

ECOSYL™

Ecocool™ Grass

Ecocool™ Corn

*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.

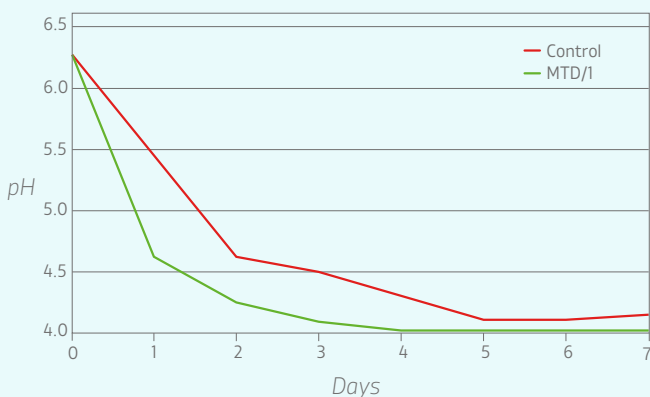
MTD/1 for fermentation

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



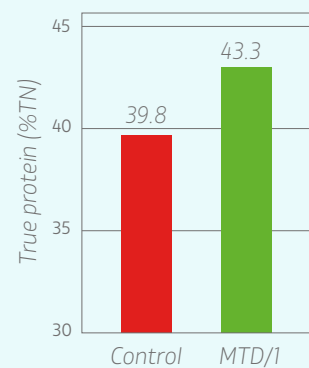
More efficient fermentation

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

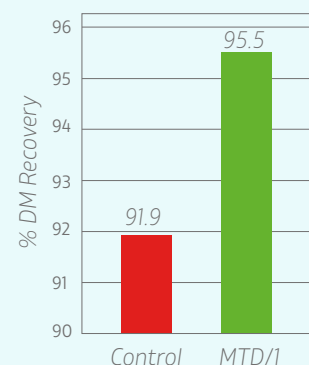
Preserves more nitrogen as true protein

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.

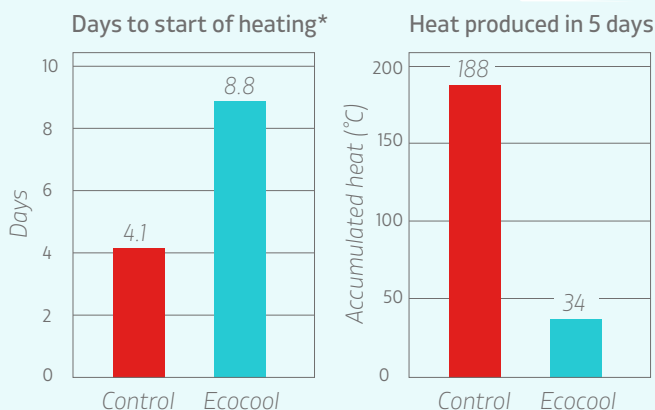
Number of yeasts (cfu/g)

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

Reduced heating

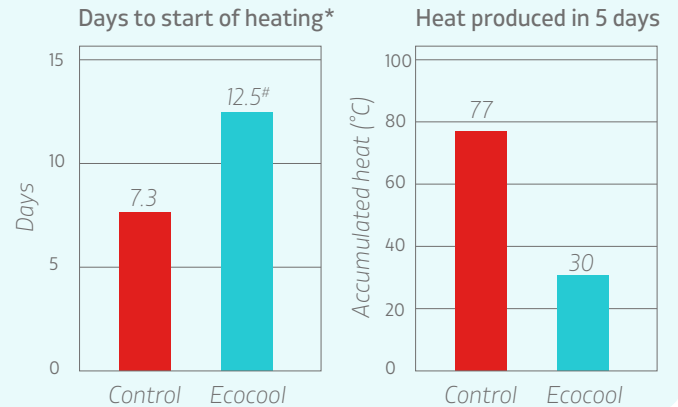
By reducing the numbers of yeasts present in the silage at opening, Ecocool increases the time it takes for silages to begin heating and reduces the extent of any heating that does occur.

