



# UM FARM NEWSLETTER

SEPTEMBER 2018

Welcome to the September 2018 edition of the UM farm newsletter, in this issue Victoria Phillips looks at how Molasses can help fill the gaps that are being left by reduced forage availability in this winter's cattle rations.

## The Forage Replacement Dilemma – Molasses can help fill the gap!

By Victoria Phillips BSc Agricultural Biochemistry and Nutrition and MSc Animal production



Whilst in Ireland last week, I heard that in the South of Ireland, where summer rations would usually include 2kg compound feed per day, some farmers were feeding 8.5kg/day to make up for the lack of grass. This is 'panic buying', and may be feasible in the short-term, but it cannot

be the basis for a winter feeding strategy. The dry summer has no doubt resulted in much-reduced winter forage stocks across the UK and Ireland, and raw material prices are on the increase. Whilst silage production costs are estimated at £35 per tonne, the costs of buying in silage are significantly more, not forgetting transport costs and the challenge of finding a seller with reserves of silage who is willing to sell.

To plan in advance is always recommended: Start by accurately calculating how much forage is available, and balance the winter feeding plan around that. It is much more cost effective to buy and transport straight replacement materials than to buy and move silage.

The shortage of forage in a diet requires three key replacement factors in **Quickly Degrading Protein, Sugars** and **Active Fibre**, the first two of these requirements can be found in United Molasses GB's **Nutrimaize** products which are manufactured by blending Urea with Molasses to produce a range of highly bonded liquids.

**Continued overleaf...**



### Molasses Market in brief

- Sugar Cane crops looking healthy, India exporting good levels of molasses
- Sugar Beet crop in EU down, yields 9% lower than last year
- Less Beet means Cane molasses demand in Industrial sector to rise
- Cane molasses costs seeing firming on \$ to £ exchange rate
- Freight rates high on back of rising oil prices
- GB Molasses market back at last winter's levels but still expected to feature strongly in ruminant diets due to the volatility in price of other feeds



## The Forage Replacement Dilemma – Molasses can help fill the gap! ctd.

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Urea is the most cost effective replacement for the quickly-degrading protein found in grass silage. Whilst not usually recommended for grass-based diets, it can be used with care to replace a proportion of the quickly degradable protein found in grass silages. (If the diet already contains urea, care must be taken not to exceed the legal limits of 8800mg/kg DM complete feed when calculated to 12% moisture). Other protein sources are also available of course, including distillers grains, hipro soya, rapeseed meal, but good rationing will make use of cheaper protein sources first.

Molasses is an excellent source of the simple sugars which are essential in restricted-forage diets as they provide energy to capture the precious, but depleted, supply of grass protein. They are also essential when using urea safely, ensuring a constant supply of energy to the rumen micro-organisms to convert urea into protein. Molasses is a very cost-effective material for replacing energy, and is commonly formulated into rations at a rate of 1kg/hd/day, however it can easily be incorporated at levels of 2-3kg/hd/day without causing handling difficulties.

The Nutrimaize range of products are thus excellent options for forage replacement as

the urea is safely incorporated into molasses and blended to give both sugars and quickly degradable protein using UM's innovative bonding process that regulates the release of nitrogen and sugars to help optimise rumen efficiency.

**Average silage contains sugars of 1% on a fresh matter basis, molasses typically contain sugars at 48% of fresh matter. If silage feeding is reduced from 15-12kg DM or 60-45kg fresh matter, then this will reduce sugars by 150g/head/day: An extra 0.25kg of a molasses product such as Nutrimaize 46 will comfortably replace this, at a cost of approximately £0.05p/hd/day**

The third replacement factor is Active Fibre for which many farms will be considering using Straw as a fibre substitute this winter, however there are limiting factors with straw as it is less palatable and lower in quality than silage so to incorporate at reasonable replacement levels it requires chemical treatment or feeding with more palatable complementary feeds such as Molasses. The Nutrimaize range of liquids will fit perfectly with straw, as it is rich in fermentable energy (FME) and rumen degradable protein (ERDP) to boost overall ration quality and improve palatability/intakes.

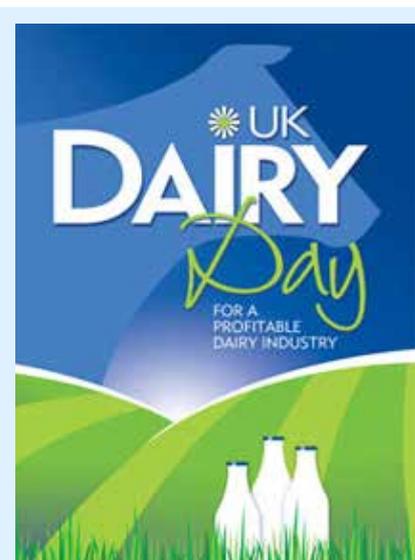
For example you can replace the protein contribution of 10kg Grass Silage with Straw and a **Nutrimaize** product while also providing the ration with significantly more sugars on an as fed basis.

**Table 1** To replace 10kg Grass silage with protein value of 11% (DM) and sugars of 5% (DM)

Grass Silage	Straw	Nutrimaize Product	Dry Matter	Protein	Protein	Sugars	Sugars	
Kg/hd/day	Kg/hd/day	Kg/hd/day	Name	Kg fed	As fed g	DM %	As fed g	DM %
10				2.5	275	11	125	5
	2.1	0.6	Nutrimaize 46	2.3	265	11.5	257	11.2
	2.0	0.75	Nutrimaize 40	2.3	266	11.6	313	13.6
	1.75	1.1	Nutrimaize 28	2.2	264	12	472	21.5
	2.1	0.6	Nutrimol Super 50	2.2	252	11.5	178	8.1
	1.9	1.0	Nutrimol Extra	2.3	275	12	277	12

This information is based on average analysis, and herd figures. For a more accurate ration plan and advice, or help calculating forage stocks, please contact Apheya Animal Nutrition ([www.apheya.com](http://www.apheya.com))

For more information about the Nutrimaize product range please contact United Molasses GB.



### UK Dairy Day at Telford International Centre

United Molasses GB will be at this year's event (stand H1-36) on **Wednesday 12th September 2018** at the Telford International Centre, so please come and say hello, and find out more about our extensive list of products including our **Nutrimaize Range**.

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