

Grass Varieties

New Management Protocols for Irish
Recommended List Trials

PPI Information Meeting
13th May 2014



Department of
**Agriculture,
Food and the Marine**

An Roinn
**Talmhaíochta,
Bia agus Mara**

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Herbage Evaluation Contact Personnel

Backweston Farm	Ballyderown Farm
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Acknowledgements:

Dermot Grogan, M.Agr.Sc

Technical & Farm Staff at the 5 Trial Centres

Background to DAFM's Frequent Cutting Protocol

- ✓ Requirement for rotational grazing information all season.
- ✓ DAFM took on board an 8 – 10 cut protocol for 2010 and subsequent sowings, which simulates grazing.
- ✓ Ceased sowing Italian Ryegrass and Hybrid Ryegrass after 2009.
- ✓ Ceased sowing Early Ryegrass after 2010.
- ✓ FC data will only be available for Intermediate and Late maturing groups of perennial ryegrasses.

Frequent Cutting Protocol

Spring Yield	Summer Yield	Autumn Yield
1 or 2 cuts	4 or 5 cuts	2 or 3 cuts
before 15 th April	15 th April – 15 th August	15 th Aug– 15 th October

- ✓ Cuts taken 15-21 days apart from Spring through Summer, extending to 28-36 days in Autumn.
- ✓ The target cutting height is 4-5cms.
- ✓ N fertiliser is applied to plots as soon as possible after cutting to optimise regrowth during the shorter cutting intervals (at a rate equivalent to slightly under the normal stocking rate upper limit of 170 kg organic N /ha).

Cooperation between DAFM & Teagasc

- ✓ Good co-operation between DAFM and Teagasc.
- ✓ Ground Cover Scores, which are used in the RL and PPI – now taken at the end of;
 - Year 0 – Sowing Year
 - Year 1 – 1st Harvest Year
 - Year 2 – 2nd Harvest Year
- ✓ Persistency Trial under grazing at Teagasc Moorepark.
- ✓ Enhanced / streamlined trial data analysis with aim of meeting stakeholder requirements.

Data Analysis

- ✓ Mixed model procedure used to analyse the data.
- ✓ Model includes:
 - Sowing year, harvest year, site, block and plot
- ✓ Fixed effects:
 - Variety
- ✓ Random effects:
 - Site, Block, Plot, Sowing year and Harvest year

Data Analysis

- ✓ Can easily take account of effects of varieties not being sowed in every trial.
- ✓ Can easily adjust for factors (site, plot, block, harvest year and sowing year) e.g. if certain varieties are outperforming others due to year, or block, etc. the model will adjust for this to ensure that this effect does not mask the true potential of each variety.

Role of DAFM in Variety Testing

- ✓ Under EU legislation, Crop Evaluation and Certification Division of the DAFM are responsible for evaluating new varieties of grass and clover in Ireland.
- ✓ To market an agricultural crop variety in the EU, it must be registered in the National Catalogue of at least one EU Member State and the seed must be certified.
- ✓ These official catalogues must be drawn up in accordance with uniform rules so that the varieties accepted will be distinct, stable and sufficiently uniform (DUS) and that they will be of satisfactory value for cultivation and use (VCU). DAFM is the Irish competent authority for this function.

Grass Seed Importation figures in relation to Recommended List (RL) varieties in Ireland



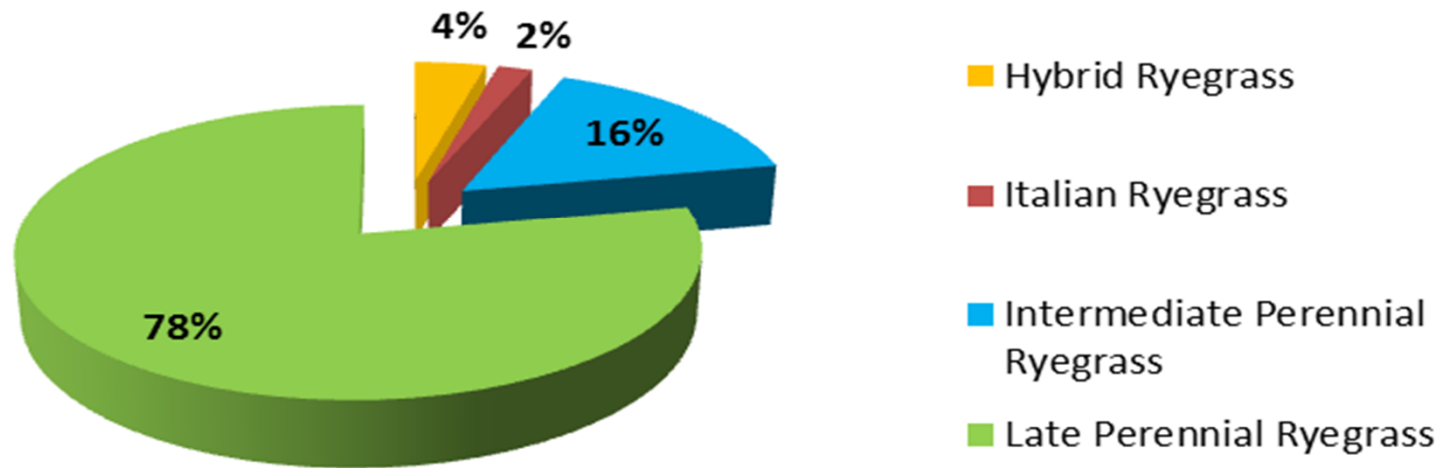
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Grass Seed Imports

