

Tried and Trusted
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SIL-LAC[®]

extra
Silage & Hay Inoculant

First Choice for
High Moisture Hay

Innovators in Agricultural Technology





Tried and Trusted, Australian developed and made Hay Inoculant delivers fresh growing, fast acting bacteria to your Hay

When you need a reliable and fast acting inoculant for your high moisture hay, your first choice for reducing the likelihood of mould and creating a stable temperature in high moisture hay is Si-Lac® Extra.

SI-LAC EXTRA BENEFITS FOR HAY:

- Make hay with moisture up to 25%.
- Cost effective, gives great value for money.
- Reduces growth of yeasts and moulds by modifying the environment in the hay bale rendering it unsuitable for growth of moulds.
- Reduces heating through reducing pH and mould growth.
- Helps to maintain quality by retaining leaf.
- Enables earlier baling - helps beat the weather risk.
- Greener hay through faster curing and less bleaching.
- Helps to increase bale weight.
- Fresh growing bacteria accelerate the process, speeding pH reduction and consuming oxygen.
- Contains three bacteria: Lactobacillus plantarum and E. faecium for fast action, and Lactobacillus buchneri for cooling.
- Increases in strength once mixed.
- Vacuum sealed packs maximize viability of bacteria.
- Does not require continuous refrigeration - store at 20 - 24°C or below.
- Long tank mix life: 5 - 14 days.
- Will not foul tanks and nozzles - can pass 50 mesh screens.
- Suitable for use with all crops.
- Use with small square bales, large squares, and round bales.

TRIED AND TRUSTED

Widely used by many farmers and hay contractors, Si-Lac Extra is sold by leading rural retailers making it Australia's leading bacterial hay inoculant. Robust and reliable, Si-Lac Extra gives hay makers "peace of mind" by enabling baling up to 25% total moisture. Bale ahead of the rain, or go early to achieve higher quality.



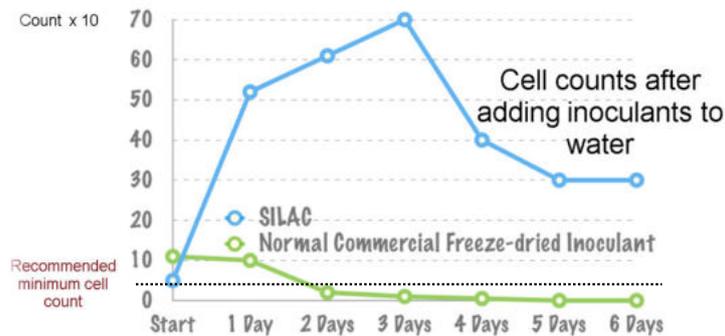
AUSTRALIAN DEVELOPED, EXCEPTIONAL PERFORMANCE

Si-Lac Extra contains Australian strains of *Lactobacillus plantarum*, *Enterococcus faecium* and *Lactobacillus buchneri* for exceptional performance under our harsh Australian conditions. Locally developed and manufactured, Si-Lac Extra is packed in vacuum sealed packs that ensure maximum viability.

Lactobacillus buchneri, has a two fold purpose in high moisture hay making. By consuming oxygen and converting it to hydrogen peroxide (1) both within the hay bale and on the peripheries of bales, the conditions for *Enterococcus faecium* and *Lactobacillus plantarum* are enhanced, and spoilage bacteria inhibited.

E. faecium has the added benefit that it also consumes oxygen during the early stages, converting it to hydrogen peroxide, further eliminating or inhibiting aerobic bacteria. (1)

This significantly reduces heating and spoilage losses.



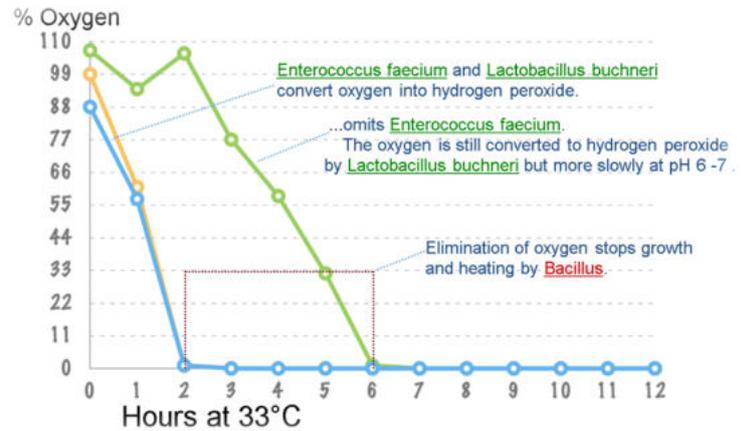
Above: Graph 2—Si-Lac Extra bacterial counts after adding to water

SUITS ALL CROPS AND USES

Si-Lac Extra is suitable for use on all crops and pastures used for silage and hay making. No need to change products for different crops.

