California Rice Research Board

Issue #39, Fall 2019

Five Year Referendum

The RRB and the other Advisory Boards in California operate at the pleasure of those voting them into existence. To ensure the continued relevance and value to the industry, a continuation vote on the program is conducted every five years. So, coming up in January 2020, there will be a ballot asking if this Program should be terminated or continued. This will be your opportunity to vote on this matter. We hope that this newsletter will give you information on what the RRB has done over the last five years. We encourage you to vote when the ballot comes in January and mail it in before the deadline.

50th Anniversary Message from CDFA

Dear California Rice Research Board:

In my travels as California Agriculture Secretary, I've had the pleasure of sharing wonderful meals with farmers, policy leaders and scientists from around the world. And yes, California rice is often on the plate. California's agricultural excellence is, of course, well known, and our rice is coveted by importers, chefs and consumers alike. But it's not just the quality and quantity of our state's farming and ranching commodities that command attention; it's also the tremendous foundation of science that supports what we grow.

That's where the California Rice Research Board and organizations like it come in. For half a century now, our rice growers have invested in their own future by funding research for the industry's common good. After the remarkable advancements made possible for California growers by the development of the Calrose variety, the Board solidified the state's leadership by accelerating breeding efforts at the Rice Experiment Station. From that original focus on varietal development, the organization soon began expanding its horizons to include weed and pest management, fertilization, agronomic issues, genetics and post-harvest processes. The more recent addition of environmental stewardship concerns such as water use efficiency, water quality and the refinement of cultural practices has kept the California Rice Research Board on the cusp of scientific advancements that our state's growers will need to maintain their markets and their well-deserved leadership position as producers of a truly global commodity.

On the occasion of your 50th anniversary, I offer my congratulations to the California Rice Research Board, as well as my thanks to the generations of growers who created and have sustained it.

Yours truly,

Karen Ross

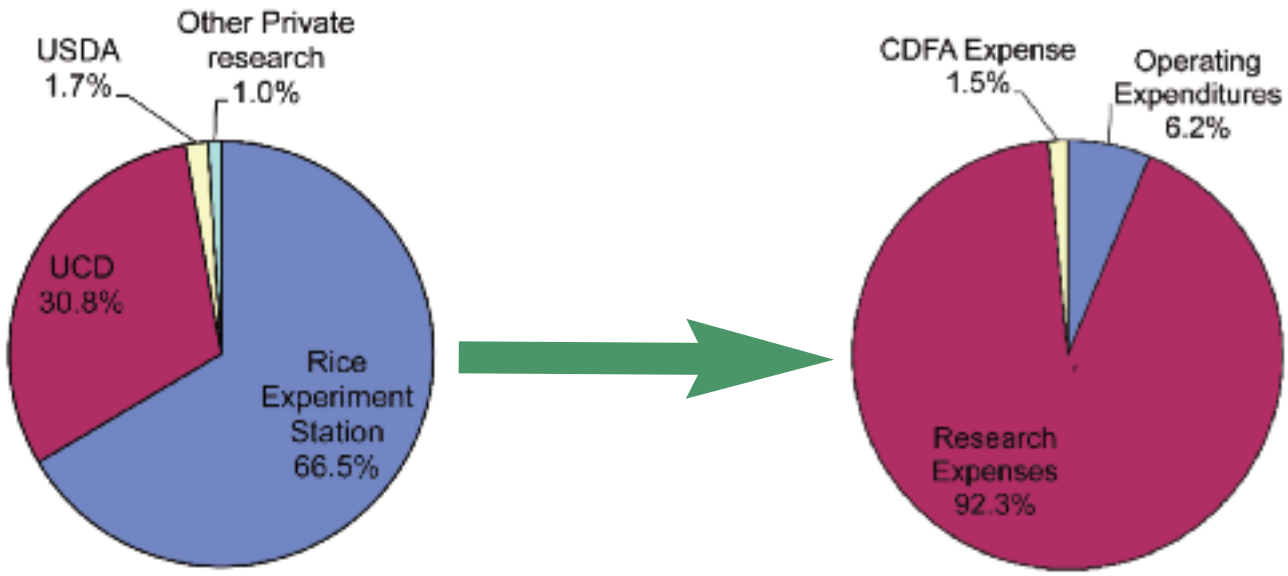
Secretary

RRB Highlights

The story – The money you contribute is well spent and produces profitable results. Let's see if that's true.