01 July 2012 – 30 June 2013

Breakdown of Ryegrass Imports



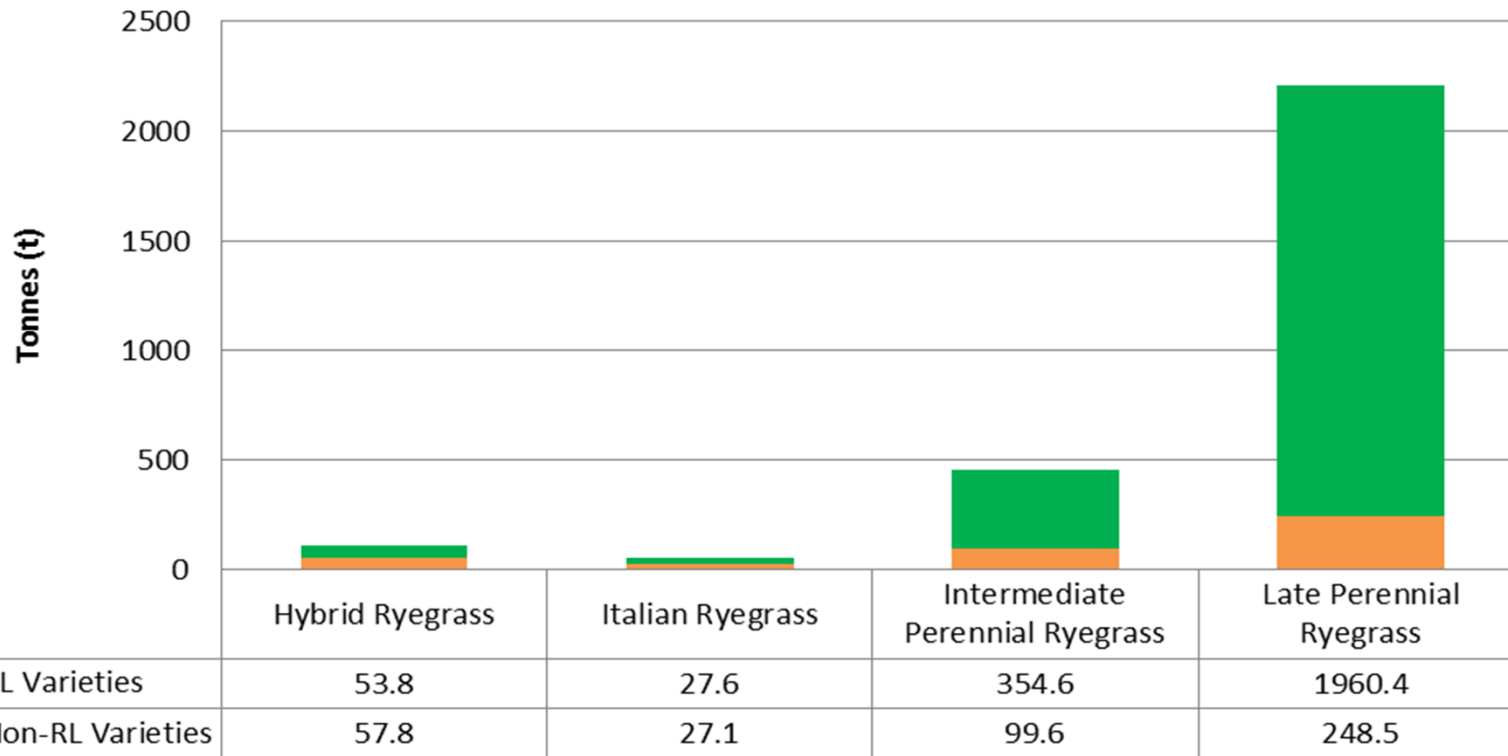
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Grass Seed Imports

01 July 2012 – 30 June 2013

Ryegrass Imports - 'Straights'



