AVAILABILITY OF “NUTRIENTS” FROM CROP RESIDUE PLOWED DOWN

The question has been asked numerous times as to how much nutrient value will be available from last year if I plowed down the crop due to the weather or poor quality. We also often get asked in drought years where the crop did not use the nutrients. “How much can I adjust the recommendations to take into account the residual fertilizer?”

In both cases we forget that the fertilizer that we apply in a given year is a calculated amount based on crop removal from the soil and that in fact we are not feeding the present crop (except for Nitrogen), we are feeding the soil or replacing what the soil will give up to grow that crop including the crop residue. The levels that we recommend are based on an economical build over time and it will not dramatically change the soil levels in one season. The point here is that it takes 6 to 18 pound of K20 to change the soil test level 1-ppm providing that there isn’t a crop removing any Potash from the soil. These levels and principals, depending on the type of soil, apply as well to Phosphorus.

Therefore, when making a recommendation for fertilizer, and trying to take into account what amount was not used by the crop or how much was returned in the residue, we can only make a determination of how much nutrient was given up by crop residue and or fertilizer application by measuring it with a soil test. The soil test tells us how much fertilizer is in the available form on the exchange complex not how much is in the whole system to be available at a later date.

In summary, if you refer to the crop removal charts in the A & L Agronomy handbook or other sources, do not make the mistake of deducting the amount of nutrients that will be returned by the crop residue until you can actually see these values in the soil test levels.

CHEMICAL RESIDUE ANALYSIS

ATRAZINE RESIDUE

Planting Soybeans on Corn ground unexpected this spring
Reduce the Risk of Unknown Yield Limiting Residues
“Don’t Guess do a Residue Soil Test”

Results available within 4 days from receipt of Sample

Other Herbicides Available for Rapid Turnaround
Metalochlor, Metribuzin, Trifluralin