

Dollar Spot

Introduction

Dollar spot is a fungal disease that impacts upon both the visual appearance and surface quality of turf. It is of particular concern in situations where high surface quality is paramount e.g. creeping bent grass on golf courses. A broad range of turf species are potential hosts for this disease with susceptible species ranging from Bent grass (*Agrostis*) through to hybrid couches (*Cynodon*), Kikuyu (*Pennisetum*) and Zoysia spp.



Whilst we note here it is particularly prevalent on intensively managed turf, it is not limited to these situations. Home lawns, parks and other areas of amenity are also sites where this disease can be found. Dollar spot primarily affects leaf tissues but has been shown to have indirect effects on root structure and growth. The disease is found Australia wide.

Biology

The primary causal agent of dollar spot is *Sclerotinia homeocarpa*. The disease overwinters as sclerotia and as dormant mycelium from the lesions of previous infections. This then acts as the inoculum source for new infections. The onset of day time temperatures ranging between 15 to 27°C encourages mycelial activity with new infections occurring when moved by water and mechanical means.

Conditions favouring disease expression

The most conducive conditions for disease occur in spring and late summer / autumn however the problem can be present right throughout summer as well. Day time temperatures between 21 and 28 °C are optimal, with overnight conditions that produce dews enhancing the likelihood of infection. Relative humidity being high (>85%) significantly increases the likelihood of infection.

Other factors implicated in disease prevalence are deficiencies of key macro elements nitrogen and potassium, excessive thatch accumulation, dry soils and poor irrigation practices.

Visual symptoms

On finer turf the 'spots' appear reasonably well defined in the early stages, 25-60mm in diameter, slightly sunken and tan in colour. Many spots may be found in close proximity to each other. On close inspection the lesions may become paler over time and cover the full width of leaf blades.



On coarser grasses with larger leaf widths, the 'spot' may be quite diffuse and poorly defined with close inspection revealing only part of the leaves being affected. A key feature is a constriction point or girdling (hourglass) often found on affected leaves.

Distribution

Found in all states of Australia, particularly coastal areas.