ED&F MAN EST. 1783 | Liquid Products

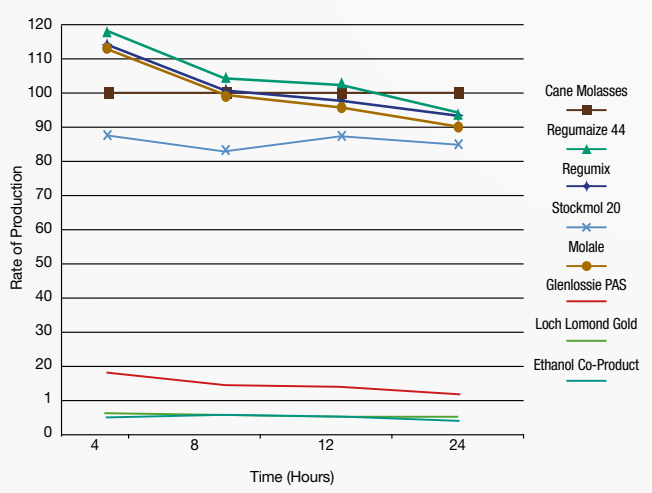
Molasses: Liquid Technology

All liquid products are NOT created equal!

It is important to understand that all liquid feeds are not the same and can vary considerably in their nutritional content. Dry matter (DM) is usually the first figure nutritionists look at. Our cane molasses blends vary from 75% DM for straight molasses to around 60% DM for some of our blends. This compares with typically 20-40% DM for other liquid co-products.

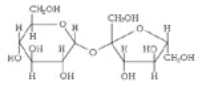
Liquid Co-products

There are a number of liquid co-products available to UK farmers. These range from the traditional pot ale syrup from the whiskey distilling industry; to wheat derived liquids from the biofuel industry; to whey-based liquids from dairy processing. These liquids have several features in common which are relatively low dry matter (typically 20-40%) when compared to molasses and the low level or absence of sugars. This is mainly due to the sugars being fermented or removed during the process from which the liquid is derived. Due to the co-products having been fermented already, they have little or no effect on rumen activity when fed. Unlike molasses based liquid feeds which are fermented in the rumen, stimulate activity and microbial growth, providing value beyond the calorific content. Additionally, liquid co-products can also be difficult to handle and store due to gelling/viscosity issues or product spoilage.



The Evidence:

Don't take our word for it: Research work* has shown that 6-Carbon (hexose) sugars have a high level of rumen digestibility and are the key sugars responsible for the positive effects in the rumen such as increased fibre digestion and improved microbial protein production.

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

*** Sniffen & Tucker: Hoards Dairyman Sept 2011**

On the other hand 5-carbon (pentose) sugars have a much lower rumen digestibility and do not show nutritional benefits associated with 6-Carbon sugars.