Handbook

Recommended Grass and Clover Lists for England and Wales

2021/22

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Recommended Grass and Clover Lists – who are they for?

Knowing the performance characteristics of grass and clover is immensely useful for grassland producers. It allows appropriate selection of varieties that will perform well under a particular system.

The Recommended Grass and Clover Lists for England and Wales are drawn up after rigorous testing for attributes such as yield, persistency, quality and disease resistance. The data come from trials carried out by the NIAB-TAG, Barenbrug, IBERS, DLF Seeds, DSV, AFBI and SRUC, and are evaluated by a panel of experts.

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 Agriculture and Horticulture Development Board and Hybu Cig Cymru.

There are three steps to making the best use of this booklet:

1. Is it on the list? – when looking at mixtures check that the varieties are listed in this booklet

2. Is it right for the job? – make sure the type of grasses or clovers listed in a mixture are fit for the purpose

3. Which varieties fit the job? – refinements can be made to mixtures in consultation with your merchant

This booklet is produced for use in England and Wales. Farmers in Scotland should consult the Scottish recommended grass and clover varieties list.

Why are grass and clover important?

The cost of production per litre of milk or kg of liveweight gain is a major consideration for all livestock producers. One of the best ways to reduce costs is to produce more forage on the farm rather than buying feed in.

There is huge potential on grassland farms in England and Wales to increase the amount and quality of the grass and clover that is grown and eaten.

As few as 1 in 20 varieties of ryegrasses tested will actually make it to full recommendation on the list

Few farmers these days would want to use bull or ram genetics from the 1950s in their livestock breeding, yet they continue to use outdated varieties in their grassland.

By relying on old varieties, farmers are missing out on millions of pounds worth of investment made by plant breeders to produce new grasses that are far superior in important aspects such as yield, digestibility and spring growth.

Is it time to reseed?

The percentage of ryegrass (or other sown species) in a sward is a better indicator of a need for reseeding than the age of the ley.

Pulling up a handful of grass plants allows farmers to assess how much perennial ryegrass (PRG) there is by looking for a red base to their stem.

Weed grasses, such as annual meadow grass, take every opportunity to invade sown pastures and do not have red stem bases. Weed grass species yield poorly, are of poor feed quality and do not respond well to nitrogen.

The ideal grass/clover balance across the grass growing season is 30% white clover to 70% grass – but clover content can vary widely between and within fields.

Reseeding or over-seeding allows farmers to increase the performance of their swards by sowing improved grass and clover varieties that match individual field objectives – i.e. long term grazing or shorter term cutting.

Consider reseeding if there is less than 50% sown species in the ley

Which type of grass?

Mixtures

In GB farmers tend to reseed with a mixture of different grasses and clover, rather than sowing a single variety.

Mixtures can produce yield benefits when compared to the same varieties sown individually. They also allow farmers to capitalise on the strengths of different species. For instance the digestibility of Perennial ryegrass (PRG) can be combined with the yield of a hybrid ryegrass (HRG) and the superior nutrient value of white clover in one field.

Heading Dates

Grasses are classified according to heading date – which is the date on which 50% of the ears in fertile tillers have emerged.

Early varieties of ryegrass reach their heading date in the first two weeks of May; intermediate varieties head during the second half of May and late varieties reach this stage during the first two weeks of June.

In general, early heading varieties grow earlier in the spring, are more erect, tiller less freely and are easier to cut for conservation than later heading varieties, which tend to be more prostrate and persistent and give good mid-season growth.

Perennial, Italian and Hybrid ryegrasses

Ryegrass is the most important sown grass grown in GB due to its productivity and suitability to the climate and farming systems.

Perennial ryegrasses (PRG) produce persistently good yields of high quality forage. Italian ryegrass (IRG) yields higher than PRG but has poor persistence.

Hybrid ryegrass (HRG) is a cross between perennial and Italian varieties, combining the strengths of the two parent species, e.g. the sward density of PRG and the out-of-season growth of IRG.

For 2 year leys – use tetraploid and diploid Italian ryegrasses
For 3-4 year leys – use hybrid ryegrass and early perennial ryegrasses
For long term leys – use intermediate and late perennial ryegrasses.

