Recommended Grass and Clover Lists
for England and Wales

2023/24

NIAB BGS bspb AHDB HYBU CIG CYMRU

Introduction

Welcome to the full Recommended Grass and Clover Lists (RGCL). This version of the RGCL is specifically for industry specialists to aid farmers in their variety selections for mixtures.

Well-managed grassland provides the most economic feed throughout the year, either as grazing or conserved forage. However, with input costs increasing, selecting the right seed mixture to suit the system is essential for efficient performance.

This booklet has the complete dataset including performance measures for seasonal growth and agronomic characters including ground cover and winter hardiness. The tables also provide information on the number of trials carried out.

The scheme has changed – it is no longer partially funded by merchants, which means the data are available to all. The testing is funded by plant breeders through the British Society of Plant Breeders and the ruminant levy boards (AHDB and HCC).

Herbage trials are organised and coordinated by the NIAB on behalf of BSPB.

Both the full list and Handbook are available at www.britishgrassland.com/publications

An excel spreadsheet with the full dataset is available to download.

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Varieties are ranked by heading date

Simulated grazing performance

What's the difference between this and conserved forage?

More regular cuts?

Conserved forage performance, e.g. silage

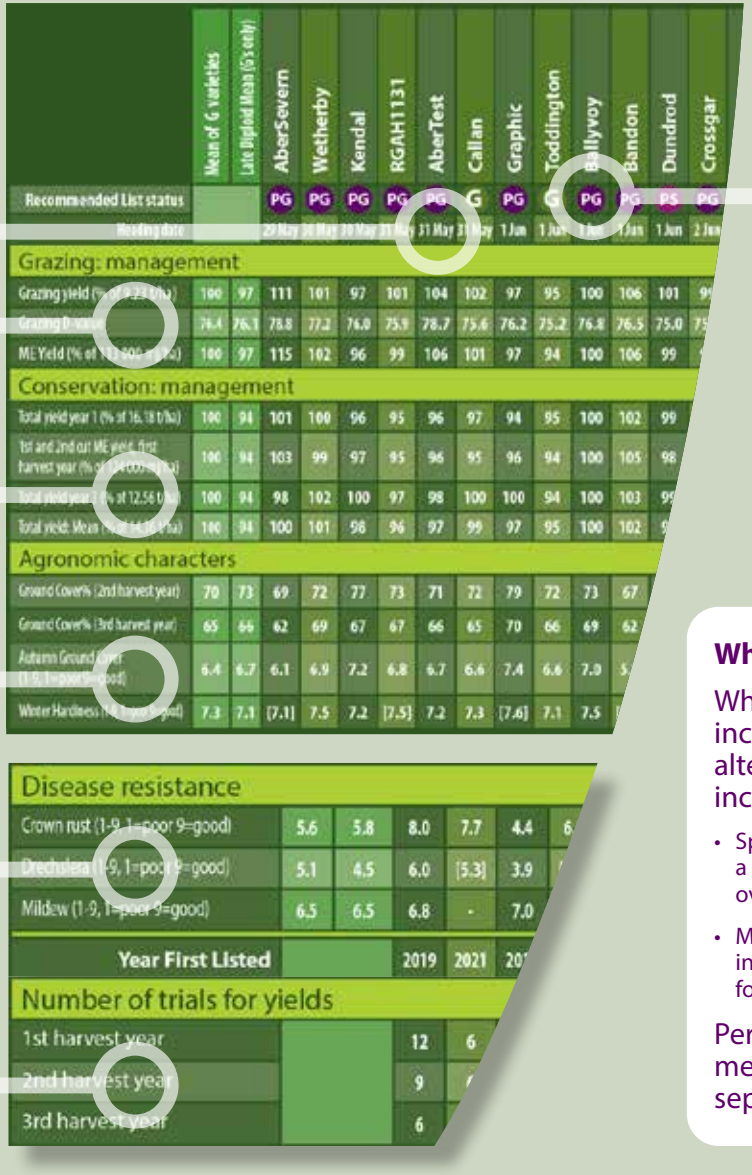
When are cuts taken?

Agronomic characteristics, such as ground cover and hardiness

Disease resistance

The number of trials used to gather yield data

The higher the number the more data behind the results



G General Use

S Recommended for Specific Use

PG Provisional General Use Recommendation

PS Provisional Specific Use Recommendation

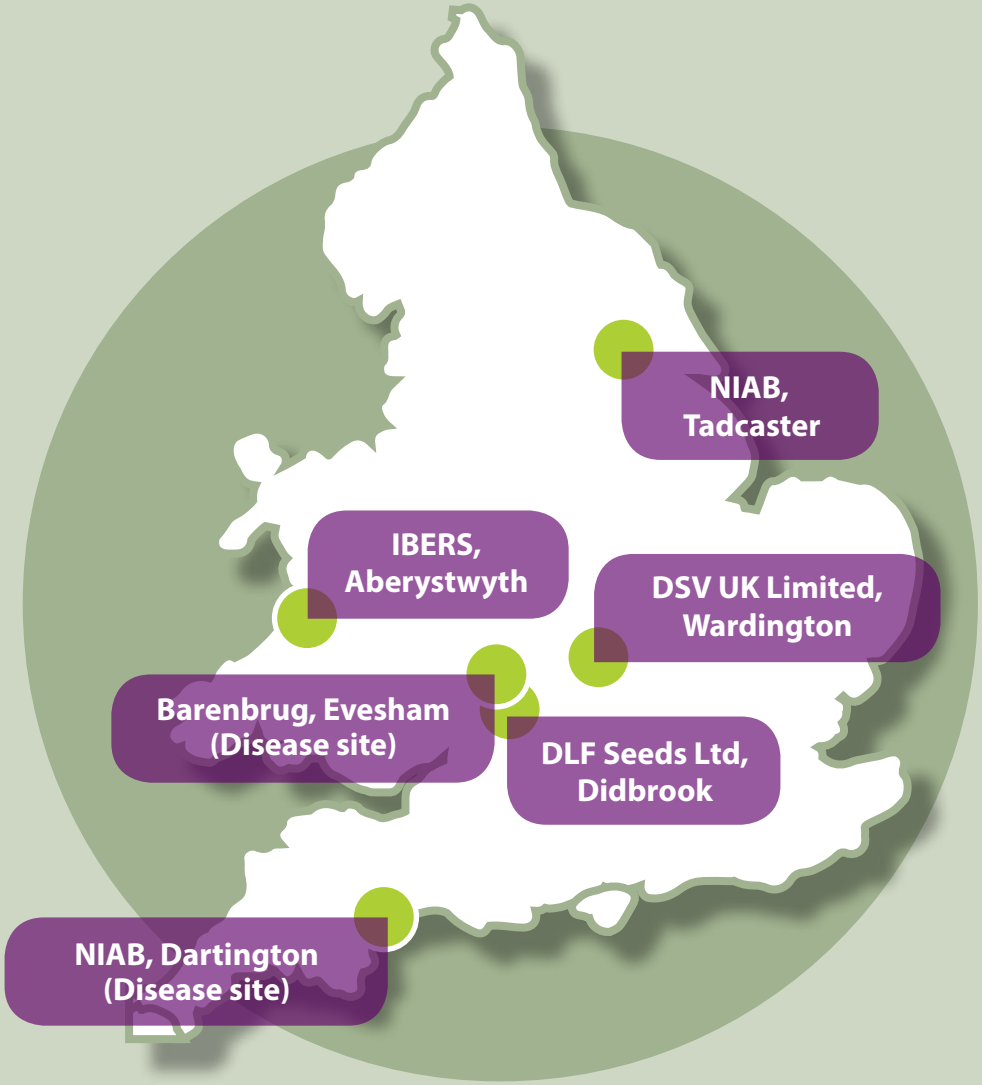
White Clover

White clover varieties include additional or alternative measures including:

- Specific clover yields within a grass mix sward and overall crop yields
- Measures of clover content in the sward and measures for ground cover

Performance is also measured under two separate systems.

Frequently Asked Questions



How and where is this information gathered?

Trial plots for each variety are grown across four locations in England and Wales. The performance of these plots is then compared to each other under different cutting regimes. The location of trial sites can be seen on the adjacent map. The Barenbrug and Dartington sites are only collecting disease data.

Are the results representative of a commercial situation?

All plots are grown outdoors in areas of grassland production. Plots receive nitrogen inputs to represent well-fertilised grassland including returns of animal manures.

What seed rates are they applied at?

Trial plot seed rates vary depending on species.

Species		Seed Rate
Perennial ryegrass	Diploid	25kg/ha
	Tetraploid	37kg/ha
Italian and Hybrid ryegrasses, plus Festulolium	Diploid	33kg/ha
	Tetraploid	50kg/ha
Timothy		16kg/ha
White clover (along with 25kg/ha of companion ryegrass)		3.5kg/ha
Red clover		13kg/ha

What is the difference between conservation and grazing management?

Conservation management applies to perennial ryegrass and timothy in their first and third year after sowing. The aim is to simulate silage cutting with the first cut at early ear emergence and then cuts are taken at six week intervals thereafter. This usually results in up to five cuts per year.

Grazing management applies to perennial ryegrass and timothy in their second year after sowing. The aim is to simulate grazing with the first cut taken at a yield of approximately 1.5t dry matter (DM)/ha and then cuts are taken at three to four week intervals thereafter.

Conservation/rotational grazing management applies to Italian and Hybrid ryegrasses and consists of an early cut followed by two conservation cuts and monthly simulated grazing cuts thereafter. White clover is cut on a monthly basis to assess yields and more frequently in separate plots to assess persistence under simulated grazing.

How much difference is there between trial sites in terms of variety performance?

There is currently no analysis of changes in performance between the same varieties on different trial sites.

How is disease resistance measured?

All perennial and Italian ryegrass variety trials are monitored regularly for the presence of foliar diseases. Usually, plots are inspected just before a cut is due, so that disease will have increased and effective discrimination between varieties can be made. The plot area is assessed visually and the percentage of total leaf area affected by different diseases is estimated. Records are collated at the end of the season and combined with previous years' data to give a robust estimate of the relative differences in resistance to disease. This is then expressed on a 1 to 9 scale, where 9 indicates a mean score of close to zero percent leaf area infected.

At the NIAB site at Dartington in Devon and the Barenbrug site near Evesham in Worcestershire, natural infection of disease is encouraged through late season management. This information is recorded and used to increase the accuracy of disease resistance values.

What if I want to know the ME value?

Metabolisable energy (ME) is the amount of energy in the sample that is available for the animal (this is calculated from the D-value), whereas D-value is a measure of the digestible organic matter of the variety. So one is a measure of what is available to the animal and the other a measure of what will be digested by the animal.

