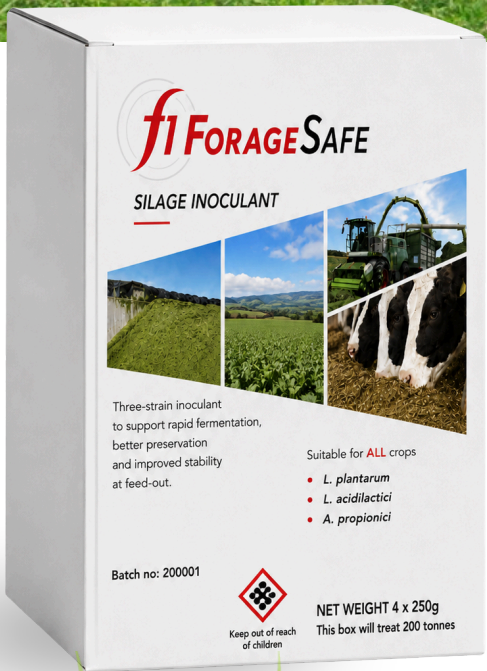




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**f1 FORAGE SAFE**  
SILAGE INOCULANT



[www.tbagri.co.uk](http://www.tbagri.co.uk)



## Why fermentation speed matters

**Once the crop is clamped, the race is on: get the pH down quickly, remove oxygen and protect the feed value you grew in the field.**

Slow fermentation gives undesirable organisms more time to work

Heating at feed-out wastes dry matter and energy.

Protein breakdown can reduce true protein and increase ammonia.



**pH**  
fast controlled  
fall

**DM**  
less avoidable  
loss

**Intake**  
cleaner cooler  
feed



**Aim: keep more home-grown feed value in the clamp, then present a cooler, more stable face at feed-out.**

# The three-strain formula

## WHAT EACH STRAIN DOES

**F1 ForageSafe combines two lactic acid producing bacteria with a propionic acid producing strain.**

### 1. *L. acidilactici*

Starts fermentation fast, helping to get lactic acid production moving early

### 2. *L. plantarum*

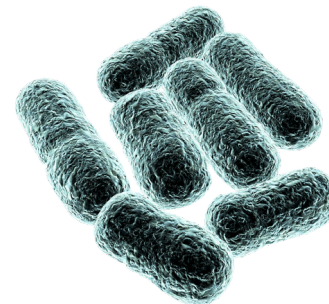
Finishes the controlled lactic fermentation and supports the pH drop.

### 3. *A. propionici*

Uses some lactic acid to produce propionic acid, supporting aerobic stability.

### Result

Fast pH drop plus better stability when the clamp face is exposed to air.



## Rapid pH drop protects the crop

The target is a rapid, controlled fall to around pH 3.8 to 4.2, using lactic acid fermentation as efficiently as possible.



### At TBA we know why it matters to farmers;

A fast pH drop slows undesirable fermentation, helps retain energy and reduces the chance of protein being broken down to ammonia.

Better preserved forage means more useful feed value from the crop already grown

# Protein, energy and performance

The technical value sits in protecting more of the crop, then turning that into intake and output.

## Fast pH drop

Less protein breakdown to ammonia

## More true protein

More useful protein retained in the silage.

## Better intakes

Cooler, cleaner forage supports appetite.

## Performance

Higher intake + protein + energy can support milk output.

**Increase intakes + increase true protein + retain energy = support performance**



## Aerobic stability: keeping the clamp face cool

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Once exposed to air, yeasts and moulds are the enemies.

They burn energy, create heat and make silage less attractive to cows.

### **A. propionici**

Slowly uses some lactic acid as an energy source and converts it to propionic acid.

### **Propionic acid**

A strong acid associated with inhibition of yeasts and moulds

### **Feed-out benefit**

Silage can stay cooler for longer  
· once air reaches the face

### **At TBA we know that farmers care about**

Less heating means less dry matter waste.

Stable feed-out matters most where the clamp face moves slowly.

