

Market Update

The molasses market continues to remain firm due to strong local demand in origin from ethanol and smaller than expected crops. The Russia/Ukraine situation also continues to impact on prices due to Russian and Belarussian beet molasses being avoided by customers creating extra demand on other origins and keeping prices high. Alongside the continuing high molasses price, we are seeing other liquid co-products, pot ale syrup etc also remain high due to strong ongoing demand from the AD/Biogas sector. There is some good news on urea with prices substantially back from their highs in late 2022. This means our high protein Regulated Release blends prices have eased significantly and we are now able to offer forward contracts for 3 months.

Although we are still seeing high prices, we also continue to see strong demand for our molasses-based liquids in both dairy and beef feeding.

Dairy: As the milk price has come down it is important to adopt a feeding strategy to deal with this. Molasses based blends can play an important role by reducing feed costs and improving feed efficiency. See later on for more details.

Beef: With beef prices remaining firm maximising growth rates and feed conversion are both vital to making money. An ED&F Man molasses blend can provide the solution.

As well as the nutritional value of our products its important to remember that molasses-based liquid have some unique physical characteristics such as stimulating feed intake, reducing feed wastage, reducing sorting and helping to control dust, all of which are important when producing a summer feeding plan.



Feed Efficiency – Key to Maximising Profits this Summer!

With falling milk prices and the price of feed slowly easing back, there is a lot more pressure on profit margins this summer. Forage is the cheapest feed on farm and producers should look to exploit this and increase feed efficiency and digestion in order to make more milk from forage.

Forage, whether this be grass, hay or silage, will always be the cheapest feed source on farm. Four key focus areas can help to make the most of forage and support cost-effective milk production this summer. These are:

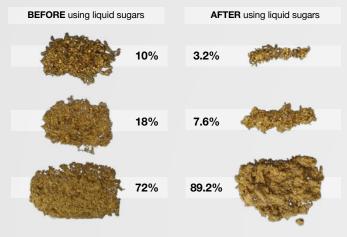
- Increase intakes
- Maintain a healthy rumen environment
- Reduce waste
- Improve fibre digestibility

Increasing forage intakes ensures that cows have the availability of maximising forage digestion and reduce the reliance on additional dry feeds. Forage intakes can be increased by reducing sorting behaviour and increasing the palatability of a ration.

A healthy rumen environment is key to making the most of forage, when the rumen pH is healthy, between pH 6.2-6.8, this helps the fibre-digesting bacteria thrive and increase the digestibility of feeds. To keep the rumen healthy, it is key that volatile fatty acids (VFA's) are quickly removed and ideally fewer undesirable acids, such as lactic acid, are produced when feed is fermented.

Reducing waste on farm is vital for cost effective production, by ensuring every kilo of feed grown or bought is consumed and utilised effectively by the animal. It has been proven that mixing a molasses based liquid feed into a TMR not only increases intake but reduces wastage and breathable dust levels. Dustiness can cause health problems to both stock and stockman alike. It can also increase feed wastage and costs as the dust could contain the expensive mineral and vitamin premix that is added to the ration.

Finally, improving the digestibility of fibres in forage is essential. Fibre is the slowest release of energy from forage but can make up for over 50% of the energy supply. Some of this fibre will be indigestible for the cow, but most can be accessed if the rumen microbes are given the opportunity and fuel. The rumen microbes often have a 'lag phase' when digesting fibre, so by stimulating the activity of the rumen microbes to begin digestion faster this can help improve the amount of fibre digested in the rumen and increase energy supply. The images below show how fibre digestibility was affected on farm by carrying out faecal sieving. The top image shows digestible feed that has come through, the middle is potentially digestible feed, and the bottom is fully digested feed with minimal nutritional value. There is a 6-week difference between the pictures and the sugar content of the TMR was increased from 3% to 6%. This resulted in a 17% increase in fibre digestion showing much more energy was being extracted from fibre.