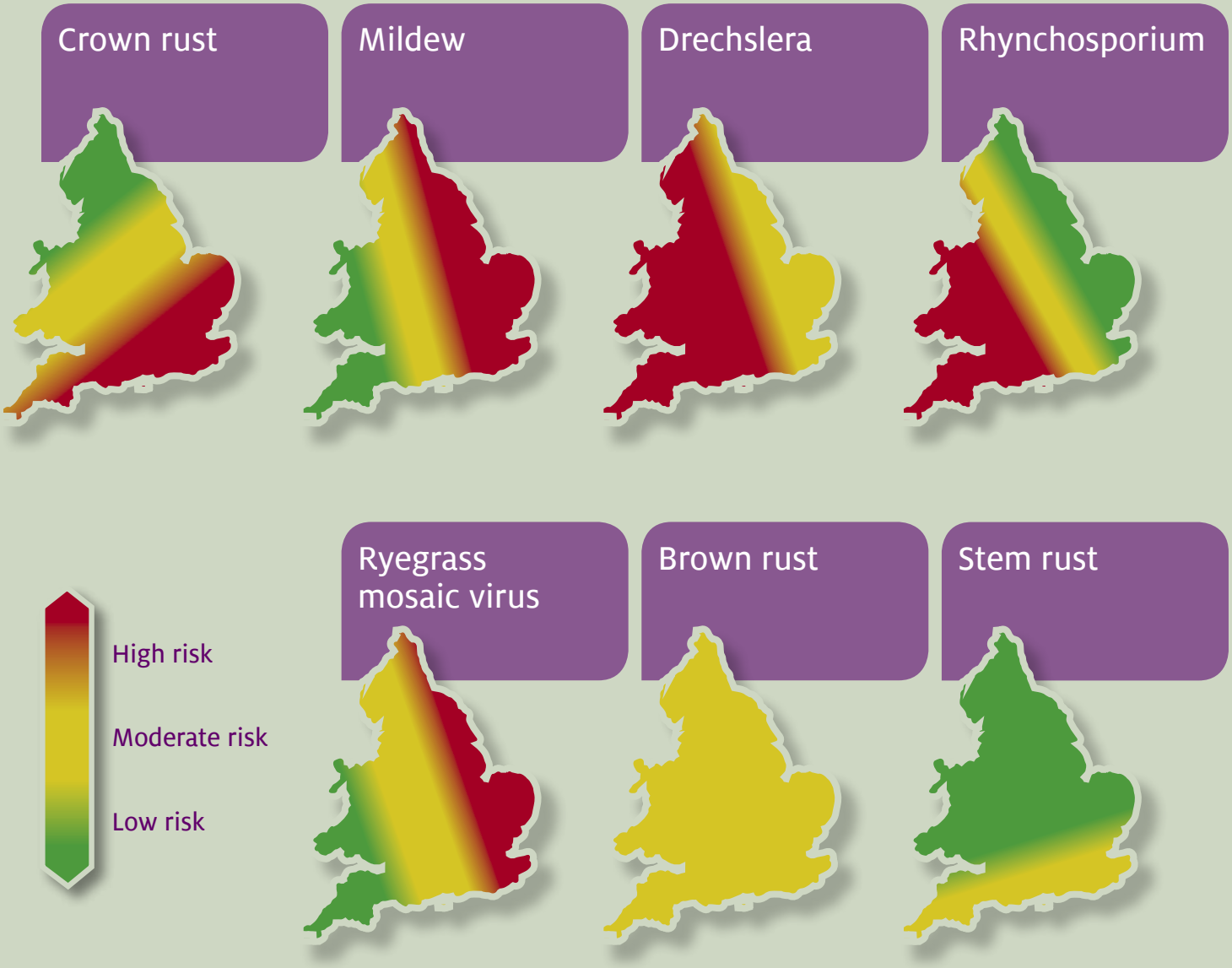
Rule of thumb
1 D-value unit = ME of 0.16

So for example a D-value of 70 would equate to an ME of **11.2 megajoules (MJ).**

Regional Disease Information

Records taken since the early 1980s show that the diseases illustrated on the right are the main ones to affect grasses in England and Wales. Though some fungicides are effective against grass diseases, their use is very limited, as is the product range available. Using resistant grass or clover varieties in seed mixtures for high risk areas provides a cost effective and reliable way to minimise the effects of disease.

Regional disease risks are shown in the maps. Disease severity is very dependent on overall climate in different areas of the country. Some diseases are more prevalent in the generally wetter and warmer west and south west, while others are more common in the drier east. In some areas, multiple diseases can be high risk. In these areas selecting varieties with a good combination of moderate (ratings 6 or 7) and preferably high (8 or 9) disease resistance is essential.



Major diseases

Crown rust usually occurs in the late summer and autumn, when there are warm days with dew at night. Once largely confined to the south and south west of England, it has recently been recorded at high levels as far north as Yorkshire.

Mildew is an issue with warm and relatively dry conditions and is usually seen between spring and summer along eastern England. It generally does not reach high levels in wet areas.

Drechslera is often most severe at the start and the end of the growing season and is encouraged by cool, wet and humid conditions, although it can occur during wet summers. It can occur throughout England and Wales.

Rhynchosporium is a wet weather disease and is usually confined to the west and south west of England, and Wales. It occurs in the spring and normally dies away during the summer months.

Ryegrass mosaic virus (RMV) is the most important virus disease affecting ryegrass and the symptoms are more common in Italian than perennial ryegrass. It is transmitted by a mite that prefers dry conditions, so RMV largely appears in the drier eastern half of England.

Less prevalent diseases

A number of other pathogens infect perennial and Italian ryegrasses. These are more sporadic than the major diseases described, but can be significant in some years.

Brown rust occurs early in the season, during April and May and throughout England and Wales. It only affects ryegrasses and is a different species to the brown rusts that infects wheat and barley. It can reach moderate levels in some varieties, but most have good resistance.

Stem rust is common in grass seed crops, but can occasionally infect leys in the far south of the country during warm autumn conditions.

Barley yellow dwarf virus (BYDV) may be quite widespread on leys where aphid vector species are present. However, symptoms are quite rare and the significance of the virus is difficult to establish.

Cocksfoot and timothy can be infected by several diseases. **Cocksfoot yellow rust** is common, but this is not the same as **yellow rust** which affects wheat. Timothy can be severely affected by **stem rust**, particularly in hay crops. Other diseases include **selenophoma** and **cladosporium leaf spots** on timothy, and **mastigosporium leaf fleck** on cocksfoot and timothy. These three fungi favour wet conditions and are more common in the west and south west.

Effects of grass diseases

Diseases not only affect yield but also quality and sward composition. On average, a disease can reduce yields by around 3%. However, responses to fungicide treatments have been far greater than this. The effects of grass diseases have been investigated using fungicide programmes on perennial ryegrass. On average, over the life of a three year ley, disease effects were estimated to cause a loss of just over 1t DM/ha, which is about 3% of the average yield of the varieties used. Individual site and variety effects were larger, for instance controlling Drechslera leaf spot at one site on a susceptible variety gave a yield response of nearly 1.25t DM/ha at first cut.

One of the most serious effects on quality is the reduction of water soluble carbohydrate, generally by 1-2%, when crown rust was severe in late season cuts. Lower water soluble carbohydrate levels reduce feeding value and may make grass less palatable. In grazing trials, rejection of rusted varieties in favour of cleaner material has been frequently recorded.

Leaf diseases increase the amount of dead material in a ley and will reduce D-value if they are allowed to increase. Mildew and rhynchosporium in Italian ryegrass have been shown to reduce D-value by between 1 to 2 units.

Grass diseases may also affect sward composition and therefore yield and quality, if susceptible varieties become less vigorous due to infection and die out. In extreme cases, there may be an ingress of unproductive weed species although other sown species may compensate.

Red and white clover diseases

The most significant disease of clover is **sclerotinia rot**, caused by *Sclerotinia trifoliorum*. Red clover is more prone to damage than white clover and the same disease can affect winter sown field beans. Symptoms are difficult to see in clover and usually the first sign of a sclerotinia problem is the disappearance of clover plants in the spring. Where infection is established, reseeding with more resistant varieties is the most effective control option.

A wide range of leaf spot diseases affect clover, as well as **powdery** and **downy mildew**. Apart from powdery mildew, most diseases tend to be more prevalent in the wetter western parts of the country. The significance of these foliar diseases is uncertain, though some loss of yield and quality is likely.

Managing diseases

Selection of a proportion of resistant varieties in seed mixtures provides an effective means of suppressing diseases. However where susceptible varieties are used because of other desirable characters, then management techniques will be needed to avoid disease build-up. Generally, cutting or grazing before leaves become significantly infected will help to reduce disease build-up.

Recommended List of
Early Perennial Ryegrass Varieties 2023/2024

		Diploids				Tetraploids			
	Mean of G varieties	Early Diploid Mean (G's only)	Genesis	Moyola	Glasker	Early Tetraploid Mean (AberTorch only)	AberTorch	Cooky	Barwave
Recommended List status			G	G	G		G	PS	PS
Heading date			11 May	14 May	17 May		9 May	17 May	20 May
Grazing: management									
Grazing yield (% of 9.23 t DM/ha)	100	98	97	98	98	95	95	96	97
Grazing D-value	76.4	75.1	74.8	74.6	76.0	76.0	76.0	76.5	75.3
ME Yield (% of 113 000 mj/ha)	100	96	95	96	97	94	94	96	95
Conservation: management									
Total yield year 1 (% of 16.18 t DM/ha)	100	105	107	105	105	103	103	102	110
1st and 2nd cut ME yield, first harvest year (% of 124 000 mj/ha)	100	102	103	100	102	102	102	101	110
Total yield year 3 (% of 12.56 t DM/ha)	100	103	104	104	100	101	101	100	105
Total yield: Mean (% of 14.36 t DM/ha)	100	104	105	104	102	102	102	101	107
Agronomic characters									
Ground Cover% (2nd harvest year)	70	66	68	65	65	69	69	67	55
Ground Cover% (3rd harvest year)	65	67	68	67	67	68	68	66	54
Autumn Ground Cover (1-9, 1=poor 9=good)	6.4	6.3	6.5	6.1	6.1	6.5	6.5	6.2	4.4
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.4	7.4	7.2	7.5	7.4	7.4	7.4	[7.9]
Grazing seasonal growth									
Early grazing yield (% of 1.30 t DM/ha)	100	118	123	117	114	109	109	106	124
Spring (% of 2.27 t DM/ha)	100	109	111	110	107	106	106	103	107
Early Summer (% of 3.47 t DM/ha)	100	88	89	88	88	88	88	92	91
Late Summer (% of 2.29 t DM/ha)	100	102	98	104	104	97	97	98	99
Autumn (% of 1.35 t DM/ha)	100	97	93	96	101	93	93	94	95

		Diploids				Tetraploids			
	Mean of G varieties	Early Diploid Mean (G's only)	Genesis	Moyola	Glasker	Early Tetraploid Mean (AberTorch only)	AberTorch	Cooky	Barwave
Conservation: seasonal growth – Year 1									
1st cut (% of 7.10 t DM/ha)	100	90	94	91	86	87	87	81	94
1st cut D-Value	71.1	71.5	70.1	70.7	73.7	73.0	73.0	74.4	74.3
2nd cut (% of 3.50 t DM/ha)	100	95	97	93	94	100	100	100	106
2nd cut D-Value	72.8	70.6	69.3	69.6	72.9	70.5	70.5	72.2	70.1
3rd cut (% of 2.59 t DM/ha)	100	104	103	101	106	101	101	102	108
4th+ cut (% of 2.88 t DM/ha)	100	104	101	103	108	99	99	101	104
Disease resistance									
Crown Rust (1-9, 1=poor 9=good)	5.7	5.8	6.0	5.9	5.4	4.1	4.1	5.7	6.9
Drechslera (1-9, 1=poor 9=good)	5.2	5.8	5.9	5.4	6.2	6.7	6.7	6.6	-
Mildew (1-9, 1=poor 9=good)	6.4	6.3	5.1	8.1	5.6	4.4	4.4	[7.1]	[5.9]
Year First Listed			2009	2009	2016		2000	2019	2022
Breeder			Teagasc, Eire	AFBI, UK	AFBI, UK		IBERS, Aberystwyth	R2n, France	Barenbrug NZ
Agent			DLF Seeds Ltd	Barenbrug UK Ltd	Barenbrug UK Ltd		Germinal	RAGT Seeds Ltd	Barenbrug UK Ltd
Number of trials for yields									
1st harvest year			13	10	10		13	12	6
2nd harvest year			13	10	10		13	12	6
3rd harvest year			15	10	10		15	9	6

