**Centipede Decline**

**Turf Affected**

Centipedegrass

**Symptoms**

Circular dead areas appear in the spring and continue to enlarge during the summer. Grass at edges of areas may yellow, wilt, and die during stress periods.

**Management**

Maintain soil pH between 5 and 5.5 and avoid excessive rates of nitrogen (use 1 lb N or less / 1,000 sq. ft. / year) and phosphorus fertilizers. Ensure adequate potassium in summer and fall. Maintain the turf at 1 inch mowing height and apply iron to foliage if yellow. Avoid drought stress. If nematodes are causing the decline, irrigate as needed or select another type of grass.

**Time Disease Occurs**

Large Patch

**Cause:** *Rhizoctonia solani*

**Hosts:** bermudagrass, centipedegrass, St. Augustinegrass, zoysiagrass

**Symptoms:** Large patch develops on warm-season grasses in the fall and spring, as these grasses are going into or coming out of winter dormancy. The disease appears as roughly circular patches, from one foot to several yards in diameter,
that are orange, yellow, reddish-brown, or tan in color. The outer edge of the patches are often bright orange or red in color when the disease is actively developing. Individual plants tend to pull up from the turf easily, and close examination of leaf sheaths reveals the presence of lesions and significant rotting.

Factors affecting disease development: Large patch begins to develop in the fall when soil temperatures decline to 70°F. The disease continues to develop throughout the fall and spring as long as cool, wet weather persists. Symptoms usually become evident in spring as the turf greens up, but in severe cases, symptoms may become evident in the fall. Centipedegrass is by far most susceptible to large patch, followed by St. Augustinegrass and zoysiagrass. The disease occurs occasionally on bermudagrass, but this grass recovers from the damage very rapidly. High nitrogen levels in the fall and spring, excessive thatch, low mowing heights, poor soil drainage, and excessive irrigation are factors that encourage large patch development.

Control: Proper site design, construction, and turf selection are very important for large patch management. Avoid growing turf in areas surrounded by trees or in low-lying areas where water will collect. Centipedegrass is highly susceptible to large patch and should not be planted in areas prone to the disease. Avoid application of nitrogen to warm-season turfgrasses in the fall and spring when these grasses are growing slowly. Mow at the height recommended for each turf species, and cultivate as needed to control thatch and alleviate soil compaction. Fungicides are effective for large patch control, but must be applied preventatively in the fall for maximum effectiveness. In areas where large patch has been a problem, begin fungicide applications in the fall when soil temperatures decline to 70°F for several consecutive days. Repeat applications on 4 to 6 week intervals until the turf goes dormant may be necessary in severe cases. Spring applications are not necessary or highly effective.