Molasses and molasses blends provide a valuable source of fermentable energy, help improve fibre digestion in forages and increase palatability of TMR's to drive intakes. Molasses contains a complex blend of different types of sugars, more specifically 6-carbon sugars such as glucose and fructose which are much more digestible than 5-carbon sugars which are found commonly in silages, processed feeds and syrups. The key differences between 6-carbon and 5-carbon sugars are highlighted in the table below. The addition of a molasses blend to diets this summer can help influence all four of the key focus areas to help make the most from forages.

	6-Carbon sugars	5-Carbon sugars
Sources	Molasses, grazed grass, SBP	Wheat syrup Fermentation co-products Fermented silage Processed feeds
Rumen digestibility	84%	<50%
Improved fibre digestion	Yes	No
Increased microbial protein production	+45%	+28%
Stimulate rumen fungi	Yes	No

For example, the following rations were created to show how a molasses blend can help this summer, by reducing feed costs, lowering production slightly and maintaining margins. Four diets were analysed in total, diet one was a formulated 40L diet which then had just the molasses removed, then 3 diets at 35L with different molasses options. By just removing molasses from the diet, milk yield dropped 1.5L/day and the diet cost was still the highest out of all diets and margin over feed the lowest. By reformulating the diet to include either liquid feed option, this will lower the total diet cost and improve margins. The best option from these diets was the inclusion of 1.5kg Regumix, an 18% protein as fed molasses blend, and removing a proportion of concentrate, blend and soya to achieve between 37-38L/day and a margin over all feed of 27.5p/L. Looking at and pricing up different diets this summer will be essential to finding the best option for your farm.

Milk Price: 38ppl. Butterfat 4%, Protein 3.2%.

	Diet 1	Diet 2	Diet 3	Diet 4
Grass Silage (kg/day)	45	45	45	45
Barley (kg/day)	3	2.5	2.5	2.5
Hipro Soya (kg/day)	2	1	1	1
16% Dairy Cake (kg/day)	4	2.5	3	3
Molale (kg/day)				1.5
Regumix (kg/day)		1.5		
Stockmol 20 (kg/day)			1.5	
Diet Cost (£/day)	4.58	3.98	4.10	4.02
Milk Yield (L/day)	38.5	37.8	35.9	35.7
Margin over feed (pence/L)	26.1	27.5	26.6	26.7
DM Intake (kg/d)	23.0	21.4	21.9	21.7
ME (MJ/d)	280	259	264	263
Crude Protein (%)	18.0	17.0	16.2	16.5
Sugar (%)	3.7	5.8	6.0	5.1

BSAS 2023

As part of ED&F Man's commitment to research, at the recent BSAS (British Society of Animal Science) Conference we sponsored a Commercial Feed Industry Award, chaired a new industry with academia session and presented some of our new research!

Firstly, the new Commercial Feed Industry Award, which was coordinated by ED&F Man and five other UK feed merchants and suppliers, was focussed on awarding research that had a strong commercial focus and potential to be utilised throughout the livestock feed industry. The winning paper looked at the effect of dietary crude protein in dairy cow diets on nitrogen use efficiency. This is a key area in ruminant nutrition to reduce nitrogen pollution and improve the efficiency of nitrogen use in cattle – did you know the average UK dairy cow requires 4kg crude protein just to produce 1kg milk protein! There is definitely room for improvement there!

Secondly, ED&F Man sponsored and chaired a new session entitled "Ruminant Nutrition: Novel approaches to improving ruminant feeding, production and efficiency". The session had four speakers in total, two from the industry (Adisseo and AB Vista) and two academic researchers. The aim was to bring research and on farm nutrition together in a way that would help drive the industry forward and give sound advice and information to the attendees.

