

# THE SOYBEAN CHECKOFF PROGRAM

## A Report to Soybean Producers and the Soybean Industry



Hot, dry weather took a big toll on 2006 soybean yields, reducing the state average yield to 26 bushels per acre on the 1.64 million acres harvested. That yield is down from a 37 bushel average on 1.59 million acres in 2005.

"This has been one of the most frustrating years for soybean production that I have ever seen," said Dr. Alan Blaine, Mississippi State University Extension Service soybean specialist. "This dry weather actually started right after Hurricane Rita in 2005 with winter rains below normal. We planted early this year in soil with low sub-soil moisture. Then we had little rain from April to August," he added.

"Hardest hit were growers in the north Delta and hill areas of North Mississippi. This year proved it takes water to grow a good soybean crop. Some growers who irrigated correctly set new record yields, while others who couldn't irrigate had their lowest yields," Dr. Blaine said.

As in 2005, Asian soybean rust failed to materialize as a problem this year. Some rust was detected late in the year after most harvest was completed, he said.

"Each year the Mississippi Soybean Promotion Board (MSPB) invests growers' checkoff funds in the research and educational programs that will benefit farmers most in the long run," said Board Chairman Morgan Beckham of Leland. "Many of these projects involve screening existing varieties, disease and insect control, irrigation technology, and improved management practices, and they include the SMART program.

"As in 2005, we again supported an intensive rust detection program in 2006. And we continued our MSPB work to develop and expand the production and availability of soy biodiesel statewide," Beckham stressed. "In the long run, increased soy biodiesel production and use should increase soybean prices and provide a high-quality, renewable energy source."

This report outlines how soybean checkoff funds are used to benefit farmers and the state's soybean industry.

### How Checkoff Funds Are Managed and Invested:

The MSPB is composed of 12 leading farmers from throughout the state who meet annually to review work under way and select new work to be done. Members of the board are Morgan Beckham, chairman, Leland; Keith Morton, vice chairman, Falkner; Jerry Slocum, Coldwater; Wayne Bush, Schlater; Billy Joe Ragland, Bentonia; Mike Guedon, Natchez; Wayne Dulaney, Clarksdale; Newall Simrall, Redwood; Clifton Porter, Rolling Fork; Jim Robertson, Indianola; Fletcher Clark, Ruleville; and Danny Murphy, Canton. Beckham and Marc Curtis of Leland serve on the United Soybean Board. Truett Bufkin of Canton is the board's executive secretary.

Before its planning meeting the board solicits research and educational proposals from agricultural researchers, Extension Service specialists, and others. Proposals are evaluated and the projects that will help farmers most are approved for funding. All projects are monitored annually.

One-half of all checkoff funds collected in Mississippi are kept in the state to support local research and educational work. The other half is sent to the United Soybean Board for national programs. A total of \$1,661,900 was collected in the one-year period from October 1, 2005, to September 20, 2006. Also in 2006 the MSPB applied for and received special USB funds totaling \$105,000 for continuing work with soy biodiesel, Asian rust, and mass media education.

### Investment Procedure Results:

- In 1992 the Soybean Management by Application Research and Technology (SMART) program was started by the MSU Extension Service with MSPB funding. As shown in the following table, the drought severely impacted nonirrigated fields, while irrigated crops produced high yields that were only 3.9 bushels per acre less than in 2005.

"Results over 14 years of the program involving 341 fields show that we have the technology to grow soybeans profitably if we irrigate the crop and manage it as recommended," said Dr. Blaine. He added that SMART field results prove it takes early planting, good variety selection, and good management, including irrigation, to produce top soybean yields.

Shown in the following table are highlights of SMART Program results in 2006.

	1992-2006	2006	2006 Irrigated	2006 Nonirrigated
State avg. yield bu/ac	29.0	26.0	---	---
SMART avg. bu/ac	45.1	43.3	57.2	23.6
Number of SMART fields	340	20	12	8
SMART yield increase over 2006 state avg. yield bu/ac	19.1	17.3	31.2	-2.4
SMART avg. yield increase over 1992-2006 avg. bu/ac	16.1	14.3	28.2	-5.4

In addition to Dr. Blaine, others conducting the SMART and Asian rust programs include Ben Spinks, Mitt Wardlaw, and Brian Ward, SMART project coordinators; and Dr. Billy Moore, coordinator of the Asian rust program. Both programs also involve other specialists and many field scouts.