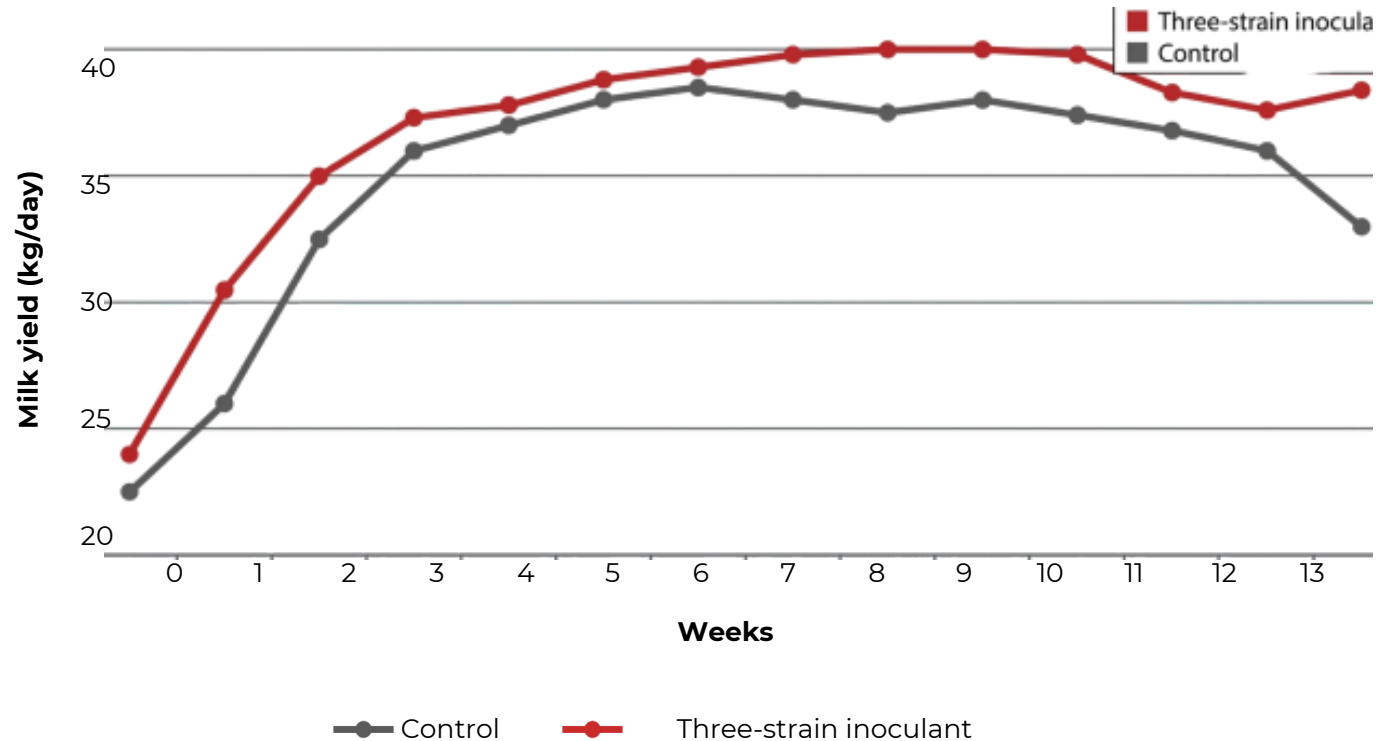
Cooler silage generally presents better at the trough.

Useful where previous silage has shown mould, heating or refusals.