Choosing the right type of grass

Ryegrass

Each type of grass has different growth and quality characteristics. When reseeding it is important to select the most appropriate grasses and clovers for the situation and to meet the objectives set for each field.

Perennial ryegrass

- Most effort by plant breeders has been concentrated on PRG
- Establishes rapidly, even from autumn sowing
- High yields in first harvest year
- High sugar content makes it good for silage-making
- Produces dense and persistent swards so useful for long term leys and establishing permanent pasture

Good for all types of management e.g. silage or hay production, extensive or intensive grazing

Italian ryegrass

- Produces heavy crops of silage or hay
- Useful for short term leys of one to three years
- Long growing season gives opportunity for 'early-bite' grazing followed by leafy hay or silage cut

Good for cutting, but can also be used for intensive spring grazing

Hybrid ryegrass

- Better ground cover and longer lived than IRG
- Good winter hardiness and disease resistance
- Mid-season digestibility better than IRG, but poorer than PRG
- First year yields lower than IRG, but yield improves in second and third year
- More drought resistant than IRG

Good for silage production and cattle rotational grazing

Diploids vs Tetraploids

Tetraploids have twice the number of chromosomes of diploid varieties, which makes all their cells bigger. This means they have larger seeds and leaves and tend to establish quickly. They are more able to compete when used for over-seeding.

Tetraploids have a more upright growth habit and are suited to drier growing conditions. In some cases they have better digestibility and palatability than diploids.

Diploids tend to be more persistent and tiller more freely and are generally better suited to wetter growing conditions. Well-managed diploid leys will usually produce denser swards.

Choosing the right type of Timothy and clover

Timothy

- Grows at lower temperatures than ryegrass so can be good for early season grazing, especially in cold, late springs
- Good mid-season growth can fill the gap when ryegrass growth falters
- Good winter hardiness and ground cover
- Can be slow to establish and yields are likely to be lower than PRG
- Best utilised in cooler, wetter areas

Good for extensive grazing and hay production

White clover

- High nutritional value, particularly protein and mineral content
- High palatability
- Good animal performance
- Can provide 150kg/ha (120 units/acre) of nitrogen for grass growth
- Match leaf size to stock (small for continuous, hard sheep grazing; medium for frequent cutting and rotational grazing; and large for cutting and cattle grazing)

Good for grazing and cutting

Red clover

- High protein content up to 19% in silage depending on percentage in sward
- High yields, even with no or low N fertiliser
- Early red clovers produce two main cuts and a small autumn cut
- Generally only lasts for three years

Good for cutting and finishing stock in autumn

Key information on each of the different grass and clover species is contained in the tables on pages 9 to 19.

The data provided has been extracted from the full Recommended Grass and Clover Lists. The full lists are available to all and can be found on the British Grassland Society website www.britishgrassland.com

Tips for reseeding

Once the decision to reseed has been made, it is important to follow some key steps:

Preparation

- Spring or autumn reseeding are equally advantageous and the choice will depend on the farming system plus when the field is available and conditions are good

Remember that any mixture containing red clover needs to be in by August and white clover needs to be in by September.

- Take a soil sample at a depth of 15cm – deeper than soil sampling in established swards as cultivation will disturb the soil
- Check for any soil structure issues – a plough may sort some of them out, but if the issue is deeper a sub-soiler may be needed
- Aim to deal with major weed problems in the old sward
- Correct any nutrient deficiencies

For lime

Apply before ploughing so it can be mixed in during cultivations and remember that it can take nine to twelve months for pH to increase so planning ahead is important.

These guidelines are based on material with neutralising value of 50. This is a simplified version as it has combined recommendations for different soil types. Look at Table 1.2 on page 14 in RB209 Chapter 1 - Principles of nutrient management and fertiliser use. See https://ahdb.org.uk/nutrient-management-guide-rb209 for more information. Seek advice from a FACTS-qualified adviser.

Guidelines for lime application

pH	Tonnes per ha	Tonnes per acre
6.2	0	0
6.0	0	0
5.5	3-4	1.2-1.6
5.0	5-7	2.0-2.8

To calculate from tonnes/ha to tonnes/acre multiply by 0.4046

Apply no more than 7.5 t/ha at one time.

