



When you buy Biotal you get more than just an inoculant.

Biotal's fully researched, registered, globally proven and specific forage inoculants come with the most comprehensive technical support services available to help you get the most from your forage, including:

- Training for contractors or farm staff to ensure best practice use of inoculants
- Advice on cutting date and inoculant choice to help achieve the best fermentation
- Crop walking and training to identify cereal stage of maturity
- Advice on how to achieve the most effective fermentation
- Forage analysis and review of silage making to identify improvement opportunities

Together Biotal's unequalled technical support and crop and condition specific inoculants can help you produce forage that delivers better performance.

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Improve your profitability with home grown concentrates



Unleashing the value of your forage

Home grown cereals can play a big part in reducing overall feed costs and improving margins.

Moist crimped cereals and maize can be harvested earlier at around 25-40% moisture and passed through a specialist crimping machine which cracks the grain to expose the starch.

When to crimp



Ear and stem predominantly golden yellow in colour

Most of the ears will be turned down

Grain difficult to squeeze between thumb and forefinger. Thumb nail pressure will leave an indentation in the grain

If 70% of the crop resembles this appearance and grain texture, the average moisture content will be between 25-40% over the whole crop.

Benefits of crimp cereals

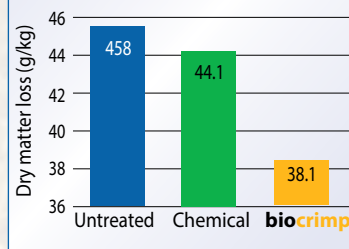
- Early harvesting (around 4 weeks before conventional combining) maximises the dry matter yield and nutritional value of both the grain and straw
- Early harvesting also allows earlier establishment of the following crop
- Reduced costs of drying grain
- Higher feeding levels can be achieved due to a steady release of fermentable energy in the rumen

Due to the high dry matter and starch content of crimped grain, aerobic instability caused by yeasts and moulds can have a major impact on quality during feedout. Biotol bio**crimp** has been widely proven to:

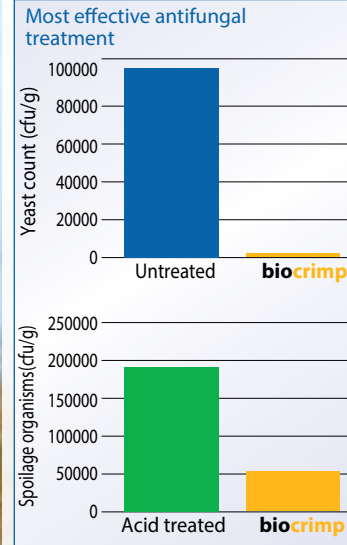
Reduce dry matter losses:

- Dry matter losses will occur during clamp storage, which will reduce the nutrients available, resulting in lower milk yield or liveweight gain
- Biotol bio**crimp** is proven to reduce dry matter losses when compared to untreated or acid treated crimped grain

Lower dry matter losses and increased nutrient availability

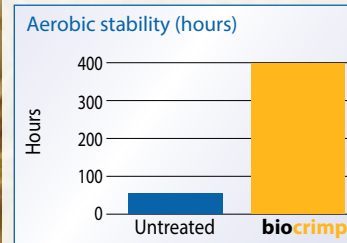


Source: IRS, Aberystwyth, University of Wales



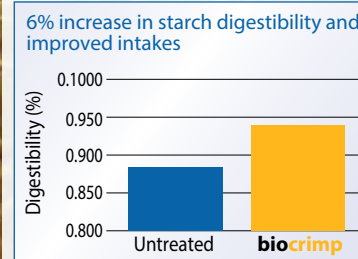
Inhibition of spoilage organisms

- During feedout, yeasts and moulds can cause significant nutrient losses and feed waste
- The presence of fungal mould will put the grain at risk from mycotoxins
- Biotol bio**crimp** contains the patented *L. buchneri* 40788 bacteria which is specifically suited for high dry matter preservation
- It produces antifungal compounds which inhibit undesirable micro-organisms that spoil crimped cereals



Improved aerobic stability

- The inhibition of spoilage organisms will prevent the grain from heating and reduce losses during feedout
- Biotol bio**crimp** greatly increases the stability of crimped grain when exposed to oxygen



Improved starch digestibility

- Biotol bio**crimp** not only improves nutrient utilisation but also increases feed preservation
- The unique action of Biotol bio**crimp** improves the starch digestibility of crimped grains