

2004 Rice Research Verification Program

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The 2004 Rice Research Verification Program (RRVP) was conducted on 11 commercial rice fields across the state. Counties participating in the program included Arkansas, Craighead, Chicot, Desha, Independence, Lawrence, Lincoln, Jackson, Mississippi, and Poinsett, with a total of 608 acres enrolled in the program. Five varieties were seeded (Wells, Cocodrie, Francis, CL161 and Cheniere) in the 11 fields. All fields were planted in April through the first week of May.

Data collected from the verification program include: (1) Flow meters were placed at each field to monitor water usage throughout the growing season, and compare conventional flooding to multiple inlet irrigation. (2) Water weevil traps were monitored in each field, in cooperation with Dr. Berndhart, to verify thresholds for the new traps. (3) Disease monitoring plots were planted in 5 of the verification fields (Chicot, Mississippi, Desha, Poinsett, and Lincoln) to compare yields of various varieties planted across the state. (4) Plant samples were taken at ½ inch internode elongation and 50% heading to analyze nutrient uptake at all locations. (5) Zinc tests were planted in 3 clay fields (Mississippi, Lincoln, and Desha) to determine the need for Zinc on clay soils. (6) Temperature and humidity sensors were placed at 5 fields to monitor the effects of temperature and humidity on milling quality.

Grain yields in the 2004 program averaged 171 bu/acre with a range of 142 to 192 bu/acre. Yields from the RRVP were 13% higher than the estimated Arkansas state average of 151 bu/acre. All varieties performed well with Wells producing the highest yield in Mississippi County with 192 bu/acre. The lowest yielding field was in Independence County at 142 bu/acre. Milling ranged from 59/71 to 68/74 with an average milling of 63/71 across all varieties.

Production cost ranged from \$244.92 to \$409.46 per acre with an average cost of production of \$315.04 per acre. Returns above cost ranged from \$70.54 to \$315.04 per acre with an average return of \$237.68 per acre without land costs. Net returns from 2004 RRVP fields averaged \$178.26 per acre above total specified operating costs and land costs which was based on a \$3.20/bu settlement. This price was obtained by averaging the cash market price from mid-August through mid-October. The average price per bushel required for growers to cover land rent and total specified production cost averaged \$1.83bushel.