



NSW DEPARTMENT OF
PRIMARY INDUSTRIES

Establishing pastures - Readers' Note

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<http://www.dpi.nsw.gov.au/agriculture/livestock/dairy-cattle/feed/publications/establishing-pastures>

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Inoculation of legumes

Inoculation of legumes is essential. Inoculation of legume seed is the application of nitrogenproducing *Rhizobium* bacteria (rhizobia) to the seed to ensure the production of nitrogen in nodules on the plant roots. Seed can be bought already inoculated, or can be inoculated on-farm.

With normal inoculation, sow seed as soon as possible or within 5 days. See Agfact P2.2.7, *Inoculating and Pelleting Pasture Legume Seeds*, for details.

Pre-sale inoculation

Many produce merchants will inoculate seed before purchase. Two companies also offer pretreated seed with extended shelf-life:

N•Dure (Wrightson Seed Group of Companies): Rhizobium shelf-life is extended from 3–5 days to 12 weeks. Seed has a lime-based coating and molybdenum is included. Seed can be sown at the same rate as unimproved raw seed.

N•Dure Plus (Wrightson Seed Group of Companies): Rhizobium shelf-life is extended from 3–5 days to 12 weeks. This treatment protects seedlings against red-legged earth mite attack for 4–6 weeks after sowing. The seed must be covered by

soil, and the pasture cannot be cut or grazed within 6 weeks of the sowing date.

AgricOTE is a patented process of pre-inoculating seed from the Heritage Seeds company. The rhizobia remain viable in the AgricOTE seed coating for at least 4 weeks after the seed has been coated. The AgricOTE seed has the correct rhizobial strain, major and minor plant nutrients and Apron® fungicide (where registered for use) to protect young seedlings from damping-off caused by *Pythium* and *Phytophthora*.

Molybdenum trioxide

Where necessary for acidic soils, molybdenum trioxide can be added when you are inoculating. Work out a rate that applies 100 g/ha. Adding molybdenum trioxide guarantees that the young seedlings have molybdenum, which is important for nodulation of legume roots and subsequent nitrogen production.

Do not use sodium molybdate to coat seeds as it kills rhizobia.

Further information

Agfact P2.2.7, *Inoculating and Pelleting Pasture Legume Seeds*

