NZ Forage Systems Fact Sheet

Gland clover

Key Points

- Gland clover is an annual legume that has not performed as well as other annual clovers in trials. Use with caution.
- Very early maturing - winter and early spring growth.
- Under New Zealand grazing management is unlikely to set sufficient seed to re-establish in following years.
- Intolerant of cold winters.
- Feed quality declines rapidly after flowering.

Gland clover - *Trifolium glanduliferum*

Originally from the Mediterranean, gland clover is relatively new to New Zealand and little work has been done on it under local conditions. Widely used in temperate Australia and USA where annual rainfall is below 500 mm.

Gland clover has not been a successful component of long term pastures in New Zealand. It appears best suited as a late winter - early spring forage. When sown in North Canterbury and East Coast dryland it is very early maturing and does not recover well from grazing.

In the Hawke's Bay it has consistently been the poorest performer when compared with other annual clovers. In the Max Clover trial in North Canterbury, gland clover produced the least dry matter of the annual legumes trialled.

Strengths

- Adaptable to a wide range of soil types.
- Suited to low spring/summer rainfall environments as very early maturing.
- Winter active and can tolerate both mild frosts and moderate waterlogging.
- Suited for hay production if not grazed.
- High level of hard seed.
- Compatible with other annual legumes in mixtures.

Limitations

- Suited only to low rainfall and sites which dry out early.
- Very early flowering.
- Very short growing season compared to other annual legumes.
- Recovers poorly from grazing.
- Susceptible to competition from more vigorous species during establishment.
- Extremely hard seeded.

Establishment

Gland clover is adapted to well drained to mildly waterlogged soils and pH levels from 4.5 to 8.0. Not suited to poor infertile soils. Sow as soon as autumn soil moisture is adequate and at 5 - 7 kg/ha for single species or 1-2 kg/ha in mixtures with other pasture legumes. Sow no more than 0.5 cm deep. If oversown / broadcast either roll or tread seed as soon as sown. If gland clover has not been sown in the paddock before ensure that seed is inoculated with the correct *rhizobia* strain (Group C). Sow with 100 to 150 kg/ha superphosphate, or potassic super.

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Weed and pest control

Good weed control is necessary prior to sowing as gland clover is susceptible to competition during establishment. Some farmers are achieving good post emergence control of a wide range of weeds and grasses by using 130 g ai/ha *haloxyyfop-P* (Crest/Galant) plus 1440g ai/ha *bentazone* (Troy/Basagran) all in 125 litres water /ha with a suitable wetter. Gland clover need to be at 3-5 leaf stage before spraying. If insects are an issue then 500 g ai/ha *chlorpyrifos* (Lorsban) should be added to the mix. Gland clover is resistant to red-legged earth mites, bluegreen aphids and cowpea aphids. Moderately susceptible to spotted alfalfa aphid and lucerne flea.

Management and animal production

Poor regrowth from grazing has been reported from multiple sites in New Zealand. Unsuited to set stocking, hard grazing will remove developing stems. Best suited to very early silage or hay. Gland clover produces high quality forage in terms of crude protein, dry matter digestibility, and ME. As with many temperate legumes, gland cover is likely to cause bloat in cattle. Contains low levels of coumarins which can be converted to dicoumarol in mouldy hay. Mouldy gland clover hay is a risk to livestock.

Cultivars

Cultivar	Maturity	Notes
Prima	Very early	Only cultivar available in Australia and New Zealand.

All seed is imported from Australia and seed supplies can be tight. Order your seed early.