Program 1R-2

▸ Chance Favors The Prepared Rice Marketer

Presented by Milo Hamilton
President and Co-Founder, Firstgrain, Inc.

First let us consider what 2012 did to our rice profits so far.

The market during the fall of 2012 was not kind to the rice price. Perhaps you have a bit of market regret you did not plant a little more of something else than rice in 2012.

Other grains were topping out from the drought induced rallies this past fall and those who grew rice in 2012 may have second thoughts about that decision, depending on what relative prices do this winter as planting decisions come to a head. By relative prices I do not mean just soybeans versus rice but also Western Hemisphere values versus Asian rice. If you do not understand how these rice markets work geographically, you will under or over estimate the price you will receive this marketing year on your rice farm. It is about that simple. Rest your marketing plan on a global understanding of what is going on for the rice price. You have no choice but to do that.

The big story in 2012 was protein (soybean) values, not starch (rice) values. So what is the rice price going to look like during the harvest of 2013? That is a very good question. At planting time in 2012 most thought that prices would be strong at harvest and maybe they planted a bit more rice acres, thinking their neighbors would cut back rice acres. We all assumed rice production would be very low. We assumed wrong.

The crop in 2012 was a problem, however, not just for the rice price but also for the milling yields as well. The production was up but the milled rice outturn was down from 2011 and a bit more like 2010. Hot and/or dry conditions are no friend of the rice plant in July.

My talk at the 2013 Rice and Cotton Conference will focus on the factors and forces shaping the rice price for 2013 in the Western Hemisphere (Arkansas and Brazil) and Asia, two markets that do not really march to the same pricing drummer. Long grain stocks in the US will be a little bit or a whole lot tighter as we move into the last half of the 2012/2013 marketing year.

You are in the business of growing money per acre not just rice. If you can make more money growing something else, the brief answer is: "do it." Do not care about what your neighbor may or may not do in 2013. Do what makes financial sense to your rotation program and above all your wallet.

Hopefully by January 2013 we will have a new farm bill and some kind of action on the deficit. What I can forecast for you in 2013 is much more price and financial market instability, not less.

These markets are not for the faint of heart but are for the prepared marketer. Chance always favors preparation, over impulse selling. Chance always favors the grateful, globally minded seller. The only kind of gratitude the market knows is the action of pricing your rice. Gratitude can also help you sleep a bit better.

Program 8R-2

▸ The Rice Ratoon Crop: Agronomic And Fertility Research

Presented by Dr. Dustin L. Harrell
Associate Professor, LSU AgCenter

Ratooning is the production of a second rice (Oriza sativa L.) crop from the stubble left behind after the first rice crop has been harvested. The ratoon rice crop develops by regenerating tillers from nodal buds located on the remaining stubble. Ratooning rice in the USA is predominately done on the Gulf of Mexico Coastal Plains area of Texas and Louisiana. Ratooning is predominately practiced there due to the longer growing season compared with other mid-south rice growing regions located further north, allowing ample time for the crop to reach maturity prior to the first winter freeze. Typically, ratoon rice yields are approximately one-third of the first crop yield. Chemicals to suppress weeds and diseases are rarely used in the ratoon crop in order to keep input costs at a minimum. Generally, the only costs associated with the ratoon crop are stubble manipulation (if used), nitrogen (N) fertilization, irrigation, harvest, and drying. The recent development of early maturing rice varieties and hybrids over the past few years has increased ratoon yields. However, stubble management and proper fertilizer management have the potential to increase yields even further.

A study was initiated in 2011 and continued in 2012 to evaluate the combined effects of post-harvest stubble management and fungicide applications on ratoon rice agronomics, disease pressure, and yield. Field trials were located at the Rice Research Station (RRS) in both 2011 and 2012 and also on a producer field in Vermilion Parish in 2012. The trials were arranged in a randomized complete block design with 2 varieties, 4 stubble management practices, and 2 fungicide treatments. All treatments were replicated four times. Varieties included Catahoula and CL131. Stubble management practices included: 1) harvesting at a conventional harvest height which would leave approximately 16 inches of stubble, 2) harvesting at a low harvest height leaving approximately 8 inches of stubble, 3) harvesting at a normal harvest height followed by bush hogging the stubble leaving approximately 2 inches of stubble, and 4) harvesting at a normal height followed by rolling the stubble. Fungicide treatments included the application of QuadrisXL at a rate of either 0 or 21 oz/A at 4 weeks after first crop harvest.

In 2011 at the RRS, mean grain yields pooled across varieties for the main crop were not significantly different prior stubble management and ranged between 8249 to 8458 lb/A. A significant yield difference in the main crop was observed for variety. Mean yields for Catahoula and CL131 were 7719 and 8996 lb/A, respectively. Foliar ratings for cercospora and bacterial panicle blight were taken approximately 2 weeks prior to ratoon harvest. Two- and three-way interactions of the main effects for foliar disease ratings were not observed. Fungicide application had a significant effect (P = 0.03) on foliar disease ratings for cercosopra but not bacterial panicle blight. When a fungicide was applied, cercospora ratings decreased from 2.6 to 2.1. Stubble management had a significant effect on both cercospora (P = 0.0001) and bacterial panicle blight (P = 0.04) when the disease ratings were pooled across variety and fungicide application. Cercospora foliar disease ratings were reduced for rolling (1.6), bush hogging (1.8), and low harvest height (1.9) compared with normal harvesting practices (4.1). Ratoon grain yield was not affected by the fungicide application when pooled across varieties and stubble management practices. All stubble management practices provided a yield advantage over normal harvesting (P = 0.0001) when pooled across variety and fungicide application. Normal harvest height ratoon yield was 2736 lb/A while rolling, bush hogging, and low harvest height yielded 3101, 3541, and 3918 lb/A, respectively.