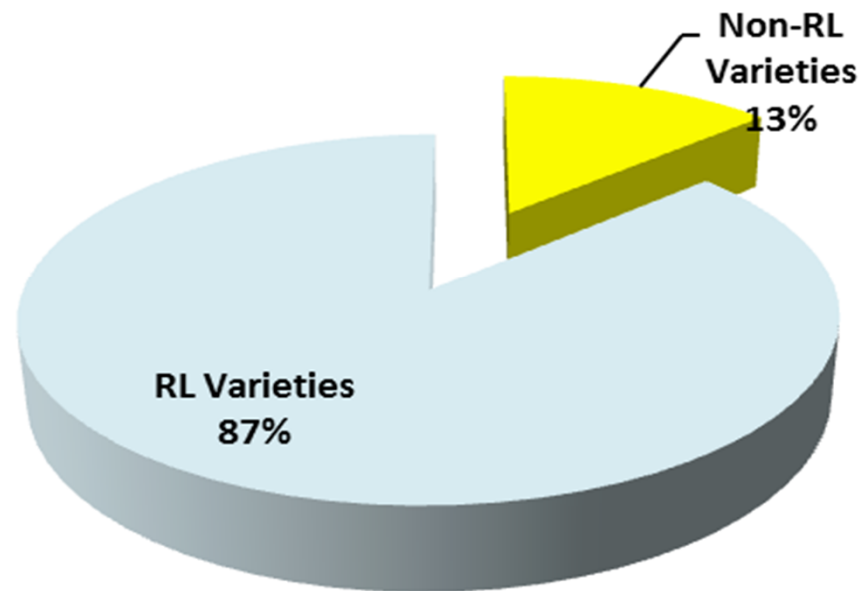
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Clover Seed Imports

01 July 2012 – 30 June 2013

White Clover Varieties



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Recommended List 2014

Grass and Clover

Recommended List Varieties for
Ireland 2014



Recommended List 2014

- ❑ RL data is derived from statutory National List evaluations.

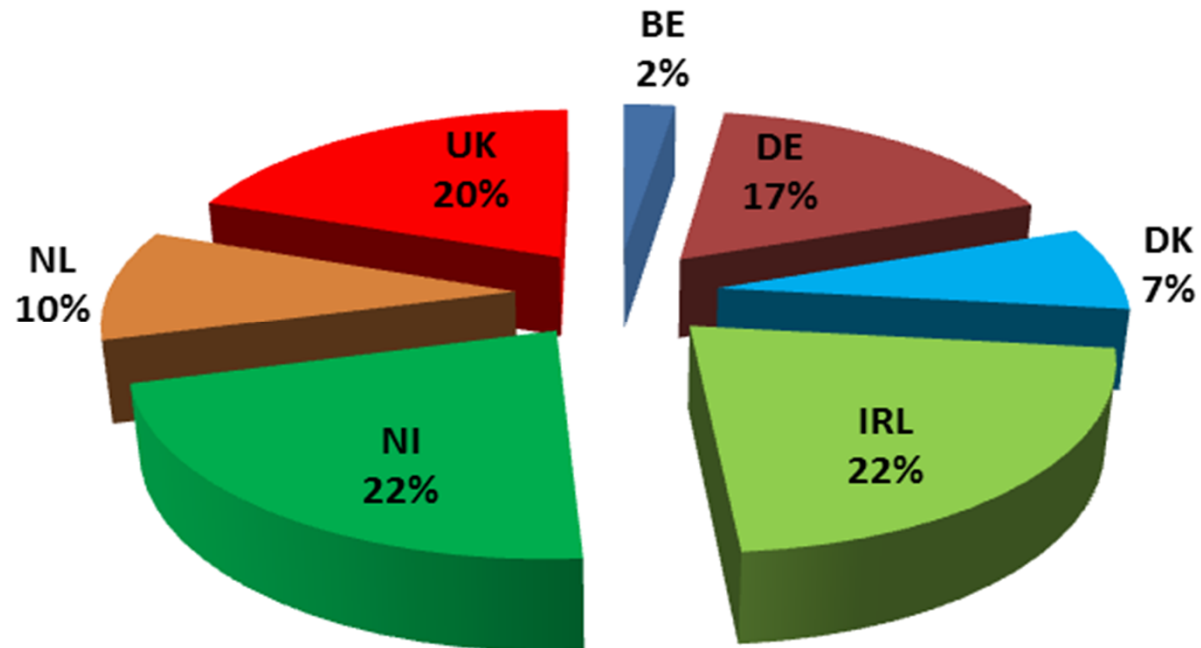
- ❑ Published in February 2014
 - Online version available at;
<http://www.agriculture.gov.ie/publications/2014/>

- ❑ For first time contains provisional data on Frequent Cutting for some varieties
 - 2010 sowing year – 2011 + 2012 harvest years

- ❑ Two 'main tables' for the two different harvest protocols with Intermediate and Late varieties.

