

MGA TIMES



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DIARY DATES

SEPTEMBER 5TH - BGS FORAGE LEGUMES CONFERENCE AT RAC CIRENCESTER. 10.30AM—4.00PM

SEPTEMBER 10TH - MAIZE DEMONSTRATION MEETING, EXETER. 10.00AM—1.00PM

SEPTEMBER 19TH—20TH - EUROPEAN DAIRY EVENT, STONELEIGH. (MGA STAND NO. CS2 540)

OCTOBER 3RD - SOUTH WEST DAIRY SHOW, SHEPTON MALLET.

GRAIN MAIZE OPPORTUNITY

The MGA Office has this week had a request from a business that would like to purchase grain maize on a continuous basis for the purposes of milling, packing and selling as maize meal to consumers. The maize he wants to purchase would apparently be in large quantities and preferably the white maize variety. If anyone is interested in supplying him, please contact the MGA office for his details.

NVZ CONSULTATION – HAS THE S*** HIT THE FAN?

Hot off the press today (21st August), DEFRA has finally issued the consultation document on the review of NVZ's in England. At the same time, they are also looking for comments on a proposed update of the Codes of Good Agricultural Practice and for opinions on options for tackling other agricultural pollutants (An extension of the Catchment Sensitive Farming initiative).

Contained within this mailing is a leaflet produced by Defra summarising the proposals. All stakeholders have been invited to respond to these consultations by the 13th November 2007. Over the next couple of months, we will review these proposals and keep all members updated on the implications (which could be huge for a large number of farmers).

The headline grabbing issues are summarised below: -

1. A requirement to store manures with high available N (>30%) e.g. cattle slurry (but not FYM) for at least 22 weeks and a ban on spreading these products for 4-5 months over the autumn & winter regardless of soil type.
2. Reduction of the manure loadings to 170 kg total N/hectare/year over the whole holding – although a derogation is being sought from the European Commission to increase this to 250kgN/ha/year on grazing systems on grassland farms.
3. An increase from 55% of England designated as an NVZ to 70%, with even 100% possible as a result of this consultation.
4. Cover crops required before establishing spring-sown crops.
5. Incorporation of organic manures on bare soil or stubbles in certain situations.

Having scanned through the 56-page consultation document (downloadable from www.defra.gov.uk/corporate/naturalenvironment.htm), there is no provision for financial assistance on capital items such as storage. The earliest any of these proposals could be implemented is March 2008, but 2 years would be given to get storage facilities up to capacity.

Plenty of food for thought over the next few months!

INVITATION TO MGA/CATCHMENT SENSITIVE FARMING MAIZE DEMONSTRATION SITE

Following on from the successful event in July, the next meeting in the MGA/CSF five event series on the key stages of forage and grain maize production will be held on Monday 10th September starting at 10.00 am, planned to coincide with the harvest of forage maize.

Subjects to be included are: -

- Ø Target silage maize dry matter at harvest. A hands-on clinic using the early, medium and late maturing varieties and maize under plastic plots on site.
- Ø Silage maize harvest issues including appropriate chop length and the need for additives.
- Ø Key catchment sensitive farming issues, such as harvest related soil compaction with the runoff and soil wash that can result, using the aid of soil profile pits.
- Ø Post harvest cultivations and over winter options.

The event will round off with a pasty lunch.

Given the current Foot and Mouth restrictions, we ask that you attend this event in non-farming clothes and that your footwear is clean. Disinfectant facilities will be available on site.

If you are interested in attending, then please complete and return the slip to ADAS on the enclosed invitation.

A clear solution for farmers



MGA WINTER TRIP TO GERMANY

In response to the ongoing demand to re-introduce the historically popular MGA study tours, members (well some of you at least!) will be pleased to receive preliminary notification of the MGA study tour, due to take place this December.

The tour will focus on the potential to produce renewable electricity energy from biomass and will be a follow up to the exploratory trip by Simon, John and John Jackson (MGA Vice Chairman) last September. While details have yet to be finalised, the following is on the programme so far:

- ◆ Extended visit to the Institute for Agricultural Engineering and Animal Husbandry at Freising, led by Felipe Kaiser, one of the lead researchers in Anaerobic Digestion in Germany.
- ◆ Visits to 2 or 3 on-farm commercial Anaerobic Digesters.
- ◆ Trip to the alleged oldest brewery in Germany!

As always the aim of this MGA study tour is to get to the facts, thereby providing members with a genuine and independent view on what is an exciting opportunity in the coming years.

Travel to Germany will be by air and therefore we will need to book flights as soon as possible, if we are to get reasonable rates. With this in mind, please contact the office to express an interest and reserve your place on what we suspect will be an oversubscribed tour. Provisional dates are Monday 3rd December to Wednesday 5th December 2007.

NEW PRODUCT FOR 2007

Members will no doubt be well aware of the need to seal clamps quickly and effectively to encourage the development and ongoing work of the anaerobic bugs. These "good" bugs convert sugar more efficiently into preserving acids, with the result that pH drops low and quickly. With this rapid ensiling and sealing in mind members have, for many years, been encouraged to sheet quickly and use salt



or other additives to minimise wastage. New to the market this year is another option, being clingfilm or to give its proper name ClampFilm™. Marketed by MGA members Kelvin Cave Ltd, ClampFilm is a 40 micron clear plastic film which is placed between the silage and the normal black plastic sheet. The claim is that the film is fine enough to be quickly sucked on to the silage surface, but tough enough to remain intact when being laid out. The film apparently improves the sealing of the clamp, allowing anaerobic conditions to be established earlier and as a consequence, helps reduced general and surface wastage. At a cost of a little over 10 pence per square metre and available in 50m long rolls of 7m, 12m, and 16m rolls it may be worth a look.

