Spring Dead Spot

PATHOGEN
Ophiostoma korrae and O. herpotricha

TURFGRASS AFFECTED
Bermudagrass

APPEARS WHEN
Infection incurs in the fall, symptoms appear the following spring

FAVORABLE CONDITIONS FOR DISEASE
- Any factor that reduces bermudagrass root growth makes turf more susceptible
- Poor surface or subsurface drainage
- Low mowing height
- High soil moisture

IDENTIFICATION
- Circular patches of straw-colored turf up to several feet in diameter evident after winter dormancy
- Roots at edges of patches are dark brown to black
- Turfgrass roots and rhizomes of turf are black and rotten

CULTURAL CONTROLS
- Any factor that reduces bermudagrass root growth makes turf more susceptible
- Improve drainage

WHAT PHOENIX OFFERS FOR CHEMICAL CONTROL
- Aerify at least three times annually
- Mow at recommended height
- Syringe turf when temperature is above 85 F

PHOTOS COURTESY: LANE TREDWAY, NORTH CAROLINA STATE UNIVERSITY
**Summer Patch**

**PATHOGEN**
*Magnaporthe poae*

**TURFGRASS AFFECTED**
- Bluegrasses and fine-leaf fescues
- Less damaging to annual bluegrass, creeping bentgrass

**APPEARS WHEN**
June through August

**FAVORABLE CONDITIONS FOR DISEASE**
- Daytime temperatures of 85 F and above
- High soil moisture, poor surface or subsurface drainage
- Low mowing height

**IDENTIFICATION**
- Sometimes called frogeye patch, small patches of turf 2 inches to 6 inches in diameter
- Grass blades in the patch can change to a dull reddish-brown, then tan
- Affected areas may overlap and blight large areas of turf with “frogeye” pattern

**CULTURAL CONTROLS**
- Maintain balanced fertility throughout growing season
- Improve surface and subsurface drainage
- Reduce compaction

**WHAT PHOENIX OFFERS FOR CHEMICAL CONTROL**

*Kestrel MEX*

*PHOTOS COURTESY: JOE RIMELSPACH, THE OHIO STATE UNIVERSITY*
Take-all Patch

PATHOGEN
Gaeumannomyces graminis var. avenae

TURFGRASS AFFECTED
Bentgrass

APPEARS WHEN
May – June and late fall (60 F to 75 F)

FAVORABLE CONDITIONS FOR DISEASE
- Develops rapidly on cool, wet soils with pH greater than 5.5
- Usually more severe on sandy soils

IDENTIFICATION
- Wilted to reddish brown or bronz circular patches of turf up to several feet in diameter
- Roots along margins of patches are dark brown

CULTURAL CONTROLS
- Disease is more severe under low or unbalanced fertility conditions
- Irrigate based on turf ET needs
- Fertilize in fall with ammonium sulfate
- Maintain moderate to high levels of phosphorus, potassium and minor elements according to soil tests
- Improve surface and subsurface drainage
- Avoid use of lime if pH is greater than 5.0
- Avoid heavy, frequent irrigation

WHAT PHOENIX OFFERS FOR CHEMICAL CONTROL

PHOTOS COURTESY: JOE RIMELSCHPACH, THE OHIO STATE UNIVERSITY