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# ECONOMICS COMMENTATOR

South Dakota State University

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## Soybean Rust: Market Implications

by  
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For most of the last year, the soybean market had little doubt that soybean rust would eventually find its way into the U.S.; the only question was when. Until its discovery in November of 2004, there was very little consideration of soybean rust in the U.S. in the day-to-day trading of soybean futures.

When the news broke in November 2004 that soybean rust had been found in the U.S., the market reaction was swift and expected; soybean futures gained as much as 40 cents over a 7- to 10-day period. However, since the rust was discovered so late in the fall, the initial bullish reaction faded rather quickly. As a result, futures prices lost most of the gains by early December 2004.

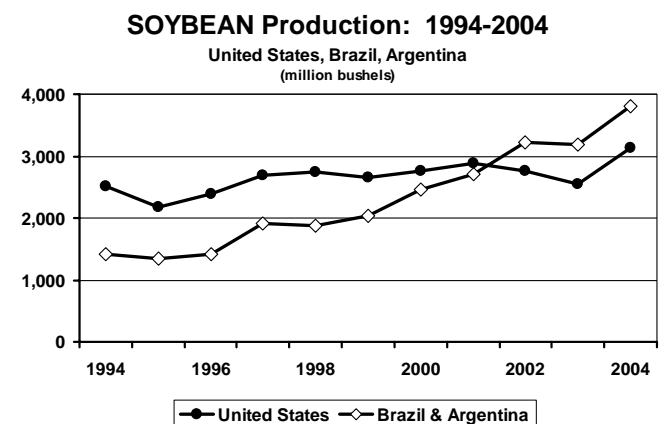
What then, will be the impact of soybean rust on prices in 2005? With the likelihood of soybean rust being detected in 2005, soybean prices will certainly have the potential to rally again this year. The extent of a possible upturn in price could depend upon the severity and location of the initial infection, the potential for the spread of the disease to larger regions of the country, the uncertainty of yield expectations during the growing season and finally, the actual yield losses that may occur. However, the challenge for the soybean market will be to balance this bullish fundamental factor that could impact 2005 production against a longer term bearish fundamental factor of carryover supplies of soybeans that are currently at the highest levels in history.

Since soybean rust is a new peril, the actual implications of this disease on soybean prices are impossible to determine in advance. We could look to

South America where rust has been a management concern for a number of years.

Regardless of the presence of soybean rust in South America, production of soybeans in that region of the world has consistently grown each year (Figure 1). This is likely due to increased acres, increased yields per acre on non-infected fields, or a combination of both.

Figure 1.



Source: USDA

Projections for soybean production in January 2005 showed an increase of as much as 15 million metric tons over the previous year. This estimate was revised downward by mid-April due to drier than normal conditions in southern Brazil and northern Argentina in late February and March.

The combined production of Brazil and Argentina still is currently projected by the USDA Economic Research Service as of mid-April at 93 million metric tons, an 8.6% increase over production in that region one year ago.

After soybean rust was found in the U.S. in November 2004, concerns arose among farmers and within the soybean trade over whether

soybean acres would decline in 2005. This was confirmed on March 31, 2005, when USDA's National Agricultural Statistics Service issued its annual Prospective Plantings report. In this report, USDA-NASS estimates that 73.91 million acres will be planted to soybeans in 2005, a decline of 1.3 million acres from a year ago. It must be noted that this is only a projection of what farmers intend to plant. Actual planted acreage figures will be reported in the 2005 Planted Acreage report released on June 30, 2005. Based on this initial acreage estimate and a trend-line national average yield of approximately 39 bushels per acre, production of soybeans in the United States could be approximately 2.85 billion bushels. Assuming demand remains relatively constant, this acreage estimate would not reduce current carryover supplies.

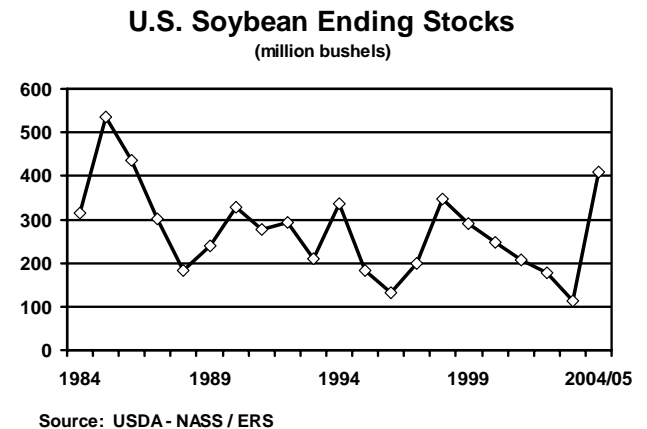
Although soybean rust is a concern to soybean growers, it turns out that a decrease in soybean acres may likely be due to a variety of considerations. As an added feature to this year's survey, farmers across the nation were asked by USDA whether soybean rust would affect their planting decisions regarding soybeans. The vast majority of soybean growers in the United States in this survey were aware of soybean rust and the potential threat it poses. However, only 6% of all farm operators nationwide who were aware of soybean rust reported that the rust issue was a factor in their planting intentions—7% indicated they would increase their acres, 53% said they would plant fewer acres. The remainder indicated rust did not change their planting intentions at all.

