



**Leaving Cert Agricultural
Science**

Free Notes

Maize



Maize

- Maize (*Zea Mays*) is a cereal crop and belongs to the family Graminae. It is mostly known as corn.
- About 20,000 hectares are allocated to maize production and is increasing.
- Most widely used in the USA

Facts:

- Can grow between 2 – 3 meters tall with roots penetrating down up to 1.5 metres
- 80% of maize grown in Ireland is grown especially for maize silage for dairy cows as a winter feed.
- We consume the rest as sweet corn.
- Maize is self pollinating and the male part is called a Tassel. The female part is called a silk



Maize products:

Maize silage VS Grass silage

- Grass silage is most popular feed where as maize is better as a fodder crop.
- Maize has a higher DMD from their first cut as silage, although you will only get one cut of maize silage per growing season. Therefore volume of maize silage is significantly less

Silage Type	DM yield (tonnes/ha)	DM%
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Grass (PRG)	7 – 8	20 – 22
Maize	15 – 20	28 – 32

- Maize with its higher DMD produces less effluent and less potential to cause pollution.
- Feeding maize silage to beef and dairy cattle increases their DM intake and LWG, reducing need for concentrates.
- Has high level of starch and protein and is very palatable to livestock

Cultivation of Maize:

Soil suitability:

- Requires a warm, well – drained soil with pH of 6.5 to 7.0.
- While maize will not grow well in waterlogged conditions

Climate/seed bed preparation:

- Needs warm and frost free climate, therefore many farmers grow under plastic.
- Maize will not germinate until temperatures reach 10°C.
- Dry weather is very important for maize and its DMD properties.
- Rotivate and plough soil in March, then harrow for fine seed bed.

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