

Safety Directions:

- Avoid contact with eyes.
- Do not inhale dust.
- See MSDS for additional information.

Peat Slurry/Adhesive Preparation

StickA adhesive is best prepared the day or evening prior to mixing with the peat inoculant to allow it to cool sufficiently. High temperatures may cause decreased rhizobia numbers.

Where possible use rainwater only for the inoculation process.

To Prepare StickA Solution for Seed Inoculation And Lime Pelleting:

1. Mix 100g StickA (for a solution of 10% final concentration of StickA™) into 200mL of near boiling water; >70°C.
2. Stir vigorously until StickA powder is completely dispersed, the use of a stirrer attached to an electric drill is very effective for this process.
3. Slowly add 800mL of cold water while continuing to stir vigorously until an even gel is produced.
4. Allow the mixture to cool (preferably overnight) before adding inoculum.
5. Add Inoculum to cooled StickA solution and mix well.
6. Once mixed, allow product to stand for a further 15 to 20 minutes stirring occasionally to ensure all lumps are dispersed and an even consistency is achieved.

Seed Inoculation (Using StickA Solution Described in Steps 1 – 5)

7. Inoculate seed in a rotary mixer or similar vessel and keep seed moving to ensure all seeds are covered in inoculant.
8. Pour in the correct volume of peat slurry for the amount of seed to be treated.
9. Peat-inoculated seed should be drilled into moist soil as soon as possible after inoculating, as a delay in sowing leads to increased death rates of the rhizobia. Seed within 24 hours and preferably within 5 hours.

Lime Pelleting (Using StickA Solution Described in Steps 1 – 5)

10. Using a slow rotary mixer add seed then pour in peat slurry to the correct weight of seed.
11. Mix until all seeds have come into contact with the slurry (1-2 minutes).
12. While rotating the seed add in sufficient lime (milled limestone) to absorb the slurry wetness without allowing too much lime to accumulate which can cause seed flow issues in some seeding systems. *Do not use builder's lime - quicklime.*
13. Mix for 1–3 minutes.
14. Allow pelleted seed to dry in a cool area out of direct sunlight.
15. Lime pelleted seed can be stored for up to 7 days in cool conditions away from sunlight. Refrigeration is recommended, do not freeze.
16. Avoid storing and/or seeding in warm and/or low humidity conditions.

Recommended inoculation rates:

Materials required for 50 kg of seed or pod			
	Peat Inoculant	StickA - 10% solution (L)	Lime (kg)
Small seed	500	2	4
Medium seed	250	2	4
Biserrula & Sulla seed	1250	2	4
Serradella Pod*	250	6 litres @ 3.3%	-
* No lime to be applied to serradella seed but clay or gypsum can be applied.			

Likely causes of poor quality lime pellets include:

- Powdery, soft pellets indicate either too much lime or uneven mixing.
- Pasty-looking pellets with the seed surface exposed indicates too much adhesive solution. Add more lime.
- Small seed clumps may be caused by excessive adhesive that may not break down after adding lime. Minimise this by rubbing the clumps against the side of the revolving drum.
- Hard, glossy, smooth pellets indicate too little lime or too much mixing after adding lime.



Three different batches of lime pelleted clover seed after being inoculated by Group C peat-slurry mix. The seeds on the left (powdery, soft pellets) display either too much lime or uneven mixing, while the seeds on the right (hard, glossy, smooth pellets) show too little lime or too much mixing after adding lime. The seeds situated in the centre indicate an even amount of mixing and lime addition.

Table 1 Seed size groupings of some common pasture species, the required inoculant group and the maximum amount of seed to be treated by 250 g inoculant packet

Inoculant Group	Common Name	Scientific Name	Seed Size	Maximum weight of seed to be treated
AL	Lucerne	<i>Medicago sativa</i>	Small	25 kg *
	Strand medic	<i>M. littoralis</i>	Small	25 kg
AM	Burr medic	<i>M. polymorpha</i>	Medium	50 kg
	Barrel medic	<i>M. truncatula</i>	Medium	50 kg
Bis	Biserrula	<i>Biserrula pelecinus</i>	Small	10 kg *
B	White clover	<i>Trifolium repens</i>	Small	25 kg
	Strawberry clover	<i>T. fragiferum</i>	Small	25 kg
C	Balansa clover	<i>T. michelianum</i>	Small	25 kg
	Persian clover	<i>T. resupinatum</i>	Small	25 kg
	Gland clover	<i>T. glanduliferum</i>	Small	25 kg
	Arrowleaf clover	<i>T. vesiculosum</i>	Small	25 kg
	Subterranean clover	<i>T. subterraneum</i>	Medium	50 kg
	Rose clover	<i>T. hirtum</i>	Medium	50 kg
	Crimson clover	<i>T. incarnatum</i>	Medium	50 kg
	Bladder clover	<i>T. spumosum</i>	Medium	50 kg
S	French serradella seed	<i>Ornithopus sativus</i>	Medium	50 kg
	Yellow serradella seed	<i>O. compressus</i>	Medium	50 kg
Sulla	Sulla	<i>Hedysarum coronarium</i>	Medium	10 kg *

* Pasture legume requires higher inoculation rates because of either small seed size, poor survival of rhizobia during inoculation or sensitivity of the symbiosis to low pH soils