



**Pioneer® brand 1174 is a multi-crop silage inoculant that can be used on all types of forage to aid in the fermentation process.**

- Pioneer® brand 1174 inoculant is designed to help improve fermentation, retain nutrient content, and enhance digestibility in ensiled forages
- Contains patented strains of *Lactobacillus plantarum* and *Enterococcus faecium* formulated to improve forage quality for silage with higher energy, ferment forage faster to retain more energy and reduce drymatter losses
- Low-cost inoculant option

AVAILABLE  
IN:



## IMPROVED SILAGE QUALITY AND A MORE EFFICIENT FERMENTATION

Our 2020 pasture trial showed a lower pH and higher lactic/acetic acid ratio when compared to the untreated highlighting a more efficient fermentation and as a consequence less protein was degraded to ammonia-N in 1174 treated silage.

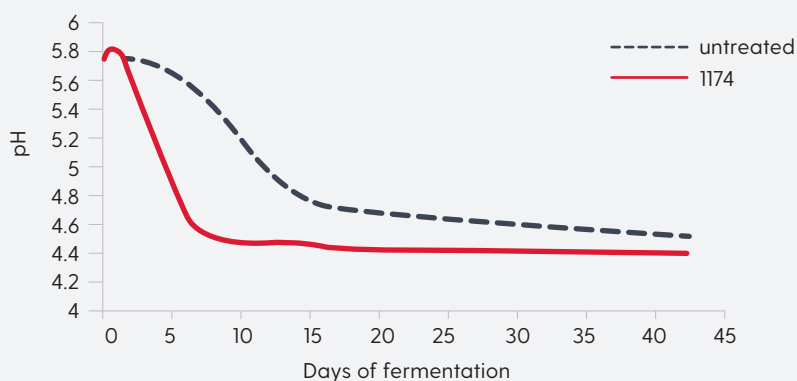
Item	Untreated	1174	Difference	Significance level (P<)
pH	4.66	4.26	-0.4	0.01
Lactic/Acetic acid	4.1	8.0	3.9	0.01
Ammonia-N, % Total N	3.38	2.63	-0.75	0.01

Source: Pioneer Silage Study 2020, silage comparisons.

## INCREASED RATE OF pH DECLINE

1174 treated silage showed a faster pH drop, when compared to untreated silage especially in the first week of fermentation.

### pH development



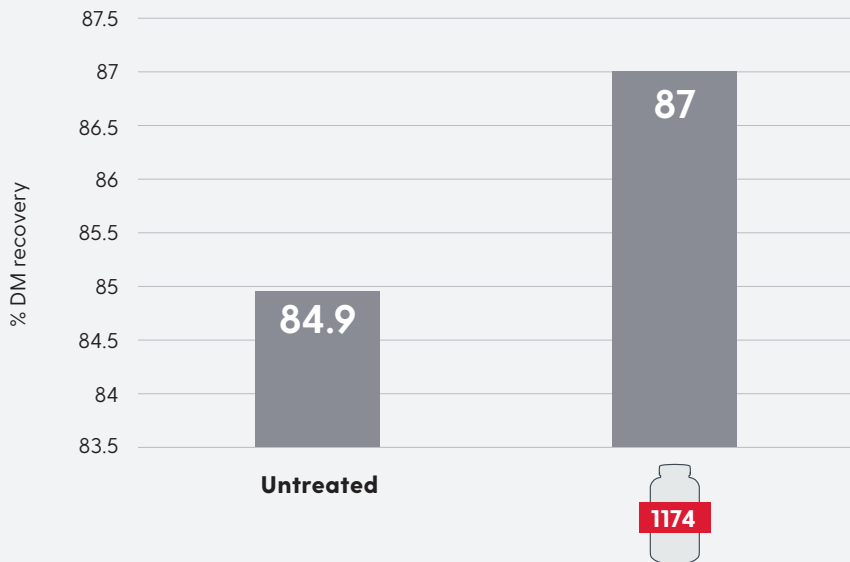
**faster pH  
drop**

Source: L.E. Philipp, Macdonald College of McGill University, Canada (1989); Food for Thought p.118

## IMPROVED DRYMATTER RECOVERY

Drymatter recovery was measured with different types of silos including bunkers, covered piles, concrete upright silos and silage bags. The intent of this research was to evaluate 1174 under as many different farm conditions as possible.

### Drymatter recovery in 10 trials



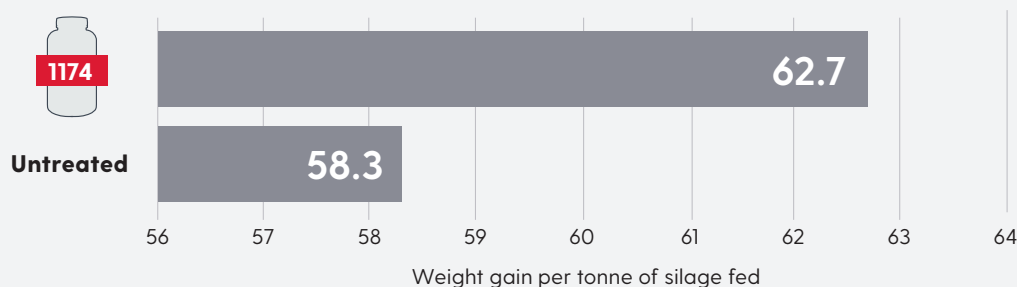
**2.1%**  
increase  
drymatter  
recovery

Source: S. Soderlund (1989) Food for Thought p. 220.

## BETTER ANIMAL PERFORMANCE

Beef feeding trial comparing weight gain when fed different forages inoculated with 1174 compared with untreated. The average improvement in gain per tonne of silage fed over six beef feeding studies was an additional 4.4 kg gain for 1174 treated silage.

### Liveweight gain trial



**4.4 kg**  
gain

Source: S. Soderlund (1989), Food for Thought, p.223. Significance level  $P < 0.005$

See more at [pioneer.co.nz/inoculants](https://pioneer.co.nz/inoculants)

PIONEER® BRAND  
**INOCULANTS**