Note that the mean of G varieties include all those from early, intermediate and late maturity groups.
Yields are expressed as a percentage of the mean of all fully recommended PRG varieties in trials. Grazing yields are measured in year 2, Conservation yields in years 1 & 3.
Grazing D-value is measured from a late-summer cut in year 2 and the Grazing ME yields are calculated as total yield multiplied by the D-value x 0.16.
Conservation D-value is measured from both the 1st and 2nd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of
Intermediate Perennial Ryegrass Diploid Varieties 2023/2024

	Mean of G varieties	Int. Diploid Mean (G's only)	Boyne	Galgorm	Aston Conqueror	Nifty	Moira	Goldwell	AberZeus	AberMagic	Alecto	AberWolf	Gosford	Agaska	AberGreen
Recommended List status			S	G	PS	G	G	PG	G	G	PG	G	G	PS	G
Heading date			21 May	22 May	23 May	23 May	23 May	23 May	26 May	27 May	27 May	27 May	28 May	29 May	29 May
Grazing: management															
Grazing yield (% of 9.23 t DM/ha)	100	103	100	107	98	102	101	105	105	104	102	100	101	104	104
Grazing D-value	76.4	76.9	74.5	76.6	76.4	76.5	75.5	76.8	77.8	77.1	76.1	77.4	77.0	75.2	77.0
ME Yield (% of 113 000 mj/ha)	100	103	97	107	98	103	100	105	107	104	102	101	102	103	105
Conservation: management															
Total yield year 1 (% of 16.18 t DM/ha)	100	101	104	104	99	103	102	99	102	101	104	100	100	100	102
1st and 2nd cut ME yield, first harvest year (% of 124 000 mj/ha)	100	101	103	102	96	102	98	97	103	101	104	101	100	100	103
Total yield year 3 (% of 12.56 t DM/ha)	100	103	106	106	103	102	104	104	105	101	100	101	103	99	104
Total yield: Mean (% of 14.36 t DM/ha)	100	102	105	105	101	102	103	102	103	101	102	100	101	100	103
Agronomic characters															
Ground Cover% (2nd harvest year)	70	71	68	66	69	69	67	69	76	68	70	74	68	67	71
Ground Cover% (3rd harvest year)	65	67	65	63	67	69	62	65	69	66	67	69	66	66	68
Autumn Ground Cover (1-9, 1=poor 9=good)	6.4	6.6	6.2	5.9	6.5	6.6	5.9	6.4	7.2	6.4	6.6	7.1	6.3	6.3	6.8
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.4	7.1	7.4	7.3	7.4	7.5	[6.8]	7.4	7.3	[7.1]	7.4	7.3	7.4	7.5
Grazing: seasonal growth															
Early grazing yield (% of 1.30 t DM/ha)	100	107	104	113	104	106	119	99	109	100	96	103	107	112	106
Spring (% of 2.27 t DM/ha)	100	108	106	113	107	107	112	104	112	105	100	104	107	111	106
Early Summer (% of 3.47 t DM/ha)	100	99	98	101	94	98	95	100	102	101	104	99	99	103	100
Late Summer (% of 2.29 t DM/ha)	100	101	97	109	95	103	99	110	104	104	102	99	96	100	105
Autumn (% of 1.35 t DM/ha)	100	105	99	107	101	105	102	110	106	109	103	98	106	105	110

	Mean of G varieties	Int. Diploid Mean (G's only)	Boyne	Galgorm	Aston Conqueror	Nifty	Moira	Goldwell	AberZeus	AberMagic	Alecto	AberWolf	Gosford	Agaska	AberGreen
Conservation: seasonal growth – Year 1															
1st cut (% of 7.10 t DM/ha)	100	99	107	101	100	102	102	94	98	96	99	98	95	97	99
1st cut D-Value	71.1	72.0	68.6	71.6	68.7	71.2	69.8	71.1	72.4	73.2	73.8	71.4	73.4	71.9	72.8
2nd cut (% of 3.50 t DM/ha)	100	101	105	98	90	98	90	100	103	104	107	105	102	104	105
2nd cut D-Value	72.8	72.7	69.0	74.6	73.5	71.5	74.2	72.6	74.0	71.5	71.3	71.7	73.5	71.3	72.5
3rd cut (% of 2.59 t DM/ha)	100	99	92	105	101	98	104	99	101	96	100	94	102	98	97
4th+ cut (% of 2.88 t DM/ha)	100	103	97	111	96	106	106	103	104	104	106	98	99	101	103
Disease resistance															
Crown Rust (1-9, 1=poor 9=good)	5.7	5.6	6.0	5.2	3.0	5.3	4.6	5.9	6.3	6.1	6.1	5.0	6.0	7.2	5.7
Drechslera (1-9, 1=poor 9=good)	5.2	4.7	4.1	4.5	5.3	5.0	5.5	-	4.9	3.5	-	4.4	4.6	4.3	4.7
Mildew (1-9, 1=poor 9=good)	6.4	6.4	6.1	6.5	5.3	5.3	6.7	[6.5]	6.1	6.6	-	5.2	7.5	6.5	7.3
Year First Listed			2010	2018	2017	2014	2014	-	2016	2008	2022	2014	2016	2018	2011
Breeder			DLF Seeds A/S	AFBI, UK	DSV, UK	DLF Seeds A/S	AFBI, UK	DSV, UK	IBERS, Aberystwyth	IBERS, Aberystwyth	DLF Seeds A/S	IBERS, Aberystwyth	AFBI, UK	DLF Seeds A/S	IBERS, Aberystwyth
Agent			DLF Seeds Ltd	Barenbrug UK Ltd	DSV	DLF Seeds Ltd	Barenbrug UK Ltd	DSV	Germinal	Germinal	Limagrain UK Ltd	Germinal	Barenbrug UK Ltd	DLF Seeds Ltd	Germinal
Number of trials for yields															
1st harvest year			29	14	13	11	11	6	11	23	6	11	11	11	12
2nd harvest year			30	13	13	11	11	6	11	23	6	11	11	9	12
3rd harvest year			27	11	12	10	10	6	11	20	6	10	11	5	11

Note that the mean of G varieties include all those from early, intermediate and late maturity groups.
Yields are expressed as a percentage of the mean of all fully recommended PRG varieties in trials. Grazing yields are measured in year 2, Conservation yields in years 1 & 3.
Grazing D-value is measured from a late-summer cut in year 2 and the Grazing ME yields are calculated as total yield multiplied by the D-value x 0.16.
Conservation D-value is measured from both the 1st and 2nd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of
Intermediate Perennial Ryegrass Tetraploid Varieties 2023/2024

	Mean of G varieties	Int. Tetraploid Mean (G and S)	Fintona	AberRoot (Fest)	Seagoe	Erinvale	Nolwen	Tollymore	Banbridge	AberClyde	Ritchie	AstonVision	Chatsworth	AberSpey	Convey	Dunluce	Pensel	Federer	Triwarwic	AstonEnergy
Recommended List status			S	PG	G	PG	G	PG	PG	S	PG	PS	PG	G	PG	S	S	PG	PG	S
Heading date			21 May	22 May	22 May	23 May	23 May	23 May	24 May	25 May	26 May	26 May	27 May	29 May	30 May	30 May	30 May	30 May	30 May	31 May
Grazing: management																				
Grazing yield (% of 9.23 t DM/ha)	100	101	103	100	100	99	99	106	101	97	104	100	102	107	101	102	98	97	97	98
Grazing D-value	76.4	76.7	76.5	78.5	76.5	77.2	76.2	76.6	76.6	77.1	75.4	77.0	76.9	78.6	75.7	76.8	74.8	76.6	75.4	77.6
ME Yield (% of 113 000 mj/ha)	100	101	103	102	100	100	99	106	101	97	103	101	103	109	100	102	95	97	95	99
Conservation: management																				
Total yield year 1 (% of 16.18 t DM/ha)	100	104	106	102	107	105	101	106	108	102	104	100	102	105	102	102	104	101	104	99
1st and 2nd cut ME yield, first harvest year (% of 124 000 mj/ha)	100	105	104	104	108	106	103	106	110	105	104	101	104	105	103	103	108	103	108	102
Total yield year 3 (% of 12.56 t DM/ha)	100	103	106	103	105	107	104	105	106	100	104	96	100	102	101	102	103	100	102	96
Total yield: Mean (% of 14.36 t DM/ha)	100	103	106	102	106	106	103	105	107	101	104	98	101	104	101	102	104	101	103	97
Agronomic characters																				
Ground Cover% (2nd harvest year)	70	64	61	58	66	60	67	60	65	67	72	66	65	66	65	62	62	67	65	64
Ground Cover% (3rd harvest year)	65	61	61	59	63	59	64	59	62	63	66	62	65	59	66	59	62	61	60	57
Autumn Ground Cover (1-9, 1=poor 9=good)	6.4	5.6	5.4	5.0	6.0	5.1	6.1	5.2	5.8	6.0	6.6	6.0	6.0	5.7	6.0	5.4	5.6	5.8	5.6	5.4
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.3	7.4	7.0	7.3	7.1	7.4	[7.2]	[7.5]	7.2	7.1	7.4	7.2	7.6	7.4	7.3	7.1	7.4	7.2	7.1
Grazing: seasonal growth																				
Early grazing yield (% of 1.30 t DM/ha)	100	101	104	95	107	107	105	111	110	96	96	110	99	108	94	92	96	92	90	90
Spring (% of 2.27 t DM/ha)	100	104	108	108	108	111	108	113	110	106	107	107	105	109	99	97	102	95	96	98
Early Summer (% of 3.47 t DM/ha)	100	101	100	98	97	94	97	103	98	97	103	94	104	105	104	106	100	100	101	100
Late Summer (% of 2.29 t DM/ha)	100	98	103	99	98	95	95	104	96	88	104	100	97	106	97	102	92	97	90	94
Autumn (% of 1.35 t DM/ha)	100	99	99	93	98	96	99	104	101	93	104	104	102	110	103	101	92	95	95	97

