IGER Grassland Development Centre

Monitoring of Grass Quality for Ensiling

Reporting on samples collected on **21st 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 21st 2007)

Crop type / Test	Young PRG /Red Clover Leys	Young PRG Ley	Young IRG / PRG Ley	Average
Dry Matter	18.6	23.7	17.5	19.6
D value	69.5	71	68	69.5
Crude protein %	18.7	19.9	17.7	18.7
Nitrate N %	0.02	0.01	0.04	0.02
Soluble sugar %@20% DM	3.4	3.7	3.6	3.5

Quality Issues

Weather this week has been characterised by dry warm sunny spells, light winds and increasing temperatures through the week although cooler today (Friday). The outlook for next week is cloudy, wet, windy with rather cool conditions dominating.

The farms that are now contributing to our reports are mostly beef/sheep farms – but also dairy producers who overwintered sheep into late winter.

Their leys will be characterised by later heading varieties which this year have been heading about two weeks earlier than average. So if you're aiming for a crop with around 67D or 50% ear emergence, cutting will possibly earlier this year.

Sulphur levels

There was one result for sulphur this week.

Sulphur % DM	Nitrogen % DM	N : S ratio
0.23	2.66	11.6

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

The above result indicates a sulphur deficiency that would impact on 2nd cut yields. This deficiency has 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

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