

TAKE-ALL PATCH

SCIENTIFIC JOURNAL FOR TURFGRASS DISEASES

CHARACTERISTICS

Take-All Patch is caused by the fungus, *Gaeumannomyces graminis*, a serious disease of St. Augustine grass and can also cause problems in Bermuda grass. The causal 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 to be a difficult disease to control.

SYMPTOMS

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 grass within the affected area occurs as roots and stolons become infected and the plants decline. Unlike brown patch, 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 brown patch 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 turfgrass will continue to decline.

TURF DISEASE PHOTOS



DISEASE CYCLE

The pathogen survives on infested 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 drier, the infected plants are stressed, and symptoms become more evident. The pathogen can spread over long distances when infected plants or plant debris are transported mechanically. Infected sod may serve as a source of inoculum even if it shows no immediate symptoms of the disease.

RECOMMENDATION

Begin treatment with 2 ounces of SLAP, 1 quart of Foundation and 15 pounds of Root Vigor 8-2-3 per 1000 square feet. Follow up applications should be every 30 days March through October at the reduced rates of 1/2 ounce SLAP and 8 ounces of Foundation per 1000 square feet. Root Vigor 8-2-3 should be applied every 5-6 months.



Natural Resources Group, Inc.
34284-B Road 196
Woodlake, CA 93286
info@callnrg.com
www.callnrg.com