	Mean of G varieties	Int. Tetraploid Mean (G and S)	Fintona	AberRoot (Fest)	Seagoe	Erinvale	Nolwen	Tollymore	Banbridge	AberClyde	Ritchie	AstonVision	Chatsworth	AberSpey	Convey	Dunluce	Pensel	Federer	Triwarwic	AstonEnergy
Conservation: seasonal growth – Year 1																				
1st cut (% of 7.10t DM/ha)	100	100	104	98	110	108	99	104	109	104	99	97	99	98	99	93	102	96	104	96
1st cut D-value	71.1	73.1	70.9	72.9	70.7	70.0	73.4	71.4	72.7	72.8	71.9	72.6	72.8	73.8	72.1	74.9	73.0	73.4	73.0	74.7
2nd cut (% of 3.50t DM/ha)	100	107	102	107	104	102	103	106	104	106	114	100	108	108	105	113	119	108	109	100
3rd cut D-value	72.8	72.9	73.8	73.1	72.7	72.8	73.0	73.5	71.7	72.4	70.1	74.7	71.8	73.9	72.5	72.4	69.9	73.0	72.3	74.8
3rd cut (% of 2.59t DM/ha)	100	103	111	99	103	100	99	102	103	93	96	95	95	108	99	104	95	102	99	101
4th+ cut (% of 2.88t DM/ha)	100	100	102	97	98	100	99	105	108	93	104	104	98	109	98	102	93	97	94	95
Disease resistance																				
Crown rust (1-9, 1=poor 9=good)	5.7	5.3	2.2	3.6	6.2	4.7	8.3	4.9	5.3	6.3	5.7	6.7	3.7	4.9	5.4	2.7	5.9	6.1	6.4	6.6
Drechslera (1-9, 1=poor 9=good)	5.2	6.3	6.7	6.3	5.0	6.7	5.4	-	-	6.6	6.1	5.2	8.2	6.6	6.2	6.7	6.7	6.0	4.6	6.8
Mildew (1-9, 1=poor 9=good)	6.4	6.6	7.2	5.5	7.9	4.7	7.3	-	[7.0]	6.6	5.9	5.1	6.5	4.5	5.9	6.5	6.8	7.0	5.6	5.9
Year First Listed			2014	2021	2011	2021	2017	2022	-	2013	2021	2018	2020	2017	2020	2005	2013	2017	2017	2006
Breeder			AFBI, UK	IBERS, Aberystwyth	AFBI, UK	AFBI, UK	R2n, France	AFBI, UK	AFBI, UK	IBERS, Aberystwyth	DLF Seeds A/S	DSV, UK	Teagasc, Eire	IBERS, Aberystwyth	DLF Seeds A/S	AFBI, UK	DLF Seeds A/S	DLF Seeds A/S	DLF Seeds A/S	DSV, UK
Agent			Barenbrug UK Ltd	Germinal	Barenbrug UK Ltd	Barenbrug UK Ltd	DLF Seeds Ltd	Barenbrug UK Ltd	Barenbrug UK Ltd	Germinal	Limagrain UK Ltd	DSV	DSV	Germinal	DLF Seeds Ltd	Barenbrug UK Ltd	Limagrain UK Ltd	Limagrain UK Ltd	DLF Seeds Ltd	DSV
Number of trials for yields																				
1st harvest year			11	8	15	8	13	6	6	13	8	14	10	13	10	29	14	12	13	11
2nd harvest year			11	6	14	6	13	6	6	12	6	13	9	13	9	30	13	12	13	11
3rd harvest year			10	6	11	6	12	6	6	11	6	11	6	12	6	27	12	11	12	10

Note that the mean of G varieties include all those from early, intermediate and late maturity groups.
Yields are expressed as a percentage of the mean of all fully recommended PRG varieties in trials. Grazing yields are measured in year 2, Conservation yields in years 1 & 3.
Grazing D-value is measured from a late-summer cut in year 2 and the Grazing ME yields are calculated as total yield multiplied by the D-value x 0.16.
Conservation D-value is measured from both the 1st and 2nd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of
Late Perennial Ryegrass Diploid Varieties 2023/2024

	Mean of G varieties	Late Diploid Mean (G's only)	AberSevern	Wetherby	Kendal	AberTest	Callan	Graphic	Toddington	Ballyvoy	Bandon	Dundrod	Crossgar	AberAvon	Oakpark	AstonKing	Drumbo	Glenarm	Zorgue	Gleneagle	Timuco	AberBann	Timing	Swan	AberThames	AberLee	Delika	AberChoice	Cancan	AberDon	Bowie
Recommended List status			PG	PG	PG	PG	G	PG	G	PS	PG	PS	PG	G	G	PS	G	G	PG	PG	PG	G	G	PS	PG	G	PG	S	G	PG	PS
Heading date			29 May	30 May	30 May	31 May	31 May	1 Jun	1 Jun	1 Jun	1 Jun	1 Jun	2 Jun	2 Jun	2 Jun	2 Jun	2 Jun	3 Jun	4 Jun	4 Jun	4 Jun	5 Jun	5 Jun	6 Jun	6 Jun	6 Jun	7 Jun	9 Jun	10 Jun	10 Jun	16 Jun
Grazing: management																															
Grazing yield (% of 9.23 t DM/ha)	100	97	111	101	97	104	102	97	95	100	106	101	99	99	98	99	95	98	96	99	103	105	97	99	106	96	101	103	101	108	100
Grazing D-value	76.4	76.1	78.8	77.2	76.0	78.7	75.6	76.2	75.2	76.8	76.5	75.0	75.9	77.3	76.3	75.1	76.7	76.1	76.1	75.6	75.3	76.9	74.6	74.5	75.8	78.5	76.4	76.4	75.1	78.5	74.8
ME Yield (% of 113 000 mj/ha)	100	97	115	102	96	106	101	97	94	100	106	99	97	100	98	98	96	98	96	98	101	106	95	97	105	99	101	103	99	111	99
Conservation: management																															
Total yield year 1 (% of 16.18 t DM/ha)	100	94	101	100	96	96	97	94	95	100	102	99	97	94	97	94	90	98	94	95	97	98	93	92	99	89	93	96	92	94	91
1st and 2nd cut ME yield, first harvest year (% of 124 000 mj/ha)	100	94	103	99	97	96	95	96	94	100	105	98	95	94	96	94	90	99	96	94	95	98	94	91	98	91	93	99	91	93	88
Total yield year 3 (% of 12.56 t DM/ha)	100	94	98	102	100	98	100	100	94	100	103	99	98	93	97	94	93	99	94	96	101	97	97	94	105	91	97	97	92	95	91
Total yield: Mean (% of 14.36 t DM/ha)	100	94	100	101	98	97	99	97	95	100	102	99	98	93	97	94	92	99	94	95	99	97	95	93	101	90	95	97	92	94	91
Agronomic characters																															
Ground Cover% (2nd harvest year)	70	73	69	72	77	71	72	79	72	73	67	68	71	75	72	68	70	72	78	74	67	72	75	75	66	77	71	68	72	67	75
Ground Cover% (3rd harvest year)	65	66	62	69	67	66	65	70	66	69	62	65	65	71	67	61	62	64	71	67	63	62	66	66	60	72	66	62	66	63	67
Autumn Ground Cover (1-9, 1=poor 9=good)	6.4	6.7	6.1	6.9	7.2	6.7	6.6	7.4	6.6	7.0	5.9	6.3	6.5	7.2	6.8	6.0	6.2	6.5	7.5	7.0	6.0	6.4	6.8	7.0	5.7	7.4	6.5	6.0	6.7	6.0	6.9
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.1	[7.1]	7.5	7.2	7.2	7.3	[7.6]	7.1	7.5	[7.1]	7.2	[7.3]	7.4	7.0	7.2	6.9	7.3	7.3	7.0	[7.0]	7.5	7.0	7.2	7.4	7.4	7.0	7.2	7.0	[7.5]	7.0
Grazing: seasonal growth																															
Early grazing yield (% of 1.30 t DM/ha)	100	85	98	92	88	86	104	91	83	106	99	100	91	96	82	98	88	90	75	84	87	93	72	85	107	78	84	93	85	93	81
Spring (% of 2.27 t DM/ha)	100	87	102	101	94	95	102	93	87	103	100	100	92	96	86	101	88	93	81	87	91	94	81	88	103	81	86	95	85	93	80
Early Summer (% of 3.47 t DM/ha)	100	103	111	100	99	106	103	104	101	98	106	102	103	101	105	100	99	100	106	108	109	112	106	106	108	104	108	107	108	113	110
Late Summer (% of 2.29 t DM/ha)	100	99	119	103	95	106	100	94	97	97	113	100	99	96	98	97	98	98	97	100	107	106	98	99	107	97	107	104	107	115	106
Autumn (% of 1.35 t DM/ha)	100	96	110	101	97	107	100	90	91	102	101	104	97	101	98	99	94	99	95	93	99	105	97	98	100	99	99	100	97	106	101

	Mean of G varieties	Late Diploid Mean (G's only)	AberSevern	Wetherby	Kendal	AberTest	Callan	Graphic	Toddington	Ballyvoy	Bandon	Dundrod	Crossgar	AberAvon	Oakpark	AstonKing	Drumbo	Glenarm	Zorgue	Gleneagle	Timuco	AberBann	Timing	Swan	AberThames	AberLee	Delika	AberChoice	Cancan	AberDon	Bowie
Conservation: seasonal growth – Year 1																															
1st cut (% of 7.10 t DM/ha)	100	100	104	108	110	103	107	105	103	110	111	114	103	105	103	105	92	112	103	99	100	100	99	92	103	91	94	100	92	87	82
1st cut D-Value	71.1	69.9	71.6	69.4	67.7	69.9	67.8	68.9	68.4	68.4	70.5	67.1	67.9	68.5	68.8	68.4	70.2	68.9	70.9	68.9	68.4	70.7	69.9	70.3	70.9	73.5	70.4	71.7	71.4	73.4	72.7
2nd cut (% of 3.50 t DM/ha)	100	95	102	96	91	93	90	93	94	96	100	92	98	88	96	90	94	90	92	99	101	103	97	101	100	91	99	106	100	107	110
2nd cut D-Value	72.8	73.4	76.3	73.3	73.7	75.8	73.6	72.8	72.5	75.1	75.8	72.0	73.3	74.1	73.0	73.1	75.0	74.0	74.5	72.5	73.3	72.8	72.6	73.0	72.4	74.2	74.1	72.6	73.1	74.8	71.8
3rd cut (% of 2.59 t DM/ha)	100	99	111	100	94	111	100	91	97	102	104	95	101	97	103	96	99	97	96	100	101	103	97	101	104	96	104	98	103	108	102
4th+ cut (% of 2.88 t DM/ha)	100	96	107	105	95	102	101	92	95	100	102	99	101	96	97	94	96	97	93	96	100	103	95	99	106	99	97	98	96	106	105
Disease resistance (1-9, 1=poor 9=good)																															
Crown rust	5.7	5.6	5.1	7.4	8.1	7.9	4.2	6.2	6.9	2.9	4.9	6.8	5.9	6.1	4.7	7.0	4.9	6.4	7.5	4.3	6.2	5.2	6.9	7.1	8.3	6.6	8.4	4.0	4.6	6.2	5.0
Drechslera	5.2	4.5	-	5.1	5.6	[4.7]	4.2	-	4.9	4.3	-	4.2	-	3.7	5.3	4.1	4.6	4.0	5.5	5.4	-	5.0	4.6	5.2	5.1	4.3	4.8	2.8	4.4	-	4.5
Mildew	6.4	6.5	-	-	6.8	6.7	7.0	-	6.4	[6.6]	-	[6.8]	-	6.2	6.5	7.0	5.8	7.2	-	6.4	-	6.6	6.3	[6.7]	-	-	-	7.4	6.6	-	7.1
Year First Listed			-	2021	2019	2020	2018	-	2010	2020	-	2019	2022	2001	2018	2019	2009	2015	2021	2019	2022	2018	2015	2020	2021	2017	2021	2009	1998	2022	2018
Breeder			IBERS, Aberyst-wyth	DLF Seeds A/S	R2n, France	IBERS, Aberyst-wyth	AFBI, UK	DLF Seeds A/S	DLF Seeds A/S	AFBI, UK	Teagasc, Eire	AFBI, UK	AFBI, UK	IBERS, Aberyst-wyth	Teagasc, Eire	DSV, UK	AFBI, UK	AFBI, UK	DLF Seeds A/S	Teagasc, Eire	DLF Seeds A/S	IBERS, Aberyst-wyth	DLF Seeds A/S	DLF Seeds A/S	IBERS, Aberyst-wyth	IBERS, Aberyst-wyth	GIE Grass	IBERS, Aberyst-wyth	DLF Seeds A/S	IBERS, Aberyst-wyth	DLF Seeds A/S
Agent			Germinal	DLF Seeds Ltd	RAGT Seeds Ltd	Germinal	Baren-brug UK Ltd	Limagrain UK Ltd	DLF Seeds Ltd	Baren-brug UK Ltd	Goldcrop Ltd	Baren-brug UK Ltd	Baren-brug UK Ltd	Germinal	Goldcrop Ltd	DSV	Baren-brug UK Ltd	Barenbrug UK Ltd	DLF Seeds Ltd	DSV	DLF Seeds Ltd	Germinal	Lim-agrain UK Ltd	DLF Seeds Ltd	Germinal	Germinal	Germinal	Germinal	DLF Seeds Ltd	Germinal	DLF Seeds Ltd
Number of trials for yields																															
1st harvest year			6	8	13	8	13	6	12	11	6	12	6	10	13	13	25	13	8	13	6	13	13	11	8	11	8	27	10	6	13
2nd harvest year			6	6	12	9	13	6	12	9	6	12	6	10	13	12	24	12	6	12	6	13	12	9	6	11	6	27	10	6	13
3rd harvest year			6	6	9	6	12	6	14	6	6	9	6	10	12	9	24	13	6	9	6	12	13	6	6	12	6	29	10	6	12

