

ECOSYL™

Ecocool™

*Silage additive
for grass, wholecrop
cereals and legumes*

**MTD/1™
PJB/1**

volac 

Two in one

Ecocool is for use with forages that are at risk of aerobic spoilage, eg high DM grass, wholecrop cereals and maize. It provides you with two specially selected unique bacterial strains in a single product – *Lactobacillus plantarum* strain **MTD/1** for a fast, efficient fermentation and *Lactobacillus buchneri* strain **PJB/1** for reduced heating and spoilage at feedout.

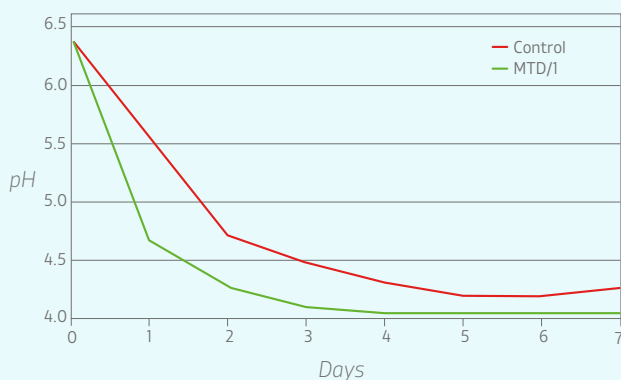
MTD/1 for fermentation

MTD/1 is the unique, high performance strain of *L. plantarum* proven over a wide range of crops and ensiling conditions. It has more trial evidence behind it than any other silage inoculant.

MTD/1 dominates the initial fermentation, producing a faster, more efficient initial fermentation with the following benefits:

- Makes better use of available sugars
- Preserves more nitrogen as true protein
- Reduces fermentation DM losses
- Minimises undesirable microbial activity

Faster pH fall



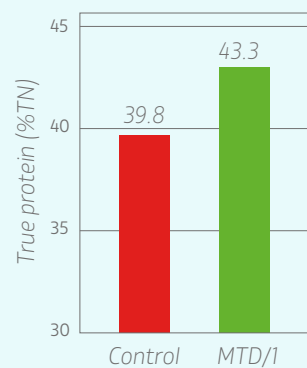
More efficient fermentation

Means of 5 maize trials

	Untreated	MTD/1
pH	4.0	3.8
Lactic acid : VFA	2.9	4.9
NH ₃ N (%TN)	7.4	5.6

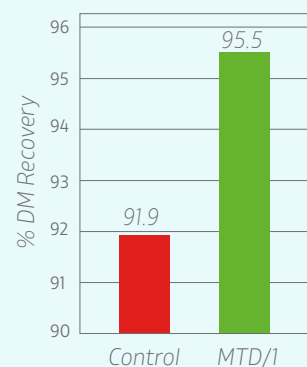
Preserves more nitrogen as true protein

Means of 22 trials



Improved DM recovery

Means of 28 trials



David Davies
Silage Solutions Ltd

'To be effective an inoculant must dominate the natural population of lactic acid bacteria and bring about a rapid, efficient fermentation. This will preserve more of the plant protein, inhibit the activities of undesirable micro-organisms and reduce DM losses.'

PJB/1 for aerobic stability

PJB/1 is a unique strain of *L. buchneri* isolated by Volac and proven on a range of forage crops to inhibit the activities of the yeasts and moulds that cause aerobic spoilage of silages, with the following benefits:

- Less heating
- Lower DM losses
- Less physical waste
- Higher energy feed
- Less risk of mycotoxins

Inhibition of yeasts and moulds

It is yeasts that initiate aerobic spoilage in most silages so it is important to minimise their numbers, both during ensiling and after opening the silo. Ecocool is very effective at doing this as can be seen from the maize trial below.

