DOES SOYBEAN RUST POINT TO REDUCED PRODUCTION?

The discovery of Asian soybean rust in some southern states has triggered a flood of commentary about U.S. soybean acreage and yield prospects in 2005 and beyond. Many believe that acreage will be reduced in 2005 and that average yields will also be negatively impacted.

There are clearly more questions about the impact of soybean rust than answers at this time. The discovery of rust at the end of the 2004 harvest season means that the industry has some time to analyze alternatives and make decisions based on the best information and recommendations of experts. The first reactions may not reflect final decisions. One is reminded of the example of soybean aphids in 2003. The early response of many producers was to plan to sharply reduce soybean acreage in 2004, but that did not happen.

Initially, the acreage response to soybean rust is anticipated to be most significant in southern growing areas where rust could be most problematic. Soybean area in the 12 southern states totaled about 11 million acres in 2004. Reduced acreage in those states in 2005 might be anticipated as a way for producers to avoid the cost and potential yield impact of the disease. However, sound economic alternatives for soybeans may be limited due to low prices and increased cost of production of other crops. In addition, some acreage in those states is already routinely treated with fungicides for the control of other foliar diseases. Treating for soybean rust might involve only a marginal increase in production costs for those areas.

Soybean planting decisions in the midwest should be impacted by expectations of the probability of soybean rust in the area in 2005; the cost of treating; the potential yield impact; and the economics of alternative crops, primarily corn. Producers will likely spend the winter months evaluating these factors and making planting decisions. It is possible for adjustments to be made in some acreage decisions late in the planning process. One of the factors that may influence the decision is the rapid increase in the cost of corn production. Crop production budgets for central Illinois, for example, indicate that variable costs of corn production increased about $21 per acre from 2000 to 2004 and might be another $9 higher in 2005. During the same time period, the variable cost of soybean production increased by only $4 per acre and is projected to increase another $4 in 2005, not including any fungicide applications. Another important factor could be the recent experience of high corn yields relative to soybeans. If
producers anticipate that relationship to continue, corn would still be an attractive alternative to soybeans even with higher production costs. Finally, planting decisions will be influenced by the relative price of corn and soybeans at planting time, as well as planting time weather.

Planting decisions in the upper midwest could be positively influenced by the discovery of soybean rust in the south. On an annual basis, there may be a lower probability of the occurrence of soybean rust in those northern states. Producers there might see expected acreage reductions in other regions as an opportunity to expand acreage in 2005.

At this juncture, it is difficult to anticipate the direction and magnitude of soybean acreage change in 2005. Producers will have to carefully evaluate all of the decision factors, including production costs and relative yields and prices of alternative crops. Given the 960,000 acre increase in soybean area in southern states in 2004, it would not be surprising to see a reduction in 2005. Some of that decline could be offset by the trend increase in soybean area in the upper midwest. The USDA’s Winter Wheat Seedings report to be released on January 12 may provide some insight on the potential changes in acreage of spring planted crops, but will not be very helpful in assessing the potential mix of those crops.

The potential yield impact of soybean rust in 2005 is nearly impossible to anticipate. The impact will presumably be influenced by the geographic extent of the incidence of the disease, the timing of its occurrence, and the effectiveness of control measures. It is known that the potential impact is severe if not effectively treated. The market will have to work through the production and price implications of soybean rust in the U.S. In the meantime, rust will again be an issue in Brazil. The planting season has generally been favorable in Brazil, but the presence of rust in commercial production has been confirmed.

While an important issue, the impact of soybean rust is not the only factor that will influence price. If current USDA projections are correct, the 2004-05 U.S. soybean marketing year will end with stocks of 460 million bushels. That is at least 260 million more than generally considered adequate. Allowing for an increase in use to 2.9 billion bushels in the 2005-06 marketing year, the 2005 U.S. crop could be as small as 2.65 billion bushels without creating a shortage. With a U.S. average yield of 40 bushels, a crop of 2.65 billion bushels could be generated with harvested acreage of 66.25 million, 7.74 million fewer than harvested in 2004. Without some reduction in U.S. production or a substantial increase in use, soybeans could remain in surplus for another year.

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