Look Out For Sheath Blight In Rice

DR. BRIAN OTTIS



s we approach midseason, it is important to be on the lookout for disease in your rice crop. Sheath blight is caused by Rhizoctonia solani, the same pathogen responsible for aerial blight in soybean. Although hybrids have been shown to have bet-

ter resistance to sheath blight than most other varieties, it is always important to be vigilant for signs of the disease.

Sheath blight disease starts at the water line typically during the time when rice shifts to reproductive growth following panicle initiation. It's during this time when the plant shifts resources and becomes more susceptible to infection by disease. Sheath blight can be found in all rice in the south, but typically does not escalate to the point necessitating a fungicide application in hybrids. Two new hybrids released in 2011, XP754 and CL XP756, have actually shown even higher tolerance to sheath blight than CL XL729 and CL XL745. Unless overfertilization is an issue, it is very unlikely that XP754 and CL XP756 will need a sheath blight fungicide application; however, always scout closely as Mother Nature plays a large part in sheath blight development. So far, it is not setting up as a sheath blight year as it's been very hot and dry in most areas.

In the event that sheath blight develops on your farm, there are a couple of management options that must be considered. First, determine if a fungicide application will be warranted by considering the field history and stage of growth. If the rice is heading, a fungicide for sheath blight is usually not warranted at this stage as the panicle has 'escaped' the disease, or the disease has already infected the flag leaf and a fungicide at this stage may be too late to be of any benefit for sheath blight. Research has shown that yield loss associated with sheath blight is most likely due to infection of the flag leaf, which supplies most of the energy to the

panicle during grain fill. Therefore, even if disease thresholds have been reached, it may be better to wait until the disease is two to three leaves below the flag leaf until the application is made in order to get more 'bang for your buck.' In the case of hybrid rice, research has shown that more often than not, a fungicide application did not pay for itself in protected yield.

Rice blast disease and bacterial panicle blight are more likely to be at play in a hot, dry year than sheath blight. Fortunately, RiceTec hybrids and some inbred varieties are less susceptible to these diseases than others. Rice blast is the most devastating rice disease worldwide. If you've ever been hit with blast, you know what can happen if left untreated. You also know that it can be an expensive pathogen with which to deal. In a year like this when water is at a premium, it will be hard for many folks to maintain a deep flood, which has been shown to minimize the impact of blast. If you are finding signs of blast, be sure to take the appropriate measures for proper control. Typically, if blast is the only disease of concern, an application of Quadris at the full label rate first at late boot followed by another full rate at 70-90 percent heading is usually effective. If blast is severe, do not skimp on this program as cutting back the rate or skipping an application can have severe consequences. If you planted a RiceTec hybrid, be vigilant for blast, but so far, common races of rice blast have not been found at treatable levels on hybrids.

As many learned through the tough crop year of 2010, we currently have no chemical means of controlling bacterial panicle blight. High nighttime temperatures, inoculum, and susceptible varieties are the necessary ingredients for infection to occur. So far this year, we have all three. At this point, we need some cooler weather in order to keep this disease at bay because the last thing we need is a repeat of 2010.

DR. BRIAN OTTIS: Marketing and Client Support Manager, RiceTec

Δ