

Choosing the Correct Forage Maize Maturity Class for Your Field

The aim of this proforma is to provide guidance to growers as to the suitability of their individual fields for maize and, if a field is suitable, direction to the most appropriate maturity class.

Growers should use the form (Step 9) to collate a score/maturity class for their field. If a field scores more than 12 (the earliest maturity variety on the list) then its suitability for maize should be questioned and alternatives such as biodegradable film or wholecrop cereal silage considered.

- **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?

| | <i>Your score</i> |
|------------------|-------------------|
| 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?

| | <i>Your score</i> |
|-------------------------------|-------------------|
| 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?

| | <i>Your score</i> |
|---------------------------|-------------------|
| 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?

| | <i>Your score</i> |
|--------------------------|-------------------|
| 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?

| | <i>Your score</i> |
|-----------------------------|--------------------------|
| <i><3° Slight</i> | <i>0</i> |
| <i>4 – 8° medium</i> | <i>1</i> |
| <i>>9° steep</i> | <i>2</i> |

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

- **Step 7**

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

| | <i>Your score</i> |
|--------------------------------------------------|--------------------------|
| <i>More than 100 metres away</i> | <i>0</i> |
| <i>10 – 100 metres away</i> | <i>1</i> |
| <i>Within 10 metres with buffer/hedge</i> | <i>2</i> |
| <i>Within 10 metres no buffer/hedge</i> | <i>3</i> |

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.

- **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**

Use this table to record your scores from the above questions. The Total Score equates to the most appropriate maturity class for that field. If a field scores more than 12 (the earliest maturity variety on the list) then its suitability for maize should be questioned and alternatives such as biodegradable film or wholecrop cereal silage considered

| <i>Factor</i> | <i>Your Score</i> |
|-----------------------------------------------------------------------------------------------|--------------------------|
| 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 | ___ * |
| <i>* Now go to the table of varieties with the same MGA group number as your score</i> | |