

Oversowing annual clovers

OMARAMA STATION - OMARAMA

The annual clover trial at Richard and Annabelle Subtil's Omarama Station investigated whether annual clovers can establish through oversowing on hill country, and which species had the most potential. The objective was to increase the clover content of pasture on sunny and shady slopes by oversowing / topdressing.

This research was undertaken as part of The New Zealand Merino Company (NZM) and Lincoln University's high country forage project. The overall goal of this work is to improve productivity and sustainability in high country grazing systems.

Establishing annual clovers at Omarama Station

In early March 2012, the following seed mixture was flown onto two different blocks (one shady and one sunny). Sulphur super 20 was applied with the seed at 350 kilograms per hectare to address low sulphur levels on both blocks.

- 'Seaton Park' Subterranean clover (four kilograms per hectare)
- 'Bolta' balansa clover (three kilograms per hectare)
- 'Frontier' early flowering balansa clover (three kilograms per hectare)
- 'Greenly' cocksfoot (two kilograms per hectare)

By May 2012 seedlings from the oversown seed were common on the south east facing slopes, particularly where the hill surface had been disturbed. Balansa clover had the largest population of seedlings (up to 50 seedlings per square metre in places), which justified closing the block in late October / early November to get maximum reseeding (see figure 1 below).



Figure 1: Balansa clover in flower on east facing slope at Omarama Station on 8 November 2012.



Figure 2: Re-establishing balansa clover seedling in the over-sown slope at Omarama Station 9 May 2013.

The block was spelled until balansa clover seed had matured, followed by intensive summer grazing to ensure that balansa clover seed had optimum conditions to germinate and establish in the autumn. In May 2013, a year on from the oversowing trial, it was found that balansa clover seedlings were re-establishing on the hill sides (see figure 2 above).