Note that the mean of G varieties include all those from early, intermediate and late maturity groups.
Yields are expressed as a percentage of the mean of all fully recommended PRG varieties in trials. Grazing yields are measured in year 2, Conservation yields in years 1 & 3.
Grazing D-value is measured from a late-summer cut in year 2 and the Grazing ME yields are calculated as total yield multiplied by the D-value x 0.16.
Conservation D-value is measured from both the 1st and 2nd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of
Late Perennial Ryegrass Tetraploid Varieties 2023/2024

	Mean of G varieties	Late Tetraploid Mean (G and S)	Ballintoy	Bijou	Meiduno	Weldone	Gracehill	Calao	Aspect	AberGain	Nashota	Thegn	Hopi
Recommended List status			G	S	S	PG	PG	PG	G	G	G	PG	PG
Heading date			31 May	1 Jun	1 Jun	1 Jun	2 Jun	2 Jun	3 Jun	4 Jun	4 Jun	6 Jun	8 Jun
Grazing: management													
Grazing yield (% of 9.23 t DM/ha)	100	103	103	100	103	101	104	98	101	106	103	102	99
Grazing D-value	76.4	76.8	76.7	74.9	76.3	76.4	76.1	76.5	76.6	77.6	77.0	77.2	76.1
ME Yield (% of 113 000 mj/ha)	100	104	104	98	102	102	103	98	101	108	103	103	99
Conservation: management													
Total yield year 1 (% of 16.18 t DM/ha)	100	103	105	101	102	100	102	100	99	106	104	97	97
1st and 2nd cut ME yield, first harvest year (% of 124 000 mj/ha)	100	106	107	104	104	103	102	102	102	109	108	99	97
Total yield year 3 (% of 12.56 t DM/ha)	100	103	105	102	102	99	103	103	100	107	102	98	98
Total yield: Mean (% of 14.36 t DM/ha)	100	103	105	101	102	100	102	102	99	106	103	98	97
Agronomic characters													
Ground Cover% (2nd harvest year)	70	67	67	68	65	70	67	68	69	69	71	70	68
Ground Cover% (3rd harvest year)	65	60	59	61	56	62	59	62	62	62	63	65	63
Autumn Ground Cover (1-9, 1=poor 9=good)	6.4	5.8	5.6	6.0	5.4	6.3	5.9	6.0	6.1	6.1	6.3	6.4	6.2
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.3	7.5	7.3	7.2	7.2	6.9	7.3	7.3	7.4	7.4	7.3	7.2
Grazing: seasonal growth													
Early grazing yield (% of 1.30 t DM/ha)	100	101	103	92	98	83	92	84	91	110	102	83	82
Spring (% of 2.27 t DM/ha)	100	101	104	98	99	89	97	90	94	108	101	88	86
Early Summer (% of 3.47 t DM/ha)	100	107	104	106	108	111	107	106	108	107	109	110	109
Late Summer (% of 2.29 t DM/ha)	100	100	101	98	100	99	105	97	96	103	101	105	96
Autumn (% of 1.35 t DM/ha)	100	103	104	90	101	100	104	95	99	107	92	100	99

	Mean of G varieties	Late Tetraploid Mean (G and S)	Ballintoy	Bijou	Meiduno	Weldone	Gracehill	Calao	Aspect	AberGain	Nashota	Thegn	Hopi
Conservation: seasonal growth – Year 1													
1st cut (% of 7.10 t DM/ha)	100	113	117	115	111	106	109	109	108	114	112	97	100
1st cut D-Value	71.1	69.7	69.1	68.3	69.8	70.6	69.3	70.2	70.3	69.7	70.3	72.1	70.4
2nd cut (% of 3.50 t DM/ha)	100	106	107	103	102	107	104	101	102	113	111	108	105
2nd cut D-Value	72.8	73.3	72.6	71.8	74.0	73.9	73.1	73.4	73.8	72.9	74.4	73.3	72.6
3rd cut (% of 2.59 t DM/ha)	100	100	103	93	102	103	102	101	98	100	105	106	102
4th+ cut (% of 2.88 t DM/ha)	100	100	101	95	99	97	103	100	95	104	101	99	96
Disease resistance													
Crown Rust (1-9, 1=poor 9=good)	5.7	4.8	3.2	7.8	5.7	6.9	7.6	5.9	4.3	5.8	6.4	6.7	6.9
Drechslera (1-9, 1=poor 9=good)	5.2	6.3	5.9	6.5	6.6	5.9	6.7	5.6	6.5	6.1	6.7	5.9	6.6
Mildew (1-9, 1=poor 9=good)	6.4	6.9	-	6.9	6.7	6.5	[7.0]	-	6.8	7.2	6.6	6.3	6.6
Year First Listed			2017	2014	2014	2019	2020	2017	2011	2012	2018	2018	2019
Breeder			AFBI, UK	R2n, France	DLF Seeds A/S	DLF Seeds A/S	AFBI, UK	Semences de France	DLF Seeds A/S	IBERS, Aber-ystwyth	DLF Seeds A/S	DLF Seeds A/S	DLF Seeds A/S
Agent			Barenbrug UK Ltd	RAGT Seeds Ltd	Limagrain UK Ltd	Limagrain UK Ltd	Barenbrug UK Ltd	Germinal	Limagrain UK Ltd	Germinal	DLF Seeds Ltd	DLF Seeds Ltd	DLF Seeds Ltd
Number of trials for yields													
1st harvest year			11	12	15	13	11	11	12	13	13	13	13
2nd harvest year			11	11	13	12	9	11	12	11	13	13	12
3rd harvest year			12	10	12	9	6	12	13	12	12	12	9

Note that the mean of G varieties include all those from early, intermediate and late maturity groups.
Yields are expressed as a percentage of the mean of all fully recommended PRG varieties in trials. Grazing yields are measured in year 2, Conservation yields in years 1 & 3.
Grazing D-value is measured from a late-summer cut in year 2 and the Grazing ME yields are calculated as total yield multiplied by the D-value x 0.16.
Conservation D-value is measured from both the 1st and 2nd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of
Italian Ryegrass Diploid Varieties 2023/2024

	Mean of G varieties	Diploid Mean (G's only)	Shakira	Syntilla	Doluga	Muriello	Fox	Jaccar	Alamo	Pinaco	Sendero	Abys	Melprimo
Recommended List status			G	PG	PG	G	G	PG	G	PG	PG	G	PG
Heading date			19 May	20 May	21 May	21 May	22 May	22 May	23 May	23 May	23 May	23 May	24 May
Total annual yields													
1st harvest year (% of 17.56 t DM/ha)	100	100	100	99	105	100	100	103	102	101	102	99	99
2nd harvest year (% of 14.35 t DM/ha)	100	100	101	101	100	99	100	101	99	101	101	102	100
Total yield: Mean (% of 15.99 t DM/ha)	100	100	100	100	102	99	100	102	101	101	102	101	99
1st and 2nd cut ME yield, first harvest year (% of 117 000 mj/ha)	100	99	100	96	102	97	98	102	100	101	101	99	95
Year of Sowing (% of 2.03 t DM/ha)	100	94	92	99	99	97	101	92	93	97	100	89	96
Conservation seasonal growth (1st harvest year)													
Early spring growth (% of 1.66 t DM/ha)	100	101	100	108	101	100	104	114	98	93	108	104	103
1st conservation cut (% of 6.37 t DM/ha)	100	98	102	96	101	95	99	104	97	98	97	98	94
1st conservation cut D-Value	71.3	71.1	70.8	71.1	70.5	71.7	70.3	70.5	71.6	71.2	71.6	71.1	70.8
2nd conservation cut (% of 4.21 t DM/ha)	100	100	100	99	106	101	98	100	104	105	105	98	100
2nd conservation cut D-Value	65.0	64.6	64.1	63.8	64.9	64.6	64.9	64.7	65.0	65.0	64.9	64.3	64.2
Monthly cuts (% of 5.39 t DM/ha)	100	102	97	101	108	105	99	102	108	104	105	100	102

