DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Arkansas Rice Update

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August 9, 2013 **No. 2013-20**

Crop Progress

Not much has changed in the past week, except for more rainfall across the northern half of the state. The comment has been thrown out there more than once that people have never been so happy to miss an August rain. That says a lot about the year we're having.

Aside from the rain, things have finally started to get on the balmy side of August like we need. The countryside has a general haze to it from all the heat and humidity. Let's not forget the sunlight – fewer clouds than in recent weeks should start to really help move things along.

The extended forecast doesn't look like much of the same though. It looks like we'll fall back into the mid- and upper-80s next week with lows in the mid-60s. I'm not that excited about a drop in our high temps, but with these lower nighttime temps helping us avoid environmental stress during grain fill, quality should be off the charts.

As far as a summary of what to watch for in the field, here is a repeat of last week because it hasn't changed:

In fields still not headed, keep an eye out for sheath blight. While we are not receiving the increase in reports of this disease we expected to be associated with the rain and cool temps, it is still moving up the canopy in some fields. Remember the threshold – 35% positive stops in susceptible/very susceptible cultivars, 50% positive stops in moderately susceptible cultivars. In fields that are headed, continue scouting for rice stink bug.

Tables – Percent of rice acres to reach growth stages during listed weeks of 2013 according to current DD50 enrollment.

Table 1. 50% heading.

50% Heading Date	Percent
50% Headed	91%
Aug 9-15	7%
Aug 16-22	2%
Aug 23-29	1%

Table 2. 20% grain moisture.

Harvest Date	Percent
Aug 3-9	0%
Aug 10-16	0%
Aug 17-23	18%
Aug 24-30	25%
Aug 31 – Sept 6	27%
Sept 7-13	16%
Sept 14-20	9%
Sept 21-27	3%
Sept 8 – Oct 4	2%

Out Standing in Your Rice Field

Rice Stink Bug

Numbers don't seem to be as high as they once were, but rice stink bug is still out there. A number of reports have been received of 5-10 per 10 sweeps. This is still treatment level, but much more manageable than some of the numbers seen early on. Late-planted fields will still have a high risk of major infestations. Continue to scout diligently. Some fields should be nearing the second two weeks of heading where the threshold moves to 10 stink bugs per 10 sweeps.

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Disease Notes

Sheath blight has picked up and is moving up the canopy actively in north Arkansas rice fields plant with susceptible cultivars. Wet and humid environmental conditions favor sheath blight. The nighttime temperatures are getting warmer and favor more sheath blight disease progress. In such disease-favorable environments, we need to continue scouting to make sure the upper three leaves will not be outrun by the disease. The upper three leaves are very important for adequate grain fill. The southern part of the state is relatively drier and reports of sheath blight are fewer than in the northern part of the state. There are still reports of severe sheath blight in isolated situations which can possibly be explained by management problems such as a thick canopy and higher nitrogen fertilizer rates.

Picture 1. Sheath blight on Mermantau in Poinsett Co. on 8/7/13.

Picture 2. Aggressive sheath blight with sclerotia (round white structures).

Blast has not been reported much despite some days of blast-favorable weather conditions in southern part of the state. Leaf blast was reported on Rex in Mississippi. Since rice across Arkansas is so scattered in developmental stages, we need to continue scouting blast in very late rice. Neck blast may be seen in blast-prone fields planted late with susceptible cultivars.

Picture 3. Neck blast blanks panicles and heads look white.

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Bacterial panicle blight (BPB) was detected in a seed-inoculated plots of Bengal and Jupiter on Aug. 5 at the Rice Research and Extension Center. The same day the disease was observed in breeding plots on the station from natural infection. An additional planting date at RREC that was seed-inoculated began to show symptoms a few days later. Both trials (the first planted late March, the other late April) began to head in the middle of July just a few days apart. The soil and air temperatures of July should have been either favorable for the bacteria to be activated and infect or it may be a matter of the pathogens adapting to a wider range of temperatures. The maximum daytime air temperature in July was 98°F with a minimum of 83°F. The maximum nighttime temperature in July was 77°F with a minimum of 64°F. The soil temperature has ranged between 79 and 88°F. To date there have been no reports of BPB in commercial fields.

Picture 4. BPB on Bengal panicles.

Picture 5. BPB on Bengal sheath.

Autumn decline (hydrogen sulfide toxicity/Akiochi/black root rot) is still being reported in some fields across the state. This phenomenon may be caught at any stage of the crop after flooding. The earlier it is discovered the less impact it will have on yield if it can be drained at the recommended timing. However, if caught late there will be a dual risk: one being from the phenomenon itself and the other from water stress caused by draining during critical reproductive stages. If the crop stage is late (after booting) and the black root rotting is extreme, then you should only lower the water to expose the soil to allow oxygen into it. Check every day to see if new roots have started growing. Once new roots are observed, return water to the field. The extent of autumn decline needs to be judged before draining in fields that show the situation late. Attempt to drain the field to a muddy state to avoid water stress on

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the plants while allowing for new roots to emerge on the upper portion of the root system.

Picture 6. Severe autumn decline in rice that started heading.

Need Help with DD50 Enrollment? Call or E-mail Me or Your Local County Extension Agent

If you prefer to enter them yourself, please visit http://dd50.uaex.edu/dd50Logon.asp.

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 jhardke@uaex.edu.

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

Acknowledgements

We sincerely appreciate the support provided by the Arkansas Rice Research and Promotion Board for this publication.

The authors greatly appreciate the feedback and contributions of all growers, county agents, consultants, and rice industry stakeholders.