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THE BIG HAUL-OFF

Many farmers and agribusinesses in the southeastern and midsouth states will long remember 2003 as a year for the record books. State agricultural statistics offices are forecasting and reporting record average yields for cotton, corn, soybeans, peanuts, and other crops. It was not uncommon to hear of many farmers producing more than 3 bales of lint cotton per acre, corn yields above 200 bushels per acre, soybean yields above 55 bushels per acre, and peanut yields near 4,000 pounds per acre.

While good fortune in 2003 will continue to be the discussion topic at the local coffee shop, it may be more important for farmers and their advisers to consider opportunities to maintain this momentum in 2004. We all recognize the importance of being able to take advantage of favorable high-yield environments, especially when good crop prices prevail.

Good to excellent yields in 2003 resulted in what may be termed “the big haul-off”, referring to the huge nutrient removal at harvest. Farmers and crop advisers should do some simple accounting to estimate their crop harvest removal of nutrients. They might be surprised to learn that their traditional fertilization rates will not result in sustainable plant nutrition. New plans may need to be developed to meet plant food uptake demand, and to replace the harvest removal of nutrients. Neglect of adequate plant nutrition limits returns on other crop inputs, it hurts soil productivity, and it can limit opportunities to attain good yields again.

So, how much phosphorus and potassium were removed in the “big nutrient haul-off” by the 2003 crop harvest? The uptake of phosphorus (reported here as P_2O_5) and potassium (reported here as K_2O) were: 72 and 210 pounds per acre by 3-bale cotton; 102 and 240 pounds per acre by 180-bushel corn; 53 and 188 pounds per acre by 55-bushel soybeans; and 34 and 162 pounds per acre by 3,500 pounds of peanuts, respectively. **About 60 to 80% of the phosphorus and 20 to 40% of the potassium taken up by these crops are removed from the field at harvest.** For forages like alfalfa, bermudagrass, and cool season grasses, hay harvests at 4 to 6 tons per acre resulted in removal of 70 to 90 pounds of P_2O_5 and 300 to 360 pounds of K_2O per acre..

On soils testing medium or lower in phosphorus and potassium, higher fertilizer rates may be required in 2004 to replace harvested nutrients, to help build or sustain soil fertility...and to provide for adequate crop needs in 2004 and beyond.

If opportunity knocks again, will you be ready? What nutrient management action will be taken in response to the “huge haul-off” in 2003? Plan now to make 2004 another banner year by providing adequate nutrition for your crops.

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