### Asian Rust Program

- The MSPB was awarded special funding from the United Soybean Board in 2006 to conduct an intensive Asian rust monitoring program to find and treat (if necessary) any outbreaks of this disease.

"We conducted an intensive program consisting of planting and weekly monitoring of sentinel plots across the state and scouting the SMART fields weekly. Fortunately, we had no presence of this disease until too late in the growing season to be an economic factor," said Dr. Moore.

"However, we conducted weekly educational broadcasts and other media programs to keep growers aware of the situation and to keep them from spraying until necessary. We estimate that the program saved growers about \$2 million in spraying costs in 2005 and 2006 by keeping them from treating until needed, versus spraying on a systematic schedule. Spraying was not necessary in 2005 or 2006 with the exception of some late planted soybeans in south Mississippi near sites where Asian rust had been confirmed," Dr. Moore added.

Records show there were about 6,000 visits to the MSUcares.com soybean web site, and about 1,762 calls were made to a toll-free rust hotline in 2006.

### Biodiesel and Biobased Products Communication Program (BBC)

- The MSPB built on its successful 2005 soy biodiesel program with special USB funds for 2006. This year's efforts were focused on increasing production (availability) and use of soy biodiesel through numerous personal contacts with prospective producers and current distributors.

Radio, television, farm magazines, newspapers, and specialty publications were used to promote more production and use. The MSPB also compiled information from current producers regarding their future plans. These plans, along with success stories from agriculture, trucking, and the school district fleets, were publicized through mass media and personal contacts.

As a result of increased visibility and demand for soy biodiesel, two new producers will be in operation in early 2007 with a combined capacity of about 25 to 30 million gallons annually. These plants will be located in New Albany and Greenville. In addition, two current fuel distributors are interested in building production plants in 2007 or 2008. Most fuel distributors anticipate increased sales in 2007 and say lack of a local supply is the major factor limiting sales.

### MAFES Research Projects

- Each year the Mississippi Agricultural and Forestry Experiment Station (MAFES) initiates new projects to benefit soybean farmers. In 2006 the MSPB approved funding for 17 new or continuation research projects. Researchers report progress to the MSPB annually. Following are highlights of progress made on some of the work funded earlier.

- Dr. Gabe Sciumbato, plant pathologist, has concluded screening in a project to evaluate private and public soybean varieties and breeding lines for resistance to stem canker, frogeye leaf spot, charcoal rot, Cercospora purple leaf, and pod rot. Results of this screening will be published in the MAFES soybean variety trials publication. Studies show that about 25 percent of the entries in certain soybean maturity groups are susceptible to stem canker.

- Dr. Bernie White, manager of variety evaluations, tested 288 soybean varieties ranging in maturity from 3.8 to 6.0 at six locations. Results of tests will be included in the annual variety trials test publication in early 2007.

- Drs. Bernie White and Gary W. Lawrence are also screening soybean varieties for resistance to root-knot and reniform nematodes to enhance soybean production. Current results indicate that there are root-knot-resistant soybean varieties in each of the maturity groups. Details will be published later.

- Dr. Normie Buehring is heading research on utilizing precision planting with reduced seeding rates for improved profitability. In the third and final year of this work, the results suggest that Mississippi soybean growers may be able to reduce seeding rates and lower cost of production without sacrificing yields.

- Drs. L. Zhang and S. Kyei-Boahen are conducting research on improving soybean potential through double cropping and seed treatment. Early indications are that double cropping may enable growers to increase returns from fields.

Space will not permit a complete listing of all projects. Those interested in receiving a list of the 2006 funded projects may contact Dr. Jonathan Pote, associate director, MAFES, Box 9632, Mississippi State, MS 39762 (telephone 662-325-0868).

### For More Information

For more information about your checkoff investment in Mississippi, contact:

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A Paid Message from the Mississippi Soybean Promotion Board