

POTATO EYES



Vol. 20, Issue 3, Fall 2008 • Alexander D. Pavlista, Ph.D., Extension Potato Specialist
University of Nebraska Panhandle Research and Extension Center • 4502 Avenue I, Scottsbluff, NE 69361



What's happening with fertilizer prices?

Dr. Gary W. Hergert, Soils Specialist
UNL Panhandle Research and Extension Center

The past two years have seen major changes in crop production costs, especially fertilizer. What happened? Why did this happen? What's projected for 2009? Fertilizer is truly an international commodity, so what happens in the Middle East, India, China and in former Soviet Union Republics like the Ukraine influences your local prices.

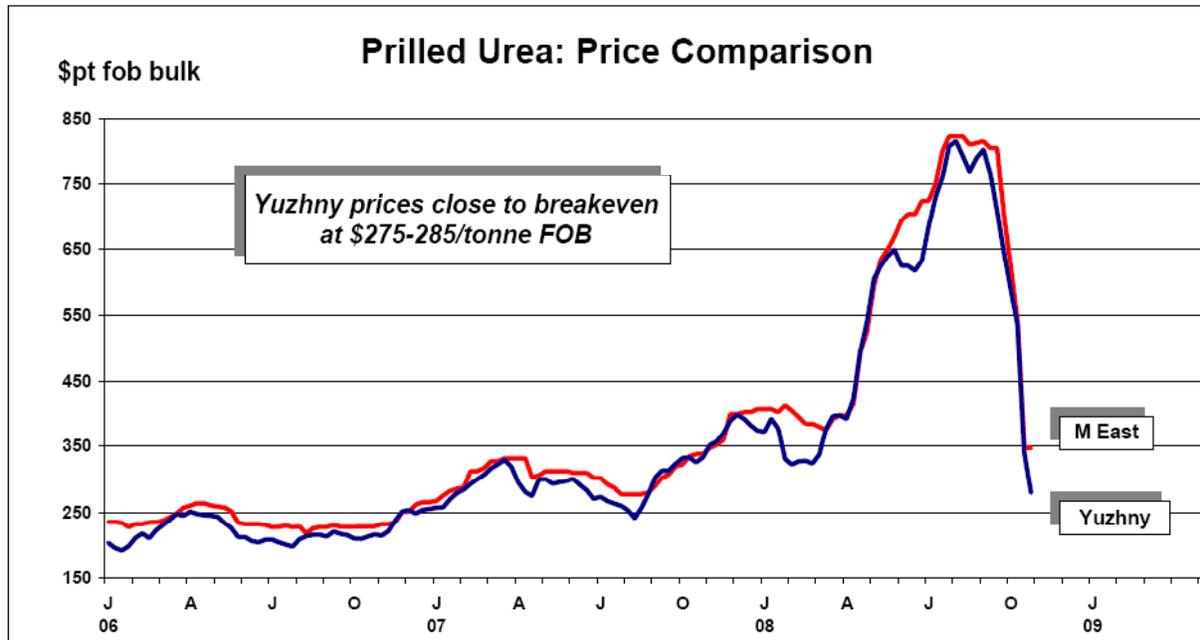
Nitrogen

Nitrogen prices tripled compared to two years ago in September, but prices have dropped just like the stock market since then.

World demand for fertilizer rose 14% in the past few years (primarily from South America, China and India). Fertilizer is a world-wide commodity and the U.S. must compete with other buyers. Because of tight margins and environmental regulations, 25 U.S. ammonia plants have closed since 1999. A few new production facilities are being built in China, the Middle East and the Caribbean. Ethanol demand increases demand for N because of increased corn acreage and US corn uses 45% of all N fertilizer. But when the financial crisis spread around the world in September, it also affected demand for fertilizer causing the huge price drop

Continued on next page

Alexander D. Pavlista



... Fertilizer prices

Continued from previous page

shown above. These are world prices. Local prices will be at least 20% higher to reflect transportation and dealer mark up.

Many fertilizer dealers purchased fertilizer that is now in their tanks or bins early last summer before peak prices. In western Nebraska, representative prices for ammonia (82-0-0) are around \$1,000 per ton, UAN solution (32-0-0) \$540, urea \$870, and MAP (11-52-0) at \$1250. Dealers cannot sell those products below their cost or they will not be in business even though current prices on the world market are much less. They will have to clear out current inventory, then enter the market to purchase lower cost product for next summer.

Phosphorus

Phosphate prices quadrupled since two years ago before dropping again. China and India had bid up the market to \$1200/ton for 18-46-0 (DAP) this summer.

