

Take-all root rot, common in lawns

Take-all root rot is a disease that often affects lawns at this time of year, particularly St. Augustinegrass. Symptoms observed above ground are due to a soil borne fungus attacking the root system. By the time leaf symptoms are apparent, the root system has already been severely damaged.

Hendry County Extension Agent, Gene McAvoy and I provide advice on this disease in today's article.

Leaf symptoms first appear in irregular patches as yellowing of lower leaves accompanied by a decrease in leaf growth rates. Lower leaves turn brown as they die. Other fungi may attack the grass and affected turf will begin to thin. The final symptom is patches of dead grass. Eventually, large areas may die, leaving mostly bare ground.

Take-all root rot is not simple to identify since other diseases, nematodes and insects can cause similar symptoms. This fungus prefers wet soil conditions and initial disease development typically occurs during rainy periods. Mowing too low, using lawn fertilizers with more nitrogen than potassium and irrigating too frequently are common stress factors that predispose the lawn to attack by take-all root rot.

Fertilizers may influence the disease by influencing soil pH. Acidifying fertilizers such as ammonium sulfate or slow-release urea products may be helpful. A lower soil pH will encourage growth of soil microbes that may be able to biologically control the pathogen. Excess nitrogen may encourage development of the disease. Disease control will not be immediate with these cultural practices. It may take several years for the cultural practices to become effective in controlling take-all root rot.

Systemic fungicides such as Banner Maxx and Bayleton may be useful but only as preventative compounds applied weeks or months in advance of above-ground symptom development. Without eliminating the plant stresses via cultural control methods, fungicides will have minimal effects. Always follow label instructions.

Replacing the sod is another alternative. It is necessary to remove the diseased sod and soil (6" deep) plus an area that is one to two feet beyond the symptomatic sod. However, there is no guarantee that new sod will not reintroduce the pathogen. Do not replant with slow-growing St. Augustinegrass cultivars as these cultivars will recover more slowly if infected. Avoid spreading known contaminated material into unaffected areas. Normal mowing will not spread the pathogen but dethatching could spread the pathogen since infected root material could be moved by the machines.

Attention to good lawn care practices will go a long way to reducing the impact of this devastating disease. To learn how to correctly maintain a Florida lawn, contact your University of Florida County Extension Office or visit <http://yourfloridalawn.ifas.ufl.edu>.

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