Typical German Biogas Plant



DEMONSTRATION MEETING REPORT

Following a normal July downpour in the morning, the skies cleared in the afternoon to leave a dry evening for this well attended event.

Over 50 members and non-members were given a tour of the demonstration site by Simon Draper & John Morgan. Whole ranges of topics were discussed (prompted by the various plots on the site), which included: -

- ◆ Soil structure & compaction.
- ◆ Fertiliser requirements for the maize crop.
- ◆ Variety choice.
- ◆ Drilling dates.
- ◆ Seed rates.
- ◆ Grain maize.
- ◆ Harvesting.
- ◆ Maize as an energy crop.
- ◆ Maize under plastic.



Of particular interest were the soil pits, demonstrating the effects of soil compaction and how targeted cultivations at establishment, can not only alleviate the problems of soil-wash and run-off, but also greatly enhance the progress of the growing maize plants.



Your livestock partner



MAIZE MASTER drill after maize

50% diploid Italian ryegrass
50% tetraploid Italian ryegrass

Big 1st cut in May then back into maize
OR 3 cuts then into arable
Can keep for 2 years unlike Westerwolds
Soaks up surplus N
Reduces soil erosion
Sow at 14 kg / acre
£1.50/kg for small orders
£1.40/kg for 1 tonne plus

Price valid while stocks last
Autumn 2007

For further details contact Brendan Paul mob 07767 310454

AT WHAT DRY MATTER SHOULD YOU HARVEST YOUR MAIZE SILAGE?

The receipt in the office this week of the program for this years European Maize Committee meeting in Denmark, the chosen subject of which is fermentation and feed quality of maize silage, has prompted a review of why we do what we do at harvest each autumn. Along side chop length decisions, covered in a paper produced by Chris Savery (soon to be circulated as an addition for your growers guide) and included in this mailing, we have re examined the logic for our Dry Matter at harvest recommendations and advice on how to work it out.

Our point of reference is the MGA Growers Guide, which in section 8 talks of targeting DM's at harvest between 28% and 33%. This recommendation is based on various UK and overseas work, which suggest that Dry Matter Intake is maximised at these levels. The growers guide shows CEDAR/MGA trial data showing increased intakes to 30% DM. Increased intakes generally result in greater energy intakes and improved performance, be that in the form of milk, meat or body condition. French reference books acquired during past MGA trips, indicates forage intakes continue to rise up to and beyond 35% DM, but goes onto suggest that digestion and clamp stability tend to decline at these very high levels.

Assessing this target DM can be hazardous (take a look at the MGA office microwave if you don't believe us!) as well as unpredictable. The growers guide talks about the thumbnail test as well as explaining in detail the oven and microwave options (don't forget the glass of cold water!) Another option outlined within the French literature may be to test individual elements of the plant and work back to total plant DM. The table below sets out the DM of the whole plant and its different elements.

DM of the entire maize plant and its component parts

% DM Whole Plant	25	30	35
Stems and leaves %	20-22	23-25	25-27
Cobs %	30-35	40-45	45-50
Grain %	40-50	55-60	60-65

It may be easiest to work on grain DM% perhaps using the thumbnail test (details of which are outlined below) or by using the oven options. Once you have a crop DM you may use standard dry down rates to estimate harvest date. Dry Down rates are currently under review using part MGA funded work at NIAB. Published data, already out there, suggests the range of dry down rates varies between 2 days per 1% of DM in August to 1 week per 1% of DM at the end of October.

Good luck with this years harvest and remember, the office team, Simon, Ruth (Agronomy) and Chris (Nutrition) are available for last minute advice or re-assurance.

MAIZE DRY MATTER TESTING- MICROWAVE METHOD

- Weigh 500 g of freshly chopped maize, and place it in a thin layer on a shallow 'microwave-safe' plate.
- Place a half-full 250 ml glass of water in the back corner of the microwave to prevent the sample from igniting.
- Heat the sample on high for several minutes. If it feels dry, weigh it, and then record its weight. Stir the sample and repeat the heating, for another minute before re-weighing.
- Continue the process, weighing every 30 seconds until the weights are near constant but before the sample begins to char. If it does char use the previous reading.
- Calculate dry matter content as:

Final weight/Original weight X 100 = DM%



THUMBNAIL TEST

The thumbnail test attempts to judge the DM of maize grains and is done by placing your thumbnail into a grain from the centre of the cob and determining whether there is moisture in the grain.

The thumbnail test is less accurate and does require a degree of experience. It is however quick and easy and does give a good measure of the dry matters once you have calibrated yourself. Doing a microwave or oven test on a sample of maize beforehand best does this.

To achieve an overall plant DM of 30% the grain DM will be around 55 - 60%. To hit this target the grains should generally be cheesy, with the grains at the top of the cob being a soft cheese consistency and the bottom ones being more like hard cheese. The middle grains should be able to take an imprint.

Where the moisture shoots out then the dry matter is likely to be around 20%, and from this point on the crop should be carefully monitored to ensure that it is drying at the average 2%/week.