



## IGER Grassland Development Centre

### Monitoring of Grass Quality for Ensiling



Reporting on samples collected on **24th April 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 (April 24<sup>th</sup> 2007)**

<b>Crop type/ Test</b>	<b>Older Ley (5yr+)</b>	<b>Younger Ley (&lt;5yrs)</b>	<b>Hybrid and IRG Ley</b>
<b>Dry Matter</b>	14.2	n/a	n/a
<b>D value</b>	69		
<b>Crude protein %</b>	20.2		
<b>Nitrate N %</b>	0.02		
<b>Soluble sugar %@20% DM</b>	3.3		

#### ***Quality Issues***

It's been a dry month for most with very little rain since Easter although warmer than last year which was fairly slow for grass growth. The heading dates of early perennial ryegrass varieties are about average for this time of year; its still early in the season, keep an eye on the weather in the next two weeks

The combination of sunshine and cool nights are pushing sugar levels upwards (above 3% at 20%DM this week) but grass growth has been slowed by lack of rain.

Ground conditions are still very dry. D values should still be high. With a settled forecast the crop should be bulking up a bit in the lead up to the earliest harvests by the barometer growers supplying results for these reports.

### ***Sulphur levels***

It's too early to sample for crop sulphur levels, however we expect some results in mid May in the lead up to 1<sup>st</sup> harvests.

Atmospheric deposition has declined significantly in recent years – resulting in many areas of the country no longer receiving enough sulphur to adequately supply a multi-cut system. Last year our early samples all came back indicating a sulphur deficiency – suggesting that an application of sulphur ahead of the 2<sup>nd</sup> cut would result in increased yields. This application may be from the bag or in the form of slurry; 50m<sup>3</sup>/ha of slurry will supply around 20kg/ha of available SO<sup>3</sup> – which would supply enough sulphur for the following silage crop.

### ***Additive use***

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 would be 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](http://www.metoffice.gov.uk/weather/uk/wl/wl_forecast_wind.html)**

### **Making big bales?**

**For a demonstration and up to date research on making big bale silage, come along to the IGER /HCC Farming Connect open day on May 9<sup>th</sup> at Plas Gogerddan, Aberystwyth SY23 5AW**

**Tel Jessica Longworth 01970 823024 or go to**

**<http://www.iger.bbsrc.ac.uk/Practice/GTT/Events.htm>**

For more information contact:

IGER Grassland Development Centre on 01970 823058

or email one of the GDC team:

[huw.powell@bbsrc.ac.uk](mailto:huw.powell@bbsrc.ac.uk),

[chris.duller@bbsrc.ac.uk](mailto:chris.duller@bbsrc.ac.uk),

[charlie.morgan@bbsrc.ac.uk](mailto:charlie.morgan@bbsrc.ac.uk), or

[heather.mccalman@bbsrc.ac.uk](mailto:heather.mccalman@bbsrc.ac.uk))

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