In This Issue

Figure 1 - 2019 Research Budget & Full RRB Budget



Where is the money from your RRB assessments spent? When the RRB was formed 50 years ago, one of the primary objectives was to fund the Rice Experiment Station. I went back to the Annual Report for the tenth year of the Board (1977-78). The division of your research dollar is almost identical to present allocations. The left portion of Figure 1 shows the how the 2019 research dollars are spent. Two thirds are spent on work at the RES and roughly one third on UC work. These proportions vary somewhat year by year due to varying research pressures, but the allocations are a fairly accurate average over time.

The right half of Figure 1 shows how the overall budget breaks down. You can see that 92 cents out of every dollar you contribute goes to research. Again, going back to the tenth year of the RRB, these percentages are within one point of current values. Your Board representatives continue to make choices that keep these percentages consistent.

The second half of the story is about profitable results. Has the money you invest in the RRB produced profitable results for you?

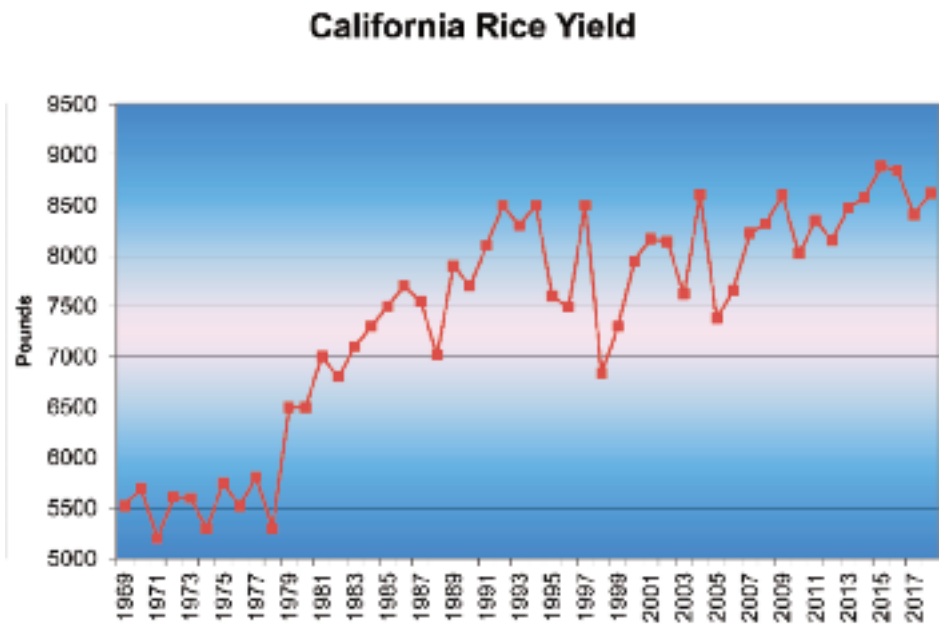


Figure 2 - Rice Yield

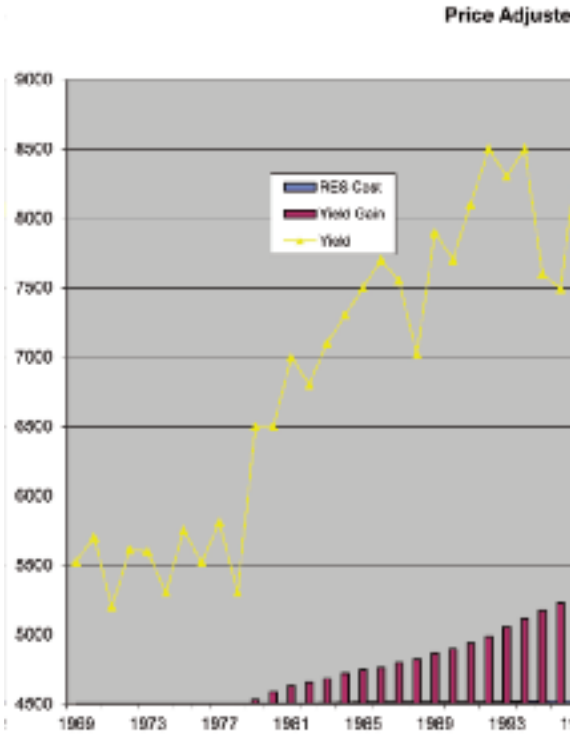