HOW TO USE

Simply add the contents of the vacuum sealed sachet to the applicator tank 12-24 hours before starting the job. If less, use water up to 40 degrees C. This starts the fresh culture growing (Graph 3). Then simply apply over the hay in the pickup of the baler as the hay is baled using a fine application nozzle ensuring best coverage. Apply as a ULV spray if you wish. Ensure the applicator is properly calibrated to apply the correct amount of inoculant to the hay.



Above: Graph 1 shows effect of oxygen scavenging by *E. faecium* & *L. buchneri*

FRESH GROWING, FAST ACTING BACTERIA

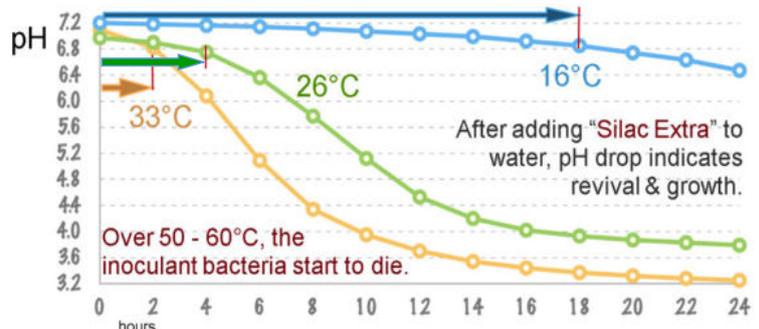
When used as directed, Si-Lac Extra delivers fresh growing bacteria to your hay, providing faster action than freeze dried inoculants applied dormant (2). Conditions for mould growth are rapidly altered. So this results in greater retention of energy and more digestible protein.

LONG LASTING

Once mixed, Si-Lac Extra actively grows in the tank, and will live for 5 – 14 days depending on the temperature due to the unique innovative formulation that includes food for the bacteria. Use Si-Lac Extra day after day. Compare this with other inoculants that only have a 24 hour tank life or claim "up to 5 days".

EASY TO USE, HASSLE FREE FORMULATION

Si-Lac Extra is designed to pass through 50 mesh screens, so doesn't foul tanks, or block screens and nozzles. Plus it's colour lets you easily see that there is product remaining in your tank.



Graph 3 above shows the pH drop at varying water temperatures, indicating that the bacteria have revived and started to grow. The higher the temperature, the quicker the bacteria are to revive.



The only Australian developed and made silage and hay inoculant containing *Lactobacillus buchneri*



Above: Untreated on left — mouldy and damp. Si-Lac Extra treated on right showing no mould or wetness.

CARING FOR YOUR BACTERIAL INOCULANT

When stored and handled as recommended, Si-Lac Extra has a shelf life of 3 years.

All bacterial silage inoculants will be compromised if mishandled during the lead up to application.

Do not leave sachets in the sun, e.g. on the dashboard, seat or the back of the ute, or let the sachet be stored at greater than 24 degrees C for any period of time.

Si-Lac Extra bacteria may also be compromised if the triple layer aluminum foil is broken or punctured. Ensure that sachets are firm when purchased.

Where possible store in a cool room or refrigerator.

IMPORTANT APPLICATION GUIDELINES

For best results, SI-LAC EXTRA is applied to hay as it is baled.

Ensure that all bales are treated. If untreated hay is baled and stacked with SI-LAC EXTRA treated hay, the untreated bales may heat and cause the whole hay-stack to catch fire.

PACKS

- Treat 50T: 450g sachet (10 per shipper)
- Treat 250T: 450g sachet (Concentrate) (10 per shipper)
- 2.25 Kg sachet (4 per shipper)

References

1. Reichelt J L 2008
2. Muck 2003; Merry et Al 1995

AIR-TECH

Wireless Controlled ULV Applicator

Grevillia Ag also supplies an Australian designed and made "Air-Tech wireless controlled" ULV applicator specifically designed for use on balers.

Air-Tech Wireless Controlled ULV Applicator provides accurate application of silage and hay inoculants using air blast technology to deliver rates as low as 50mL per tonne.

