

2005 Rice Research Verification Program

J.W. Branson, S.K. Runsick

The 2005 Rice Research Verification Program (RRVP) was conducted on 22 commercial rice fields across the state. Counties participating in the program included Arkansas, Ashley, Chicot, Clay, Craighead, Crittenden, Cross, Desha, Lawrence, Lee, Lonoke (2), Mississippi, Phillips, Poinsett, Pope, Prairie, Randolph, St. Francis (2) Woodruff and Yell with a total of 1390 acres enrolled in the program. Five varieties were seeded (Wells, Cocodrie, Francis, Cheniere, Cybonnet and XP 723) in the 22 fields. All the fields were planted in the optimum time frame beginning with Ashley and Craighead Counties on April 4th and ending with Cross County planted on May 14th.

Data collected from the verification program includes: (1) Flow meters were placed in the fields to monitor water usage throughout the growing season, and compare conventional flooding to multiple inlet irrigation. (2) Water weevil traps were placed in each field in cooperation with Dr. Berndhart. (3) Disease monitoring plots were planted in 10 of the verification fields (Ashley, Chicot, Craighead, Crittenden, Desha, Mississippi, Pope, Randolph, St. Francis and Woodruff) to compare yields of various varieties planted across the state. (4) Zinc tests were planted in 5 fields to determine the need for Zinc on clay soils. (5) Seeding rate studies were conducted in eight locations.

Grain yields in the 2005 program averaged 170 bu/acre with a range of 128 to 199 bu/acre. Yields from the RRVP were 20 bu/acre higher than the estimated Arkansas state average of 150 bu/acre. The highest yielding fields were seeded with Cheniere and XP 723 in Desha and Pope Counties. Two fields, Ashley and Randolph Counties, exceeded 190 bu/acre. The lowest yielding field was in Lawrence County at 128 bu/acre. Milling ranged from 64/75 to 50/70 with an average milling of 56/71 across all varieties.

Production cost ranged from \$377 to \$496 per acre with an average cost of production of \$430 per acre. Input costs were significantly higher, i.e. fertilizer \$99.89/A and irrigation 92.65/A. Returns above cost ranged from a \$129/A loss in Crittenden County to \$112/A profit in Ashley County, with an average return of \$13.00 per acre without land costs. Much of the difference in net returns can be attributed to yields and irrigation amounts. Irrigation ranged from 54.9 ac-in in Crittenden County versus 29.5 ac-in in Ashley County.