

## Make sure your maize pays!

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### How amazing is your maize?

Following an excellent summer, a lot of the maize will be fit to cut soon. Now is the time to start checking your maize crop for signs of maturity.

Below we have outlined the key things you need to consider prior to harvesting!



### Dry Matter Tests

Whole plant dry matter can be carried out as the dry matter of the plant rapidly increases each week. The whole plant dry down rate will increase as maize approaches target dry matter.

#### Key Stats

- Target whole plant dry matter: 32% - 34%
- Whole plant dry down rate: 2% per week (just before target DM reached)

### Whole Plant Dry Matter Test

Before you start make sure you select a plant that represents the whole crop. The cob needs to be nearly ripe (see later) before you consider doing this test.



1. Cut one representative plant around 8" from the ground and chop into 1" sections. Make sure you cut the cob along its whole length too.
2. Mix thoroughly, weigh and tip into a microwave proof dish. Put a glass of water in the microwave too to reduce the risk of the maize catching fire!!
3. Heat up for around 5 minutes, stir and then heat for again for another 5 minutes.
4. Reweigh the sample and keep repeating for a further 2 minutes.
5. When the sample stops losing weight take the final sample weight, divide it by the initial weight, multiply by 100 and this represents the dry matter.

This is the most accurate method of assessment of crop dry matter.

### **Top Tip**

Make sure you watch the maize closely in the microwave when heating as Janice did set one sample on fire!

You can heat your sample up over a low heat in the bottom of an aga, but this will take much longer to do.

## **Assessing the Cob**

Alternatively, you can check the cob development to give you an idea of what the overall plant dry matter is. This is a bit hit and miss, especially with some of the stay green varieties. But it is better than doing nothing.

1. Take a representative cob from a plant and break the cob in half.
2. Take a sharp bladed knife and cut into the grains from the outside edge inwards.
3. When the milk line is around a third of the way down the cob the crop will be approximately 30 – 32% DM. When the milk line is half way down the cob and the grains become hard and doughy the dry matter will be around 32-34%. And when there is no milk line and the top half of the grain is glassy and hard the dry matter is over 35%.



## Harvesting at the Right Stage is Important

If maize is harvested too late and over ripe it will have long term effects on cow performance and fertility due to the availability of the starch and the increased risk of moulds and yeasts building up in the high dry matter crops. Therefore, it is very important that you keep an eye on your crops this autumn as the harvesting season will be early.

Taking maize too early is also bad news as you lose out on a lot of starch production and end up with a wetter crop that ferments and causes acid problems in the rumen.

Over ripe maize will need at least 3 months to ferment before feeding to take full advantage of the forage.



## Options after Maize

The early harvest of maize this year presents a great opportunity for getting a good quality autumn grass reseed established – not many years we can say that happens!

Establishing a ley after maize will improve soil structure and help to reduce the risk of N leaching over the winter.

We normally recommend following maize with an Italian ryegrass ley that establishes quickly before the winter comes. But there may be opportunities to get some long term leys in too.



Remember when you are reseeding that the cost of the grass seed mix is small relative to the whole cost of doing all the fieldwork.

If you are putting in a long term ley, pay a bit extra and make sure your mix contains the latest recommended varieties. They will give you a good payback over the lifetime of the ley.



### **Are you meeting the nutritional needs of your herd?**

Continued reviews of nutritional management and dietary requirements of your herd can ensure improved feed efficiency, health and productivity.

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Call our office on 01666 817278

[sarah@douglasgreenconsulting.co.uk](mailto:sarah@douglasgreenconsulting.co.uk)

