



GRASSLAND DEVELOPMENT CENTRE CANOLFAN DATBLYGU TIR GLAS



Autumn Grass Quality

Late summer and autumn grass makes a very valuable contribution to livestock production including the milking dairy cow. However its quality can be over estimated so it is important to assess the available grass before deciding on the need and the type of supplementary feed. Points to note are:

- **Digestibility (D) or ME Values:** Leafy grass grown after a summer of good sward management will have high D (70+) and ME (11.2+) values. Values below this indicate levels of stemmy material from earlier rejected grazing.
- **Crude protein (CP):** Soil N availability is often high at this time of year and elevates nitrogen uptake and crude protein to levels above 25%CP in autumn grass. Crude proteins are high in clover rich herbage and this will be of better nutritional value. Crude proteins above 20% indicate the need for supplements with readily available energy (eg starch or carbohydrate rich) to mid and early lactation cows.
- **Soluble carbohydrate (WSC):** levels drop with shorter days and reduced sunshine. While temperatures remain high, grass growth rates have a high demand for sugars for structural growth; later sugar production will also decline at lower temperatures. Low sugar levels result in poorer utilisation, particularly of the highly degradable herbage protein and increase the need for supplementary energy. Levels below 10% of DM are considered low in summer, but may fall below 5% in autumn grass.
- **Dry matter (DM):** levels vary with the weather and amount of surface water at sampling, but autumn grass is invariably wetter than summer grass, and the extra bulk and dilution of nutrients will limit intake and diet utilisation. Autumn grass is typically in range of 12-18% DM.

Results for week of 17th September

The results below illustrate the differences between a range of swards

Hendy, Caernarfon – Dairy farm – well managed grazing paddock with good ryegrass% but with low clover content – few rejection areas.

	10 th September	17 th September
Dry Matter%	20.5	(sample awaited)
D value	73	
ME	11.6	
Crude protein %	18.7	
WSC%	14.8	

Dyffryn, Meifod, - Dairy Farm – aftermath regrowth, high ryegrass% and good white clover. Light slurry application

	10 September	18 th September
Dry Matter%	19.6	17.3
D value	72	73
ME	11.4	11.6
Crude protein %	18.6	10.6
WSC%	12.4	28

Great Bottom farm Raglan, - Beef and sheep – grazing field on free draining red sandstone permanent pasture that suffered waterlogging this year

	20 September
Dry Matter%	21.1
D value	70
ME	11.1
Crude protein %	10.2
WSC%	22.7

Bwlchyrduyallt, Brecon - 8 year old ley aftermath for lamb finishing

	20 September
Dry Matter%	18.5
D value	73
ME	11.6
Crude protein %	11.9
WSC%	29.4

The key changes from the previous bulletin are noticeably lower proteins even though the swards contain a good clover content, and fairly high sugars. The sugar levels are probably related to the cold night and bright sunny days of sampling (17th and 18th September).

Digestibility and energy (ME) of the samples was good, all above 11 and 70D although a little lower than the previous samples, it still suggests leafy swards. The older leys of Bwlchyrwyallt and Great Bottom farms are giving good nutritional figures; a reflection of good management through the summer. In a poorer sward, the difference in energy content is quite large – enough to reduce animal performance by almost 50% (one unit of D generally equates to 5% increase in live weight gain or milk production).

Crude protein levels in all samples were low, even in the clover sward. This indicates low soil N and poor uptake – due to poor summer conditions. This would be even more pronounced in a poor sward with less ryegrass.

Conversely, *sugar* levels are holding up quite well with the sunny spells. As levels drop with shortening day length, supplements for early lactation cows will be needed and should have good energy quality.

Dry matters remain high and are helping maintain intakes. These will be quick to drop with a period of wet weather. Be ready to react and if possible limit the grazing time of high yielders. The lamb finishing pastures are of high quality and should support good lamb growth rates at this stage providing the animals select the higher protein areas of clover.

For more information contact:
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