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**NEWS RELEASE FROM THE OFFICE OF:**

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## **TAKE-ALL PATCH**

This spring has been nothing but unusual for home lawns and agriculture producers. It started off very cool, then extremely hot and dry. The weather this past fall also has lead to extremely severe cases of Take-All Patch in many home lawns.

Take-all patch is caused by a fungus and is a serious disease of St. Augustine, but also causes problems on Centipede and Bermuda grass lawns. The organism seems to be most active during the fall, winter and spring when there is abundant moisture and temperatures are moderate. The disease has the ability to destroy large sections of turf grass if left uncontrolled, and has proven maybe the most difficult disease to control.

When the disease is active, the first symptom is often a yellowing of the leaves and a darkening of roots. The area of discolored and dying leaves may be circular to irregular in shape and up to 20 feet in diameter. A thinning of the turf within the affected area occurs as roots, nodes and stolons become infected and the plants decline. Unlike brownpatch, the leaves of take-all infected plants do not easily separate from the plant when pulled and the stolons will often have discolored areas with brown to black roots. The roots are sometimes so rotted that damaged stolons are easily pulled from the ground. Roots and stolons of brownpatch infected plants usually have a healthy appearance. Regrowth of the grass into the affected area is often slow and unsuccessful as the new growth becomes infected. During the stressful high temperatures of the summer months, the weakened, infected turf grass will continue to decline.

The pathogen survives on infected debris and on infected perennial parts of living grass plants. When conditions are favorable (cool, moist weather), the fungus grows on the surface of roots,

stolons, rhizomes, crown and leaf sheaths of the grass and then penetrates and infects the tissues. As the weather becomes warmer and dryer, the infected plants are stressed, and symptoms become more evident.

Controlling take-all patch is not easy and much has yet to be learned about this disease. Control efforts should consist of both cultural and chemical methods. Good surface and subsurface drainage is important. Excessive watering can also favor development of take-all patch. Irrigating only when required to maintain good plant growth and vigor is suggested and infrequent but thorough water is preferred to frequent shallow watering. Follow soil test recommendations for a balanced fertility program. Avoid over application of nitrogen fertilizer, slow release and sulfur-coated urea fertilizers. Use ammonium sulfate as a nitrogen source.

Since the pathogen can survive on infested thatch, prevention of thatch build-up is suggested. If soil compaction exists, aeration will help to alleviate this condition and allow the grass to establish a deeper, more vigorous root system. Mow frequently to minimize thatch and limit the use of herbicides which can cause increased stress on turf.

Since infection is thought to occur primarily in the fall, with disease progression continuing during the fall and winter months under cool moist conditions, fall applications may be the best time for fungicides to be applied for preventative purposes. Its efficacy in controlling the already established disease may be disappointing.

Fungicides such as Heritage, Immunox, Terraclor, or Turfcide seem to do an effective job if used on a preventative basis to destroy the fungus once it is established on the turfgrass.

Dr. Phil Colbaugh and Research-Extension colleagues at Texas A&M Research Center at Dallas have also discovered that using a top-dressing or lawn dressing with the acid peat moss (Michigan Peat or Peat Compost results in control of the Take-All Root Rot on St. Augustine grass lawns. The use of organic topdressing to control turf grass disease is a relative new approach to controlling turf grass diseases.

The Gregg County Extension web page has additional information on Take-All Patch at [gregg-tx.tamu.edu](http://gregg-tx.tamu.edu)

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