The Nutrient Management Guide (RB209) provides recommendations for grass establishment:

- For spring sown reseeds the recommendation is 60kgN/ha
- For autumn reseeds the recommendations for moderate soil nitrogen supply situations is 0-50kg per ha depending on sowing date and soil Nitrogen supply
- Grass and clover reseeds have no requirement for nitrogen at establishment

For phosphate and potash:

P or K index	Phosphate (P_2O_5) kg/ha	Potash (K_2O) kg/ha
0	120	120
1	80	80
2	50	60 (2-) 40 (2+)
3	30	0
>3	0	0

Remember to deduct any nutrients applied in the seedbed from the first season's grazing or silage/hay requirements.

Full reseed

- For a full reseed, spray the old sward using a product containing glyphosate

Ensure there is enough leaf area remaining to take up the product and manufacturer's instructions are followed.

Consider how pests like leather jackets can be controlled – without chemicals.

- For a full reseed, plough, press and work down to a firm and reasonably fine seedbed
- Drill or broadcast the seed on to the rolled seedbed, to place it no deeper than 1cm
- Ring roll or light harrow to ensure maximum contact between seed and soil, but avoid burying the seed below 1cm, especially small seeded species such as clovers and timothy

Over-sowing

- Over-sowing or stitching-in can be a way to rejuvenate old or damaged grass without the cost of a full reseed
- As existing grass or weeds can out-compete the new seedlings, good soil structure and nutrients are still important
- The best time is summer as the existing grass is less vigorous and soil temperatures will be high, although soil moisture may be a limiting factor
- The seedlings need light so 40% of bare ground should be seen before over-sowing is considered – harrowing in two directions may help
- The seed can be broadcasted or direct drilled and the existing sward can be sprayed off beforehand or "checked" by hard grazing or cutting
- Seed to soil contact is still important, so roll after sowing or allow sheep to graze the field for 7-10 days to tread the seed in
- Seed rate will change depending on sward conditions – a minimum of 8kg per acre and up to 15kg for badly damaged swards
- Do not apply nitrogen as it will only boost the growth of the existing sward (if it has not been sprayed off)

Post-establishment

- Once the grass is established (after five to six weeks), graze lightly with sheep or young stock when the grass reaches 8-10cm to firm in roots and encourage tillering. Do not graze it down lower than 4cm
- Weed control in a new ley is usually necessary to ensure good establishment and to avoid variable ground cover
- If significant weed problems are expected, consider establishing the ley without clover and introduce it once the weed problems have been solved

All grass and clover species can be successfully established by following the above guidelines, however, tetraploid ryegrasses are likely to establish quicker and easier than diploids as they have larger seeds and are more competitive against the existing grasses.

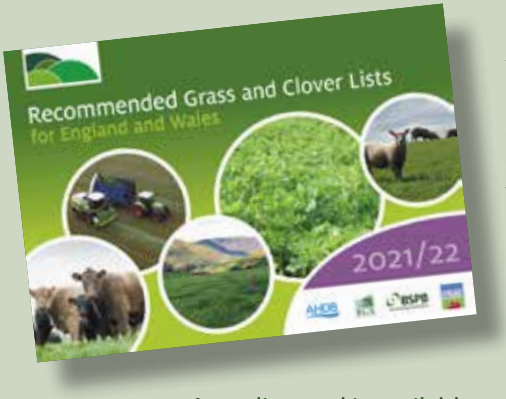
Source: Wynnstay, Germinal GB Ltd, AHDB

How to use the Recommended Grass and Clover Lists

The tables on the following pages contain data extracted from the Recommended Grass and Clover Lists for 2021/22. They are provided to help producers to check and formulate seed mixtures in conjunction with their merchant.

The data produced are based on cutting trials in North Yorkshire, Shropshire, Oxfordshire, Gloucestershire, Worcestershire, Devon and Ceredigion, plus additional information from Northern Ireland and Scotland. Each variety is sown for two or more seasons.

