

Hard-Seeded French Serradella Demonstration

Aim: Assess the establishment of two new hard-seeded French serradellas, Erica and Margurita, in the medium rainfall zone using the under-sowing technique.:

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Company: Liebe Group

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Location: West Buntine, MTS



Background: Erica and Margarita are hard seeded French serradellas which can persist through cropping rotations. The establishment costs of pastures can be significant, however with the decreasing profitability of many pulse break crops, new techniques for establishing legume based pastures need to be explored. In 2003 hard-seeded serradella pod was mixed with wheat seed and sown with the wheat crop. Due to the high level of initial hard seed there was very little germination of serradella in 2003. During 2003-2004 summer the hard seed of the serradella broke down and allowed a good establishment in the 2004 growing season.

Trial Details:

Plot size and replication	2 replicates, 100m x 30m
Soil type	Sandplain
Sowing date	Serradella was sown with the wheat in 2003
Conditions at sowing	Good soil moisture
Machinery	Knife points press wheels
Seeding rate	50 kg/ha of Serradella pod (seconds).
Fertiliser	Non in 2004
Herbicides and Insecticides	45 g/ha of Raptor
Paddock History	2003 = Wheat, 2002 = Wheat, 2001= Lupins

Results:

Both Erica and Margurita germinated exceptionally well this season. Dry matter mean production in October was approximately 4.3 t/ha. Dry matter production was slightly lower than the Cadiz sown into the same paddock this season, probably due to a lower seedling density.

Summary:

- Under sowing Hard-Seeded Serradella seems to be an economical and sustainable way of establishing pastures the year after a wheat crop, particularly if pods are produced in the farm.
- Sowing depth had no significant effect on germination or plant density, however it is recommended not to bury too deep pods of serradella (max 2-3cm) to avoid seedling losses.
- Weed control in the plots was very poor, this could have been a result of no use of wetter with the application of Raptor.

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