The April 14th Illinois Production Cost Report reported average fertilizer prices in Illinois as $797 per ton for anhydrous ammonia, $687 per ton for DAP, and $598 per ton for potash. Throughout 2011, fertilizer prices have increased at a gradual rate. Anhydrous ammonia increased $20 per ton, DAP increased $15 per ton, and potash increased $33 per ton so far this year.

Much larger increases occurred during the last half of 2010. From August 5th to year-end 2010, anhydrous ammonia price increased from $549 to $777 per ton, an increase of $228 per ton. DAP increased from $509 to $672 per ton, an increase of $163 per ton. Potash increased from $488 to $565 per ton at the beginning of the year, an increase of $77 per ton.
Fertilizer price increases have occurred at the same time that corn and soybean prices increased. Several explanations exist for the simultaneous increases. Commodity price increases lead to more row crop acres and increasing fertilizer use, thereby causing fertilizer price increases. Higher commodity prices also suggest an increased ability of farmers to pay for inputs, potentially leading to higher input prices.

Higher fertilizer prices lead to higher per acre fertilizer costs. Application rates of 180 pounds per acre of anhydrous ammonia, 170 pounds of DAP, and 85 pounds of potash will meet the needs of many high producing corn fields. Using these rates, corn fertilizer costs were $113 per acre if all fertilizer in August 2010. Fertilizer purchases at the beginning of 2011 resulted in a $151 per acre, an increase of $38 per acre over August costs. April 14th purchases of all fertilizer resulted in a $155 cost per acre, $4 higher than beginning of year costs. Farmers will have different costs from those above because most farmers do not purchase all fertilizer on a single date.

For soybeans, 100 pounds of DAP and 120 pounds of potash will provide the nutrient needs of many high producing fields. Using these rates, soybean fertilizer costs were $55 per acre in August 2010. First of the year purchases yielded a $68 per acre cost, an increase of $13 per acre from summer costs. April 14th purchases of all fertilizer resulted in a $70 cost per acre, $2 higher than beginning of year costs.

Because of nitrogen fertilizer price increases, corn fertilizer costs rose faster than soybean costs. Per acre corn minus soybean fertilizer costs were $58 per acre on August 2010, $83 per acre at the beginning of 2011, and $85 on April 14th, 2011. These increases reduce corn returns relative to soybean returns. Obviously price changes also play a role in return comparisons between corn and soybeans.