resistant horseweed had begun to regrow by 35 DAT. The greatest control was observed following Grasp and SuperWham plus Facet, which controlled glyphosate-resistant horseweed 70 to 78% and 64 to 66% at 35 and 49 DAT, respectively.

At-planting treatments targeting volunteer Roundup Ready soybean included the maximum labeled rate and one-half the labeled rate of three burndown herbicides. Gramoxone Inteon (paraquat) at 3.75 and 1.88 pt/A, Ignite (glufosinate) at 29 and 15 oz/A, and Harmony Extra (thifensulfuron plus tribenuron) at 0.6 and 0.3 oz/A were applied to volunteer Roundup Ready soybean in the V3 growth stage. Ignite is not currently labeled for burndown in rice, and Harmony Extra received labeling allowing application at planting in 2007. Control was visually estimated at 7, 14, 21, 28, and 56 DAT. Gramoxone Inteon at both rates and Ignite at 29 oz/A controlled volunteer Roundup Ready soybean >94%at all evaluations. Control following Ignite at 29 oz/A was greater than that following the lower rate at all evaluations until 56 DAT. Both rates of Harmony Extra were less effective than Gramoxone Inteon and Ignite at all evaluations. Furthermore, Harmony Extra applications caused rice injury at all evaluations and delayed rice maturity. Rice yield following both rates of Harmony Extra was lower than that following both rates of Gramoxone Inteon and Ignite at 29 oz/A.

In-season herbicides targeting volunteer Roundup Ready soybean were also applied at the maximum labeled rate and one-half the labeled rate. Treatments included SuperWham at 4 and 2 qt/A, Regiment at 0.67 and 0.33 oz/A, Grasp at 2.8 and 1.4 oz/A, Permit at 1.33 and 0.67 oz/A, and Grandstand at 16 and 8 oz/A applied to volunteer Roundup Ready soybean in the V3 growth stage. Control was visually estimated at 7, 14, 28, and 56 DAT. At 14 DAT, the higher rates of all herbicides provided greater control than half rates. With the exception of Permit, all herbicides controlled volunteer Roundup Ready soybean ≥81% 14 DAT when applied at the maximum labeled rate. By 28 DAT, control with both rates of Regiment, Grasp, Permit, and Grandstand was at least 97%. SuperWham at 4 and 2 qt/A controlled volunteer Roundup Ready soybean 88 and 73%, respectively, 28 DAT. By season's end rice yields following all treatments were equivalent and ranged from 161 to 174 bu/A.

Results from 2007 indicate that volunteer Roundup Ready soybean can be effectively managed with herbicides applied either at planting or during the rice crop. Among herbicides currently labeled for application at rice planting, Gramoxone Inteon would be preferred over Harmony Extra for optimizing volunteer Roundup Ready soybean control and rice yield. For in-season applications, Regiment, Grasp, and Grandstand are the best options for season-long volunteer Roundup Ready soybean control. Glyphosate-resistant horseweed management is more problematic. The only herbicide that provided >80% control was Grasp, and this control decreased at later evaluations. The lack of labeled burndown options in rice, combined with the low levels of glyphosate-resistant horseweed control with in-season rice herbicides, dictates the need for more investigation into management of this weed in rice.

Variety And Insecticide Seed Treatment Performance In Mississippi

Presented by Dr. Nathan W. Buehring
Assistant Extension Professor, Mississippi State University

Presented by Tim W. Walker
Mississippi State University

Presented by Jason A. Bond
Rice Weed Scientist, Mississippi State University

In an effort to help rice producers make decisions for 2008, "Mississippi Variety Trial" data collected in 2006 and 2007 are summarized below.

Averaged over 2006 and 2007, Clearfield XL729 has shown a 31% yield advantage over CL-161 and CL-171AR. For the same time period, no yield difference was detected between CL-161 and CL-171AR. Furthermore, CL-161 and CL-171AR produced similar yields at over 20 locations. Neither cultivar out-performed the other more than 3 to 4 bu/A. CL-161 did have an advantage to other Clearfield cultivars with respect to whole milled rice. Whole milled rice of CL-161 was 3.8% better than Clearfield XL729 and 0.6% better than CL-171AR. One disadvantage to Clearfield XL729 is that its average height was 5 inches greater than CL-161 and CL-171AR.

Clearfield XL730 and Clearfield XP745 responded comparably to Clearfield XL729 in rough rice and whole milled rice yields; however, Clearfield XL730 has more shattering potential. Considerable yield losses were observed with Clearfield XL730 due to excessive winds from Hurricane Katrina in 2005. Plant height is a disadvantage for Clearfield XP745 as it averaged 2.5 inches taller than Clearfield XL729 and 8 inches taller than CL-161. As a result, the lodging potential with Clearfield XP745 is higher than Clearfield XL729, CL-161, or CL-171AR. In two strip trials comparing CL-161 and CL-171AR, CL-161 showed more susceptibility to lodging than CL-171AR.

In comparisons of conventional cultivars, XL723 demonstrated a 14% yield advantage over Cocodrie and Wells. Whole milled rice for XL723 was 0.5% lower than Cocodrie, while Wells was 4.4% lower than Cocodrie. XL723 averaged 2 inches taller than Wells and 6 inches taller than Cocodrie. XL723 would fit well on lighter soil that has recently been land formed, as well as areas with greater blast potential.

In one year of evaluations, XP744 produced equivalent rough rice and whole milled rice yields to XL723; however a disadvantage of XP744 compared with other cultivars is that it averaged 3 inches taller than XL723 and 9 inches taller than Cocodrie.

In 2007, two trials were conducted to evaluate the use of Cruiser™ , V-10170, and Dermacor™ X-100 as a seed treatment for the control of rice water weevil larvae. Each trial consisted of seed treatments of Cruiser™ at 2.05, 2.56, and 3.072 fl oz/100 lb seed, V-10170 at 2.56, 3.84, and 5.12 fl oz/100 lb seed, and Dermacor™ X-100 at 1.2, 2.4, 4.8, and 9.6 fl oz/100 lb seed. These seed treatments were compared to a foliar application treatment of Karate at 2.56 fl oz/A at 3 days following flood establishment and untreated check was also included, which received no seed treatment and foliar application.

For each treatment replication, two-4 inch soil cores were extracted at 3 weeks following flood establishment. The most effective and consistent control of rice water weevil larvae was achieved with Cruiser™ at 3.072 fl oz/100 lb seed, V-10170 at 3.84, and 5.12 fl oz/100 lb seed, and Dermacor™ X-100 at 2.4, 4.8, and 9.6 fl oz/100 lb seed.

▸ Expanded Capabilities Of RiceTec Hybrid Rice

Presented by Kurt Johns

Technical Services Representative, RiceTec Inc

Producers push the envelope every year with methods that are outside the norm to take every advantage they can get. These growers get strange looks and many questions from other farmers, however the reasons many get these questions and the interest is because many of them have at least considered what these innovators are putting to the test. RiceTec many times works with our customers who want to try new things outside the norm.

One of the concepts RiceTec is working on with our customers is Rice Irrigation Management. There are other ways to irrigate besides the standard permanent flood. One way is intermittent flooding which is what many growers are already doing they just don't call it that. They simply cannot keep a "permanent" flood on the field due to soil type or well capacity. Another way is multiple inlet irrigation, which consists of laying poly pipe across the field and punching holes in the pipe in every paddy which