



IGER Grassland Development Centre

Monitoring of Grass Quality for Ensiling



Reporting on samples collected on **30th May 2007**

Producing a high quality, well fermented, stable silage will only be possible if the grass at cutting time is of suitable quality.

Targets

High sugars (above 3% @20%DM) to provide an energy source to drive fermentation

- *low nitrate N% (below 0.1)* to prevent the production of ammonia nitrogen that will increase buffering capacity and restrict fermentation
- *D value* – the digestibility of grass is directly related to its energy level – target above 67D for growing/fattening animals and dairy cows.

This weekly GDC update will allow you to gauge how swards are progressing across Wales - to help you make the best quality silage. The majority of samples are currently from lowland dairy farms – as the weeks progress the samples will increasingly come from beef/sheep farms and from higher altitudes

GDC GRASS TEST RESULTS (May 30 2007)

Crop type/ Test	Red Clover Leys	Change
Dry Matter	18.1	-0.8
D value	65	-4.5
Crude protein %	18	-0.7
Nitrate N %	0.01	0
Soluble sugar %@20% DM	2.3	-1.15

Quality

There were few samples this week, perhaps reflecting the fact that many have taken first cut silage from Italians and hybrid type leys in the last few weeks. The red clover leys that comprise this weeks samples have dropped slightly in quality- sugar levels to below the target, due probably to the rather difficult wet cool weather. We expect to receive later cut samples now from beef and sheep farmers at slightly higher altitudes and swards to be more dominated by perennial ryegrass with other grass species. It will be interesting to look at the quality factors in these swards.

Additives?

It is recommended that where silages are high quality targeted for growing/fattening stock or milking cows that an additive should be used to maximise protein quality. Additives are advisable on all silages where conditions may restrict rapid fermentation; low sugars, high nitrates, wet crops and poor harvesting conditions.

A good inoculant (one with a million + bugs/gram dry matter) will help to achieve a good fermentation in wet conditions – there should be no need to resort to an acid unless there are high nitrates or significant soil contamination.

Weather forecast

For the latest 5 day forecast follow this link

http://www.metoffice.gov.uk/weather/uk/wl/wl_forecast_wind.html

In view of the small number of samples it is difficult to make comment. However many farmers will be using slurry on aftermaths and below are a few tips on this.

Topical note- slurry on aftermaths

Many of you will be applying **slurry** on **aftermaths**; one big advantage of slurry is that it provides the crop with readily available potash, a bit of sulphur and phosphate – and if you're lucky even some nitrogen. Some maintain that the water helps the crop in a dry spell, but an application of 3000gl/acre of slurry is only similar to 1/8 of an inch (3mm) rain– and because it all comes in one go, on a sunny day, a fair amount will evaporate immediately. Unfortunately the disadvantages of applying slurry using in the summer using **conventional** methods (eg splash plate) can outweigh the advantages, although many problems are overcome by using a slurry injector or a trailing shoe. These machines can cut N losses by up to 75% and also leave swards clean for cows to graze a couple of days after spreading.

Injectors and trailing shoes work best with some grass cover, 5-6inches – and are most effective with moderate application rates of around 3000gl/acre. Applying 3000gl/acre with an injector rather than a splash plate will help to break up any soil compaction and increase the nitrogen applied. Remember to account for these nutrients when planning aftermath fertilisers.

For our factsheet 'Why use a slurry injector?' please go to our web pages or contact one of the extension team in the Grassland Development Centre at IGER Aberystwyth on 01970 823058 <http://www.iger.bbsrc.ac.uk/Practice/GTT/Events.htm>

or email one of the GDC team:

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The Grassland Development Centre, based in IGER is managed by the Welsh Assembly Government as part of Farming Connect.