In 2012 at the RRS, mean first crop yields were not different from each other prior to stubble management treatments and fungicide application but did differ (P=0.079) between Catahoula (8742 lb/A) and CL131 (10472 lb/A). When pooled across varieties and fungicide application, days to 50% heading for the normal harvest height, low harvest height, rolling, and bush hogging stubble management practices were 43, 45, 52, and 55 days, respectively. Foliar ratings for cercospora were taken approximately 1 week prior to ratoon harvest. The three-way interaction of the main effects was not significant for ratoon grain yield. A two-way interaction between stubble management practice and variety was significant (P = 0.038; LSD = 309 lb/A). Catahoula ratoon grain yields were similar when harvested normal or when harvested at a lower than normal height (1975 and 1972 lb/A, respectively) and were reduced when rolling (1462 lb/A) or further reduced when bush hogging (1098 lb/A). CL131 ratoon grain yields were statistically similar for the low harvest height (2737 lb/A), normal harvest height (2681 lb/A), and rolling (2593 lb/A). However, ratoon rice grain yields were statistically lower for bush hogging (2393 lb/A) compared with the normal harvest height. A three-way interaction of the main effects for foliar cercospera disease incidence ratings was not observed; although a two-way interaction for stubble management and fungicide application was observed (P = 0.038; LSD = 0.7). In general, cercospera incidence was greatest for the ratoon rice harvested normally (4.8) and was reduced when applying any stubble management practice (all < 3.0) when fungicide was not applied. Fungicide application reduced cercospera pressure from 4.8 to 3.5 in the normal harvest height rice when a fungicide was applied. However, fungicide application did not significantly reduce disease pressure when coupled with a stubble management practice.

In 2012 at the Vermilion Parish location, main crop mean rice yields differed between Catahoula and CL131 (8899 and 8036 lb/A, respectively) but did not differ prior to implementation of the other treatments. A highly significant grain yield response (P = 0.0001; LSD = 154 lb/A) was observed for the interaction between variety and stubble management. Raton grain yields for CL131 was greatest when harvested at a low harvest height (2921 lb/A), were reduced when either rolling (2768 lb/A) or bush hogging (2759 lb/A), and reduced further (2024 lb/A) at the normal harvest height. Ratoon grain yields for Catahoula were statistically similar for the low harvest height (2541 lb/A), normal harvest height (2451 lb/A), and rolled stubble (2413 lb/A); however, ratoon grain yields were reduced (2179 lb/A) when bush hogging compared with all other treatments. Mean cercospera disease ratings pooled over stubble management and fungicide application were significantly (P = 0.0001; LSD = 0.2) greater in CL131 (4.8) compared with Catahoula (3.3). When pooled over variety and fungicide application, stubble management was significant for cerospera ratings (P = 0.0001; LSD = 0.05). Normal harvested rice straw produced ratoon rice with a higher incidence of cercospora (5.4) compared with rolled stubble (3.9), low harvest height stubble (3.6), or bush hogged stubble (3.5). Fungicide application in the ratoon crop did not statistically improve ratoon grain yields or decrease cercospera disease incidence.

Program 9R-2

▸ Water- And Energy-Saving Rice Irrigation: Comparison Of Intermittent Flooding And Row-Rice Systems

Presented by Dr. Joseph Massey
Associate Professor, MSU

During the 2010-2012 growing seasons, six Clearfield varieties were planted at the top and bottom of a paddy in producer's fields and managed using intermittent flooding within a straight-levee, multiple-inlet system. The number of wetting and drying cycles to which the upper rice plots were subjected ranged from five (2010) to eight (2011). The corresponding irrigation water use values ranged from 18 A-in/A (2011, 2012) to 23 A-in/A (2010) while in-season rainfall at the study locations was 10.6 inches (2010), 7.6 inches (2011) and 3.1 inches (2012). Statistical analyses comparing top of paddy vs. bottom of paddy rough rice yields for the combined 2010-2012 data indicate that of the six varieties/hybrid, four showed no differences ($p > 0.05$) in yield (CL111, CL142, CL181, CLX745) and two (CL131 and CL151) showed significant yield increases ($p < 0.05$) when the upper plots were subjected to intermittent flooding as compared to the continuously-flooded lower plots. Results from up to nine other varieties that were tested for only one or two years, but were not included in these analyses, always followed this same trend: Either rice yields were unaffected or were improved by intermittent flood management when compared to continuous flooding. These tests always included a 1-x rate fungicide treatment at full boot stage. Seeding rate, fertility program and weed management were as standard practice for the cooperating growers. Although the 2012 milling data were not available at the time of this writing, there have been no statistical differences between intermittent and flooded rice in terms of milling quality measured in on-farm trials to date. These test confirm these rice varieties can be successfully grown under less-than-full flood conditions while benefiting from reduce water and energy use. Certain producers find that using rice flood depth gauge (such as pictured below) can assist them in managing their flood so as to improve rainfall capture and reduce over-pumping.