



Turfgrass IPM Advisory

Quarterly Turfgrass Pest Update, USU Turfgrass Extension Vol. 11(2), Summer 2018

Turfgrass Integrated Pest Management

An integrative approach to the management of turfgrass insect pests, diseases and weeds is most effective. Prevention is the best strategy!

What to Watch For

It's hot and damage from pests and diseases may be more apparent than when temperatures were cooler. Be prepared for cool-season turf dormancy (yellowing) to show up as well.

Pest Alert: *Ascochyta* Leaf Blight

Ascochyta leaf blight has been identified in Salt Lake, Iron, Emery, Utah, San Pete and San Juan counties this year.

Ascochyta leaf blight is a disease that primarily effects Kentucky bluegrass, but may also occur on tall fescue and perennial ryegrass.

Conditions favoring the disease are not well understood, though it appears to be enhanced by changes in soil moisture. Frequent mowing or mowing with dull blades may exacerbate symptoms by increasing infection sites.

Symptoms

The symptoms of *Ascochyta* leaf blight may develop at any time during the growing season, but are especially apparent during hot and dry periods that may follow cooler, rainier conditions. The disease is primarily a disease of the leaves and does not effect the roots or crowns of the grass plant. The disease may resemble drought stress. However, the symptoms appear very quickly, as opposed to slowly over time.



Figure 1. *Ascochyta* fungal fruiting bodies (Photo credit: Lee Miller, University of Missouri, bugwood.org).

Sometimes, symptoms may even appear overnight. Infected leaves often have a bleached tip that dies back to 1/2 or 1/3 of the total length of the leaf. The margin between the damaged and healthy tissue is abrupt and may be slightly pinched. Other symptoms may include white banding or leaves may collapse entirely.

The disease produces fungal fruiting bodies in the diseased leaf tissue called pycnidia (Fig. 1), which occur throughout dead leaf tissue and may be viewed with a hand lens.

Management

Because damage is to the leaves, good cultural management practices will help turf recover from *Ascochyta* leaf blight over time.

Water Management

Because soil moisture plays such a large role with the disease, promoting water penetration into the soil and irrigating efficiently is key to management and recovery.

Check irrigation systems to ensure all sprinkler heads are working properly and that water is being applied as evenly over the area as possible to avoid drought stress.

Aerate annually each spring to improve water penetration into the soil, as well as to reduce any thatch buildup.



Figure 2. *Ascochyta* leaf blight on Kentucky bluegrass (Photo credit: Ned Tisserat, Colorado State University Extension).

Fertility

Follow a [balanced fertilization program](#) that avoids excessive applications of nitrogen, especially in the spring.

Mowing

Maintain grass height from 2 to 3 inches and minimize leaf wounding by maintaining sharp mower blades. Avoid mowing during wet weather and reduce mowing frequency during outbreaks. Removing clippings will not reduce disease severity, so continue to return clippings.

Chemical Control

Several fungicides are labeled for the treatment of *Ascochyta* leaf blight and can inhibit its growth. However, they can be very expensive and difficult to apply. Because of the sporadic nature of the disease, timing of fungicide applications is also difficult.

Recall that the disease effects leaves and not roots or crowns. With time and good management practices, new leaves will emerge and the area will recover.



Figure 3. *Ascochyta* leaf blight damage. Note that not all leaves are blighted (Photo credit: Ned Tisserat, Colorado State University Extension).

- Adapted from Colorado State University's Fact Sheet, *Ascochyta* Leaf Blight of Turf (2.901) by Dr. Ned Tisserat

Summer Patch/Necrotic Ring Spot Complex



Summer Patch/Necrotic Ring Spot has been diagnosed in Salt Lake, Piute, Emery, Cache, Wasatch, Davis, and Iron counties this summer.

The summer patch/necrotic ring spot complex continues to be a problem in the state. While the disease primarily infects Kentucky bluegrass, it may also be seen in annual bluegrass and fine fescue. The diseases damage the roots and crowns of the grass plants and the first symptoms are small, light green patches of turf that get larger over time. Frequently the turf will survive the infection and re-grow in the center of the patches, giving them a ring-like (“frog eye”) appearance.

Maintain the highest mowing height possible and prevent drought stress. Core aerate once annually to reduce thatch and avoid over application of N fertilizers. Also consider over-seeding or renovating affected areas with resistant varieties of Kentucky bluegrass (America, Midnight, SR2100) or other turfgrass species.

Several fungicides are labeled for treatment of the summer patch/NRS, though a commercial applicator’s license may be required. Keep in mind, also, that the effectiveness of fungicides for NRS control has been inconsistent and correct timing of application is critical. More detailed information may be found [here](#).

Upcoming Webinar Highlights USU Turf Research

On the second Tuesday of each month, USU’s Center for Water Efficient Landscaping (CWEL) presents a webinar.

On July 10th, CWEL’s own Dr. Kelly Kopp will be discussing how industry and science are joining forces to promote landscape water conservation and will highlight USU’s work in this area.

Please register [here](#) and share with others who may have interest.



Recommended Cultural Practices for Summer

Seeding/Over-seeding

In late summer, declining temperatures provide the opportunity to seed new turfgrass areas or to over-seed areas that may have been damaged over the summer. The cooler temperatures will promote germination and growth of cool season turf species such as Kentucky bluegrass, tall and fine fescues, and perennial ryegrass. An additional advantage to over-seeding at this time of year is reduced annual weed pressure. Choose pest resistant or recommended turfgrass cultivars when possible.

Fertilization

Nitrogen is of primary concern in turfgrass fertilization. In the late summer, apply 1 pound of slow-release nitrogen (N) fertilizer per one thousand square feet of lawn area. This will help the grass to recover from summer damage and any stress that may have occurred. It will also be especially helpful for areas that have suffered damage due to diseases such as summer patch or necrotic ring spot. In a slow-release form, N fertilizer will provide a consistent source of nutrients as the turf begins actively growing again.

Irrigation Maintenance

Consider performing some routine irrigation system maintenance. Over the course of the growing season, sprinkler heads may have become tilted, sunken or clogged. Do a short test run through each zone on your system and locate those heads that could use some adjustment. Also consider [evaluating or having your system evaluated](#) for uniformity of water application and to help refine your irrigation schedule.

Timely USU Extension Fact Sheets

[Northern Utah Turfgrass Management Calendar](#)

- Recommended scheduling of turfgrass management practices

[Southeast Utah Turfgrass Management Calendar](#)

- Recommended scheduling of turfgrass management practices

[Southwest Utah Turfgrass Management Calendar](#)

- Recommended scheduling of turfgrass management practices

[St. George, Area Utah Turfgrass Management Calendar](#)

- Recommended scheduling of turfgrass management practices

[Necrotic Ring Spot and Summer Patch of Turfgrass](#)

- Symptoms, diagnosis, and management

***Precautionary Statement:** All pesticides have benefits and risks, however, following the label instructions will minimize the risk and maximize the benefit. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use.

Turfgrass IPM Advisory is published seasonally by Utah State University Extension.

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Archived advisories may be found [here](#).