

Discover, Innovate and Grow -1 and 2 March 2016

AHDB Dairy organised a two-day research conference to discuss the outcomes of their research partnerships, one of which focused on grass, forage and soils.

Some of the main messages from the event were:

Sampling fresh grass for analysis

Variation has been seen between the results of grass samples coming from labs and it has been linked to sampling technique.

There is a need to sample grass in a consistent way between cutting dates and ideally the grass should be cut rather than plucked. Grass samples need to reach the lab within 24 hours, in a sealed bag, with as much air squeezed out as possible. Chilling the samples helps to reduce nutrient losses, even if the samples don't reach the lab within 48 hours, but this may not always be achievable.

Better prediction of the nutritional value of grass and clover silages

A project to understand whether the equation used to analyse grass silages was appropriate for silages that contain grass and white or red clover found that the equation did not predict crude protein, ash and acid detergent fibre (ADF) levels adequately in grass and clover silages. Crude protein levels were under-predicted in grass and clover samples by up to 4% when clover levels were high.

A new equation is being generated and will be used by Forage Analytical Assurance (FAA) labs in the future to increase the accuracy of the analysis. Until the new equation is available, it is recommended that silages with high-clover contents are analysed using wet chemistry techniques.

Feeding fresh grass to housed dairy cows

Work investigating whether cut grass could be used to replace either 25% or 50% of a total mixed ration (TMR) to a group of high-yielding dairy cows was discussed. The grass was harvested daily and cows fed 50% fresh grass diets ate nearly 90 kg fresh weight per day compared to around 55 kg fresh weight when fed the 100% TMR diet. The milk yield of the grass-fed cows did drop by around four litres per day and it appeared that mixing grass in a TMR wagon did affect the grass integrity and ration heating could be a problem.

At lower milk prices, the 50% inclusion rate of cut grass was more economical, with a potential saving of 3p per litre in feed costs.

Future work is aiming to compare cell grazing with zero grazing, with the aim of optimising how fresh grass can be fed to dairy cows.

Lucerne silage

The inclusion of lucerne silage into dairy cow diets can increase dry matter intakes and reduce the requirement for purchased protein. For dairy farmers, the decision to incorporate lucerne silage in diets should be based on the ability of the farm to grow the crop and likely fertiliser savings, rather than improvements in milk yield and milk quality

See the BRP + document [Growing and Feeding Lucerne](#) for additional information.

More information on AHDB Dairy research projects can be found [here](#)