Since only 6% of farmers in the U.S. indicated that soybean rust factored into their planting intentions, this means that there are other reasons that may likely be of more significance to reduced planting intentions than the rust issue alone.

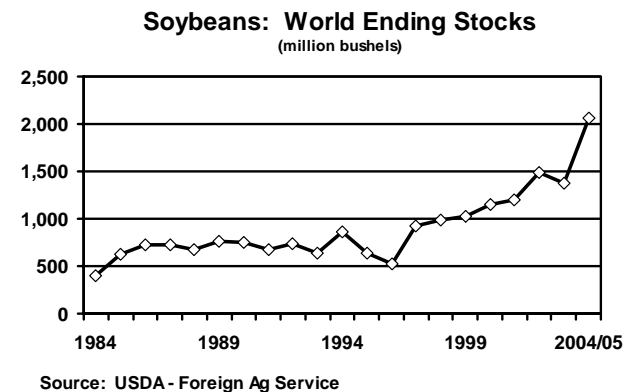
The carryover supply of soybeans is perhaps the most important bearish fundamental factor in direct opposition to the potentially bullish factor of soybean rust. Current estimates of carryover supplies of soybeans in the U.S. are the largest since 1986. Estimates of worldwide carryover are the largest in history; exceeding the previous record of two years ago by almost 34%.

If the United States and South America both raise soybean crops that, combined, exceed production of a year ago, world supplies will very possibly continue to grow. This should, in turn, put additional pressure on price (Figures 2 and 3).

**Figure 2.**



**Figure 3.**



From a purely fundamental standpoint, the current carryover supplies of soybeans are so large that price pressure would be the normal expectation throughout 2005, especially if both the U.S. and South American harvests in 2005 are sufficient to at least maintain current carryover supplies. However, this expectation was already put to the test in February and March of 2005.

Dry conditions in southern Brazil—not soybean rust—was given as the primary reason for an unexpected rally that lasted well into the month of March. Since futures prices gained as much as \$1.20 to \$1.80 during this rally, one

might reasonably expect that soybean prices will also rally if soybean rust is discovered in the U.S. during the 2005 growing season. If a rust rally occurs, South Dakota soybean growers may have an advantage in making pricing decisions over their counterparts in the southern states and main corn-belt states. Because of South Dakota's location on the disease path, the later season infection period compared to more southern soybean growing states and the fact that South Dakota farmers will have more forewarning of the disease's potential threat, South Dakota soybean growers could take advantage of higher prices due to a disease that may have a greater yield impact in other regions of the country.

Combine the rust factor and large carryover supplies with the other primary element that dictates production—rainfall—and this mix leads to expectations of a volatile market in 2005. This potential volatility will lead to pricing opportunities if rallies occur. Volatility could also lead to missed opportunities if prices decline. It will be critical to evaluate pricing alternatives, crop insurance coverage, and production costs to plan ahead for making sales when, and if, the market offers a profitable price.

While we can't predict the extent of any bullish or bearish swings in the market, it is still possible for producers to plan ahead by writing a marketing plan and working with brokers, grain elevator managers, Extension educators, and others to make the plan feasible and realistic.

The plan should include production expectations and a working knowledge of crop insurance coverage and the revenue and/or yield protection it provides. Depending upon your insurance coverage, you could realistically forward price a majority of your expected production without any fear of losing gross revenue. The plan should include price levels (price triggers) at which forward sales can be made, possible calendar dates for making sales regardless of price direction, and methods for making sales. Although there is nothing wrong with waiting until harvest is underway to make cash sales of soybeans, a well thought-out, yet simple marketing plan can help you take

advantage of profitable pricing opportunities that may be available prior to harvest.

It is also important to evaluate production costs and to create a marketing plan that captures cost of production and profit. It will be important to evaluate forward pricing strategies that will lock in a price, such as a futures hedge or a cash forward contract. These strategies will protect against any price decline after the pricing strategy is employed. If you have committed bushels to one of these strategies and prices begin to rise, you could re-own those committed bushels on paper by purchasing at the money or out of the money call options.

Another price protection mechanism that can be used as a single strategy is to simply buy put options that lock in a floor price only. In the case of either the call options or the put options, the value of the premium will likely be an issue that determines the purchase of at-the-money or out-of-the-money options or whether an option purchase is reasonable or prudent in the first place.

For those bushels yet uncommitted to a pricing strategy, a stepped-up sales plan could be established to make sales at pre-defined price levels. A marketing plan should also include a strategy for making sales or deferring sales in the event prices decline during the growing season.

With any of these strategies, it will still be important to know the county loan rate value for soybeans. In the event that soybean prices fall, any of the above-mentioned pricing strategies may establish a floor price that is lower than the loan rate.

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