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NEWS RELEASE FROM THE OFFICE OF:

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Take-All Patch In Turfgrass

One of the most frustrating problems home gardeners, landscapers and turf managers deal with is problems in the home lawn that do not have easy, quick answers. Two of these problems that we get numerous call concerning is controlling moles and lawn diseases. The best answer for moles is trapping, but it requires persistence, practice and maybe a few minor skills. This year the number one disease many homeowners are dealing with is take-all patch. Unfortunately, take-all patch is very difficult control. It requires a combination of chemical treatments and good turf management and still control can be difficult and frustrating.

Some of the damage might be confused with the all to common brown patch or chinch bug damage from last year. If you see areas of your lawn where the stolons are being killed, pull some of the stolons up where the leaves are still alive. Look for rotten roots and dead leaves that are straw to dark gray colored. The rotten roots are the dead giveaway for take-all patch. With the take-all patch fungus, the roots will be short and rotten, leaves will stay attached to the stolons and the stolons will be dead. In Brown patch diseased lawns, the roots remain healthy, the leaves easily detach from the stolons and the stolons will normally be healthy.

Take-all patch is caused by a fungus and is a serious disease of St. Augustine, but also can cause problems on Centipede lawns as well. 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 to be one of 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. 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 watering is preferred to frequent shallow watering. Follow soil test recommendations for a balanced fertility program. Avoid over application of nitrogen fertilizer. Use slow release and sulfur-coated urea fertilizers and be sure that you follow a fertility plan based on a soil test. Even after this, you might want to still apply a smaller amount of nitrogen in you fertility plan.

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. Applications are probably best made in the fall

of the year and repeat applications on 28 day intervals.

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 and the official verdict is still out on this, if works or not in East Texas.

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