

Brown blight and crown rust

Brown blight

- Summary** Brown blight (BB) is caused by the fungus *Drechslera siccans*. It is most common in spring and autumn but damage can occur all year.
- Species affected** Ryegrass, fescue, cocksfoot.
- Identification** BB causes leaf lesions of various shapes and sizes. These consist of small, oval, brown spots, the centres of which become light brown to white as they enlarge. Longer, dark brown streaks also appear. Infected leaves turn yellow and die from the tips.
- Spread** BB survives on dead and diseased plant tissue. It is spread by wind, rain, equipment or animals. In moist conditions, spores germinate, causing new infections.
- Prevention and management** Timely cutting and grazing minimise damage from BB. Fungicides can minimise damage but profitability is questionable.



Brown blight on ryegrass leaves.

Crown rust

- Summary** Crown rust (CR) occurs throughout NZ, caused by the fungus *Puccinia coronata*, mainly in warm, moist conditions from early summer to late autumn. It depresses pasture growth and palatability.
- Species affected** Ryegrass, tall fescue.
- Identification** CR produces bright orange powdery spots (or pustules) on leaves.
- Spread** The pustules produce orange spores that are carried by wind or rain to other leaves. These germinate to produce new pustules.
- Prevention and management** Use more resistant varieties where CR occurs.



Crown rust on a ryegrass leaf.

Rust resistance	Variety
Very high	<i>Bealey, Alto</i>
High	<i>Bronsyn</i>
Moderate	<i>Arrow</i>
Poor	<i>Nui</i>

To avoid rust, graze pastures at the correct time; don't let them get too long. Application of N fertiliser helps prevent rust.

If rust is present, hard graze to remove infected pasture and apply N if possible. New growth should show little rust. Fungicides are uneconomic.