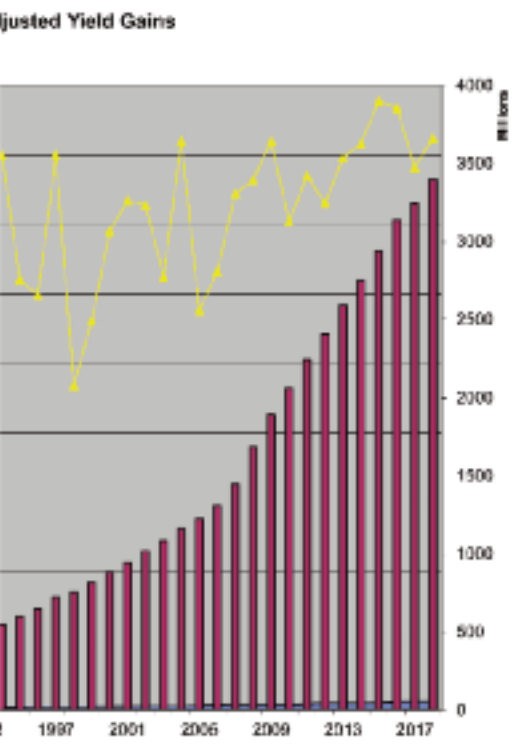
Figure 3 - Cumulative Pri

Looking at Figure 2, the single line shows yield over the years. The yield gains up until about 1990 were pretty spectacular. Then we seemed to level off and had a number of difficult weather years. The yield average held about the same till around 2008 with the adoption of M-205 and M-206. Yields began to stabilize and move up again. On the near horizon are new varieties that should help boost yields again as they are adopted.

Return on investment, 60% effect chart

The bars on figure 3 show how the gains made by breeding (60% of the equation) and agronomy (40% not shown here) have benefitted you. The formula goes like this: The average yield for the year minus the 1969 yield times 60 percent. That amount is multiplied by the USDA average price and acres. Each year is added to the prior year, and you can see that over time that results in over $3 billion dollars in benefit to the industry.

How does that affect you personally? Figure 4 Uses the same result, but divides it by the cumulative dollars invested into breeding. Over that 50 year period, each dollar invested now yields $60 back to you in increased yield, quality, and higher head and totals.