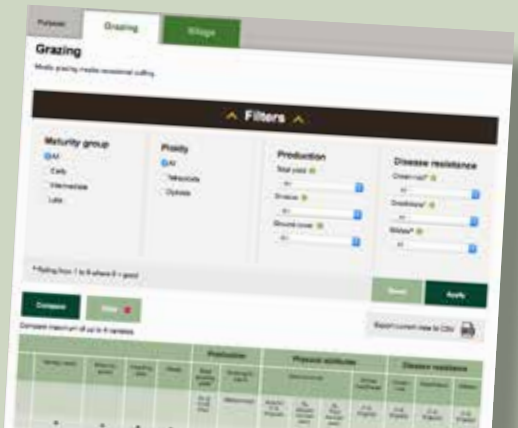
The cost of grass seed is a small proportion of the expense of reseeding – yet taking time to select the right varieties will reap productivity and lifespan benefits.



Your grass seed merchant will have a more in-depth booklet with more information about each variety on the Recommended Grass and Clover Lists. It can found at **www.britishgrassland.com/publications**

An online tool is available at **https://ahdb.org.uk/recommended-grass-and-clover-lists**

It can be used to compare perennial ryegrasses for various traits to help choose the correct varieties for the job.



Recommended List of Early Perennial Ryegrass Varieties 2021/2022

OK for short term cutting and grazing leys.
Can lose quality quickly as head early.

Variety	Heading date	Simulated grazing management: Total annual yield (Average = 100 at 9.81t DM/ha)	Simulated grazing management: D-value Midsummer	Conservation management: Total annual yield (Average = 100 at 15.05t DM/ha)	Conservation management: D-value 2nd conservation cut	Ground cover (1 = poor 9 = good)	Crown rust (1 = poor 9 = good)	Drechslera (1 = poor 9 = good)	Suitable for my farm ✓
Diploids									
Genesis	10 May	98	76.4	104	70.8	6.9	6.2	6.0	☐
Moyola	13 May	101	76.1	104	70.6	6.8	6.0	5.4	☐
Kilian	16 May	97	76.8	98	71.1	6.9	6.9	[5.7]	☐
Glasker	18 May	99	77.1	102	72.3	6.5	5.3		☐
Tetraploids									
AberTorch	8 May	97	76.9	101	71.8	6.6	4.7	6.5	☐
Cooky	17 May	96	77.2	100	72.5	6.2	5.3	7.2	☐

Yield

For yield figures, 100 equals the average yield for the varieties on the Recommended Lists. For example, if a variety has a yield of 105, it is above average. If it has a yield of 95, it is below average. It is measured in tonnes of dry matter per hectare.

D-value

D-value is a measure of quality and refers to the percentage of the dry matter that can be digested by an animal. A higher number is better.

Crown rust and Drechslera

Score relates to resistance. A higher number is better.

[ ] Limited data.

Recommended List of Intermediate Perennial Ryegrass Varieties 2021/2022

Variety	Heading date	Simulated grazing management: Total annual yield *Average = 100 at 9.81t DM/ha*	Simulated grazing management: D-value Midsummer	Conservation management: Total annual yield *Average = 100 at 15.05t DM/ha*	Conservation management: D-value 2nd conservation cut	Ground cover *1 = poor 9 = good*	Crown rust *1 = poor 9 = good*	Drechslera *1 = poor 9 = good*	Suitable for my farm ✔
Diploids									
Boyne	21 May	98	75.3	103	69.7	6.4	5.9	4.4	☐
Galgorm	22 May	105	77.9	103	74.8	6.1	5.2	4.4	☐
AstonConqueror	24 May	98	77.4	99	73.9	6.7	2.6	4.8	☐
Nifty	24 May	101	77.6	100	71.8	6.4	5.2	4.6	☐
Moira	24 May	99	76.4	101	74.2	5.9	4.6	5.8	☐
Glenariff	25 May	98	75.4	97	72.8	6.5	6.2	4.9	☐
AberZeus	27 May	103	78.2	101	74.3	7.3	6.3	4.6	☐
AberMagic	28 May	101	77.8	99	72.0	6.5	6.1	3.5	☐
AberWolf	28 May	99	78.3	99	72.3	7.0	4.9	4.1	☐
Gosford	29 May	99	77.5	99	73.6	6.4	5.7	4.2	☐
Agaska	30 May	100	76.6	98	71.8	6.3	7.0	[4.9]	☐
Elyria	30 May	97	76.8	95	72.4	6.9	6.2	6.0	☐
AberGreen	30 May	103	77.7	100	73.3	7.0	5.6	4.8	☐

Good for cutting, but can also be used for intensive spring grazing.

