## **Check Your Potash: Research Has Found New Ways To Save Farmers Money**

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PORTAGEVILLE, MO. avid Dunn, Supervisor of the Soil Test Lab at the Delta Center in Portageville, Mo, has made progress in fertilizer management for crops.

Dunn began his research because of the considerable rise in fertilizer prices in the past few years. "Researchers and farmers alike were wondering if fertilizing was even still an option because of price," said Dunn, "so what I did was pull together all that I had, to present a coherent picture of our reality. The price of fertilizer has gone up but the price of commodities that farmers sell has also gone up."

Fertilizing is necessary and profitable for farmers so Dunn set out to find how farmers could still come out of fertilizing with a significant profit.

"I pulled together all the crops from the experiments that I had conducted with Dr. Gene Stevens from 2007. In each experiment, we fertilized with a soil test recommendation. I then took the yield numbers from that year and the fertilizer that we used and compared that years fertilizer prices to commodities and figured out the net return," said Dunn.

"I then did the same thing with the same yields but with 2008's fertilizer prices and commodity prices. What I found was that there was actually more money left over in 2008," said Dunn.

"One thing that I do have to point out is that in terms of our gross receipts, 2007's fertilizer cost amounted to about 14 percent and in 2008, it amounted to about 18 percent of our gross receipts. These were cotton tests, soybean tests, corn tests, and rice tests," said Dunn.

Dunn stated that it is important to point out that in southeast Missouri farmers are blessed with an abundance of native phosphorous so the soil tests don't require a lot of

phosphorous applications.

"One of the other things that I pulled together from this research was the cost to the farmer on being low in various nutrients like potash, a potassium nutrient that is important in water regulation, promotes good flowering, promotes good pod set, and that plays a role in disease resistance and shattering. When I had the numbers based on current prices in 2008 and the current price of rice, I discovered that if I was 100 pounds of potash low in my soil the yield drag I could expect amounted around \$300 dollars worth of rice," said Dunn, "where as to apply that 100 pounds of potash would have only cost me \$60 dollars."

"That tells me that if you have a situation were you are low in potash, you defiantly need to apply it to get the maximum yields. It is impossible to get maximum profit without maximum

yield," said Dunn.

What if you were not able to apply enough potash before planting? Is it too late to correct the situation at mid-season? "In an experiment with soybeans, we had a field that was deficient in potash. We mixed Roundup with glyphosate and potash fertilizers, for a combined weed and feed approach. That year, we were able to get yields of five more bushels over untreated areas," said Dunn.

"The main thing of importance is to make sure that you are field scouting to see where you might be deficient in potash. Potash deficiency in most plants is characterized by a yellowing of the leaf margins. It usually starts in the lower leaves that turn yellow and is followed by a reddening of the leaves and then death," said Dunn.

Dunn stated that if potash deficiency is going to be a problem, it is usually very visible and identifiable and easily corrected.



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