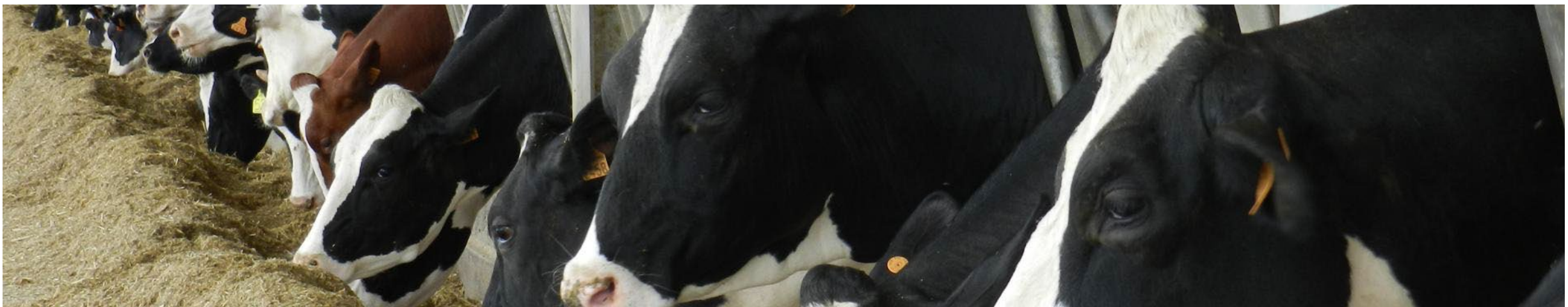


# Siltech Rapid

## Silage additive portfolio



# Siltech Rapid

- **Siltech Rapid** is a biological additive for the rapid silage treatment of grasses silage, lucerne, mixtures of grasses with lucerne and other forage crops.
- **Siltech Rapid** includes three homofermentatives strains LAB. These homofermentative strains have been selected to maximise performance when working together.



# Siltech Rapid

## Composition:

- *LAB: 1 x 10<sup>11</sup> CFU/g:*
- *Lactobacillus plantarum DSMZ 16627, 1k20749 - 5 x 10<sup>10</sup> CFU/g*
- *Pediococcus acidilactici NCIMB 30005, 1k21013 - 2,5 x 10<sup>10</sup> CFU/g*
- *Lactobacillus paracasei NCIMB 30151, 1k20748 - 2,5 x 10<sup>10</sup> CFU/g*

## **DIRECTIONS FOR USE:**

Each 100g sachet should be mixed with about 25 liters of clean water.

Dose: lucerne 100g/50 tonnes, grasses 100g/75 tonnes.



# Siltech Rapid

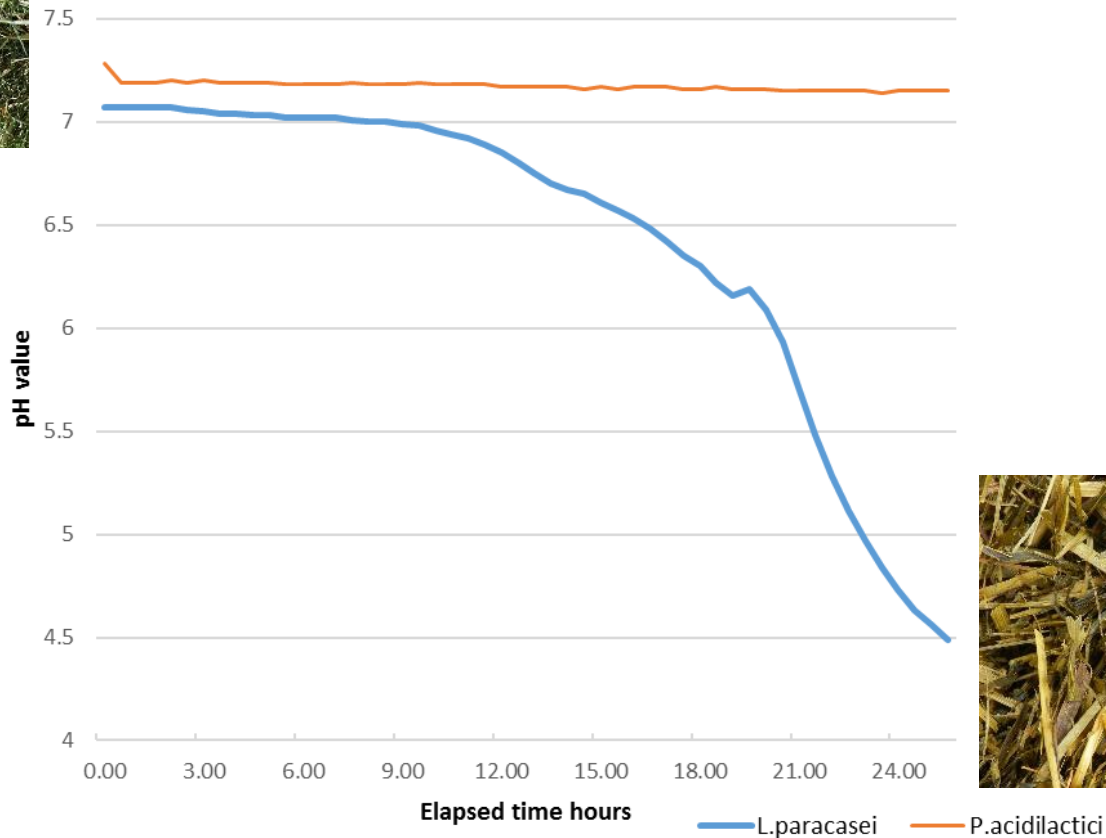
- Reliability is critical even in low sugar conditions. Siltech Rapid contains *Lactobacillus paracasei*, a strain of bacteria which is able to produce a fructanase enzyme, only when required, to release additional sugar, which in turn feeds the bacteria which drops the silage pH quickly to a stable level.
- This enzyme is only produced when the bacteria run out of available water soluble carbohydrates. Other silage additives without this strain have to rely on a slow release of sugars which results in a slow inefficient fermentation.



