

Sowing pastures by direct drilling in South West Victoria

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Sowing pastures by direct drilling has been widely recommended in Victoria for many years, but because of inconsistent results very few farmers have adopted it. The application of new technology, outlined below, has produced more reliable and consistent results.

- Split applications of Sprayseed². This gives an excellent kill of all annual weeds without soil disturbance. This overcomes the problem of further germinations of weeds being encouraged. Weed competition is a major reason for poor pasture establishment when sowing by conventional methods.
- Use an inverted T soil opener (also known as a Baker point). There is minimal disturbance of the surface soil during sowing and it is claimed that the seed is consistently placed in a better environment for germination and establishment than with any other soil opener (1).

The recommended program for sowing pastures by direct drilling in south west Victoria is:

- Bare the paddock by heavy grazing, cutting for hay or burning, by early March
- After the seasonal break, allow 3-6 weeks for a complete germination of annual plants.
- Spray Sprayseed² twice, 7 to 10 days apart, both at 1.0 l/ha. Dicamba (0.2 l/ha) and 2,4-D Amine (0.2 l/ha) are included in the first spray to improve the kill of clover seedlings. The program assumes good conditions for spraying and the pasture consists mainly of annual plants (capeweed, barley and silver grasses, subterranean clover).
- Sow any time after the second spraying using a drill fitted with inverted T points, followed by light covering harrows.

Establishment counts of Trikkala subterranean clover, 6-8 weeks after sowing, have been used to measure the success of pasture sowings. On three experimental areas and 16 demonstration areas sown in autumn 1985 and 1986 the establishment was 4.7 ± 0.5 seedlings/m²/kg seed sown. On 44 farm paddocks sown by conventional methods in autumn 1985, the results were 3.7 ± 0.2 seedlings/mL/kg seed sown. Results with direct drilling are expected to improve as more experience is gained with the technique.

The technique is particularly appropriate for introducing new subterranean clover cultivars into existing pastures and where perennial grasses with less robust seedlings than those of perennial ryegrass are being sown.

Farmers who have followed the above program have, without exception, obtained far better results than they would have expected using conventional methods.

Sowing pastures by direct drilling after winter cropping has been most challenging because several difficult to control weeds persist (e.g. sorrel, toadrush). Slugs may cause a serious loss of seedlings in some situations but can be dealt with effectively by baiting. Spraytopping pastures in the spring prior to sowing, to prevent seed set by annual grasses, appears likely to reduce the weed burden to be dealt with before sowing.

1. Baker, C.J. 1986 25th Ann. Conf. Grasslands Soc. Vic. 32-40.