Crop Progress

This sucks. I don’t believe in sugarcoating. The rainfall predictors did a pretty good job this time around with rainfall amounts in northeast Arkansas totaling 6-8” just from Saturday night’s event alone. It’s no surprise to many out there in the middle of it that flooding is extensive and getting worse.

In Fig. 1 it’s very clear that major flooding is occurring at multiple points along the Black River (purple markers). Most all other points of observation along the Black are near flood stage (yellow) or have minor (orange) or moderate (red) flooding. Unfortunately with flooding in Missouri and more rainfall forecast for all areas on Wednesday night, things are going to get worse.

Flooding in 2011 occurred at almost this same time and helped to cause 266,000 acres of prevented planting on rice. At the time flooding occurred only 45% (Fig. 2) of the rice crop had been planted. Here in 2017, we have 89% of our rice planted, meaning the loss won’t just be the inability to plant, but the loss of actively growing rice fields with many expenses already in the fields.

At this time I estimate we have lost approximately 100,000 acres of rice in the state of Arkansas. I do not mean prevented planting, I mean acres lost that have already been planted. The worst of these losses are in Randolph, Lawrence, Jackson, Clay, Greene, Craighead, and Poinsett counties. However, the damage and losses will only increase beyond my estimate, not get lower. The downstream flooding of the Black, Current, St. Francis, Cache, and White Rivers is yet to be realized – and remember that all of these rivers eventually converge.

Fig. 2. Weekly planting progress, 2012-2017, USDA-NASS.

How Long Will Submerged Rice Live?

There’s a lot of variation in crop progress of submerged rice fields out there. What to expect of rice survival is difficult to answer simply as many factors come into play such as rice growth stage, air temperature, water temperature, water depth, water clarity, water movement, etc.
As a general rule, the breaking point for young, submerged rice is about 10 days. Rice that is germinated but not emerged can sometimes last up to 14 days as it continues to live off the seed. Some larger rice under bad conditions may give up at 7 days. But 10 days should be the breaking point you’re looking at for most of the rice out there. If the water is not off in 7 days you need to start actively working to get water off someway somehow if possible.

Replanting and Crop Insurance

For those with crop insurance who will be looking at replant situations sometime after this is all over – you need to talk with your adjuster and insurance company. While the final planting date is set as May 25, the late planting period extends another 15 days to June 10. This means that under new rules you would be potentially required to replant rice until June 19. This is based on the new RMA definition of “practical to replant”.

**Practical to replant** – Our determination, after loss or damage to the insured crop, based on all factors, including, but not limited to moisture availability, marketing window, condition of the field, and time to crop maturity, that replanting the insured crop will allow the crop to attain maturity prior to the calendar date for the end of the insurance period. It will be considered to be practical to replant within or prior to the late planting period, or on or prior to the final planting date if no late planting period is applicable, unless we determine it is physically impossible to replant the acreage or there is no chance of seed germination, emergence, and formation of a healthy plant.

The following planting date figures are two different sets of data to tell the same story. **Fig. 3** is an illustration of all field yields from the Rice Research Verification Program since 1983. **Fig. 4** illustrates planting date study results conducted at the Rice Research & Extension Center at Stuttgart since 2004. Both ultimately show that, on average, when planting is delayed until early May our yield expectation is 15% below optimum and when it is delayed into June our yield expectation is 30% or more below optimum. If our replant efforts are pushed into late May and June it becomes extremely difficult to cover the costs of production.
Flooding in Northeast Arkansas

The following images are courtesy of agents Mike Andrews in Randolph Co., Herb Ginn in Lawrence Co., and Matthew Davis in Jackson Co. In several of these photos there are supposed to be roads which are no longer visible, and there are supposed to be rice fields that are now under 4+ feet of water. The guy in the boat is passing a 10 ft tall shed, you do the math.
Enroll Fields in the DD50 Program to Help Time Management Decisions

The variability in environmental conditions the past few seasons has shown the importance of managing the rice crop on time. The DD50 Rice Management Program helps to predict the timing of the most critical practices to make sure we hit our marks and produce the best crop that the environment allows. The DD50 program can be found at http://DD50.uaex.edu. The program is now much friendlier for mobile use than in the past and efforts are underway to further improve functionality for future seasons. Please let us know if you have any questions or encounter any problems.

Additional Information

Arkansas Rice Updates are published periodically to provide timely information and recommendations for rice production in Arkansas. If you would like to be added to this email list, please send your request to rice@uaex.edu.

This information will also be posted to the Arkansas Row Crops blog (http://www.arkansas-crops.com/) where additional information from Extension specialists can be found.

More information on rice production, including access to all publications and reports, can be found at http://www.uaex.edu/rice.

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