Variety	Heading date	Simulated grazing management: Total annual yield *Average = 100 at 9.81t DM/ha*	Simulated grazing management: D-value Midsummer	Conservation management: Total annual yield *Average = 100 at 15.05t DM/ha*	Conservation management: D-value 2nd conservation cut	Ground cover *1 = poor 9 = good*	Crown rust *1 = poor 9 = good*	Drechslera *1 = poor 9 = good*	Suitable for my farm ↙
Tetraploids									
Fintona	20 May	101	77.3	104	74.3	5.4	2.2	7.2	☐
Glenstal	22 May	98	76.8	100	72.0	5.9	2.2	6.4	☐
Seagoe	22 May	99	77.1	105	73.1	5.9	6.1	6.0	☐
Nolwen	22 May	97	77.2	101	73.3	6.3	8.6	6.9	☐
AberRoot	22 May	98	79.3	100	73.5	5.0	4.2	[6.8]	☐
AberClyde	25 May	94	77.5	99	72.6	6.0	6.4	6.5	☐
Ritchie	25 May	102	76.2	102	70.1	6.7	5.8	[7.4]	☐
AstonVision	26 May	99	77.8	97	74.8	6.2	6.4	5.5	☐
Chatsworth	27 May	102	78.3	100	72.4	6.1	4.2	[8.2]	☐
AberSpey	29 May	104	78.7	102	74.3	5.8	5.1	6.5	☐
Convey	29 May	101	76.9	100	73.1	6.0	5.5	[7.9]	☐
Dunluce	30 May	100	77.5	100	72.9	5.5	2.3	6.8	☐
Caledon	30 May	100	76.5	102	70.7	5.2	5.9	8.4	☐
Diwan	30 May	95	76.7	102	71.8	5.2	7.5	6.9	☐
Triwarwic	30 May	95	76.5	102	72.5	5.7	6.4	5.4	☐
Federer	31 May	98	77.0	99	73.4	6.1	6.4	[6.1]	☐
Pensel	31 May	96	75.2	101	70.1	5.5	5.9	7.6	☐
Montova	31 May	96	75.3	100	71.1	6.0	4.2	6.5	☐
AstonEnergy	1 Jun	96	78.1	95	75.1	5.1	6.6	7.2	☐

[ ] Limited data.

Recommended List of Late Perennial Ryegrass Varieties 2021/2022

Variety	Heading date	Simulated grazing management: Total annual yield (Average = 100 at 9.81t DM/ha)	Simulated grazing management: D-value Midsummer	Conservation management: Total annual yield (Average = 100 at 15.05t DM/ha)	Conservation management: D-value 2nd conservation cut	Ground cover (1 = poor 9 = good)	Crown rust (1 = poor 9 = good)	Drechslera (1 = poor 9 = good)	Suitable for my farm ✓
Diploids									
Kendal	31 May	97	76.2	99	73.4	6.7	7.1	[6.5]	
Wetherby	31 May	102	77.7	102	73.3	6.8	7.6	[5.5]	
Callan	2 Jun	102	75.8	100	73.3	6.6	4.4	[3.7]	
AberTest	2 Jun	102	79.5	95	76.4	6.7	6.5	[6.3]	
Ballyvoy	2 Jun	100	77.4	102	75.4	6.8	3.1	[4.3]	
Toddington	2 Jun	96	75.9	96	72.2	6.6	6.8	5.5	
Dundrod	2 Jun	98	76.2	97	72.8	6.5	6.4	5.8	
AberAvon	3 Jun	99	77.7	95	74.0	7.0	6.1	4.1	
AstonKing	3 Jun	99	75.6	97	72.8	6.0	6.3	[4.2]	
Oakpark	4 Jun	100	76.6	98	72.8	6.7	4.6	[5.6]	
Romark	4 Jun	96	76.8	91	74.8	6.4	5.7	4.7	
Drumbo	4 Jun	97	77.3	94	74.8	6.1	4.9	4.8	
Glenarm	4 Jun	98	76.9	100	73.9	6.3	6.3	4.0	
Gleneagle	5 Jun	100	76.3	97	71.9	6.7	4.4	[5.6]	
Cavendish	5 Jun	96	75.4	96	73.4	7.0	6.6	4.5	
Clanrye	5 Jun	96	75.9	98	71.4	6.3	5.1	5.3	
Timing	5 Jun	98	75.5	97	72.5	6.6	6.8	4.8	
Smile	6 Jun	100	77.2	97	73.5	6.4	3.4	4.8	
Zorgue	6 Jun	97	76.6	95	74.5	7.4	7.3	[6.3]	
AberBann	7 Jun	107	77.8	100	72.6	6.4	4.9	[5.3]	
AberLee	7 Jun	98	79.1	92	75.3	7.3	6.4	4.2	
Swan	8 Jun	101	74.8	96	73.1	6.9	6.5	[5.6]	
Delika	8 Jun	102	76.9	97	73.7	6.4	8.3	[5.5]	
AberChoice	10 Jun	103	77.0	98	72.4	6.0	3.8	3.0	
Cancan	12 Jun	101	75.9	93	73.1	6.5	4.2	4.8	
Bowie	18 Jun	102	75.9	93	71.7	6.6	4.4	[4.3]	

