Maximising white clover

Pasture

Grow & Utilise

White clover is a key element of our farm systems thanks to its high feed value, warm season growth and natural ability to fix nitrogen.

It is more difficult to establish in a pasture than grass, however. Take care with soil fertility, sowing technique and cultivar choice. Clover content is also greatly influenced by on-going pasture management.

Soil fertility

Correct soil fertility is a must. Clover is sensitive to soil pH, growing best at 5.8-6.2. Ensure adequate levels of phosphate, sulphur and molybdenum. If lack of clover is on-going, test the herbage of clover plants present to help find answers.

Establishment

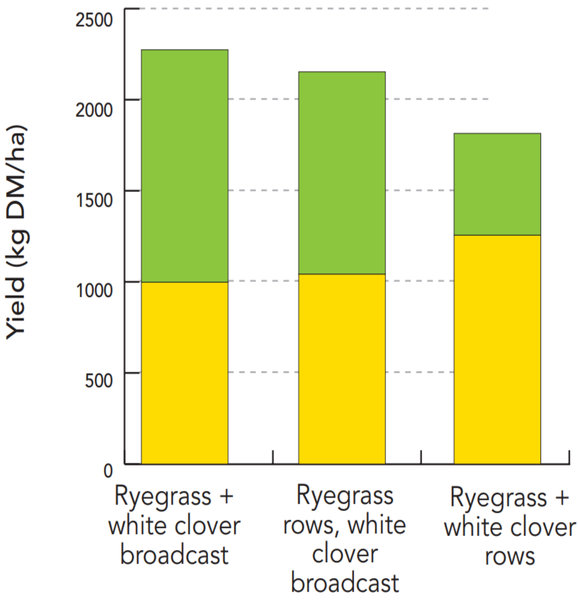
Careful establishment helps white clover thrive.

It has a small seed, requires shallow sowing (<5 mm), and is often sown too deep. Drilling ryegrass and clover in the same row through a coulter drill means competition from the faster establishing ryegrass suppresses clover (see graph below). Where possible don't sow ryegrass and clover together in rows. If cultivating, roller drills are ideal. If your drill (or your contractor's) has a separate small seed box, one option is to order your clover seed separately, sow it through this, then roll.

Sowing method & clover

In this trial, white clover and ryegrass were sown using three widely used methods. Nine months after sowing, broadcasting white clover seed gave on average 20% more clover in the pasture than drilling with ryegrass in a row.

White clover and ryegrass DM yields from differnt sowing methods



From Canterbury trial sown 2 April. Plots were sown with 20 kg/ha diploid perennial ryegrass and 4 kg/ha white clover at 10-15 mm depth (if applicable). Pasture yield and composition were measured in January.

Maintaining good clover

Once established, white clover will perform best under rotational grazing, so it is frequently exposed to sunlight, not shaded out under high grass covers. White clover is also preferentially grazed by stock, so continuous set-stocking often leads to over grazing and reduced clover levels.

Kotuku, Ruru & Apex have many stolen growing points. Each point is a potential new plant.

Cultivar choice

We recommend two main clover mixes, one for dairy and cattle grazing, the other for sheep and deer. These both contain cultivars of two leaf sizes, for greater adaptability to climate, topography and management.

Kotuku/Ruru - Dairy/beef

This is a high yielding combination, performing well across a range of conditions. Kotuku, with its large leaf, fast establishment, and high summer and autumn

growth, is complemented by *Ruru*, which has a medium leaf, high stolon density, early growth and persistence. Refer to *Kotuku* and *Ruru*).

Ruru/Apex - Sheep/Deer

This combination has smaller leaves, and better tolerates close grazing while still providing very good warm season production. *Ruru* with its medium leaf is complemented by *Apex* with a small leaf. Both have shown good tolerance to summer dry conditions or under clover root weevil attack. (See *Apex*)