Price Adjusted Yield Gains

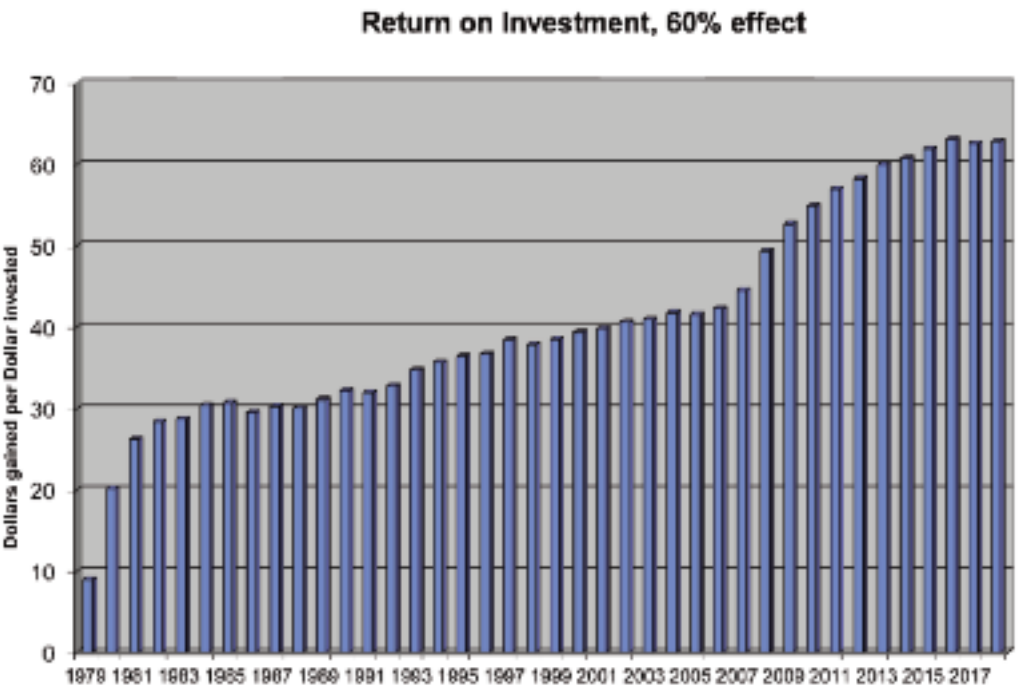


Figure 4 - Annual Return on Investment, 60% Effect

The other third of the RRB research budget involves a wide range of projects. These projects cover agronomy, water, soils, environmental degradation, weeds, pests, genetics, stewardship, post-harvest, variety trials, rice straw, nutrients, algae, and modeling just to name a few. These are things that impact you every year. The Color Chart rattling around in your truck, the potassium recommendation tool on-line, water holds worked out by UCD to lower herbicide levels in the river, weed control efficacy for a given material, Weedy red rice solutions. There are also projects that the RRB funds to help you with regulation or information such as arsenic, mercury, water use efficiency, and environmental fate of pest control materials. A few projects even look to create new uses for rice and its by-products such as Novel Nanomaterials and Performance Industrial Products, Rice Hull/Straw Ash in Concrete, and building materials from rice straw. You can find reports on all these projects in the Annual Reports or online at www.carrb.com.

The purpose of the Rice Research Board is to help assure the continuing competitiveness and prosperity of the California rice industry by soliciting, evaluating, funding and overseeing research projects and programs that address industry needs. The RRB is a quiet, low-key, organization, but we work hard to keep this mission of serving the California rice grower as our focus

2019 Budget Summary			
	General Fund	Reserve	Totals
Carryover	541,341	9,365,158	9,906,500
Income	2,727,700	1,492,000	4,219,700
Total Income	3,269,041	10,857,158	14,126,200
Operating Expenditures	257,791		257,791
Research Expenditures	2,825,252	1,000,000	3,825,252
CDFA/Audit Expense	61,000		61,000
Total Expenditures	3,144,043	1,000,000	4,144,043
Unallocated Reserve	124,999	9,857,157	9,982,157

Ian Grettenberger

In April 2017 the rice industry lost our long-time entomology specialist, Larry Godfrey. With his passing, the process of finding a replacement began. The job was posted, candidates applied and finally there were presentations and interviews. Early in 2019, Ian Grettenberger was selected as the replacement for Larry.

To back up a bit, Ian hails from Olympia, Washington where he received training in biology and developed a desire to work in applied entomology. He went to Penn State, worked on applied ecology in field crops, IPM tools, soybean aphid and their natural enemies. Finally, he arrived at UC Davis and worked under Larry Godfrey on bagrada bug. The entomology specialist position came available, Ian applied and was selected.

Ian has been focused on keeping the entomology program going. He is grateful to Luis Espino and Kevin Goding who really helped bridge the gap and keep up the entomology research. The project will continue to focus on RWW, armyworm, tadpole shrimp, insecticide testing (including new materials),variety susceptibility to pests, and developing IPM tools.

The main goal here is to do the applied work and learn how to use the available tools in the best way possible, as well as develop new tools. This will involve optimizing scouting, adapting our practices to a shifting regulatory landscape, and dealing with invasive species.

Work will be ongoing at the RES with the typical projects as well as off-station work in grower's fields. Some projects, such as armyworm, will occur in UCD greenhouses. Just as Larry had other responsibilities, Ian will be working on cotton, alfalfa, melons and bagrada bug as well as rice.

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