

Iron chlorosis intensifying on Kentucky bluegrass
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The yellowing of Kentucky bluegrass lawns, sports fields, and golf turf is becoming quite severe around Nebraska. This happens every August as the soils become warm and wet. It is thought that the iron extraction systems in grass, called phytosiderophores, stop working normally. This reduces iron in the leaves and leads to iron deficiency.

We are studying how and why this happens. Our first application of different iron chelates at Heritage Hills Golf Course in McCook failed. We presume it was because we watered it in (on purpose). We then re-applied the different iron products and are seeing positive responses. This would suggest it is a root issue. We'll continue this research with the support of Mr. Bill Bieck at Heritage Hills.

In the meantime, here are some tips if you have iron chlorosis:

- Avoid excessive irrigation. The chlorosis is usually worse around irrigation heads. Try to dry the soil down between irrigation events.
- Avoid nitrogen fertilization. Extra nitrogen fertilization increases growth rate and further dilutes the iron concentrations within the plant. This will intensify the chlorosis.
- Apply liquid iron products. Chelated products or iron sulfate applied at 1-2 oz/1000 ft² can help. Don't water the iron in after the application. Avoid driving over the iron application (with a car, mower, etc.) because that can lead to black track marks in the turf.

Bill Kreuser, Assistant Professor and Turfgrass Extension Specialist, wkreuser2@unl.edu



Figure 1. Iron chlorosis is most commonly observed around irrigation heads. Limit irrigation frequency to minimize the risk of iron chlorosis in Kentucky bluegrass growing on high pH soils.