



## Maize

Maize can be of great benefit to milk and beef production. Maize silage with a high starch content is an ideal complement to grass silage in the diet. Maize and grass silage is the best combination and the cheapest forage available. High starch coming from maize improves milk protein and higher protein means more money for your milk. Maize is also ideal for fattening cattle. Maize can be fed to milking cows over Winter and can also be fed to cows at grass during periods of grass scarcity in Spring or Summer.

Selection of the site or field in which to grow maize is very important. Maize likes a sheltered field with a free draining soil. The altitude should not exceed 100 metres above sea level.

Variety choice is also important. It is important to grow an early maturing variety that will have a good mature cob full of starch before mid October. The main varieties are listed on the Dept. of Agriculture Recommended List 2011.

### Recommended List (2011) of Forage Maize Varieties suitable for growing without plastic cover - Department of Agriculture:

	Yield of Dry Matter	Dry Matter Content	Starch Content	Plant Height	Year First (metres) Recommended
Controls* (actual)	14.1t/ha	32.7%	23.6%	-	-
Acclaim (PR-2)	91	112	106	1.91	2010
Adept (PR-1)	102	97	106	2.05	2011
Andante (R)	98	100	101	2.23	2003
Beethoven (R)	111	93	97	2.22	2010
Destiny (PR-1)	97	106	106	2.1	2011
Fergus (R)	109	98	100	2.21	2008
Katy (R)	106	95	101	2.11	2010
Kougar (PR-1)	104	100	105	2.06	2011

\* Control varieties were Andante, Avenir and Loft in 2008, Andante, Avenir and Fergus in 2009 and Adante, Fergus and Nimrod in 2010.  
 \* No varietal lodging data included to insufficient lodging during the trial period 2008 to 2010.  
 (R): Recommended for general use. (PR): Provisionally Recommended (the number after the PR, indicates the number of years provisionally recommended).

## TOP SWARD Minimum Cultivation

- These mixtures will establish very quickly with minimum cultivation, including strip seeding.
- Seeding rate should be increased, by at least 15% where sowing with minimum cultivations.
- Draza slug pellets should be used if direct drilling with a strip seeder.

## Reseeding with TOP SWARD

**Timing**  
 Reseeding can be carried out from mid-March to early September. The April - June period is best for good clover establishment. Teagasc Moorepark have shown that by reseeding in spring after 2 early grazings the sward can be quickly back into production and it is a good time of year for controlling any weeds in the new pasture.

**Seed Rate**  
 Teagasc, Moorepark recommend using 14 kg seed per acre in good seedbed conditions. This rate should be increased in less than ideal conditions or if sowing in September.

The Key to successful establishment of a new ley with Top Sward mixes is ensuring the best practices are followed at sowing time.

### Minimum Cultivation Technique Procedure:

1. Silage Area: Spray silage with Glyphosate, 5-7 days before cutting the crop during fine weather. It is important to use the higher rates of Glyphosate to kill weed grasses.
2. Grazing Area: Spray grass with Glyphosate when grass height is 75 - 100mm high during dry weather. Use higher recommended rates to kill weed grasses. Graze bare 5-7 days later. The quality of the grass will hold up to 14 days depending on growth.
3. Apply ground limestone as recommended by soil analysis for surface application. However, a minimum of 1 ton / acre must be applied prior to cultivation to prevent surface acidification. Granulated lime may also be used at the rate of 2x50 kilo bags per acre.

4. Apply 3x50 kilo bags of 10-10-20 per acre, respecting the nitrates regulations.
5. Cultivate (Rotovate/Power Harrow/Disc Harrow) the top 50mm of soil to a fine tilth. Silage area can be cultivated immediately after cutting.
6. Roll.
7. Select the most suitable Top Sward grass seed mixture for your requirements and sow at 14kg per acre. Increase the seed rate in less than ideal conditions.
8. Cover grass seeds (light bush or grass harrow). If many sods are covering the seed, rolling will be sufficient.
9. Roll with a heavy roller in dry conditions.
10. Aim to have reseeding completed by mid August for better establishment, especially of clovers.
11. Apply 1-1.5 bags of 27.5% C.A.N. when field begins to green, respecting the nitrates regulations.
12. POST EMERGENCE: Control weeds in the new pasture with a herbicide spray which is recommended for use on newly re-seeded clover and grass. Take care that the clover is sufficiently well established before spraying. This is best done before the first grazing.
13. If the Seedling docks are present SPRAYING IS ESSENTIAL to prevent the buildup of docks in the new pasture. Failure to control seedling docks at this stage may lead to a rapid increase in docks in the pasture where they are much harder to control this is best done before the first grazing.
14. When ground cover of grass is 75 - 100mm, graze with weanlings or sheep.