Diploids – Good for long term grazing and cutting leys. Good for ground cover.

Tetraploids – Good for medium term cutting leys and in grazing mixtures.

Variety	Heading date	Simulated grazing management: Total annual yield *Average = 100 at 9.81t DM/ha*	Simulated grazing management: D-value Midsummer	Conservation management: Total annual yield *Average = 100 at 15.05t DM/ha*	Conservation management: D-value 2nd conservation cut	Ground cover (1 = poor 9 = good)	Crown rust (1 = poor 9 = good)	Drechslera (1 = poor 9 = good)	Suitable for my farm ✓
Tetraploids									
Ballintoy	31 May	103	77.3	105	72.4	5.5	3.7	6.1	☐
Bijou	1 Jun	100	75.1	103	71.6	5.9	7.2	6.9	☐
Gracehill	1 Jun	104	76.8	106	73.1	5.5	7.0	[9.0]	☐
Meiduno	2 Jun	103	76.6	103	73.6	5.1	6.0	7.6	☐
Weldone	2 Jun	103	77.4	100	73.5	5.9	6.3	[8.3]	☐
Hurricane	3 Jun	97	76.8	101	72.9	6.0	6.6	6.9	☐
Calao	3 Jun	100	77.4	102	73.3	5.9	6.8	6.4	☐
Aspect	3 Jun	100	77.1	100	73.2	6.0	4.5	6.7	☐
AberGain	4 Jun	106	78.0	106	72.8	5.9	6.2	6.5	☐
Nashota	5 Jun	105	77.6	105	74.2	6.4	6.6	[7.7]	☐
AberBite	5 Jun	102	77.7	99	74.3	5.7	6.1	6.7	☐
Twymax	6 Jun	98	77.5	99	73.9	6.1	4.7	6.4	☐
Youpi	6 Jun	98	77.1	97	73.5	6.0	7.9	8.5	☐
Thegn	6 Jun	103	77.2	99	72.8	6.2	6.4	[7.7]	☐
Hopi	9 Jun	103	76.6	98	72.3	5.9	6.7	7.7	☐

[ ] Limited data.

Recommended List of Italian Ryegrass Varieties 2021/2022

Good for silage production and cattle rotational grazing.

Variety	Heading date	Total annual yield *Average = 100 at 16.53t DM/ha*	D-value 2nd conservation cut	Early spring growth 1st harvest year *Average = 100 at 1.69t DM/ha*	1st Conserv-ation cut *Average =100 at 6.60t DM/ha*	Ground cover	Crown rust	Mildew resistance	Suitable for my farm ↙
						1 = poor 9 = good			
Diploids									
Shakira	18 May	99	65.3	101	103	3.5	6.7	6.5	☐
Syntilla	19 May	100	64.6	112	97	4.1	7.6	[6.6]	☐
Muriello	20 May	100	65.5	102	94	4.0	6.4	6.7	☐
Meribel	20 May	98	65.1	98	95	3.8	2.5	6.5	☐
Fox	20 May	100	65.9	104	98	4.0	7.1	6.8	☐
Pinaco	21 May	102	65.8	93	99	4.1	6.2	[7.0]	☐
Steel	21 May	99	65.6	103	101	3.9	7.7	6.3	☐
Alamo	21 May	101	66.1	99	97	4.2	6.4	7.0	☐
Abys	22 May	100	65.4	103	97	4.3	7.1	7.1	☐
Sendero	22 May	104	66.4	111	98	4.2	7.5	[7.2]	☐
Melprimo	23 May	100	64.4	106	95	4.1	7.2		☐
Belluna	23 May	100	65.6	100	94	3.9	6.8	6.9	☐
Davinci	23 May	102	65.7	101	97	4.0	6.5	6.6	☐
Javorio	24 May	99	66.2	97	99	3.8	5.5	6.6	☐

