

## YELLOW LAWNS AND BROWN PATCHES

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The annual yellowing of some Kentucky bluegrass lawns has started. In other lawns, especially fescue turf, brown patches are appearing.

Summer yellowing of Kentucky bluegrass is due to iron chlorosis, which is a lack of iron in plants but not necessarily a lack of iron in the soil.

In the Great Plains, soil pH tends to be alkaline which makes iron less readily available for plant uptake. One might then wonder why bluegrass lawns are not always yellow if it's due to soil pH.

Yellowing of Kentucky bluegrass from iron chlorosis is believed to not only be caused by high pH soil; but also a root dysfunction when soils are wet soil temperatures become hot in July and August. Root dysfunction also reduces uptake of iron by plants.

While there is not much we can do about soil temperatures, we can avoid overwatering lawns or watering too frequently so soils remain wet rather than moist. Roots do not function well in wet soils due to low oxygen levels.

When lawns begin to yellow, the instinct may be to apply nitrogen. However, iron chlorosis will not respond to nitrogen. Instead, nitrogen may increase turf growth which in turn increases the need for iron, compounding the issue.

If turfgrass is growing about one to one and a half inches a week, it has adequate nitrogen levels. If yellowing occurs, check the grass blades. With iron chlorosis, the veins will appear green rather than yellow.

To treat for iron chlorosis, irrigate correctly to avoid consistently wet soils and apply a foliar only application of iron, such as iron sulfate. Do not water the iron in or it will be much less effective. Follow label directions for the rate to apply.

If the lawn has not been core aerated in the last few years, consider having the lawn plugged in September. A practice that relieves soil compaction and encourages root growth.

Brown Patch disease shows up as reddish-brown patches in lawns. It infects tall fescue and Kentucky bluegrass lawns, but is much more noticeable in tall fescue.

To confirm brown patch, look at grass blades within or near the affected area. They will have tan colored, irregular shaped lesions with a reddish margin. It's best to check for these prior to mowing or the portion of the blade with a lesion may be removed.

While this is a fungal disease, fungicides are usually not recommended on residential lawns as most turfgrass will grow out of this disease.

To aid recovery, maintain consistent growth meaning not too slow and not too fast. Try to keep grass growing about one to one and a half inches per week. If it is below that, a summer fertilization is recommended; especially if the lawn is less than 10 years old.

When turfgrass shows signs of needing irrigation, water in the mornings when the wind is calm, humidity is high, and evaporation rates are lowest. Watering in the mornings encourages leaf drying will reduce conditions needed for high infection rates.