Finally, our most recent research "The effect of a molasses based liquid feed on diet digestibility, volatile fatty acid production and methane emissions in lactating dairy cows" was presented in the reducing the environmental impact of dairy cows session. The research was completed last year at the University of Reading using 1.4kg **regumix** in the lactating diet. The addition of molasses replaced a proportion of the blend to keep the diets at the same protein and energy level. The key results were:

- Significant increase in milk fat percentage
- Significant increase in total and individual volatile fatty acid production
- Slight reduction in methane production

We feel it is vital to maintain the connection between scientific research and on farm nutrition. BSAS leads the way in animal nutrition with a strong focus and efficiency, and sustainability – something ED&F Man feels strongly about and an area where our products can help.



Sustainability Update

ED&F Man UK have a dedicated Sustainability Team, comprised of staff across the whole business with a key



focus on investigating, researching and implementing more sustainable practices throughout the company. The team have been hard at work continuing to make improvements and changes throughout our business to reduce our carbon footprint and progress towards being a more sustainable business in the future.

These changes can range from simple ideas, such as the installation of motion sensor lights at our offices and terminals in an effort to reduce our energy usage, to more complex projects such as, the insulation and installation of more efficient boilers and pumps across terminals. One of the most recent successes was ED&F Man UK and Ireland obtained accreditation to the ISO14001 standard. This is an Environmental Management System certification which helps organisations demonstrate an ongoing commitment to continual improvement in environmental performance.

ISO14001

As part of the ED&F Man's approach of continuous improvement towards the Environment and Sustainable Practices we decided to work towards accreditation



for the ISO 14001:2015 standard. The ISO 14001:2015 is an Environmental Management System certification which helps organisations demonstrate an ongoing commitment to continual improvement in environmental performance in key areas such as lowering energy usage, reducing waste, increase recycling and raising awareness and understanding of environmental practices throughout the business. After a lot of hard work, we are extremely pleased to announce that we have been successful in obtaining accreditation to the ISO 14001:2015 standard.

Fresh-Guard

Higher dry matter silages, maize silages and TMR's containing high proportions of moist feeds have a heightened risk of aerobic spoilage when fed out. The first signs of this are the ration heating,



usually accompanied by distinct off odours. When this occurs, the most digestible and valuable nutrients are lost first such as sugars and amino acids. Furthermore, due to the production of off odours the ration becomes less attractive meaning increased levels of feed are wasted and dry matter intakes are depressed.

A typical 5% reduction in dry matter due to heating in the TMR can equate to a loss of 1.1kg DM/cow/day significantly reducing animal performance. To help prevent aerobic spoilage consider adding a ration conditioner like **Fresh-Guard**.

Fresh-Guard is a cost-effective addition to any bulk ED&F Man molasses blend roughly costing around 3p/cow/day, it has been proven to reduce heating and undesirable microbial activity in TMR's and helps to ensure intakes are maintained in challenging conditions.





Due to the increased use of molasses based liquid feed on farm we are seeing a strong demand for molasses tanks. While ED&F Man offer a cost-effective **Tank Finance Scheme** on new tanks, we are seeing many enquiries from farmers looking for second hand molasses tanks. We are ideally placed to be able to help facilitate this. For example, many farmers have moved up from a 12T tank to a larger capacity tank and may be looking to sell the original tank... we can help put you in touch with a likely buyer. If this is of interest, email us at molasses-tanks@edfman.com or call us on freephone **0800 3898450**. Remember, there are lots of reasons to move to a bulk tank:

- Safe convenient storage
- Easy and accurate to use
- Cost advantages of 'bulk buying'
- Overcomes all 'on farm' storage concerns and frees up dry storage areas
- Makes liquid molasses products the easiest to use on the farm
- Simple to use, no complicated pumps or electrics required
- Eases handling and eliminates drums and IBC's





We are busy planning for the following events and look forward to seeing you there:

06 June	Scotland's Beef Event	SCOTLAND'S BEEF EVENT2023 SCOTTSHEET ASSOCIATION
07 June	NSA North Sheep	SHEEP EVENT
21 June	Down to Earth South	DOWN TO EARTH
06 July	Down to Earth North	DOWN TO EARTH
13 September	UK Dairy Day	K DAIRY Day &

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