MGA MILKLINE DRY MATTER GUIDE

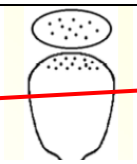
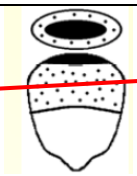
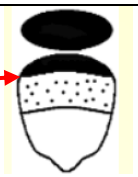
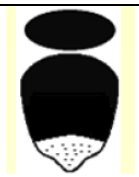
How to Determine DM content.
When carrying out our review of Maize Dry Matter research and advice, it became apparent that in general our European colleagues were using a different system to assess standing crop DM. No mention is made of microwaves or overnight drying in ovens, but much more is made of the Milk Line tests. Before describing this approach however, it is worth remembering that standing crop DM's are in fact a combination of stem/leave, cob and grain.

The milk line test.
Take a cob from the plant and break it in half. Remove a kernel from the cob and run your fingernail along the length of the kernel, starting at the flat/dented end working towards the end that was attached to the cob. Note the point where the solid starch ends and the liquid milk begins, in general when the milk line is $^{1}/_{3}$ to ½ way down the dry matter is 32 - 35% and ready to harvest. **Please refer to table below as a guide.**

MGA dry matter recommendation.
We recommend you should aim to harvest maize silage with a whole plant dry matter of between 32-35%, if optimum intakes and financial performance is your primary aim.

As with any new technique it is important to relate it to past experience. With this in mind we strongly urge you to undertake a standard MGA microwave dry matter test to check your Milk Line assessment is correct.

MILK LINE TEST DRY MATTER GUIDE

Grain Stage	Milky	Milky doughy	Doughy milky	Doughy	Hard dough	Hard and glassy
Grain Aspect (from central crown)	All milk - no milk line	Milk line begins to show from the top	Milk line 1/4	Milk line 1/3	Milk line 1/2 and top becomes glassy and hard	Top half of grain glassy and hard, no milk stage
Husk	Green	Green	Green	Yellowing	Yellowing	Desiccated
Grain DM %	Less than 52%	Less than 52%	52	55	58	More than 58
Kernel **Milk Line**						
Whole Plant DM%	**Less than 25%**	**25-28**	**28-30**	**30-32**	**32-35**	**More than 35**

Milk line ⅓ of the way

Milk line ½ of the way