# Siltech Rapid

*Lactobacillus paracasei*

Change in pH value with time of *L.paracasei* NCIMB 30151 and *P.acidilactici* NCIMB 30005 using Inulin as carbon source

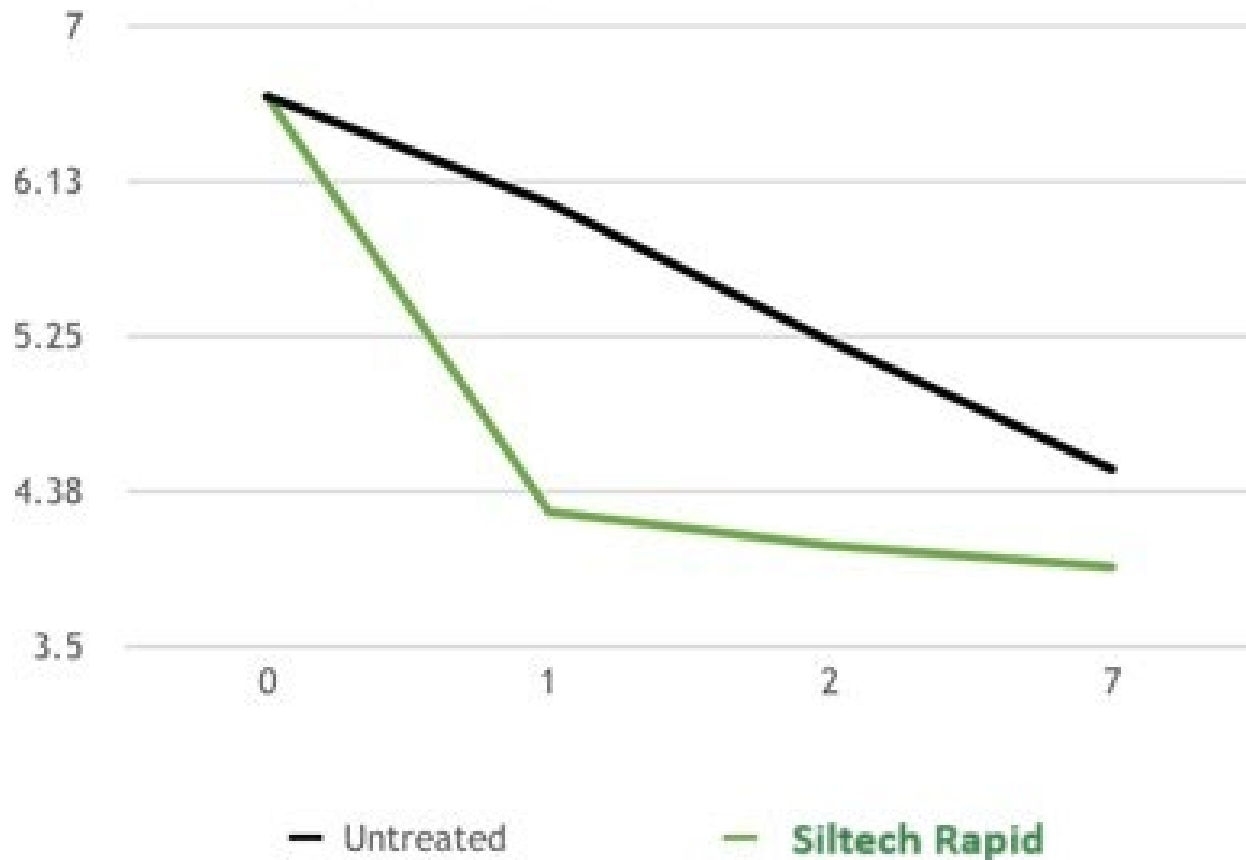


- Graph shows *L. paracasei* continuing to drop the pH when the only carbohydrate is fructan (Inulin)
- Most LAB cannot grow at all in this media
- Result is great reliability even in low sugar conditions



