INTRODUCTION: Stratego from Bayer CropScience is a premix fungicide consisting of trifloxystrobin & propiconazole. The product is registered and utilized on a number of important USA crops, including rice, wheat, corn, peanut and pecans. In 2005, Stratego was granted by EPA a Sec. 18 Quarantine Emergency Exemption for the control of Asian soybean rust. Stratego was successfully utilized by growers for the preventative control of the disease during the 2005 and 2006 growing seasons where rust had been a problem. During the last several years, Stratego has also been broadly evaluated in internal and University soybean field trials for control of foliar soybean disease, plant health and yield benefits. Results of these multi-year trials indicate Stratego is effective for broad-spectrum disease control, plant health benefits and yield enhancements. Stratego has been submitted for Federal Sec. 3 soybean registration which is expected in time for the 2007 growing season.

MATERIALS AND METHODS: Stratego has been evaluated in numerous field trials conducted by Bayer CropScience personnel and University cooperators for several years. Trials ranged from small plot, replicated trials to large non-replicated strip trials applied in grower fields. Environmental conditions and disease severity varied greatly from trial to trial and included trials conducted under severe drought stress to excess moisture. Stratego was applied as a broadcast foliar spray application (one to two applications) from the R1 to R6 soybean growth stages at rates of 7 to 10 fl oz/acre (128 to 183 gai/ha), both with and without adjuvants. Spray gallonages generally ranged from 10 to 20 gallons/acre with spray pressures of 30-60 psi. In some cases plots were harvested and yields/acre determined.

BROADSPECTRUM DISEASE CONTROL

Environmental conditions favoring optimal soybean growth and yield also favor disease development. Stratego applied at the R1 to R6 soybean growth stages control a broad-spectrum of important soybean foliar disease including the following diseases.

Asian Soybean Rust Control:

Asian soybean rust infections in the USA since introduction in 2004 have generally occurred late in the growing season and have been of low to moderate severity. Under these conditions, Stratego applied as preventative applications has provided excellent protection in replicated soybean research trials.

Plant Health Effects and Yields:

Strobilurin-containing fungicides such as Stratego, are very effective at controlling soybean diseases, thus allowing treated plants to devote more energy toward maximizing yield potential. Disease control, along with strobilurin effects on improved plant nitrate utilization and plant respiration, may contribute to improved crop yields. In many cases improved soybean yields have been noted from Stratego-treated areas, even in the absence of visual disease symptoms.

Conclusion: Results of these multi-year trials indicate Stratego is effective for control of Alternaria leaf spot, anthracnose, Asian soybean rust, brown spot, Cercospora blight, frogeye leaf spot, pod & stem blight, powdery mildew, and Rhizoctonia aerial blight when applied at the R1-R6 soybean growth stage or prior to disease development. In addition, plant health and yield benefits have been documented following application of Stratego. Stratego will become an important tool for grower’s to utilize in order to maximize their soybeans’ yield potential. It is expected that Stratego will be granted a Federal Sec. 3 soybean registration prior to the 2007 growing season.

The Stratego Sec 3 registration on soybeans is pending at EPA. Stratego has a Sec. 18 Quarantine Emergency Exemption granted by EPA for Asian soybean rust.