of which is to convince you that "we are different and better". Why don't you try us and see?

"GOLD" Program
"SILVER" Program
"BRONZE PLUS" Program
"BRONZE" Program

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