	Mean of G varieties	Diploid Mean (G's only)	Shakira	Syntilla	Doluga	Muriello	Fox	Jaccar	Alamo	Pinaco	Sendero	Abys	Melprimo
Agronomic characters													
Ground Cover% (1st harvest year)	57	59	57	62	60	59	58	59	62	59	60	60	61
Ground Cover% (2nd harvest year)	52	53	45	56	52	55	54	53	56	56	56	57	52
Autumn Ground Cover (1-9, 1=poor 9=good)	3.8	3.9	3.3	4.1	3.8	4.0	4.0	3.9	4.1	4.1	4.1	4.2	3.8
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.2	7.1	[7.1]	[7.4]	7.2	6.9	[7.5]	7.2	-	[7.3]	7.6	7.4
Disease resistance													
Ryegrass mosaic virus (1-9, 1=poor 9=good)	4.8	4.3	6.2	-	-	3.3	3.8	-	4.6	-	-	3.8	-
Mildew (1-9, 1=poor 9=good)	6.7	6.8	6.6	6.6	-	6.7	6.8	-	7.0	6.8	7.2	7.0	[7.1]
Brown Rust (1-9, 1=poor 9=good)	6.4	6.1	6.3	6.6	[7.1]	5.8	5.8	[7.3]	5.1	[5.0]	5.5	7.3	6.7
Crown Rust (1-9, 1=poor 9=good)	6.8	6.9	6.7	7.8	7.1	6.7	7.2	6.7	6.7	6.6	7.0	7.3	7.3
Year First Listed			2012	2020	2022	2006	2004	2022	2001	2021	2020	2004	2019
Breeder			DSV, France	R2n, France	DSV	ILVO/DSV	Force Limagrain	Semences de France	Innoseeds, NL	DSV	DSV	R2n, France	ILVO
Agent			DSV	RAGT Seeds Ltd	DSV	Germinal	DLF Seeds Ltd	Germinal	DLF Seeds Ltd	DSV	DSV	Barenbrug UK Ltd	Limagrain UK Ltd
Number of trials for yields													
Year of sowing			9	4	3	15	9	3	15	3	4	10	7
1st harvest year			11	11	6	26	10	6	28	8	11	10	12
2nd harvest year			11	9	6	24	10	6	26	6	9	10	12

Yields are expressed as a percentage of the mean of all fully recommended italian ryegrass varieties in trials.
Conservation D-value is measured from both the 2nd and 3rd cuts in year 1.
Conservation ME yields are calculated as the first year 2nd cut multiplied by its D-value x 0.16, plus the first year 3rd cut multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of
Italian Ryegrass Tetraploid Varieties 2023/2024

	Mean of G varieties	Tetraploid Mean (G's only)	Melsprinter	Kigezi 1	Udine	Hunter	Melsitra	Arman	Messina	Barmultra II	Cazzano	Barimax
Recommended List status			PS	G	G	G	PS	PS	G	G	G	G
Heading date			19 May	19 May	19 May	20 May	20 May	21 May	21 May	22 May	22 May	22 May
Total annual yields												
1st harvest year (% of 17.56 t DM/ha)	100	100	102	99	97	102	103	101	101	100	100	102
2nd harvest year (% of 14.35 t DM/ha)	100	100	93	102	101	97	94	96	100	99	99	99
Total yield: Mean (% of 15.99 t DM/ha)	100	100	98	101	99	99	98	98	100	100	100	101
1st and 2nd cut ME yield, first harvest year (% of 117 000 mj/ha)	100	101	101	99	99	103	102	100	101	103	102	104
Year of Sowing (% of 2.03 t DM/ha)	100	105	118	105	112	99	108	109	108	107	97	97
Conservation seasonal growth (1st harvest year)												
Early spring growth (% of 1.66 t DM/ha)	100	99	108	100	96	97	104	103	106	100	95	89
1st conservation cut (% of 6.37 t DM/ha)	100	101	97	103	101	103	97	101	99	104	98	103
1st conservation cut D-Value	71.3	71.5	71.8	70.3	70.4	71.0	71.9	71.4	72.9	71.8	72.8	72.3
2nd conservation cut (% of 4.21 t DM/ha)	100	100	107	96	97	105	107	97	100	100	102	104
2nd conservation cut D-Value	65.0	65.3	64.5	64.9	65.5	64.2	64.7	65.2	65.5	65.8	65.9	64.6
Monthly cuts (% of 5.39 t DM/ha)	100	98	104	98	93	98	107	103	101	97	103	103

	Mean of G varieties	Tetraploid Mean (G's only)	Melsprinter	Kigezi 1	Udine	Hunter	Melsitra	Arman	Messina	Barmultra II	Cazzano	Barimax
Agronomic characters												
Ground Cover% (1st harvest year)	57	55	53	56	56	55	57	59	57	57	52	56
Ground Cover% (2nd harvest year)	52	50	42	52	52	48	44	46	51	51	48	46
Autumn Ground Cover (1-9, 1=poor 9=good)	3.8	3.7	3.1	3.8	3.8	3.5	3.2	3.4	3.7	3.7	3.5	3.3
Winter Hardiness (1-9, 1=poor 9=good)	7.3	7.3	[7.4]	7.2	7.6	7.3	[7.3]	[7.1]	7.4	7.3	7.0	7.3
Disease resistance												
Ryegrass mosaic virus (1-9, 1=poor 9=good)	4.8	5.2	-	4.4	6.0	5.2	-	-	[6.9]	4.1	[4.5]	-
Mildew (1-9, 1=poor 9=good)	6.7	6.6	-	6.4	6.8	6.7	7.3	6.9	6.5	6.2	7.1	6.5
Brown Rust (1-9, 1=poor 9=good)	6.4	6.7	[6.0]	7.1	6.4	6.9	5.9	6.7	7.0	6.2	6.7	5.4
Crown Rust (1-9, 1=poor 9=good)	6.8	6.7	7.6	7.6	7.5	5.7	7.8	7.3	7.5	7.6	4.4	7.1
Year First Listed			2022	2010	2012	2008	2020	2020	2017	2009	2015	2018
Breeder			ILVO	DLF Seeds A/S	DLF Seeds A/S	DSV, Germany	ILVO	DSV	ILVO	Barenbrug, NL	DLF Seeds A/S	Barenbrug, NL
Agent			Freudenberger UK Ltd	DLF Seeds Ltd	Limagrain UK Ltd	DLF Seeds Ltd	DLF Seeds Ltd	DSV	Limagrain UK Ltd	Barenbrug UK Ltd	DLF Seeds Ltd	Barenbrug UK Ltd
Number of trials for yields												
Year of sowing			3	14	9	11	4	4	8	13	9	7
1st harvest year			6	10	11	18	11	11	12	10	13	13
2nd harvest year			6	10	11	16	9	9	12	10	13	13

Yields are expressed as a percentage of the mean of all fully recommended italian ryegrass varieties in trials.
Conservation D-value is measured from both the 2nd and 3rd cuts in year 1.
Conservation ME yields are calculated as the first year 2nd cut multiplied by its D-value x 0.16, plus the first year 3rd cut multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of Hybrid Ryegrass Varieties 2023/2024

			Diploids				Tetraploids													
	Mean of G varieties	Diploid Mean (G and S)	Pirol	Barsilo	Barclamp	Tetraploid Mean (G's only)	AberSheen	AberEcho	Aston Crusader	Enduro	Bannfoot	Tetragraze	Perkins	Novial	AberNiche (Fest)	AberOpal	RGT Cordial	Kirial	Perseus (Fest)	AberImage
Recommended List status			G	S	S		PS	G	G	G	G	S	PG	G	S	PG	PG	G	S	PS
Heading date			23 May	26 May	27 May		17 May	18 May	21 May	22 May	22 May	22 May	22 May	22 May	22 May	23 May	23 May	24 May	25 May	27 May
Total annual yields																				
1st harvest year (% of 18.22 t DM/ha)	100	103	103	102	103	99	101	101	100	96	96	96	96	96	101	102	99	98	95	98
2nd harvest year (% of 13.53 t DM/ha)	100	97	99	94	98	102	107	102	102	100	101	101	105	101	100	103	105	103	102	108
3rd harvest year (% of 12.41 t DM/ha)	100	94	98	93	89	102	108	98	103	102	103	101	102	102	103	105	105	106	106	102
Total yield: Mean (% of 14.85 t DM/ha)	100	98	100	97	96	101	105	100	102	99	100	99	100	99	101	103	103	102	101	102
1st and 2nd cut ME yield, first harvest year (% of 119 000 mj/ha)	100	101	100	100	102	100	99	103	100	98	98	101	95	97	101	107	98	99	98	99
Year of Sowing (% of 1.63 t DM/ha)	100	89	95	90	83	104	78	92	101	105	88	88	84	99	94	93	87	116	101	90
Agronomic characters																				
Ground Cover% (2nd harvest year)	60	58	60	54	59	62	56	62	61	63	65	68	63	63	57	61	67	61	58	57
Ground Cover% (3rd harvest year)	54	47	47	48	45	58	50	57	57	59	66	62	62	60	50	55	64	57	55	58
Autumn Ground Cover (1-9, 1=poor 9=good)	4.0	3.6	3.7	3.5	3.6	4.2	3.6	4.2	4.2	4.3	4.6	4.6	4.4	4.3	3.7	4.1	4.6	4.1	4.0	4.0
Winter Hardiness (1-9, 1=poor 9=good)	7.4	7.5	7.6	7.3	7.6	7.4	[7.3]	7.2	7.4	7.4	7.4	7.4	7.7	7.4	7.5	[7.3]	[7.7]	7.4	7.4	7.4
Conservation seasonal growth (1st harvest year)																				
Early spring growth (% of 1.57 t DM/ha)	100	105	111	104	100	96	88	95	106	90	79	77	100	91	106	86	90	93	94	91
1st conservation cut (% of 6.50 t DM/ha)	100	98	98	96	99	102	97	100	103	102	103	109	97	102	96	103	99	101	100	98
1st conservation cut D-Value	72.2	72.5	71.9	72.9	72.9	72.2	71.2	73.4	71.8	72.0	72.0	71.7	72.4	71.5	73.0	74.8	72.6	71.4	72.3	73.5
2nd conservation cut (% of 3.95 t DM/ha)	100	109	110	109	110	95	104	103	94	90	85	87	91	89	112	104	93	94	96	99
2nd conservation cut D-Value	68.1	65.6	65.3	66.4	65.2	69.3	68.1	69.9	68.7	69.4	71.5	69.4	68.0	69.7	66.0	70.3	69.7	69.2	67.1	67.3
Monthly cuts (% of 6.04 t DM/ha)	100	103	101	105	102	99	106	102	99	95	99	91	97	95	99	105	105	97	90	98

			Diploids				Tetraploids												
	Mean of G varieties	Diploid Mean (G and S)	Pirol	Barsilo	Barclamp	Tetraploid Mean (G's only)	AberSheen	AberEcho	Aston Crusader	Enduro	Bannfoot	Tetragraze	Perkins	Novial	AberNiche (Fest)	AberOpal	RGT Cordial	Kirial	Perseus (Fest)	AberImage
Disease resistance (1-9, 1=poor 9=good)																			
Ryegrass mosaic virus	5.8	4.8	3.9	3.7	[6.7]	6.8	-	5.7	6.8	6.8	7.8	6.7	-	7.6	6.6	-	-	7.9	7.1	-
Mildew	6.4	5.7	4.4	7.1	5.7	6.7	8.2	6.3	7.0	6.4	6.9	6.6	7.7	6.5	6.7	6.7	6.0	7.1	6.0	6.8
Brown Rust	5.6	5.7	5.9	4.2	6.9	5.8	[2.3]	3.0	7.2	6.8	7.1	7.1	6.7	6.5	7.1	-	[6.7]	6.4	7.1	6.8
Crown Rust	5.9	5.8	6.2	4.7	6.6	6.1	4.5	4.5	6.3	7.0	5.6	4.2	6.3	6.9	6.0	3.9	6.8	6.6	7.2	2.7
Year First Listed			2005	1998	2017		2021	2002	2014	2005	2018	2008	2020	2010	2011	2022	2021	2012	2018	2020
Breeder			Steinach, Germany / DSV	Barenburg, NL	Barenburg, NL		IBERS, Aberystwyth	IBERS, Aberystwyth	DSV, UK	R2n, France	AFBI, UK	DLF Seeds A/S	DSV	R2n, France	IBERS, Aberystwyth	IBERS, Aberystwyth	R2n, France	R2n, France	DLF Seeds A/S	IBERS, Aberystwyth
Agent			Germinal	Barenbrug UK Ltd	Barenbrug UK Ltd		Germinal	Germinal	DSV	Limagrain UK Ltd	Barenbrug UK Ltd	DLF Seeds Ltd	DSV	Barenbrug UK Ltd	Germinal	Germinal	RAGT Seeds Ltd	RAGT Seeds Ltd	DLF Seeds Ltd	Germinal
Number of trials for yields																				
Year of sowing			14	6	6		4	12	6	8	4	6	4	8	8	4	4	7	4	4
1st harvest year			29	12	12		8	30	17	12	13	12	11	12	10	6	8	11	13	11
2nd harvest year			27	12	12		6	28	15	12	13	12	9	10	10	6	6	11	13	9
3rd harvest year			26	11	13		6	27	12	11	12	11	6	10	11	6	6	12	12	6

