



## New Technology for More Nutritious Grass Mixtures

Since 2008, Limagrain; the owners of Sinclair McGill have been developing a database which gives all the nutritional attributes of the grasses that they test. This has been made possible by the use of NIRS (near infrared spectroscopy) mounted on a forage harvester which sends a full breakdown including sugars, energy, dry matter, digestible fibre and protein to the plant breeder as the plot is harvested.

Armed with this knowledge every Sinclair McGill mixture is now assessed for forage quality and adjustments are made to ensure this is optimised in all mixtures. To ensure rumen efficiency and optimum production of milk or meat a mixture should have the correct balance of nutritional components, so a range of varieties with various attributes are included. A variety high in sugars but with lower digestible fibre would be compensated by a variety that exhibits the opposite attributes. The end result will be a mixture where all the components contribute to a perfectly balanced mixture that is more



Ian Misselbrook

efficiently digested and converted to meat or milk.

If every ingredient in a mixture is selected for optimum nutritional attributes then it qualifies for LG Animal Nutrition (LGAN) accreditation, but this can only be applied to a few highly focussed mixtures such as Prosper. However in mixtures where other factors are deemed to be important the breeders are still able to optimise nutritional quality whilst at the same time ensuring it meets all the other important requirements such as persistency, dry matter yield and stock carrying capacity.

The LGAN concept has been proven in feeding trials conducted at The Schothorst Institute, a leading independent livestock research institute located in the centre of The Netherland, in 2013, where cows fed on a mixture formulated using the above principles produced 5% more milk than those fed on a good conventional mixture. This is worth over €150 per cow per year; not a saving one can easily ignore!

Ian Misselbrook April 2014



## Dates for your Diary!

Sinclair McGill and Grass Technology have teamed up to bring a series of open days exploring Zero Grazing opportunities for farmers, aiming to maximise grassland production.

### Topics covered:

- Ideal mixtures for getting the most from your pastures
- New grass seed technology, including LGAN mixtures
- How zero grazing can play a part in farming in Ireland
- The nutritional value of zero grazed grass in the diet

*There will also be a demonstration of the Grass Tech Grazer*

### Dates and Locations:

- Monday 19th May: PJ McCarthy, Lislavan, Co. Cork
- Tuesday 20th May: Ivan Rumley, Bandon Rd, Co. Cork
- Friday 23rd May: Jeramiah Daly, Scartaglin, Co. Kerry
- Monday 26th May: John Sweeney, Rathkeale, Co. Limerick
- Tuesday 27th May: Bart O'Leary, Meelin, Newmarket, Co. Cork
- Wednesday 28th May: Leo Morrin, Galway

More dates to follow for June and July.  
For further details on the above events call us on 051 832814.



Dr Mary McEvoy from Teagasc Moorepark explains the Pasture Profit Index which aims to quantify the total economic merit (€ per ha/year) of individual perennial ryegrass varieties in trial in Ireland. These varieties and others are widely used in the Sinclair McGill mixtures and this data will be very helpful in formulating mixtures in the future.

**The Pasture Profit Index –  
simplifying variety selection  
by Dr Mary McEvoy**

Over the last number of years, Teagasc has been developing a Pasture Profit Index, with the objective of quantifying the total economic merit (€ per ha/year) of individual perennial ryegrass varieties. The index aims to simplify the selection of perennial ryegrass varieties for grassland farmers by identifying the performance of varieties in economic terms across a number of key traits. These traits are: spring, mid-season and autumn DM yield, quality, persistency and silage (1st and 2nd cut).

Teagasc have been working closely with the Department of Agriculture, Food and the Marine (DAFM) on the index in recent months. DAFM are responsible for the evaluation of grass varieties in Ireland and produce the Recommended List of Grass and Clover Varieties each year. The Pasture Profit Index, generates the economic merit of each variety based on its performance within the DAFM trials, relative to the base within each trait. An overall total economic merit value will be published for each variety. In addition, the performance of each variety within each trait will also be presented within the sub-index. This will identify the economic



**Grass trials in Moorepark**

merit of each variety within each of the key traits: spring, mid-season and autumn DM yield, quality, silage and persistency. This will allow the farmer to select varieties based on individual paddock requirements. If for example, a farmer is reseeding a paddock on the grazing platform where silage performance is not important, the emphasis would be placed on seasonal DM yield, quality and persistency with less importance placed on the silage performance. Alternatively, if selecting a variety specifically for silage production, then greater emphasis would be placed on the performance of that variety in the silage sub-index, perhaps, reducing the emphasis on seasonal performance. The total economic merit has

been calculated for 16 perennial ryegrass varieties which are currently on the Recommended List of Grass Varieties.

A prototype of the Pasture Profit Index will be released to the industry in early summer 2014. In this prototype the highest performing variety has a total Pasture Profit Index value of €226 per ha/year, compared to the lowest performing variety which has a total Pasture Profit Index value of €8 per ha/year. It is envisaged that in 2015 the Pasture Profit Index will contain the majority of perennial ryegrass varieties which are recommended to Irish farmers.

For further information contact Dr. Mary McEvoy (email: [mary.mcevoy@teagasc.ie](mailto:mary.mcevoy@teagasc.ie))

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