As you plan for 2009, fertilizer prices will be higher than in 2008, although there may be some bargains later next spring. The keys to maintaining profitability are to

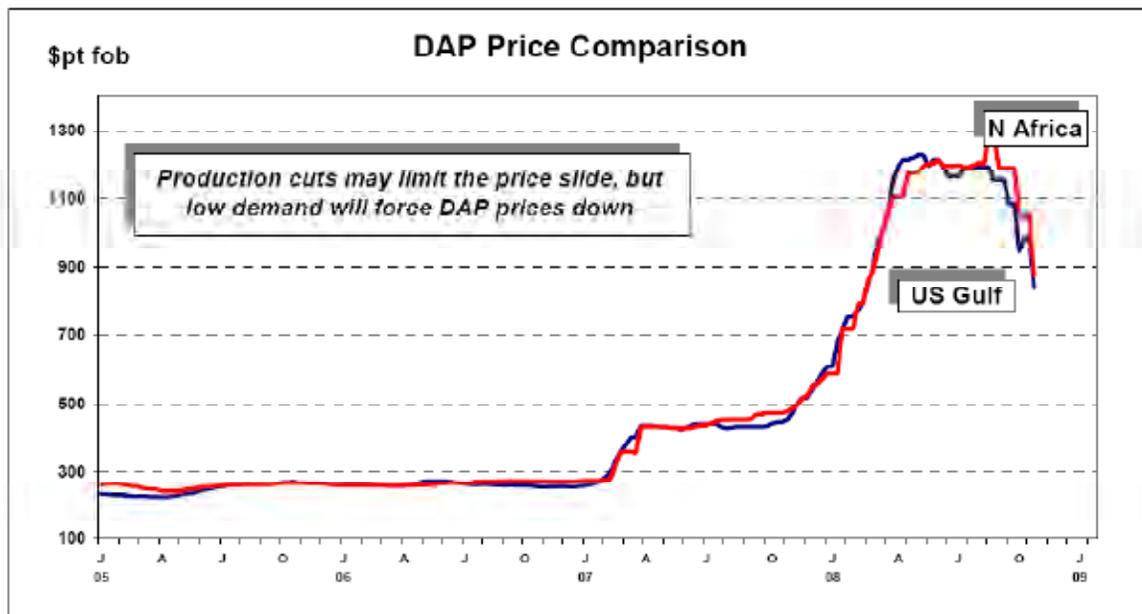
know your soil test levels and do the best job of fertilizer application to enhance efficiency. For N this means split applications to assure no N is lost to early spring leaching. Sidedressing or applying N with irrigation water during the season is a good option. For phosphorus, row application is twice as efficient as broadcast and with P prices for 10-34-0 over \$1.25 per pound of phosphate, efficiency is important. Strip-till or zone-till placement of P at shallower depths (3 to 4 inches below seed depth) should perform similarly to row application and provide similar efficiency.

Controlling Production Costs

Producers cannot control fertilizer prices (other than being aware of world trends and locking in a good deal when they find one), and they do not control commodity prices. What they can control is their production inputs and costs by improved management.

Soil testing is more important than ever. Nebraska soil sampling recommendations are at: <http://www.ian-rpubs.unl.edu/epublic/live/g1740/build/g1740.pdf>.

Continued on next page



(source: The Market)

... Fertilizer prices

Continued from previous page

Sample the 0 to 8 inch depth for routine analysis. To fine tune recommendations, consider sampling smaller areas than the standard recommended 40 acres. You can create your own “management zone” sampling based on soil type, slope or past productivity if you have yield maps of other crops. You might be surprised at the variability in your fields. By having the information you can consider if you want to develop some type of site-specific nutrient management or continue with uniform application. Either way, you will understand the range of variability which may explain some of those “problem” areas you see later in the growing season.

Deep sampling for residual nitrate-N is essential. Make sure you credit all N sources. Suggested soil sampling depth is 0 to 8 inches and 8 to 24 inches for potatoes.

Know your soil P and Zn levels. Most Nebraska and high plains soils contain sufficient levels of potassium, magnesium, manganese and iron. Follow current recommendations for sulfur based on quality versus nutrient need. If DTPA-Zn is less than 0.5 ppm include 1 lb Zn/ac in row-applied fertilizer or broadcast apply

recommended rates.

Consider replicated strip trials to determine the effect of lower or higher fertilizer rates on yield and quality. Doing your own test plots takes time, but the payoff is knowing how recommendations work on YOUR fields and farm. Fine-tuning fertilizer use with high prices needs to be an on-going process.

Comparison shop. University fertilizer recommendations tend to be lower than those suggested by many commercial labs. Land Grant University fertilizer suggestions are based on research and on-farm verification and have been proven to provide sufficient nutrient levels for producing both high yield and high quality. Look at different products and do some fertilizer arithmetic to compare the actual cost per pound of nutrients, especially mixed grade fertilizers. Work with a reputable dealer who can provide accurate estimates, timely delivery and well-maintained equipment. Remember, service after the sale is also important. Also look to unbiased information from Extension educators and specialists. Following these suggestions can help keep potato production profitable in 2009.



**The Nebraska Potato Eyes
is on the World Wide Web at:
www.panhandle.unl.edu/peyes.htm**

Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska-Lincoln cooperating with the Counties and the U.S. Department of Agriculture.

University of Nebraska-Lincoln Extension educational programs abide with the non-discrimination policies of the University of Nebraska-Lincoln and the United States Department of Agriculture.