



## IGER Grassland Development Centre

### Monitoring of Grass Quality for Ensiling



Reporting on samples collected on **14th 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 14th 2007)**

<b>Crop type/ Test</b>	Young PRG Ley	Young IRG / PRG Ley	Old PRG Ley	Average Change*
<b>Dry Matter</b>	21.9	13.5	15.8	-0.3
<b>D value</b>	70	68	66	-1.6
<b>Crude protein %</b>	17.1	20.6	18.5	-1.02
<b>Nitrate N %</b>	0.01	0.1	0.01	-0.02
<b>Soluble sugar %@20% DM</b>	4.3	3.1	2.7	-0.1

\*(Figures in the “change” column above are the average from samples received from farms this week compared to the average of last weeks results)

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

Days this week have generally started with locally heavy showers drying into the afternoons and generally becoming warmer through the week with increasingly fresh and stronger winds. The weather we wanted for silage making hasn't really materialised this week with today, (Friday) possibly offering the best opportunity to cut. The forecast promises a sunny end to the day, milder weather and strong

winds. Generally, good weather for wilting is anticipated into Saturday which is forecast mostly dry and sunny. Make the most of it if your crop is ready!

Digestibility will continue to fall at around 2 units a week, as will protein – but perhaps the biggest concern of maturing crops is the knock on effect to tiller densities and to regrowth. As we said last week for the most forward crops, particularly if they have gone down, seriously consider the possibility of cutting and baling small acreages if a short weather window appears. The most vulnerable will probably be leys sown last year.

See last weeks report for guidelines on handling wet silages and tactics to avoid soil contamination.

### ***Sulphur levels***

There are two results for sulphur this week.

<b>Sulphur % DM</b>	<b>Nitrogen % DM</b>	<b>N : S ratio</b>
0.19	2.66	14
0.12	1.68	14

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

Both of the above results indicate a sulphur deficiency that would impact on 2<sup>nd</sup> cut yields. These deficiencies have occurred even on ground that has had significant slurry applications over winter.

### ***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)

### **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:

[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.