Yields are expressed as a percentage of the mean of all fully recommended hybrid ryegrass varieties in trials.
Conservation D-value is measured from both the 2nd and 3rd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
Hybrid diploids have more secondary heading than hybrid tetraploids.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of Timothy Varieties 2023/2024

	Mean of G varieties	Presto	Comer	Dolina	Promesse	Comtal	Winnetou	Baronaise
Recommended List status		G	G	G	S	G	G	PG
Heading date		7 Jun	8 Jun	8 Jun	8 Jun	9 Jun	10 Jun	13 Jun
Grazing: management								
Grazing yield (% of 9.36 t DM/ha)	100	101	100	103	95	100	96	101
Grazing D-value	72.3	72.3	71.7	71.5	72.7	71.9	73.9	73.7
ME Yield (% of 109 000 mj/ha)	100	101	99	102	95	100	98	103
Conservation: management								
Total yield year 1 (% of 13.84 t DM/ha)	100	100	99	102	94	99	99	96
ME yield of 1st+2nd cut year 1 (% of 99 000 mj/ha)	100	101	99	101	96	98	101	100
Total yield year 3 (% of 12.82 t DM/ha)	100	99	103	103	95	98	98	100
Total yield: Mean (% of 13.34 t DM/ha)	100	100	101	102	94	99	99	98
Agronomic characters								
Ground Cover% (2nd harvest year)	72	72	71	70	73	73	74	71
Ground Cover% (3rd harvest year)	66	67	65	64	69	67	68	67
Autumn Ground Cover (1-9, 1=poor 9=good)	4.9	5.0	4.7	4.6	5.3	5.0	5.3	5.0
Winter Hardiness (1-9, 1=poor 9=good)	6.8	7.0	6.9	7.0	6.8	6.7	6.6	-
Grazing: seasonal growth								
Early grazing yield (% of 1.12 t DM/ha)	100	110	98	106	79	96	89	117
Spring (% of 2.38 t DM/ha)	100	104	95	108	92	98	95	108
Early Summer (% of 3.69 t DM/ha)	100	100	103	99	98	102	97	97
Late Summer (% of 2.48 t DM/ha)	100	101	100	102	93	100	97	99
Autumn (% of 1.01 t DM/ha)	100	99	100	109	91	101	92	103

	Mean of G varieties	Presto	Comer	Dolina	Promesse	Comtal	Winnetou	Baronaise
Conservation: seasonal growth – Year 1								
1st cut (% of 6.38 t DM/ha)	100	102	99	101	93	98	99	95
1st cut D-Value	64.4	64.0	64.5	64.0	66.0	63.7	65.7	67.2
2nd cut (% of 3.39 t DM/ha)	100	99	102	102	98	100	97	96
2nd cut D-value	65.4	65.1	64.9	65.1	65.9	65.0	66.9	68.1
3rd cut (% of 2.00 t DM/ha)	100	97	100	106	95	98	100	94
4th+ cut (% of 2.07 t DM/ha)	100	96	96	102	92	103	103	101
Year First Listed		2005	2001	2003	1990	1989	2003	2020
Breeder		DSV, Netherlands	ILVO	ILVO	Innoseeds, NL	DLF Seeds A/S	DLF Seeds A/S	Barenbrug, NL
Agent		Germinal	Limagrain UK Ltd	DLF Seeds Ltd	DLF Seeds Ltd	Limagrain UK Ltd	DLF Seeds Ltd	Barenbrug UK Ltd
Number of trials for yields								
1st harvest year		11	11	11	11	11	11	7
2nd harvest year		11	13	11	11	11	11	7
3rd harvest year		10	14	10	10	10	10	6

Yields are expressed as a percentage of the mean of all fully recommended timothy varieties in trials. Grazing yields are measured in year 2, Conservation yields in years 1 & 3.
Grazing D-value is measured from a late-summer cut in year 2 and the Grazing ME yields are calculated as total yield multiplied by the D-value x 0.16.
Conservation D-value is measured from both the 1st and 2nd cuts in year 1.
Conservation ME yields are calculated as the first year first cut multiplied by its D-value x 0.16, plus the first year second cut yield multiplied by its D-value x 0.16.
[ ] = Only 2 trials worth of data.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of White Clover Varieties 2023/2024

	AberAce	Aberystwyth S.184	AberHerald	Coolfin	Quartz	Buddy	Iona	AberDai	AberSwan	Grassands Bounty	Dublin	AberSirius	Violin	Barblanca	Legacy	Aran	Kakariki	Brianna
Recommended List status	G	G	G	PG	PG	G	G	G	G	G	G	PS	G	G	PG	G	PG	G
Leaf area (length x breadth mm²)	442	631	760	776	804	813	841	900	924	936	967	1008	1039	1112	1125	1346	1353	1463
Light defoliation (cutting or rotational cattle grazing) 2nd harvest year																		
Total Clover yield (% of 4.91 t DM/ha)	76	85	99	93	89	89	95	101	105	102	110	107	105	106	101	111	112	115
Total yield: Grass + Clover (% of 10.64 t DM/ha)	91	97	99	97	98	97	100	101	101	101	103	103	101	102	103	102	102	104
% Clover	38	40	46	44	41	43	44	46	48	47	50	48	48	48	45	50	51	51
Clover yield: First cut (% of 0.67 t DM/ha)	75	79	92	107	95	91	98	110	115	109	113	110	102	117	127	110	119	111
Clover yield: Last cut (% of 0.57 t DM/ha)	61	66	97	88	85	79	92	101	107	104	112	108	112	118	101	122	125	127
3rd harvest year																		
Yield of clover (% of 4.07 t DM/ha)	71	74	110	94	94	90	99	92	114	98	113	121	110	111	109	106	116	114
Yield of Grass + Clover (% of 9.82 t DM/ha)	90	93	103	98	101	97	98	99	104	102	105	110	103	104	107	101	103	102
% Clover	33	33	45	40	39	39	42	39	45	40	45	46	44	44	42	43	47	46
Clover yield: First cut (% of 0.56 t DM/ha)	63	68	112	105	97	98	99	94	124	97	115	139	110	118	127	115	138	113
Clover yield: Last cut (% of 0.40 t DM/ha)	71	68	106	87	123	79	93	93	110	99	108	127	102	126	115	115	142	121
Autumn ground cover																		
Light Defoliation — Ground cover % (1st harvest year)	45	54	49	46	52	44	48	50	51	51	49	51	50	53	53	50	51	46
Light Defoliation — Ground cover % (2nd harvest year)	43	50	61	55	56	47	48	57	56	58	60	57	59	67	66	57	56	59
Light Defoliation — Ground cover % (3rd harvest year)	45	48	56	52	56	50	54	49	55	52	52	56	56	57	51	52	51	54
Light Defoliation — **Overall (1-9, 1=poor 9=good)**	**5.4**	**6.2**	**7.7**	**7.0**	**7.3**	**6.1**	**6.5**	**6.9**	**7.3**	**7.2**	**7.4**	**7.5**	**7.6**	**8.2**	**7.8**	**7.1**	**6.9**	**7.4**

		AberAce	Aberystwyth S.184	AberHerald	Coolfin	Quartz	Buddy	Iona	AberDai	AberSwan	Grassands Bounty	Dublin	AberSirius	Violin	Barblanca	Legacy	Aran	Kakariki	Brianna
Hard Defoliation	Ground cover % (1st harvest year)	58	61	50	62	61	55	55	57	53	58	54	46	57	58	57	54	55	52
	Ground cover % (2nd harvest year)	67	68	59	69	68	63	61	60	65	70	61	51	63	67	66	54	55	58
	Ground cover % (3rd harvest year)	59	56	51	59	69	54	54	51	54	61	53	47	56	64	56	43	55	50
	Overall (1-9, 1=poor 9=good)	**7.9**	**7.6**	**6.3**	**8.0**	**8.9**	**7.0**	**6.7**	**6.5**	**7.2**	**8.3**	**6.7**	**5.2**	**7.2**	**8.3**	**7.5**	**5.1**	**6.4**	**6.2**
Spring ground cover																			
Hard Defoliation	Ground cover % (1st harvest year)	40	39	33	39	33	31	33	34	36	34	34	29	31	30	34	30	25	28
	Ground cover % (2nd harvest year)	63	70	55	63	58	61	58	57	56	61	57	44	60	55	48	52	49	52
	Ground cover % (3rd harvest year)	52	49	50	52	56	49	51	47	50	51	48	44	48	50	48	42	44	46
	Overall (1-9, 1=poor 9=good)	**8.6**	**8.8**	**7.1**	**8.7**	**8.2**	**7.8**	**7.6**	**7.1**	**7.2**	**8.1**	**7.1**	**4.7**	**7.6**	**7.0**	**5.7**	**5.7**	**5.5**	**6.1**
	Year First Listed	**2001**	**1969**	**1994**	**2019**	**2021**	**2013**	**2011**	**1997**	**2018**	**2003**	**2015**	**2021**	**2009**	**2001**	**2022**	**1981**	**2021**	**2015**
	Breeder	IBERS, Aberystwyth	IBERS, Aberystwyth	IBERS, Aberystwyth	Teagasc, Eire	Grasslands Innovation Ltd	Teagasc, Eire	Teagasc, Eire	IBERS, Aberystwyth	IBERS, Aberystwyth	AgReSearch Ltd (New Zealand)	Teagasc, Eire	IBERS, Aberystwyth	DLF Seeds A/S	AgReSearch Ltd (New Zealand)	Grasslands Innovation Ltd	Teagasc, Eire	Grasslanz Technology Ltd	DLF Seeds A/S
	Agent	Germinal	Barenbrug UK Ltd	Germinal	Limagrain UK Ltd	DLF Seeds Ltd	DLF Seeds Ltd	DLF Seeds Ltd	Germinal	Germinal	Limagrain UK Ltd	DLF Seeds Ltd	Germinal	Limagrain UK Ltd	Barenbrug UK Ltd	PGG Wrightson Seeds	Germinal	Limagrain UK Ltd	DLF Seeds Ltd
Number of trials for clover yields																			
2nd harvest year		**23**	**10**	**12**	**9**	**5**	**11**	**10**	**25**	**11**	**10**	**11**	**5**	**14**	**10**	**5**	**23**	**5**	**11**
3rd harvest year		**22**	**11**	**13**	**7**	**5**	**11**	**10**	**24**	**11**	**10**	**11**	**5**	**13**	**10**	**5**	**22**	**5**	**11**

Yields are expressed as a percentage of the mean of all fully recommended white clover varieties in trials.

