



Overview

Pythium Blight is caused by several *Pythium* species, but most commonly *Pythium aphanidermatum*. *Pythium* Blight is a foliar disease that can infect many turfgrass species. The main concern with *Pythium* Blight is how quickly it can spread and devastate turfgrass. Blight infects crowns and leaves and can eventually kill large stands of turf if action is not taken.

Environmental Conditions Favoring Disease Development

This pathogen is active in the summer months during extended periods of hot, humid conditions when nighttime temperatures are above 65°F and daytime temperatures are above 85°F. Blighted turf can also appear in drainage patterns or along equipment routes.

Symptoms and Identification

In higher cut turf, *Pythium* Blight can appear in irregularly shaped patterns over large areas. In shorter cut turf patches are smaller and more circular often appearing discolored, though small patches can spread very quickly. Leaves can look water-soaked and feel oily when leaves are rubbed between fingers (Figure 1). Involving a qualified disease

diagnostic lab would be recommended for accurate diagnosis.

Management

Cultural

Pythium is dependent on prolonged leaf wetness and moisture for infection to occur. The primary focus of cultural management for *Pythium* Blight involves techniques to maintain proper soil moisture and turfgrass health. Alleviate soil compaction and provide good drainage. Equally important in protecting turfgrass is irrigating with sufficient water as well as irrigating at the right time of day. Irrigating in the early morning hours is recommended as this allows the turf to dry out by late morning.

Chemical

Pythium Blight is best managed by using a preventative fungicide application program. Applications should be dispersed in anticipation of environmental conditions that are conducive for disease development. In cool-season turf, the pathogen can be active during extended periods of hot, humid conditions when nighttime temperatures are above 65°F and daytime temperatures are above 85°F. In warm-season turf, the

pathogen can be active during extended periods of humid and cloudy conditions when nighttime temperatures are above 50°F.

Fame® SC Fungicide and Serata™ Fungicide can be used in rotation to control *Pythium* Blight. Fame SC contains fluoxastrobin, a strobilurin fungicide with activity against *Pythium* diseases. Serata contains Picarbutrazox, a brand-new mode of action for *Pythium* disease control.

References

2017. Smiley RW, Dernoeden PH, Clarke BB. Compendium of Turfgrass Diseases, Third Edition. American Phytopathological Society. St. Paul, MN. Pp. 71-77.
2011. Latin, R. A Practical Guide to Turfgrass Fungicides. The American Phytopathological Society. St. Paul, MN. pp. 204-206.
2019. J. Kerns and L. Butler. *Pythium* Blight in Turf. www.TurfFiles.ncsu.edu.

Photo(s) Courtesy

Figure 1. Kansas State University, Megan Kennelly



Figure 1 Matted, greasy turf