



# Rusts

## › Causal Agent: *Puccinia* & *Uromyces* species

## › Susceptible Turfgrass

All cool season turfgrass species.

## › Symptoms

- Early symptoms of Rust diseases appear as light-yellow flecks on leaves or stems.
- The flecks enlarge, elongate, and turn yellow in colour.
- The yellowed area of the infected spots enlarge and elongate parallel to the leaf or stem axis as the infection matures.
- The leaf blade turns yellow starting at the tip and progressing to the base.
- The infected areas rise above the epidermis and then rupture, releasing spores that are yellowish-orange to reddish-brown in colour.
- A severe disease infection can cause the shoot to turn yellowish to reddish-brown in colour and slow in growth.
- As individual plants die, the turf thins.

## › Conditions Favouring Disease

- Rust diseases typically occur in early spring through mid-summer.
- Rusts favour moist, low-light areas.
- Leaf wetness is required for fungal growth.
- Depending on the species, rusts favour temperatures between 18°C and 30°C.
- Severe Rust infections occur on slow-growing turfgrass particularly those with low nitrogen levels and/or plant water stress.

## › Management Tips

- Convert to a turfgrass seed blend that is resistant to rust diseases found in the area.
- Apply adequate levels of nitrogen and other nutrients.
- Remove clippings from turf.
- Reduce shade and improve air circulation.
- Regulate irrigation to minimise the amount of time moisture remains on the leaf surface.
- Water deeply and infrequently.



## › General Comments

Grasses growing under stressful environmental conditions are most easily parasitised by the Rust fungi.

## › Distribution

New South Wales, Australia Capital Territory, Victoria, South Australia and Tasmania.

NO CHEMICAL CONTROL OPTIONS  
CURRENTLY REGISTERED