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Recommended List of Red Clover Varieties 2023/2024

			Diploids							Tetraploids			
		Mean of G varieties	Merviot	Lemmon	AberClaret	Harmonie	Sinope	Fearga	Ganymed	Amos	Maro	Atlantis	Magellan
Recommended List status			S	G	G	G	PG	G	PG	G	G	G	G
Conservation: management													
Total yield 1st harvest year (% of 12.06 t DM/ha)		100	104	99	101	98	101	99	103	100	99	102	100
Total yield 2nd harvest year (% of 12.95 t DM/ha)		100	97	98	102	99	100	101	104	100	96	100	101
Total yield 3rd harvest year (% of 10.04 t DM/ha)		100	83	96	105	98	99	106	108	95	88	101	104
Total yield: Mean (% of 11.70 t DM/ha)		100	95	98	103	98	100	101	105	98	95	101	102
Protein content %													
1st cut - 1st harvest year		17.8	17.1	17.6	17.0	18.3	17.8	17.1	16.6	18.1	18.0	17.8	18.0
2nd cut - 2nd harvest year		19.8	19.6	19.5	18.7	19.6	19.5	18.3	18.2	20.2	19.7	20.5	20.2
2nd cut - 3rd harvest year		20.0	19.2	19.7	19.0	20.3	19.1	18.6	19.2	20.5	19.8	20.2	20.2
Agronomic characters													
Ground cover % (1st harvest year)		71	70	71	69	73	69	66	72	72	65	70	72
Ground cover % (2nd harvest year)		62	50	60	59	66	61	58	63	61	50	61	62
Ground cover % (3rd harvest year)		50	33	51	49	56	46	48	52	46	37	49	50
Conservation seasonal growth													
1st harvest year	1st Cut (% of 5.53 t DM/ha)	100	105	99	96	101	102	91	104	100	98	103	101
	Protein yield: 1st Cut (% of 0.98 t DM/ha)	100	101	98	92	103	102	87	97	102	99	103	102
2nd harvest year	2nd Cut (% of 3.63 t DM/ha)	100	97	92	105	99	99	104	102	102	98	101	102
	Protein yield: 2nd Cut (% of 0.72 t DM/ha)	100	96	91	98	98	98	96	94	104	98	105	104
3rd harvest year	2nd Cut (% of 3.31 t DM/ha)	100	86	91	106	97	91	109	104	101	90	100	104
	Protein yield: 2nd Cut (% of 0.66 t DM/ha)	100	83	90	101	99	87	101	100	104	89	102	105
Year First Listed			1980	2003	2010	2012	2018	2018	2022	2005	2010	2011	2014
Breeder			ILVO	ILVO	IBERS, Aberystwyth	Nord. Pflan/ DSV	DLF Seeds A/S	Teagasc, Eire	DLF Seeds A/S	Slechtitelská stanice, The Czech Republic	LSPB	Nord. Pflan/ DSV	Nord. Pflan/ DSV
Agent			Limagrain UK Ltd	Barenbrug UK Ltd	Germinal	DSV	DLF Seeds Ltd	Goldcrop Ltd	Limagrain UK Ltd	DLF Seeds Ltd	Limagrain UK Ltd	DSV	DLF Seeds Ltd
Number of trials for yields													
1st harvest year			15	15	15	15	9	12	6	15	15	15	15
2nd harvest year			13	13	13	13	7	10	6	13	13	13	13
3rd harvest year			13	13	13	13	4	7	6	13	13	13	13

G General Use S Recommended for Specific Use PG Provisional General Use Recommendation PS Provisional Specific Use Recommendation

Descriptive List of
Lucerne Varieties 2023/2024

	Daisy
Conservation: management	
Total yield 1st harvest year (% of 11.11 t DM/ha)	**100**
Total yield 2nd harvest year (% of 14.17 t DM/ha)	**100**
Total yield: Mean (% of 12.64 t DM/ha)	**100**
Seasonal growth: 1st harvest year	
1st Cut (% of 4.15 t DM/ha)	**100**
Protein Content%: 1st Cut	**18.5**
Agronomic characters	
Ground cover % (1st harvest year)	**65**
Ground cover % (2nd harvest year)	**64**
Year First Listed	**2003**
Breeder	DLF Seeds A/S
Agent	DLF Seeds Ltd
Number of trials for yields	
1st harvest year	**5**
2nd harvest year	**5**

Descriptive List of Cocksfoot Varieties 2023/2024

	Mean of descriptive list varieties	Sparta	Lidacta	RGT Lovely
Conservation management				
Total yield 1st harvest year (% of 14.74 t DM/ha)	100	94	99	106
Total yield 2nd harvest year (% of 15.99 t DM/ha)	100	94	96	109
Total yield: Mean (% of 15.28 t DM/ha)	100	94	98	107
Seasonal growth: 1st harvest year				
1st cut (% of 5.34 t DM/ha)	100	98	100	102
1st conservation cut D-Value	65.2	65.4	64.4	65.7
2nd cut (% of 3.25 t DM/ha)	100	92	98	109
2nd conservation cut D-Value	69.5	69.7	69.3	69.6
3rd cut (% of 3.18 t DM/ha)	100	93	102	105
4th+ cut (% of 2.97 t DM/ha)	100	91	97	113
Agronomic characters				
Ground cover % (2nd harvest year)	64.4	67.2	66.3	59.6
Ground cover (1-9, 9=good)	6.5	6.5	6.5	5.8
Winter hardiness (1-9, 9=good)	5.8	6.1	5.4	-
Disease resistance				
Resistance to Mildew (1-9, 9=good)	7	7	7	-
Resistance to Mastigosporium (1-9, 9=good)	4	6	5	2
Resistance to Yellow Rust (1-9, 9=good)	5	3	6	-
Year First Listed		1982	1991	2021
Breeder		DLF Seeds A/S	DSV, Germany	R2n, France
Agent		DLF Seeds Ltd	DSV	RAGT Seeds Ltd
Number of trials for yields				
1st harvest year		6	6	4
2nd harvest year		5	5	2

Useful Contacts

Aberystwyth University (IBERS)
Gogerddan
Aberystwyth
Ceredigion
SY23 3EE
01970 823000

Agri-Food and Biosciences Institute
Manor House
Loughgall
Co Armagh
Northern Ireland
BT61 8JA
02838 892344

Barenbrug UK Ltd
33 Perkins Road
Rougham Industrial Estate
Bury St Edmunds
Suffolk
IP30 9ND
01359 272000

Semences de France
Activité fourragère et gazon
62 rue Léon Beauchamp
59930 La chapelle
d'Armentières
France
0033 320 48 41 41

Goldcrop Ltd
Carrigtwohill
Co. Cork
Ireland
T45 F685
00353 214882800

Germinal GB Ltd
Camp Road
Witham St Hughs
Lincolnshire
LN6 9QJ
01522 868714

DLF Seeds Ltd
10, Westerton Road
East Mains Industrial Estate
Broxburn
West Lothian
EH52 5AU
01506 674800

DSV
Wardington Road
Wardington
Banbury
Oxfordshire
OX17 1FE
01295 758800

Feldsaaten Freudenberger GmbH & Co. KG
Magdeburger Straße 2
47800 Krefeld
Germany

Grasslanz Technology Ltd
Grasslands Research Centre
Tennent Drive
Private Bag 11008
Palmerston North 4442
New Zealand
0064 6 351 8255

ILVO Plant
Caritasstraat 39
9090 Melle
Belgium
0032 9 272 28 59

INRA Chez Agri-Obtentions S.A.
Chemin de la Petite Miniere
78280 Guyancourt
France
0033 130482300

Limagrain UK Ltd
Rothwell
Market Rasen
Lincolnshire
LN7 6DT
01472 371471

PGG Wrightson Seeds
PO Box 69132 Lincoln,
Canterbury 7640,
New Zealand
M +64 27 555 3349
D +64 3 966 9394

RAGT Seeds Ltd
Grange Road
Ickleton
Essex
CB10 1TA
01799 533700

Teagasc
Crops Research Centre
Oak Park
Carlow
Co. Carlow
R93 XE12
Ireland
00353 599170200

NIAB
Headley Hall
Spen Common Lane
Tadcaster
North Yorkshire
LS24 9NT

What's different in this year's RGCL?

New varieties

On the 2023/24 RGCL, five new varieties have been added.

The challenge with new varieties is that seed availability may not be high enough for them to be in many mixtures, but they are ones to watch.

Name	Type	Page
Goldwell	Inter PRG Dip	8
Banbridge	Inter PRG Tet	10
Graphic	Late PRG Dip	12
Bandon	Late PRG Dip	12
Doluga	Italian Dip	16

What do I want?

Field name: _____

For: ☐ Beef ☐ Sheep ☐ Dairy ☐ Mixed grazing

It is likely to be:
☐ Grazed only ☐ Silaged once ☐ Silaged 2-3 times

Needs to last:
☐ 1 year ☐ 2 years ☐ 3-4 years ☐ 5 years ☐ 10 years ☐ is for overseeding only

My soil pH is: ☐ 5 - 5.5 ☐ 6 - 6.5 ☐ 6.5+

P and K indexes are: **P:** _____ **K:** _____

Nitrogen use: ☐ None ☐ Low ☐ Medium ☐ High

My priority is: ☐ Yield ☐ Quality ☐ Balance of both

I wish to include varieties for:
☐ Early spring growth ☐ Mainly mid-season growth
☐ Late autumn grazing ☐ Extended spring and autumn grazing

Crown rust resistance is:
☐ Very important ☐ Moderately important ☐ Not important

Other diseases I am concerned about include: _____

Species must include:
☐ White clover ☐ Red Clover ☐ High digestibility grasses ☐ Timothy

☐ Other _____

Other requirements: _____

Complying with latest spray legislation at a glance

These measures now apply to grassland weedkillers

- Demonstrate Integrated Pest Management (IPM) is followed on your farm
- The sprayer operator on your farm must hold a Recognised Certificate; Grandfather rights are no longer valid
- All pesticide application equipment (excluding handheld equipment) in use must have a valid National Sprayer Testing Scheme (NSTS) Certificate.

These measures are a legal requirements for the UK and its farmers through the UK's Sustainable Use Regulations. Non-compliance could lead to prosecution and threaten your Single Farm Payment. They will also feature in Red Tractor standards.

H2OK? Think Water – Keep it Clean

Many grassland weedkillers are detected in drinking water sources, take extra care to protect water when filling and washing the sprayer and avoid over-spraying ditches and streams.

For more advice visit **www.voluntaryinitiative.org.uk**

Recommended Grass and Clover Lists are funded by plant breeders through the British Society of Plant Breeders and the ruminant levy boards (AHDB & HCC).

The full Lists can be found at **www.britishgrassland.com/product-category/recommended-grass-and-clover-lists/**

Detailed descriptions of each variety are available from NIAB. They are listed within their Forage Variety Advantage publication, which can be purchased by non-members from www.niab.com

Email: enquiries@bspb.co.uk

Phone: 01353 653200