## Lactation performance

### Milk yield over 13 weeks, kg/day



### How to read the data

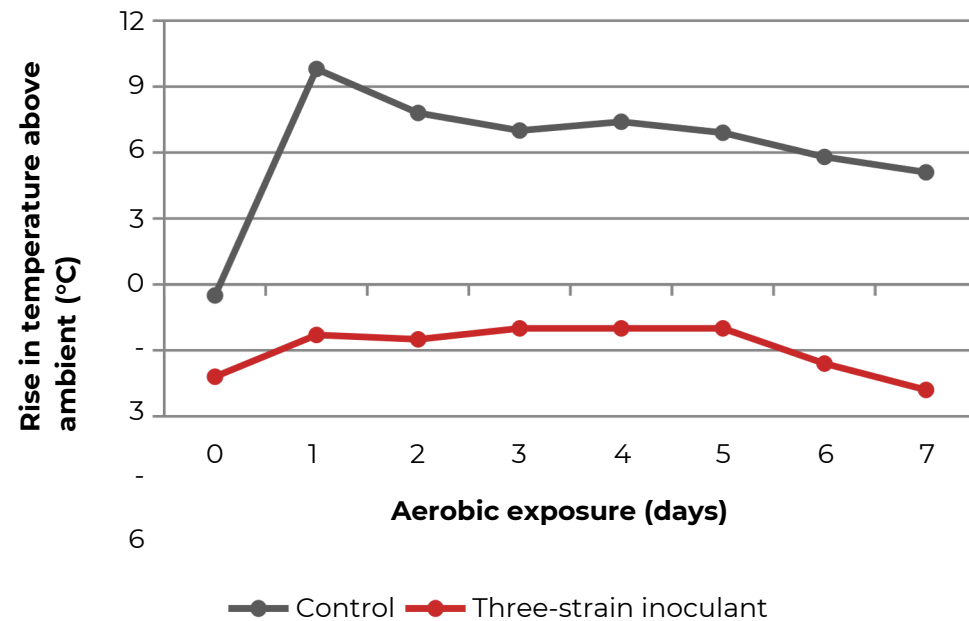
The graph shows the three-strain inoculant line sitting above control for much of the period.

Actual response depends on crop, clamp, dry matter, ration and cow factors.

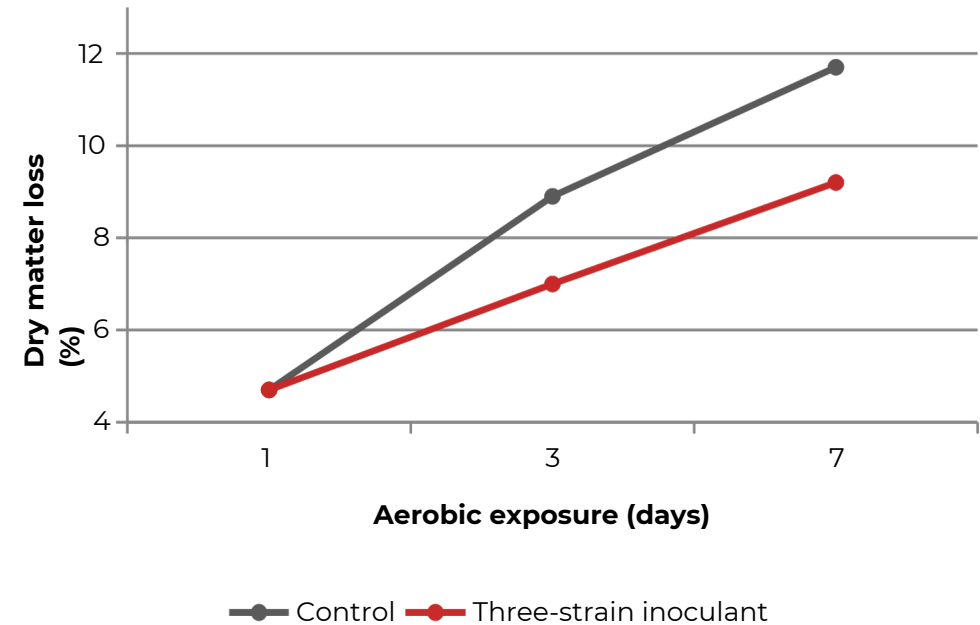


## Dry matter loss and heating

**Rise in temperature above ambient, °C**



**Dry matter loss during aerobic exposure, %**



### Practical meaning

Cooler feed-out and low dry matter loss means less waste. This matters when silage faces heat up, where feed-out is slow, or where previous clamps have shown mould and refusals.

# How to use it well on farm

The additive works best when the basics are right. Think of it as part of the whole silage system, not a substitute for good clamp management.

## 1. Right crop

Know grass or maize crop, dry matter and chop length.

## 2. Even application

Apply at the correct rate with clean water and calibrated equipment.

## 3. Tight clamp

Compact well, seal fast and keep oxygen out.

## 4. Good feed-out

Keep the face tidy and move across it quickly enough.

### Before use, check

- Which crop and what dry matter are you expecting?
- How quickly do you feed across the face?
- Has the silage heated before?
- What are the ration and performance targets?





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## FI ForageSafe

### The technical takeaway

- 1 Two lactic acid bacteria support a faster, controlled pH drop.
- 2 *A. propionici* supports aerobic stability through propionic acid.
- 3 The aim is cooler, more stable, better preserved silage.

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