

**Reports of *Pythium* root rot on the rise
June 30, 2016**

There have been several reports of declining creeping bentgrass greens lately. The turf appears sunken, is slow growing, slightly chlorotic (yellow), and thinning. The symptoms are diffuse and generally lack a clear patch-like shape. Fungicides applied to control disease like anthracnose have been ineffective. Visual inspection of the roots seems normal and the soil is wet. These are the symptoms of root disease. If using technology like a FLIR One and TDR probe, you'll discover the soil is wet but the plants are hot.

We've seen an up-tick in reports of *Pythium* root rot the past two seasons. Like many other root diseases, the *Pythium* root rot pathogen started to impact the roots during the cool and wet weather the past two springs. Damage was not obvious at first because the turf wasn't challenged with moisture stress. That changed with the onset of extreme heat, drought, and evapotranspiration last June. The affected roots were unable to supply the leaves with adequate moisture and nutrition, which led to the decline.



Symptoms of a root disease can sometime appear nondescript. Too much PGR can also have that appearance. Be sure to confirm the correct cause before developing a management strategy.

As with any disease, it is important to obtain an accurate diagnosis. Other root pathogens (i.e. take-all, summer patch, and *Pythium* root dysfunction.) can also have similar symptoms but may require different treatment. Issues like drought, anthracnose, and even over-application of PGRs can also look similar to root rot. Be sure to submit a sample to develop a cost effective management strategy that will also control the disease. A popular curative program for *Pythium* root rot is to apply Terrazole or Koban (ethazole) followed by Segway (cyazofamid) a few days later. Ethazole is fast acting and cyazofamid is very effective against the pathogen. Be sure to water these products into the soil immediately after application. Low rates of soluble fertilizer, venting, and slightly increasing mowing height can also help to promote root recovery.

If you are seeing symptoms of a root disease, submit a sample to identify the cause of the problem before spending time and money on control products that may not be effective.

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For more information on these different diseases, click the link below from NC State University and UNL:
[Pythium root rot](#), [Pythium root dysfunction](#), [summer patch](#), [anthracnose](#), [PGR over-regulation](#)