



ECOSYL™

DA Ecocorn

*Silage additive
for maize and
wholecrop*

**Double
Action**

MTD/1

volac 

Preservative + inoculant in one for maize and wholecrop cereal silages

DA Ecocorn offers the benefits of two additives in one - all the proven fermentation and animal performance benefits of the high performance MTD/1 strain of *Lactobacillus plantarum* plus reduced aerobic spoilage from potassium sorbate, a safe, non-corrosive food and feed-approved preservative - a single, easy-use pack.



Maize and wholecrop cereals are high energy crops and it is important to capture as much of that energy as possible. Some will always be lost during fermentation, especially with wetter crops that undergo a more extensive fermentation. But by far the biggest potential loss is from aerobic spoilage, especially at feedout, the risk increasing as the dry matter (DM) increases.

With maize harvested at a typical DM of around 30-32%, aerobic spoilage (heating and moulding) on the face and shoulder of untreated clamps can result in over 15% of the total energy being lost, and it may be as high as 50% when severe aerobic spoilage occurs.

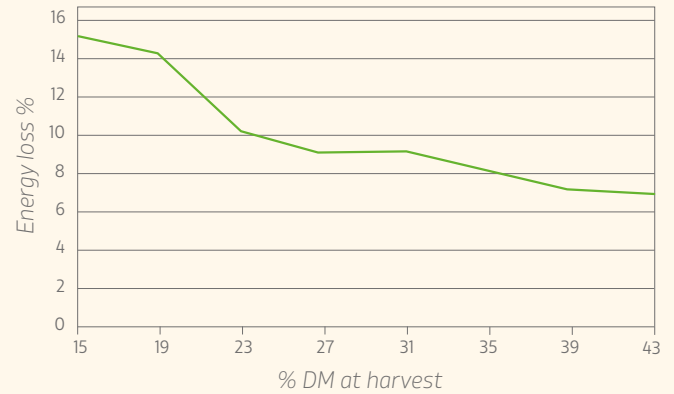
Chemical action

The preservative reduces the growth of the yeasts and moulds that cause aerobic spoilage, resulting in reduced losses and a higher quality, more palatable silage.

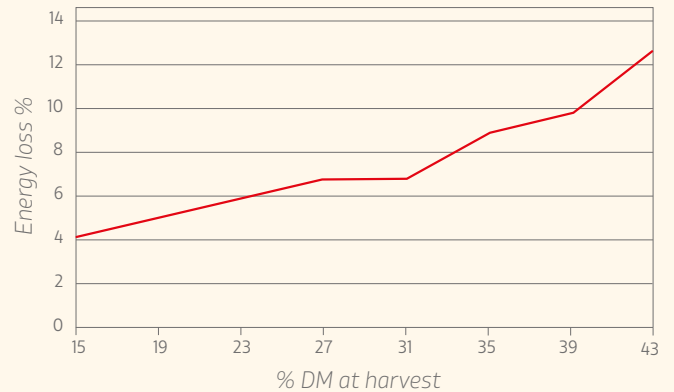
In a 2002 MGA trial, DA Ecocorn was the only product tested to reduce the daily loss in income due to heating and spoilage.

The graph on the right shows how effective chemical preservatives can be at preventing heating in maize silage.

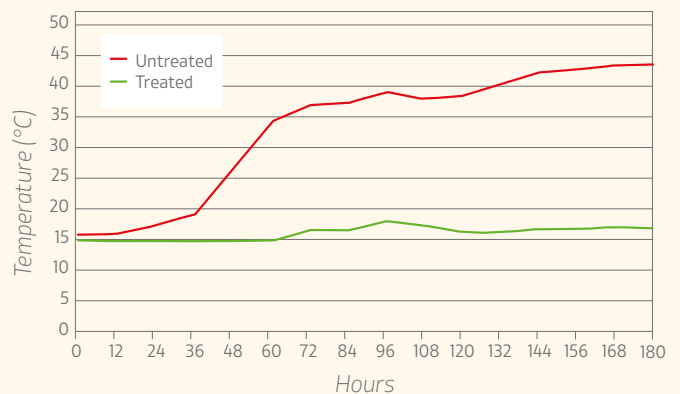
Typical energy losses resulting from fermentation of maize



Typical energy losses from aerobic spoilage on the face & shoulders of maize clamps



Independent trial of MTD/1 + preservative on maize (INRA, 1998)



Trials have shown treated silage remains stable for longer. Trough life is also extended.

