



## IGER Grassland Development Centre

### Monitoring of Grass Quality for Ensiling



Reporting on samples collected on **18<sup>th</sup> June 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. Currently samples are from beef/sheep farms and from higher altitudes.

#### **GDC GRASS TEST RESULTS (June 18th 2007)**

<b>Crop type/ Test</b>	Older PRG Ley A	Older PRG Ley B	Older PRG Ley C	Average CHANGE *
<b>Dry Matter</b>	13.7	15.5	22.8	-0.6
<b>D value</b>	65	67	67	0.7
<b>Crude protein %</b>	18.9	20.8	15.4	-0.7
<b>Nitrate N %</b>	0.01	0.01	0.01	0
<b>Soluble sugar %@20% DM</b>	1.6	1.5	3.2	-0.4

- \* this is the change from last week to this week of the average of all results received

#### **Quality Issues**

Silage making has been put on hold this week with the wet weather. The outlook for next week from the weather sites is "unsettled with rain or showers at times, and turning colder as a brisk northerly wind develops on Monday and Tuesday" All the samples come from older leys this week which are between 6 and 9 years old.

Ley A contains the hybrid AberLinnet and AberExcel AberDart mixture. Ley's B and C are perennial ryegrasses.

D values appear to be steady around 67D without having dropped very much during the last week.

We have seen a drop in grass sugar levels however- It's been a very wet week with heavy scattered showers for most during this last week which is reflected in lower sugar levels.

The best result this week comes from ley C with ideal dry matter and sugar levels for ensiling (above 20% and 3% respectively). Although 8 years old, the result demonstrates that an older ley managed well remains productive providing quality grass into its 8th and 9<sup>th</sup> year.

### ***Sulphur levels***

There were no results for sulphur this week.

Sulphur levels of less than 0.25% OR a nitrogen : sulphur ratio greater than 13 indicates sulphur deficiency.

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 all our samples 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.

### **NOTE:**

This is the last grass for silage report covering the first cut period for lowland dairy and upland beef and sheep farms this year.

We hope the reports have been of use to you and would like to draw to your attention to a series of factsheets that are also available from the Grassland Development Centre on silaging matters.

They are:

- Fertiliser for Silage- Beef and Sheep
- Why big bale silage?
- Why use an additive?
- Reducing silage loss
- Reducing Red Clover silage loss
- On farm assessment of grass silage
- Interpreting grass silage analysis

These are available from the Grassland Development Centre at IGER or on the website at <http://www.iger.bbsrc.ac.uk/Practice/GTT/Factsheets.htm>

### **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)

**For more information contact:**

IGER Grassland Development Centre on 01970 823058

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

or email one of the GDC team:

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