



Pythium Root Dysfunction

› Causal Agent: *Pythium* spp.

› Susceptible Turfgrass

Cool and warm season grasses.

› Symptoms

- Affected turf may appear thin, off colour and slow growing.
- This may occur in small patches or as a general decline and loss of large turfgrass area.
- Under cool, wet conditions symptoms may first appear as small, diffuse yellow patches of turf 4 to 7cm in diameter.
- As temperatures rise, large areas of turf may wilt, turn brown and die.
- In severely infected plants, crowns may appear water-soaked and root systems are greatly reduced in volume and vigour.
- Roots and crown may be extensively discoloured.
- No foliar mycelium is evident during infection.

› Conditions Favouring Disease

- Hot days (30-35°C), humid or rainy weather when night temperatures are warm (above 20°C).
- Relative humidity exceeding 90% for at least 14 hours and a minimum temperature not falling below 20°C.
- Pythium Root Dysfunction occurs in areas with high soil moisture, poor drainage and low light.
- Areas with low mowing height and excessive wear.

› Management Tips

- Water early in the day.
- Water infrequently and deeply.
- Removal of excessive thatch.
- Do not over fertiliser turf with nitrogen.
- Avoid mowing during moist, hot weather.
- Promote good light penetration into the turf canopy.
- Increase air circulation to speed the drying process of the turf.



› General Comments

- Pythium Root Dysfunction is common on highly maintained turf, such as golf course greens.
- Although symptoms of Pythium Root Dysfunction are typically non-distinctive, this disease can appear as yellow, irregularly shaped patches.

› Distribution

Found in all states of Australia.