## Out-wintering of livestock

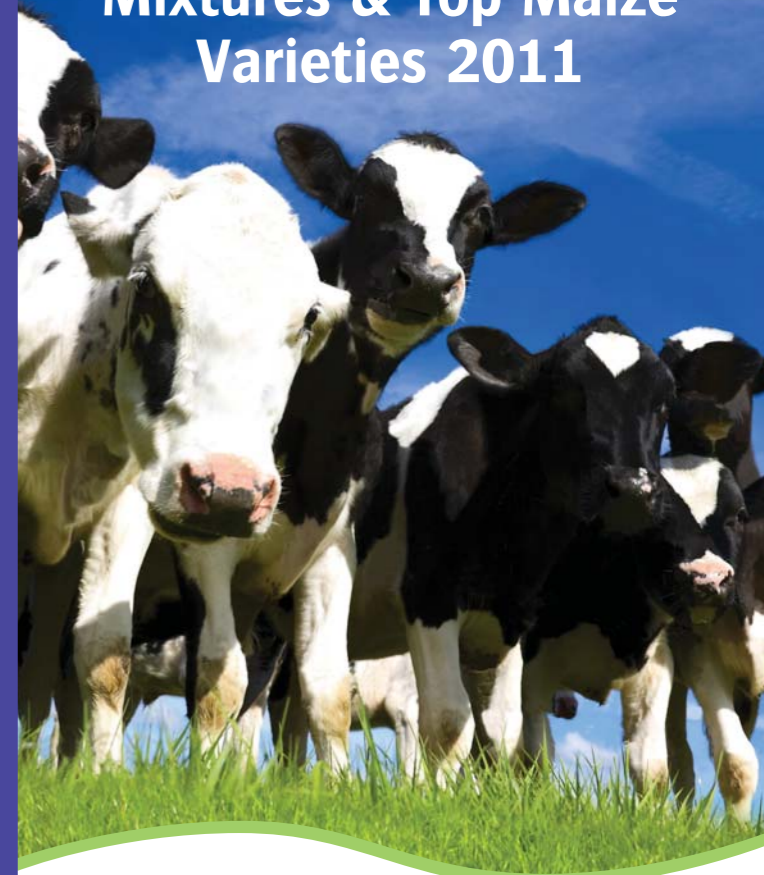
This is being investigated by Teagasc researchers as a way of reducing the costs of keeping stock during winter. Fodder beet, Kale, fodder rape and stubble turnip are the crops which are most useful for this purpose. Kerry Agribusiness can offer all the leading varieties of these crops and guidance on growing them.  
[www.kerryagribusiness.ie](http://www.kerryagribusiness.ie)

For further information, contact your local Kerry Agribusiness Branch.

Website: [www.kerryagribusiness.ie](http://www.kerryagribusiness.ie)



## Certified Grass Seed Mixtures & Top Maize Varieties 2011



Another Great Product From Kerry

5A0910



## Why use TOP SWARD?

- Produced using only top varieties from Irish recommended lists.
- High quality seed used to guarantee quick establishment of swards.
- Tetraploid ryegrasses added to mixtures to boost yield, digestibility and sugar levels.
- High pasture persistency post-sowing.
- All varieties are tested for purity and high germination levels.
- Formulated in conjunction with Teagasc Experts.
- Top Sward is updated annually using the latest technical info.

Grassland Management is one of the key factors in profitable dairying, sheep or beef production. Pastures that are dominated by weed grasses are not as productive as newly sown pastures dominated by selected varieties. The right choice of grass mixture is the foundation of successful farming.

**TOP SWARD** is that foundation.

## TOP SWARD STRENGTHS

- **QUALITY:** Research work has shown that quality as well as quantity is vital for top animal performance on grass. Therefore grass breeders have focused on improving quality as well as increasing yield.
- **RESEARCH:** Teagasc are leaders in research on which type of grass gives best animal performance. In actual grazing trials with milking cows where a number of grasses were compared, they found that the late heading varieties give the highest yield of milk and highest level of milk protein. Late heading varieties were shown to have a high yield of very leafy grass with a very low stem content.
- **SUGAR:** Other research work indicates that high sugar levels in grasses increases the energy intake. Increased energy intake helps cows to convert nitrogen in grass more efficiently into milk protein.
- **INTAKE:** High performance at grass comes from high intakes and this in turn is influenced by leafiness, density and quality.