Variety	Heading date	Total annual yield *Average = 100 at 16.53t DM/ha*	D-value 2nd conservation cut	Early spring growth 1st harvest year *Average = 100 at 1.69t DM/ha*	1st Conserv-ation cut *Average =100 at 6.60t DM/ha*	Ground cover	Crown rust	Mildew resistance	Suitable for my farm ✔
						1 = poor 9 = good			
Tetraploids									
Itarzi	17 May	100	66.7	95	104	3.7	6.8	6.2	
Udine	18 May	99	66.2	94	103	3.8	7.5	7.0	
Hunter	19 May	100	65.3	98	105	3.5	5.6	6.7	
Melsitra	20 May	100	65.6	105	100	3.1	7.6	[7.3]	
Barmultra II	20 May	101	66.5	104	104	3.8	7.7	6.2	
Kigezi 1	20 May	101	65.8	99	104	3.6	7.7	6.3	
Gemini	20 May	102	66.5	97	102	3.4	1.0	6.7	
Messina	20 May	102	66.5	108	102	3.7	7.6	6.6	
Arman	20 May	100	66.6	106	103	3.1	7.5	[7.0]	
Cazzano	21 May	101	66.9	96	100	3.5	3.9	7.4	
Barimax	21 May	101	65.5	90	104	3.2	7.1	[6.4]	

[ ] Limited data.

Recommended List of Hybrid Ryegrass Varieties 2021/2022

Good for silage production and cattle rotational grazing.

Variety	Heading date	Total annual yield *Average = 100 at 15.16t DM/ha*	D-value 2nd conservation cut	Early spring growth 1st harvest year *Average = 100 at 1.52t DM/ha*	Ground cover	Crown rust	Mildew resistance	Suitable for my farm ✓
					1 = poor 9 = good			
Diploids								
Pirol	21 May	100	65.7	117	3.8	5.9	4.4	
Barsilo	25 May	96	67.1	112	3.4	3.7	7.2	
Barclamp	26 May	97	65.5	109	3.7	6.4	5.6	
Tetraploids								
AberSheen	13 May	106	68.2	98	3.6	3.2	8.2	
AberEcho	16 May	101	70.5	101	4.2	3.5	6.2	
Crusader	19 May	101	69.8	109	4.2	6.0	7.2	
Bannfoot	20 May	100	71.9	82	4.5	6.1	7.0	
Enduro	20 May	100	69.9	95	4.3	7.1	6.5	
Tetragraze	20 May	99	70.1	79	4.6	4.2	6.6	
Novial	21 May	100	70.5	95	4.3	7.0	6.5	
Perkins	21 May	101	68.7	110	4.6	6.2	8.3	
RGT Cordial	22 May	103	70.3	93	4.7	6.9	5.9	
AberNiche #	22 May	101	66.1	115	3.7	5.6	6.7	
Kirial	23 May	101	70.0	101	4.1	6.6	7.2	
Bahial	23 May	100	70.2	96	4.4	6.4	6.0	
Amalgam	24 May	98	70.5	82	4.8	6.8	5.5	
Perseus #	25 May	100	67.7	101	4.1	7.8	6.1	
AberImage	26 May	102	67.6	99	4.1	2.6	6.8	

[ ] Limited data. # Festulolium type variety.

Recommended List of Timothy Varieties 2021/2022

Good for extensive grazing and hay production.
Good for wetter soils.

