



Technical Bulletin presented by ALOSCA Technologies Pty Ltd

Summer Sowing Pastures

A new pasture establishment technique designed to use nature to soften hard seed and pods of some pasture varieties

Content produced with the permission of Dr Brad Nutt, Dr Angelo Loi and Dr Neil Ballard

Summer sowing pasture is a new technique designed to use nature to soften hard seed and pods of some pasture varieties. This method has been devised by Dr Brad Nutt and Dr Angelo Loi from DPIRD Pasture Division. This means that pasture sowing can take place in January/February at a time when there is less pressure compared to the normal sowing window. It can also be used as an opportunity to prepare seeding equipment, again at a time that is less stressful to the operator.

Paddock selection can be left until after harvest but care should be taken not to sow paddocks treated with sulfonyl- urea herbicides Glean, Logran, Ally (Group B) or Lontrel (Group I) the previous season. Some stubble reduction may be necessary to prevent too much surface shading which will reduce the surface temperature and reduce the softening.

Soil types will influence variety selection. Serradella is best suited to sandy loams, gravels and deep sands, Bartolo bladder clover to good loams and clays that aren't susceptible to water logging.

Sowing pod of Margurita, Frano₂O™ hard seeded French serradella pod, Avila yellow serradella pod, unscarified Bartolo bladder clover seed, in Jan/Feb enables the natural softening processes of darkness, time and ground temperature fluctuations (daytime 60 degrees, night time 15 degrees) to have the seed ready to germinate from April onwards. This enables the pasture to germinate at the same time as other pasture components when the season breaks and give the new pasture species an even opportunity to compete. This will then maximize growing opportunities during the warmer, early part of the season and enable the plants to be better established prior to the colder weather in mid- winter. Cold conditions slow growth and is a major inhibiting factor for pasture established after the break in a more conventional fashion.

It is important to give it sufficient time to soften, hence the early sowing time. Sowing later than February will result in a smaller percentage of the seed to soften and you will have a less than optimal pasture establishment. Unseasonal rain that causes false breaks and high germination of sub clover will only germinate the small natural levels of soft seed in the recommended species (ranging from 1% to 10% depending on species) so will not impact on the pasture establishment. In contrast to dry sowing closer to the break, which has been practiced for decades, with Summer Sowing you can use unprocessed seed (header sample) without any extra expense with seed and pods that you have produced yourself, thereby making establishment significantly cheaper than other methods.

Inoculation with Nitrogen fixing rhizobia is an important part of the process. Alosca dry granulated inoculum is recommended as it will

not be affected by the autumn ground temperatures and lack of moisture before the seasonal break. It is important to match the pasture species with the correct strain of rhizobia. Serradella with Group GS and the clovers with Group C should be used at 10 kg/ha and placed as close as possible to the seed.

Sowing depth should 10 mm. It is important for seed and pods to be covered and in darkness, but not to a depth that will inhibit germination. It is equally important that the seed is covered to prevent ants and birds removing the seed. Don't forget that some soil movement into the sowing furrow may occur post sowing.

Stocking rate is the main driver of profit and plant density is the main driver of stocking rate.

Sowing rates vary depending on the species. Hard seeded French serradella, Margurita, Frano₂O™ should be sown at 20 to 25 kg/ha, Avila yellow serradella at 25 to 35 kg/ha, Bartolo bladder clover at 15 to 20 kg/ha, When producing your own seed higher rates can easily be used, which will result in better competition with undesirable weed species as well higher dry matter production.



Above, summer sown on the right, more feed when you need it and more Nitrogen fixed for the season.

Insect control is important and as with all new crops, insect populations need to be monitored and controlled when necessary. To maintain a high legume content, grasses and broadleaf weed control will be an important part of the management. Care should be taken not to use insecticides and herbicides that damage the growth or seed setting capacity of individual cultivars.

Acknowledgements:



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