## TOP SWARD

TOP SWARD 1

### TS1 1 Cut Silage & Early Grazing Systems

2.7 kg Tyrella	2.8 kg Aberavon
3.0 kg Portstewart	0.25 kg Barblanca White Clover
3.0 kg Abercraigs	0.25 kg Aberherald White Clover

12.0 kg per pack

Designed to give early growth in Spring. Silage cuts can be taken from this mix from early June onwards. The varieties used are highly resistant to poaching and give good Autumn growth. Highly digestible grasses are also used in this mix.

## TOP SWARD

TOP SWARD 2

### TS2 2 Cut Silage Systems

2.3 kg Abermagic	2.2 kg Aberavon
3.7 kg Dunluce	3.8 kg Soriento

12.0 kg per pack

TS2 is composed of high quality grasses which will produce quality silage. It can be grazed both in early Spring and late in to the season. Good dense sward are a particular feature and the absence of clover is beneficial to the control of weeds and in particular Docks.

## TOP SWARD

TOP SWARD 3

### TS3 Grazing Mixture

4.0 kg Tyrella	2.0 kg Twymax
3.5 kg Soriento	0.25 kg Aberherald White Clover
2.0 kg Portstewart	0.25 kg Crusader White Clover

12.0 kg per pack

TS3 mixture is formulated with 100% late perennial rye grasses - Research from Moorepark showed that late grasses can deliver extra milk yields right across the grazing season, but in particular during the summer months. Over three years research, this benefit was worth almost €50 per cow per year!

The inclusion of all late grasses helps to maintain sward quality and digestibility in mid-season and thus minimises the need for topping during the summer months.

## TOP SWARD

TOP SWARD 4

### TS4 Heavy Soils Mixture

3.5 kg Soriento
4.0 kg Portstewart
4.0 kg Mezquita
0.25 kg Crusader White Clover
0.25 kg Aberherald White Clover

12.0 kg per pack

- Suitable for heavy/difficult soils
- Longterm leys
- Dense Varieties to prevent poaching
- Good midseason/Autumn growth

## TOP SWARD

TOP SWARD 5

### TS5 High Clover and REPS Mixture

3.0 kg Tyrella
3.0 kg Twymax
4.0 kg Cancan
1.0 kg Barblanca White Clover
1.0 kg Crusader White Clover

12.0 kg per pack

- High clover mix
- Less fertiliser required
- Good Spring/Autumn growth

**NB:** Care should be taken to avoid bloat in animals when grazing a sward with a high proportion of clover.

**PLEASE NOTE** due to restricted availability on grass seed varieties, mixes may need to be changed during the course of the season.



## OVERSEEDING WITH CLOVER

Clover content of pastures declines with age. If a full reseed is not necessary, clover can be reintroduced into the sward by the following technique.

### Method of Overseeding White Clover into Permanent Pasture

- **Where:** Suitable on well managed grassland – not suitable on old 'butty' swards.
- Ensure that the field is correctly fertilised - P, K and pH values are correct
- **When:** Overseeding can be done from April to July. Works best in May or June. Ideally after a heavy crop of silage, or a tightly grazed sward.
- **How:** Spread 2 kg/acre Clover pelleted seed mixed with a bag of 0-7-30 fertiliser. Mix seed and fertilizer in the field and spread criss cross
- Apply slurry as required – ideally around 3000 gals/acre of watery slurry

### Post Establishment Sward Management

- Apply no Nitrogen fertilizer for the rest of the year
- Graze every four weeks (pre-grazing covers of between 1000 and 1400kg DM/ha)
- Avoid leaving too much herbage on sward during the winter and spring
- This system suits farmers who have a long grazing rotation
- Best to only graze newly established swards during the first full year in production

### Important Points in Clover Management

- Clover does not like high Nitrogen fertilizer input. Only apply Nitrogen fertilizer during February to April to boost early grass before clover starts to produce Nitrogen.
- It is important to graze established clover swards before closing for silage during the spring
- Need adequate soil pH and soil P and K levels
- Clover suffers more from low temperatures – needs to be well established before the winter, hence May/June sowing is best.
- Need to graze swards fairly tightly during the Autumn and during the Spring
- There is a normal fluctuation in white clover content in the sward during the year, varying from 10% in April to 40% during August.

TOP SWARD..... ANOTHER GREAT PRODUCT FROM KERRY.