		Simulated grazing management		Conservation management				
Variety	**Heading date**	**Total annual yield** *Average = 100 at 10.06t DM/ha*	**D-value** Midsummer	**Total annual yield** *Average = 100 at 13.95t DM/ha*	**D-value** 2nd conservation cut	**Ground cover**	**Winter hardiness**	**Suitable for my farm** ↙
						1 = poor 9 = good		
Presto	7 Jun	100	73.3	99	65.1	4.9	7.2	☐
Comer	8 Jun	102	71.7	102	64.5	4.7	7.2	☐
Dolina	8 Jun	102	71.8	103	64.3	4.5	7.2	☐
Promesse	8 Jun	95	73.5	95	65.0	5.2	6.9	☐
Comtal	9 Jun	100	72.3	98	64.8	5.2	7.0	☐
Winnetou	10 Jun	96	74.1	99	65.9	5.3	6.7	☐
Moverdi	11 Jun	101	73.1	98	65.9	3.8	6.6	☐
Baronaise	13 Jun	101	74.5	99	67.3	5.2		☐
Motim	16 Jun	96	72.5	97	64.6	5.6	6.8	☐

Recommended List of White Clover Varieties 2021/2022

Good for grazing and cutting.

Variety	Leaf area (mm^2)	Total yield of clover: 3rd harvest year (Average = 100 at 4.25t DM/ha)	Total yield of grass + clover: 3rd harvest year (Average = 100 at 10.62t DM/ha)	Autumn ground cover 1 = poor, 9 = good: After light defoliation	Autumn ground cover 1 = poor, 9 = good: After hard defoliation	Suitable for my farm ✔
AberAce	423	73	92	4.8	7.9	☐
Aber S.184	640	80	95	5.8	7.6	☐
Coolfin	820	98	98	6.6	7.5	☐
AberHerald	827	114	104	7.3	6.2	☐
Buddy	848	93	97	5.6	7.1	☐
Iona	869	97	96	5.9	6.7	☐
G Bounty	938	91	99	6.5	8.3	☐
AberDai	957	95	99	6.4	6.3	☐
AberSwan	959	116	102	6.9	7.0	☐
AberSirius		124	110	7.0	5.0	☐
Dublin	1092	110	104	6.9	6.9	☐
Violin	1097	113	104	7.3	7.5	☐
Alice	1155	102	100	6.3	5.9	☐
Barblanca	1174	112	102	7.5	7.8	☐
Aran	1470	109	102	6.7	4.9	☐
Brianna	1591	115	103	7.0	6.3	☐

Recommended List of Red Clover Varieties 2021/2022

Good for cutting and finishing stock in the autumn.

Variety	Conservation management				Suitable for my farm ✓
	Yield of 1st cut in 1st harvest year *Average = 100 at 5.06t DM/ha*	**Total annual yield** *Average = 100 at 11.91t DM/ha*	**Crude protein** *% in 1st cut of 1st harvest year*	**Ground cover** *% (2nd harvest year)*	
Diploids					
Merviot	112	97	17.1	45	☐
Lemmon	101	100	17.5	57	☐
AberClaret	99	105	17.0	56	☐
AberChianti	85	99	17.1	60	☐
Harmonie	100	100	18.2	60	☐
Metis	95	94	17.4	58	☐
Discovery	105	100	16.2	46	☐
Sinope	110	101	17.9	55	☐
Fearga	95	106	17.1	59	☐
Tetraploids					
Amos	105	101	18.1	56	☐
Maro	102	99	17.9	50	☐
Atlantis	103	104	17.8	57	☐
Magellan	98	101	18.0	57	☐

Useful Contacts

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01359 272000

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Germinal GB Ltd
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What's different in this year's RGCL?

New varieties

On the 2020/21 RGCL, eight new grass 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
AberRoot	Intermediate perennial ryegrass	10
Ritchie	Intermediate perennial ryegrass	10
Wetherby	Late perennial ryegrass	12
Zorgue	Late perennial ryegrass	12
Delika	Late perennial ryegrass	12
Pinaco	Italian Ryegrass	14
AberSheen	Hybrid Ryegrass	16
RGT Cordial	Hybrid Ryegrass	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: _____

_____

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

The full Lists can be found at **www.britishgrassland.com/rgcl**

AHDB

BGS

bspb
PROMOTING SEED INNOVATION

HYBU CIG CYMRU

Complying with spray legislation at a glance

These measures 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**