MGA Site & Maturity Group Selector

The aim of the selector tool is to identify if your field is suitable for maize growing and if suitable from which maturity group you should choose your varieties. Answer the field specific questions recording the score in the form set out in Step 9. Use the score generated to identify suitable varieties in the following tables and graphs.

- ***Step 1***

What is your target harvest date?

	Your score
15th - 22nd September	***3***
23rd - 30th September	***2***
1st - 7th October	***1***
8th - 15th October	***0***

Harvest should be targeted at mid to late September to optimise the yield and quality of maize silage. The later the crop is harvested, the greater the risk of run- off and soil erosion. Earlier harvest also provides an opportunity to drill following crops in a timely manner. In cooler summers maturity will be slower and consideration should be given to this when choosing the most suitable variety.

- ***Step 2***

What is your target drilling date?

	Your score
Before 10th April	***0***
10th - 20th April	***1***
21st - 30th April	***2***
1st - 10th May	***3***
After 10th May	***4***

Maize matures at a standard rate. As a consequence harvest date will be sooner for earlier drilled crops.
Note : Maize drilling date should be based on soil temperature and ground conditions at the time, in preference to date.

- ## Step 3

What is the altitude of your field?

	Your score
0 - 45m	***0***
46 -90m	***1***
91 – 135m	***2***
136m +	***3***

Altitude does have an effect on the maturity of the crop, but this can be outweighed with south facing slopes.

So, if you are growing in the more marginal higher areas, ensure that the crop is grown on a south-facing slope if possible.

What is the Aspect of your field?

	Your score
North Facing	***1***
Highly exposed to wind	***1***

North facing and or exposed fields will be slower to mature than others.

- ## Step 4

What are your likely field characteristics?

	Your score
Light / Fine	***0***
Medium / Good	***1***
Heavy / Cloddy	***2***
V Heavy / V Cloddy	***3***

Soil type affects seedbed preparation and quality; the ability to retain moisture during the growing season will influence harvesting conditions. Therefore, fields that are likely to produce a cloddy seedbed or give rise to difficult harvesting conditions should be allowed for.

- ## Step 5

What is your annual rainfall?

	Your score
Low (250mm-675mm)	***0***
Medium (700-975)	***1***
High (1000mm+)	***2***

When soil becomes wet it generally gets colder leading to slow maize growth.

In high rainfall areas soil wash and erosion is also more of a concern.

- ***Step 6***

What is the average gradient of your field?

	Your score
<3° Slight	*0*
4 – 8° medium	*1*
>9° steep	*2*

While water will run off any compacted field whether flat or sloping, the speed built up when running off steeper fields can result in more damage being caused.

(For slightly sloping, free draining fields Step 7 can be ignored)

- ***Step 7***

How close to the lowest edge of your field to a watercourse, and or gateway onto a road, and or building, and or other environmental feature eg SSSI etc?

	Your score
More than 100 metres away	0
10 – 100 metres away	1
Within 10 metres with buffer/hedge	2
Within 10 metres no buffer/hedge	3

While soil movement within your own fields is not ideal, such, within field movement, is not as challenging to the environment as that which leaves the farm.

Post harvest cultivation, plus the establishment of a green cover, either within or after maize, will go a long way to reduce soil and water movement, both within and beyond the field boundaries.

- ***Step 8***

Which county are you in? ***Please select from the table***

County	Score	County	Score
Berkshire	0	Lincolnshire	1
Buckinghamshire	0	Norfolk	0
Cambridgeshire	-1	Northamptonshire	1
Cheshire	1	Nottinghamshire	1
Cumbria	2	North & Mid Wales	2
Devon & Cornwall (North)	2	Northumberland	3
Devon & Cornwall (South)	1	Oxfordshire	0
Derbyshire	2	Scotland	3
Dorset	0	Shropshire	0
Durham	2	Somerset	0
Essex	-1	Staffordshire	1
Gloucester	0	South Wales	1
Glamorgan	1	Suffolk	0
Gwent	1	Surrey	0
Hampshire	-1	Sussex	-1
Herefordshire	0	Warwickshire	1
Hertfordshire	0	Wiltshire	0
Kent	-1	Worcestershire	1
Lancashire	1	Yorkshire (North)	2
Leicestershire	1	Yorkshire (South)	1

- ***Step 9***

Calculate the most suitable range of varieties by their MGA group

Answer the questions as best you can to generate a score which relates to the MGA maturity group that best suits your individual fields. If the process generates a MGA maturity group number that is not available on the list, your field is high risk in terms of soil/water runoff if compacted during harvest. For High Risk fields post harvest cultivation/establishment of green cover is particularly important. You may also wish to consider whether maize is suitable for that particular field and or whether plastic film may speed up maturity.

Factor	***Your Score***
1. Harvest date	___
2. Drilling date	___
3. Altitude/Aspect	___
4. Soil characteristics and seedbed quality	___
5. Annual rainfall	___
6. Gradient	___
7. Proximity of environmental features	___
8. County	___
Total Score	___ *
**** Now go to the table of varieties with the same MGA group number as your score***	

In the 9 steps plan the ideal targets have been set and highlighted. If you consistently fall below these targets, then the likelihood is that the farm is less favourable and therefore varieties should be chosen from these categories.