# Siltech Rapid *Fast fermentation*

pH Drop over Time in Days

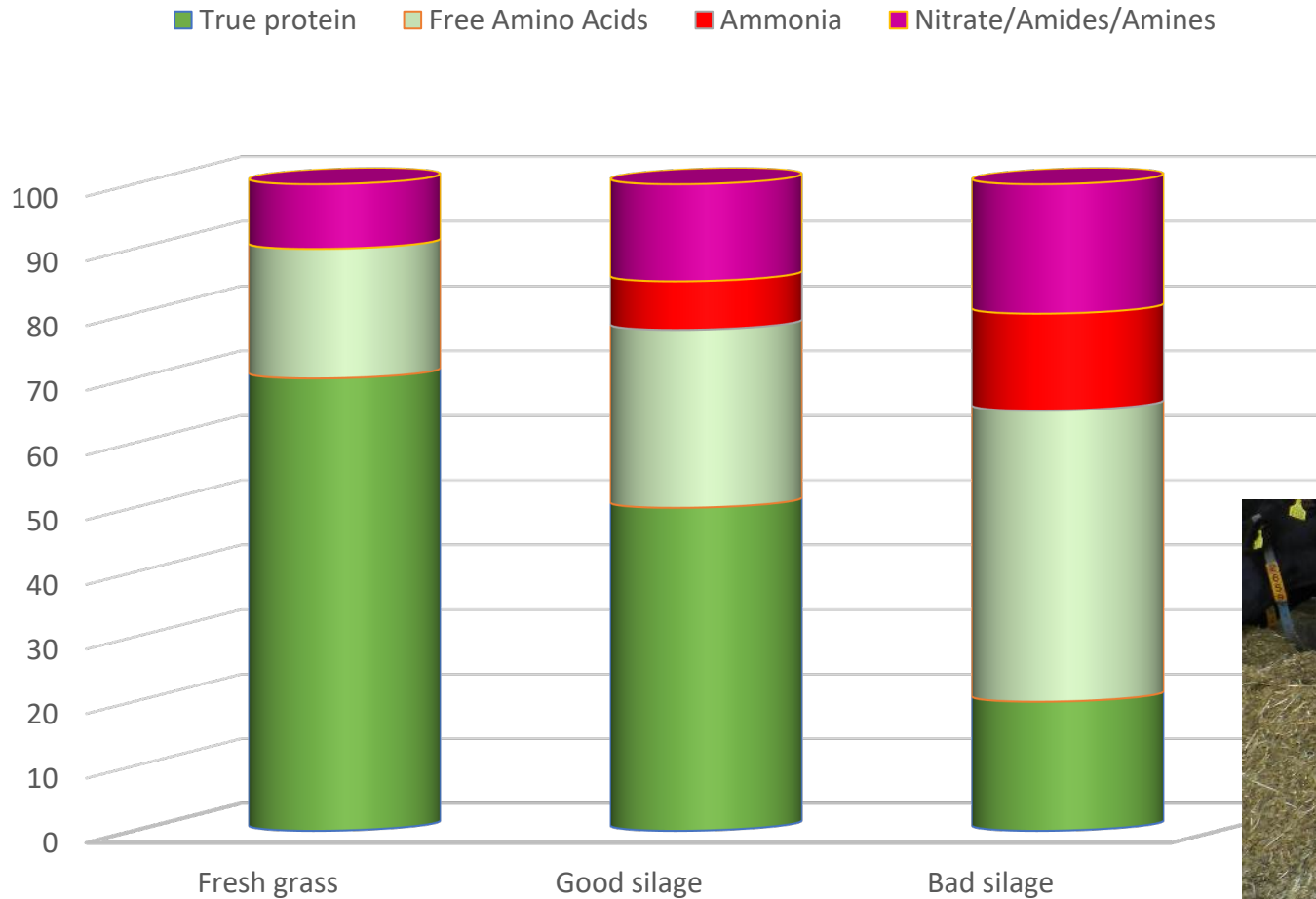


- A natural fermentation of grass can take from 2-6 weeks, **Siltech Rapid** will ferment grass in 2 days. This stops unwanted organisms growing in the silage before the silage is stable.
- These organisms both waste energy and breakdown valuable true protein in the silage.



# Siltech Rapid

## *Protein breakdown reduction*



- The rapid pH drop leads to a significant reduction in the level of protein breakdown.
- Increased true protein level leads to more milk / growth
- reduced ammonia levels leads to increased intake and palatability

