Crop News

FOR CRAIGHEAD COUNTY PRODUCERS

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Rice Stink Bugs

With the extremely mild winter, the threat of large numbers of insects was a real concern. We need to be particularly wary of the potential for rice stink bug as we approach heading.

Scout fields once or twice weekly after 75% panicle emergence using a 15” sweep net. Treat when 5 or more stink bugs are found per 10 sweeps, or 2 per square yard are found 2 weeks after 75% panicle emergence.

After this time period, treat when 10 stink bugs are found per 10 sweeps or 3 per square yard.

Scouting should be done early in the morning (8-10 a.m.) or late evening (6-8 p.m.) to achieve accurate numbers.

Disease Concerns

Blast, under the right conditions, which include moderate temperatures; frequent rainfall; long dew periods (the fungal spores need free water and a few hours to infect plant tissue); frequent cloudy weather; and “upland” conditions (that is, rice that is growing without a deep flood, or in soils with inconsistent or intermittent flooding, or in furrow-irrigated fields, or pivot irrigated fields etc), can increase rapidly on leaves and collars across a field planted to a susceptible variety. Rice growing in deep floods (greater than 4 inch water depth) is more resistant to blast than rice growing in less well watered conditions. Under favorable conditions, leaf lesions increase so rapidly that the foliage starts to “burn down” in spots, sometimes looking like a contact herbicide (E).

Branon Thiesse
County Extension Agent-Staff Chair
Lesions on the leaf are usually longer than they are wide, with pointed ends, like a long football (F) with a reddish brown border and light colored center. However, lesions can vary greatly on different kinds of rice (G) (H) and on highly susceptible varieties like the California medium grains in the past can develop so rapidly and extensively that entire areas of leaves are blighted in a few days (I).

The most dangerous phase of rice blast disease is the “neck blast” phase, when the fungus infects the base of the panicle or the so-called sub-panicle node. Entire fields of susceptible varieties were destroyed by this phase in 2009, when rainy conditions allowed the fungus to develop rapidly (O) (P) (Q). This phase resulted in yields as low as 35 bushels per acre in some fields last year, and head rice quality in the 30s. This phase can occur without obvious leaf blast in the field, since the leaf blast phase tends to occur in June and then disappear somewhat in July and early August. It is also believed that spores may move from other fields into susceptible ones, with spores catching on the flag leaves and washing to the base of the leaves or blowing onto developing heads to start infections. Neck blast is difficult to control and often each field requires a number of observations and judgment calls to manage the disease effectively. Every field tends to react differently.

One of the most important management option is flood management. Shallow floods, intermittent floods, furrow irrigated and pivot irrigated rice systems strongly favor neck blast development. Last year, most of the damaged fields had water management problems, in spite of excessive rainfall. On farms where irrigation water is limited, then rice acreage should be limited to what the system can handle, in the sense of maintaining rice paddies with a 4 inch flood (minimum). When leaf blast is observed, or in fields with a history of blast, a deep flood should be established and maintained throughout the growing season to minimize blast. Research has shown that a deep, consistent flood can be worth a fungicide application on a susceptible variety. If you cannot maintain a deep flood on a field, then the field should be planted with a resistant variety.

Another management option for blast during the growing season is the use of fungicides. Modern fungicides for blast management are strobilurins, and much more effective than older fungicides at preventing the disease.

**Sheath Blight**

As mid season nitrogen applications are going out, sheath blight may become a concern especially on susceptible, short stunted varieties. Environmental conditions will play a large role in the severity of this disease. Extremely high temperatures are not favorable for the advancement of the fungus. Sheath blight begins as a water soaked looking lesion at the water level, and under warm and humid conditions, can progress up the plant very rapidly. We need to protect the upper most two leaves from infection so the rice heads can fully mature. Treatment should be considered when 35% infection occurs in susceptible and very susceptible varieties, and 50% on others.

One maybe two applications of a fungicide may be needed to get this protection. Growth stage of rice (how close to heading) will dictate the need for multiple applications.

If you have any questions, please call the Extension Office at 870-933-4565.
Invitation to Activities

All of the activities mentioned in the newsletter are open to everyone regardless of race, color, national origin, age, religion, gender, disability, or any other legally protected status. Persons with disabilities who require alternative means for communication of program information (large print, audiotapes, etc.) should notify the county Extension office as soon as possible prior to the activity.