

Arkansas Wheat Promotion Board – 2006 Annual Report

Title: Wheat Research Verification Program

Principal Investigators:

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Cooperators:

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Abstract:

The following abstract was included in the WRVP annual report distributed to board members at the August funding meeting. Further information can be obtained by contacting the principal investigators or at the University of Arkansas Cooperative Extension Service website:

<http://www.aragriculture.org/crops/wheat/Verification/default.htm>

The 2006 Wheat Research Verification Program (WRVP) was implemented by the University of Arkansas Cooperative Extension Service on 12 producer fields located in Arkansas, Ashley, Crittenden, Cross, Desha, Drew, Greene, Jackson, Lawrence, Poinsett, and Randolph Counties. This is an increase from 7 fields in the program in 2005. This increase in WRVP fields is in direct relation to the increased wheat acreage in Arkansas this past year. Cooperators from the counties above selected 9 varieties from a short list provided by the agent and research verification coordinator. These varieties were selected based upon performance and characteristics determined by the University of Arkansas variety tests. Soil types ranged from sandy loam to clay, with previous crops of corn, soybean, and rice, as well as one field left fallow prior to wheat planting. Seeding dates ranged from October 4 through November 11, with seeding rates varying from 113 to 165 lbs/ac. Nine fields were drill seeded and three were broadcast seeded. Cooperators in Arkansas, Ashley, Desha, and Randolph Counties utilized a bedded seedbed to provide multiple drain furrows that became critical in periods of heavy precipitation. Eight of the 12 fields in the WRVP were treated with herbicides. Leaf and stripe were a decreased problem with only two fields treated in 2006. Insects were also not a factor throughout the season; however, many fields showed the typical minor symptoms of barley yellow dwarf virus (BYDV), which is vectored by aphids. Some fields experienced wet weather occasionally, but dry weather prevailed for much of the winter and throughout the spring months. This allowed for an earlier than usual harvest in most fields. Harvest dates ranged from May

20 through June 9. Average yield for the WRVP was 73.1 bu/ac, compared to a state average yield of 61 bu/ac on 300,000 harvested acres. Yields ranged from 52.7 bu/ac in Jackson County to 93.7 bu/ac in Greene County. Dry conditions during harvest improved test weight, and the average test weight was 59.6 lb/bu this year. Improved variety selection, good surface drainage, timely fertilization, and effective pest management practices have been frequently mentioned by producers and county agents as factors which make WRVP fields more profitable and/or produce higher yields. Economic analysis was conducted using a budget generator to estimate specific costs of production for each field. Returns were calculated using the cooperator's sales price or the average June price reported by the Arkansas Market News Service from terminals at Wynne and Dermott. Ten of the 12 WRVP fields resulted in a positive net return. Fertilizer remains the greatest input cost associated with wheat production in Arkansas. The Wheat Research Verification Program continues to demonstrate that Extension's research-based recommendations can produce profitable, high yielding wheat across a wide range of conditions and soil types. Over a 20-year period, the WRVP has averaged 13.3 bu/ac greater than the state average yield. The program is funded by the wheat check-off dollars and administered through the Arkansas Wheat Promotion Board.