	Days Stable	
	Untreated	DA ECOCORN
Wheat	2.4	8.0
Barley	2.1	5.3
Maize	1.3	8.4

Biological action

MTD/1 is the unique high performance strain of *Lactobacillus plantarum* proven over a wide range of crops and ensiling conditions to improve fermentation and animal performance.

MTD/1 increases the speed and efficiency of fermentation, reducing losses and improving palatability, as shown below for maize.

Mean of 5 trials	Untreated	MTD/1
pH	4.0	3.8
Lactic Acid/VFA	2.9	4.9
NH ₃ N (g/kgTN)	7.4	5.6

With 15 independent dairy trials, MTD/1 is supported by more animal performance evidence than any other inoculant.

Trials with maize and wholecrop cereals have shown increases in milk yield of up to 1.8 and 2.2 litres/cow/day respectively.

	DM intake (kg/cow/day)		Milk Yield (kg/cow/day)	
	Untreated	MTD/1	Untreated	MTD/1
Maize	11.4	12.6	36.5	38.3 (+1.8)
Wheat*	21.1	21.8	35.3	37.5 (+2.2)

* Total TMR DM intake

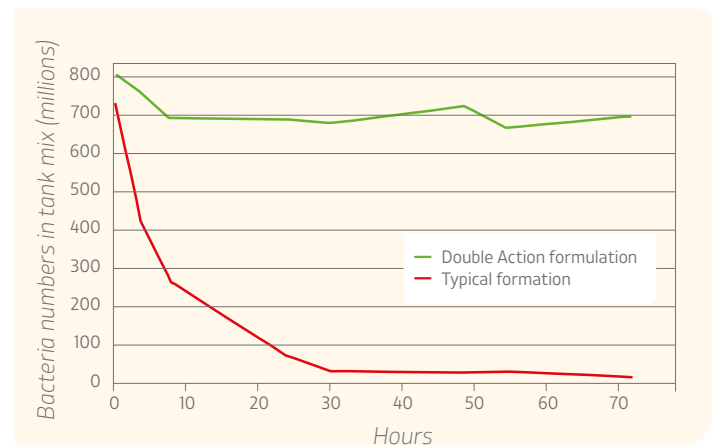
Double Action

Maize and wholecrop silages are very prone to aerobic spoilage, especially at feedout, resulting in high DM losses and significantly reducing their potential intake and production advantages.

Potassium sorbate is a very effective inhibitor of the yeasts and moulds that cause aerobic spoilage but, because it is also inhibitory to bacteria, it would normally also inhibit a lactic acid bacteria inoculant.

Development of unique formulation techniques has enabled MTD/1 bacteria and potassium sorbate to be combined in DA Ecocorn as a single product.

As the graph below shows, with this special formulation the bacteria are unharmed, while almost half the inoculant bacteria in a typical formulation are killed by sorbate within four hours of making up the tank mix.



Trials have proved that mixing MTD/1 bacteria with sorbate results in no reduction in the performance of the inoculant with no difference in the amount of lactic acid produced or pH achieved.

Wholecrop Wheat (42% DM)	Untreated	MTD/1	MTD/1+ Sorbate
pH	4.5	4.0	3.9
Lactic acid (g/kg DM)	7.6	16.5	16.3

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Mixing and application

- Available for liquid or dry application
- One pack treats 50t of forage
- Liquid application at 2 l/t
- Tank mix life: 48 hours
- Dry application at 400 g/t
- Shelf life (unopened): 30 months in a cool, dry place.
Use open bags within 3 days
- GMO free



MTD/1 is a natural bacterial strain first isolated in the UK by British scientists. It is manufactured and packaged in the UK.

For further information:

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