Recommended List 2014

Origin of RL Varieties



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Recommended List 2014

	Ryegrass Maturity Group					
	Italian	Hybrid	Early	Inter	Late	Total
Diploid	1	1	2	5	13	22
Tetraploid	2	2	0	6	9	19
Total	3	3	2	11	22	41

Herbage Evaluation Trials 2014



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Plans for 2014

2014 Sowings

- ✓ Athenry – Lates
- ✓ Backweston – Inter & Lates
- ✓ Donegal – Inter
- ✓ Kildalton - Lates
- ✓ MK / Ballyderown – Inter & Lates



Sowing Plan for 2014

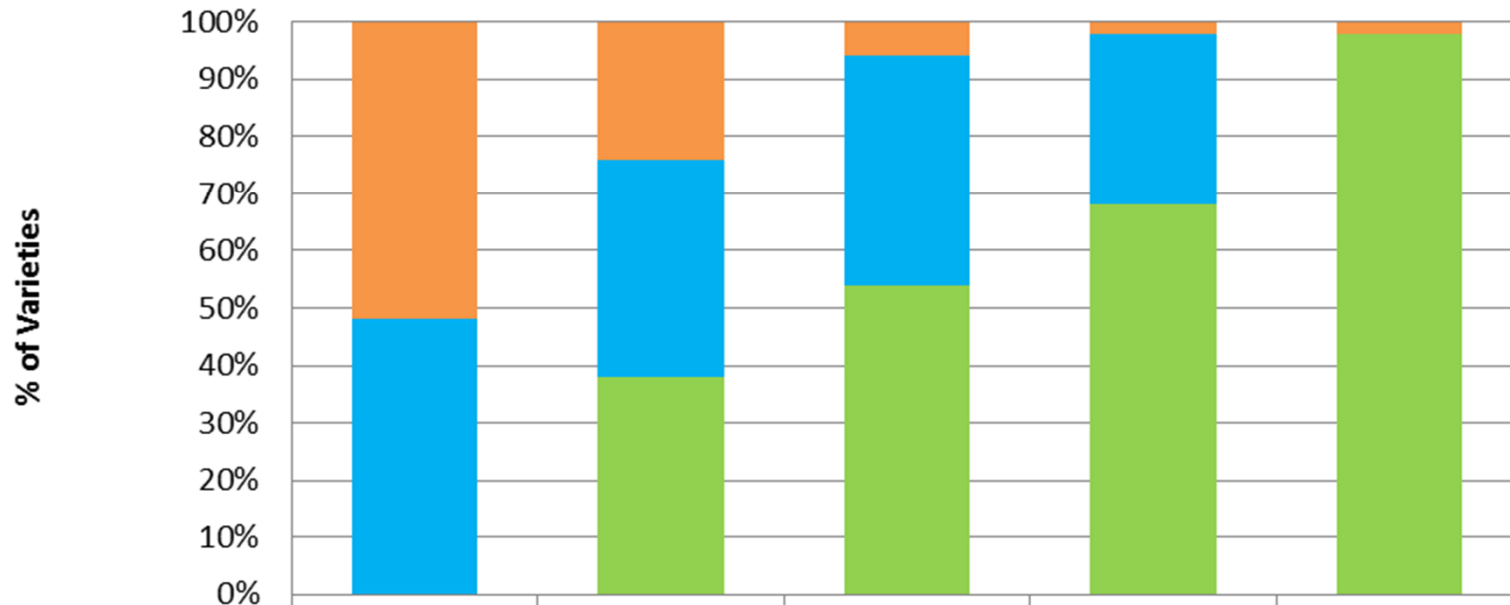
Site	Inter	Lates	FQT CU
Athenry	-	24 varieties	-
Backweston	24 varieties	24 varieties	-
Donegal	24 varieties	-	15 varieties
Kildalton	-	24 varieties	15 varieties
Moorepark	24 varieties	24 varieties	-
Controls:	2 Inter + 2 Lates	2 Inter + 2 Lates	2 Inter + 2 Lates

Harvest Protocols: GP & FC for Inter and Lates at each site

Harvest Years: 2015 (Year 1) + 2016 (Year 2)

Frequent Cutting Data and RL

Availability of FC data on RL



	RL 2014	RL 2015	RL 2016	RL 2017	RL 2018
GP data only	52%	24%	6%	2%	2%
FC provisional data (P)	48%	38%	40%	30%	0%
FC full data (F)	0%	38%	54%	68%	98%

The Future..?

- More FC data available for RL varieties.
- Increasing confidence in data for all varieties.
- Information from Teagasc's Pasture Base Ireland.
- Number and varieties of species evaluated?
- Suitable hybrid or festulolium varieties for FC?
- Palatability.
- Scientific developments.

Thanks for your attention

Go raibh míle maith agaibh go léir!



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