## **Bouncing Back From Glyphosate Injury**

STUTTGART, ARK

he University of Arkansas Division of Agriculture has traditionally recommended DAP or ammonium sulfate fertilizer to help rice injured by glyphosate or Roundup drift.

The division gets telephone calls every spring from rice farmers worried about glyphosate herbicide injury to their crop from airborne drift caused by spraying of other crops on a neighboring farm.

"We've always recommended fertilizer and a flush because we felt like the fertilizer and a flush of water would encourage it to grow," said Dr. Chuck Wilson, extension rice specialist.

But now, in light of high fertilizer prices, they're going to the field to test that recommendation. The results in 2007 surprised them.

"In 2007, we didn't see a significant improvement from those fertilizers at test locations at Lonoke and in Poinsett County. It didn't economically pay for itself. So we're asking ourselves, 'Do we need the fertilizer to help in recovery?'"

That brings up another question. In the past, after farmers applied fertilizer and flushed their rice to help their crop recover from glyphosate drift, the crop seemed to bounce back faster. "The question is was it the fertilizer or was it going to recover without it anyway?"

Wilson said he and Dr. Bob Scott, extension

weed scientist, are cooperating with Mississippi State University on the two-year study, which is funded by the Arkansas Rice Research and Promotion Board.

Results of the study will be made available to rice farmers.

Scott said the 2007 results didn't satisfy them. "We didn't understand why we didn't see an improvement after fertilizer and flushing the crop. With all the weather changes in 2008, results are expected to be very variable." The data for the two years will be made available to farmers in 2009.

There's a lot at stake. "One of the biggest costs for farmers is an increase in weed control since it takes you longer to get a flood up because the rice won't tolerate it until it recovers from the injury," says Scott.

Scott says, "No research has ever been done to confirm the recommendation that evolved in a field situation. Visual observations of the fields in the past indicates the rice looked greener and seemed to perk up a little faster if you apply fertilizer, but we didn't have data to back it up. Low and behold, the data in 2007 didn't support this.

"If we see the same results as we did in 2007, then we'll start to believe that we should stop recommending fertilizer and a flush and that a normal fertilizer program is fine, even on damaged rice."  $\Delta$