Clover rust and sooty blotch

Rust

Summary

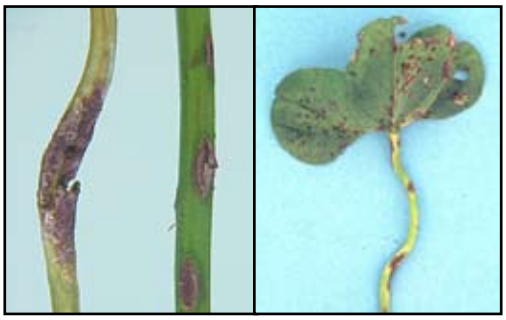
Rust is caused by the fungus *Uromyces trifolii-repens* and is found occasionally on clover throughout NZ. It can cause loss of forage quality.

Identification

The rust pathogen produces brick-red pustules on the underside of leaves and on the petioles. Pustules on petioles cause characteristic twisting.

Prevention and management

Graze infected plants.



Rust on clover petioles (left) & leaf. (photo: MAF, Lincoln)

Sooty blotch

Summary

Sooty blotch (SB) is caused by the fungus *Cymadothea trifolii*. It can appear in early summer, but is most common in late summer and early autumn.

Identification

SB causes stunting and partial defoliation. Raised dark green patches appear on the upper surfaces of leaves. On the underside of these patches are black spots which produce numerous dark spores. Infected leaves initially look healthy, but then become dry, discoloured and die.

Sooty blotch on the underside of a clover leaf.

Spread

During summer, spores of SB are spread via wind and water. In spring infection occurs from sexual spores released at the end of winter from fruiting bodies in the trash.

Prevention and management

Diseased plants have increased levels of coumestans (flavonoid oestrogens) that can cause reproductive disorders in grazing animals. Timely grazing or cutting can minimise damage from this disease.