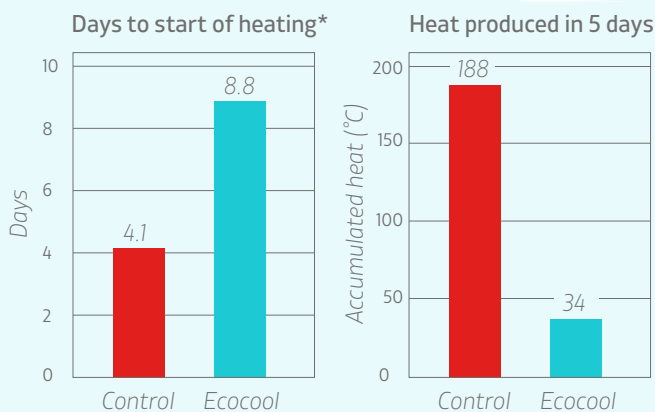
Number of yeasts (cfu/g)

	Control	Ecocool
After ensiling	1,500,000	<1,000
After air exposure	440,000,000	<1,000

Reduced heating

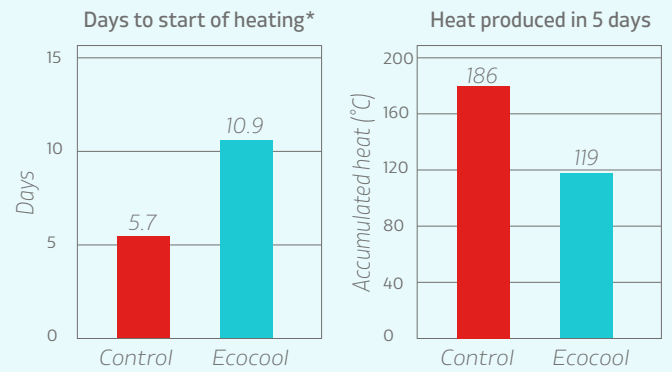
By reducing the numbers of yeasts present in the silage at opening, Ecocool increases the time it takes for silages to begin heating and reduces the extent of any heating that does occur.

Maize (33% DM)



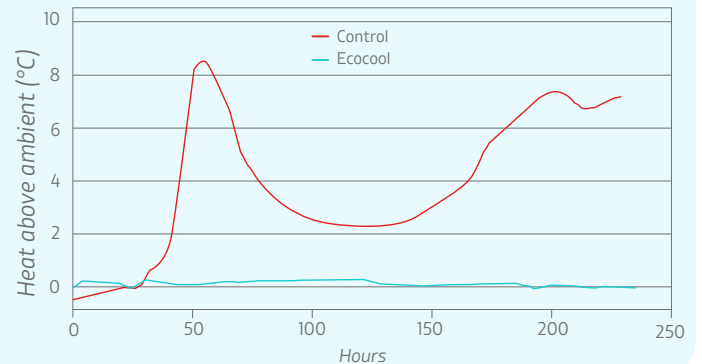
Grass (34% DM)

The Ecocool treated silage was still stable after 10.9 days.



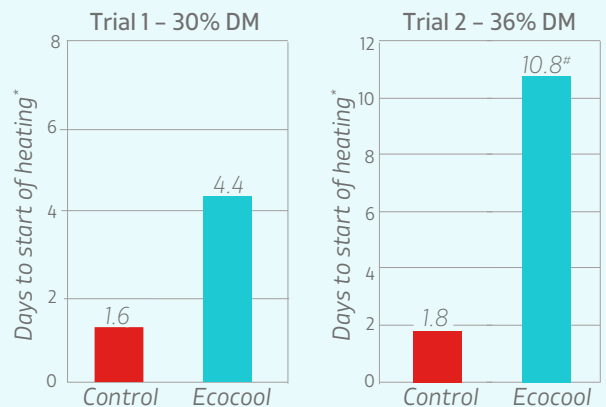
Maize (37% DM)

The Ecocool treated silage remained completely stable for more than 10 days.



Kung et al, 2014 - University of Delaware

In both maize trials Ecocool treated silages were significantly more stable than the untreated controls.



*increase 2°C above ambient

Still Stable

ECOSYL™

Ecocool™



Mixing and application

- One bottle treats 100t
- Liquid application only – variable from 20 ml to 2 l/t
- 48 hour tank mix life
- 24 month shelf life in a cool, dry place
- GMO free, suitable for organic use



MTD/1 and PJB/1 are natural bacterial strains first isolated in the UK by British scientists. They are manufactured and packaged in the UK.



Category 2 (Maize)
- improved aerobic stability

The use of silage additives cannot be expected to overcome poor silage making practices.

For further information:

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