

## FAQ's about Managing Brown Patch Disease of Tall Fescue Lawns

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### 1. I had a beautiful tall fescue lawn last fall and this spring, but by mid-summer it looked terrible. What's causing this disaster?

A fungal disease called brown patch is the most common disease of tall fescue in the Upper South. Brown patch looks like circular patches of brown grass from six inches to three feet in diameter. See Figure 1. As these patches become more numerous and increase in size large areas of turf may be killed.



**Figure 1.** Brown patch disease on a turf type tall fescue.

### 2. How do I identify brown patch?

It's really pretty simple. Go out early in the morning while the dew is still on the leaf blades. Look for "cob web" like strands of fungus growing from leaf blades of infected grass. Patches of diseased turf often have what is called a "smoke ring" of fungal growth at the margin of the patch. Also, look for large lesions on the blades of grass. These lesions are bluish-gray when the disease is active and bleached when weather conditions are not favorable for disease development. See Figure 2.

### 3. What causes brown patch? Was my seed contaminated?

Brown patch is caused by the fungus, *Rhizoctonia solani*. This fungus is found in most soils and not on turf seed.

### 4. What environmental conditions favor brown patch?

Hot, humid weather is ideal for brown patch development. Generally, late May to July is prime brown patch season in Middle Tennessee. Cooler temperatures and low humidity stop the disease temporarily. Brown patch often develops when temperature approaches 90F during the day and 70F at night.



**Figure 2.** Brown patch lesions on tall fescue.

### 5. How does shade influence brown patch?

Common sense tells us that grass growing in shade is slower to dry each morning and thus has more brown patch. Right? This is one time when common sense is wrong. Brown patch development has more to do with turf density. In general, you have more tall fescue shoots/sq ft in full sun. So you are more likely to have brown patch most severe in turf areas in full sun than shade. Conditions within the turf canopy are simply more favorable for disease development in full sun.

### 6. Does irrigation affect brown patch development?

Watering frequently at night increases the risk of brown patch. Lawns should be irrigated infrequently to

a depth of six inches. Irrigation during the day is preferred to irrigation at night.

### **7. Does fertilization timing affect brown patch?**

Absolutely! Late spring and/or summer fertilization almost guarantees that brown patch will be a problem. If you are going to fertilize your tall fescue lawn once a year, do it in October. If you fertilize your lawn more than once, try October and early spring. Avoid fertilizing your lawn after April 15.

### **8. Why is fall seeding preferred to spring seeding for cool season grasses?**

Fall seeding is preferred for several reasons. First, seeding in the fall allows two seasons of rapid growth prior to the heat and drought stress of summer. Also, fall seeding allows tall fescue seedlings to mature and survive a moderate amount of brown patch.

### **9. Are fungicides available for controlling brown patch?**

Yes. Myclobutanil (Immunox), azoxystrobin (Heritage), propiconazole (Banner MAXX) or similar products applied as a foliar spray prior to hot, humid weather prevent brown patch development. Granular fungicides should be applied with a rotary spreader when the turf is wet. Foliar sprays generally are more efficacious than granular fungicides. Results with fungicides are not as satisfactory if the disease has caused significant damage. Most fungicides have to be applied at 14 day intervals when conditions favor disease development. Fungicides such as azoxystrobin have a longer use interval, up to 28 days.



**Figure 3.** Brown patch control with azoxystrobin (Heritage) right; untreated left. UT Plant Science Farm Aug 2006.

A lawn care service can apply fungicides for you. Ask your service for information about brown patch management.

### **10. I don't want to apply fungicides; what options do I have to speed the recovery of my lawn?**

Save your money on fungicide applications and buy turf-type tall fescue seed. Simply overseed your damaged lawn in early fall and fertilize according to soil test recommendations.

### **11. Are there turf-type tall fescue cultivars highly resistant to brown patch?**

No, but there is research looking for resistance to brown patch. I would stay away from the ultra-dwarf cultivars as they are slower to recover from brown patch damage. Choose a good turf-type cultivar or a mixture of several cultivars.

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