14 – Rice Research Verification Trials

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The Rice Research Verification Program (RRVP) has been conducted since 1983 on 169 commercial rice fields totaling 9,930 acres. The RRVP is funded in part by rice grower check-off contributions. The verification program emphasizes management intensity to reduce input cost and maximize crop yields. An inter-disciplinary approach must be used for successful rice crop management. Each management decision during the year is affected by the decision(s) made previously and likewise will affect future management decisions.

Each year University of Arkansas rice production recommendations are evaluated on RRVP fields seeded in different varieties, cultural practices and environmental conditions. Information is gathered through data collected from each field as a whole as well as small replicated plots within the fields. This agronomic information is used to improve and refine recommendations to meet the needs of Arkansas rice farmers and identify areas which need additional research.

Farm cooperators agree to pay production expenses, provide crop expense data for economic analysis and implement recommended production practices in a timely manner from seedbed preparation to harvest. A designated county Extension agent from each participating county assists the RRVP coordinator in obtaining field background information, keeping records on the field and maintaining regular contact with the grower. The agent is also responsible for scouting the field twice each week to evaluate field conditions and pest thresholds. Management decisions are made by the RRVP coordinator based on the current University of Arkansas recommendations during weekly field inspections. Technical assistance is provided by the appropriate Extension specialist or researcher as needed.

Economic information is collected on the RRVP fields to estimate crop expenditures and returns. Selected yield and economic information is given in Tables 14-1 and 14-2. Good yields in the RRVP have enabled participants to achieve acceptable returns (Table 14-1). Yields in 1996, 1997, 1998 and 1999 were 10, 15, 11 and 24 bushels per acre over the reported state average, respectively. Average break-even prices (total cost in Table 14-1 divided by average grain yield) for RRVP fields actually decreased despite a dramatic decrease in the average rice price. This is another indication of the excellent yields achieved in the program. Break-even prices were calculated using weighted means for each year and do not include charges for land or management. Additional information on economic performance

Table 14-1. Economic Information of RRVP Fields in Four Selected Years

Year	Avg. Ark. Rice Price	Yield	Production Cost*	Break-even Price	Returns Above Cost
	$/bu	bu/A	$/A	$/bu	$/A
1996	4.50	147	370.60	2.53	124.35
1997	4.46	141	342.29	2.45	129.87
1998	4.00	140	316.67	2.27	101.62
1999	3.13	155	343.03	2.24	134.60

*Production costs and returns above costs do not include the cost of land or management.

of RRVP fields can be obtained in the annual RRVP summary found in the B.R. Wells Rice Research Series published by the University of Arkansas Agricultural Experiment Station. Rice production budgets and the Rice Research Studies publication are available at your local county Extension office.

The verification program usually works with producers for two years in the same field. Therefore, a field with a rice behind rice rotation will be in the program for two consecutive years. A field that has any other rotation will be in the program one year and will return to the program the next year that particular field is back in rice. Cooperators and fields for the program are chosen through a joint effort involving the coordinator, county Extension agents and Extension district directors. Interested parties should contact their local county Extension agent.

Table 14-2. Average Cost of Six Crop Input Items of Three Selected Years

Year	Seed	Herbicide	Fertilizer	Fungicide	Irrigation	Aerial Application	Total
	$/A						
1997	19.95	45.54	42.62	16.67	25.49	24.22	174.49
1998	23.31	44.46	44.00	0.00*	23.92	28.10	163.79
1999	23.19	32.08	39.51	23.17	24.83	25.40	168.18

* No fungicides were applied in 1998.