

# **Necrotic Ring Spot**

# **Symptoms:**

Necrotic ring spot (NRS) is the most destructive disease of Kentucky bluegrass in Colorado. The disease also damages red fescue and annual bluegrass. Necrotic ring spot is a perennial fungal disease that attacks and kills turf grass roots and blades. Recovery from a severe outbreak is slow and difficult.

NRS is active from May until October. Symptoms become apparent during the heat of summer in late July and August. Disease symptoms first appear as small, scattered, straw colored patches in the lawn. As the disease progresses, the patches merge forming rings of crater-like scars. Often tufts of green grass remain in the center, giving the lawn a frog eyed appearance.

### **Treatment:**

The key to controlling necrotic ring spot in the lawn is both an adjustment in cultural activities, as well as two fungicide treatments per year.

### Watering

Necrotic ring spot almost often occurs in lawns receiving too much moisture, however reducing your watering practices is not the answer. The goal of lawn watering is to effectively wet the soil to a depth of 6 to 8 inches - without water puddling on the soil surface.

During the growing season, we recommend one 15 minute watering in the morning, and one 15 minute watering in the evening. During the spring and fall, watering two days per week should suffice. During hot and dry summer months, watering 3 days may be necessary.



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# Treatment: (continued)

#### Mowing

Your lawn mowing height should be 2 1/2 to 3 inches. The longer grass blades will help shade the soil, keeping the roots cooler in the hotter months. A taller lawn height also conserves moisture and promotes lateral growth to thicken the turf. A sharp mower blade will also improve the general health and appearance to the lawn.

#### Core Aeration

Power core aeration is one of the most important cultural practices available for your lawn. We recommend two aerations per year - once in the spring and fall. Aeration helps control thatch, improves the soil structure, helps create growth pockets for new roots and opens the way for water and fertilizer to reach the root zone of your lawn.

#### Over-seeding

Over-seeding may be ordered with your fall aeration. Often over-seeding, with a blend of disease resistant seed, will help re-establish your lawn in damaged areas. Our mix is a combination of blue, rye and fescue grasses.

#### Fertilizer

Abundant soil fertility also encourages NRS development. Withholding some nitrogen fertilizer, while making the lawn just a bit less lush, will discourage necrotic ring spot. The secret to good NRS management is to provide a balanced fertilization regimen, which avoids peaks and valleys in nutrition. That is, apply fertilizer that slowly releases nutrients into the grass plant. Swingle offers two different fertilization programs designed for necrotic ring spot management.

## Organic based fertilizer

This fertilizer is primarily derived from organic sources including alfalfa, blood meal, cottonseed meal, urea, and ferrous sulfate. Applied five times during the season, this fertilizer provides readily available nutrients and also includes a slow release component. Biological stimulants are also included to increase microbial activity. Soil microbes break down the thatch layer into useable nutrients for the grass – it also increases the soil biodiversity.

## Time released engineered fertilizer

This fertilizer is applied once during the season - either in the spring or fall. Caliber Cote releases nutrients when the soil is moist. The slow release of nutrients helps the turf grow steadily promoting healthy root growth, while maintaining a green lawn.