Maize (33% DM)



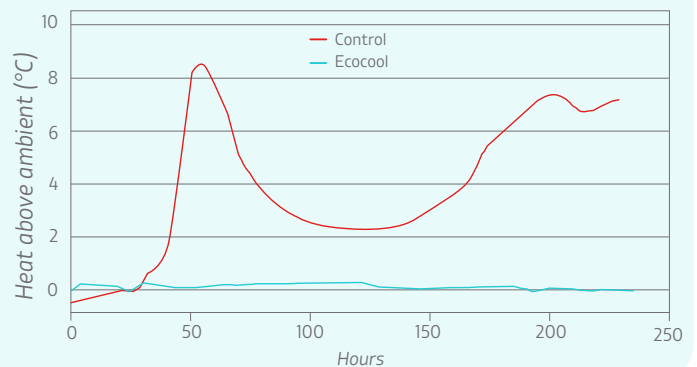
Grass (31% DM)

The Ecocool treated silage was still stable after 12.5 days.



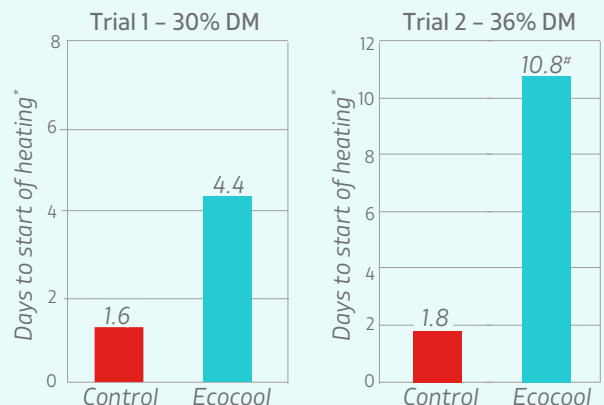
Maize (37% DM)

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

**Waliswood Holsteins, Clyncoch**

Paul Williams milks 170 cows in SW Wales along with his wife Bessie and son Bryn. The herd yields 10,300 litres with 100 acres of grass silage forming the basis of the winter ration plus 29 acres of wholecrop wheat. The grass is cut every six weeks, with four cuts a year. 'Quality forage is my cheapest and best option. We have used Ecosyl for several years with excellent results, but now I keep the cows in all year so I need something extra to help keep the rations fresh, especially in the summer. Ecocool has done a fantastic job. The rations stay fresh for longer so the cows eat more and don't try to sort it. I firmly believe palatability is key to production – the more they eat, the better they milk.'

**Prairie Holsteins, Coomb Farm**

Sion Davies milks 900 cows in SW Wales with his wife Audrey and three daughters. The herd averages 11,970 litres with the best 100 cows doing 14,750. He feeds grass, maize and wholecrop cereal silages and red clover haylage and has used Ecosyl for many years, including the time he spent farming in the US and Canada. He also uses DA Ecocorn on his wholecrop and maize but two years ago agreed to try Ecocool on his wholecrop and was well impressed. 'My aim is to increase efficiency with our existing cow numbers. For that, my forage needs to be top quality with minimal waste. It takes us 4 days to cross the 60 foot face but Ecocool keeps it nice and cool which is just what we need.'

Ecocool Grass: For grass, legumes and cereal/legume bi-crops

Ecocool Corn: For maize and wholecrop forages

Mixing and application

- Available for a liquid application only
- One bottle treats 100t of forage
- Versatile liquid application:
 - Any applicator – standard to ULV
 - Apply from 20 ml/t to 2 l/t
- Tank mix life: 48 hours.
- Shelf life (unopened): 12 months in a cool, dry place.
- GMO free



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.

Ecosyl silage additives are exported worldwide. In 2011 Ecosyl Products Ltd received the Queen's Award for Enterprise for innovation.

**For further information:**

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