



Handbook

Recommended Grass and Clover Lists for England and Wales



2019/20





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 for 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 AHDB 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 feed on the farm rather than buying it in.

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

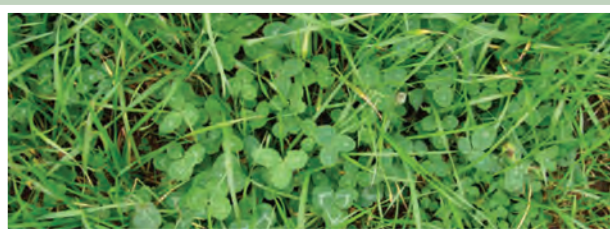
As few as 1 in 20 varieties of ryegrasses tested will actually make it to full recommendation on the list

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these days would want to use bull or ram genetics from the 1950s in their livestock breeding, yet they continue to use outdated varieties in their grassland.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 there is by looking for any with 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 – ie 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 the UK 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 can be combined with the yield of a hybrid ryegrass 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 the UK 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 eg 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 and 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/rgcl



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 13 in Chapter 1 – Principles of nutrient management and fertiliser use. See ahdb.org.uk/rb209 for more information. Seek advice from a FACTS-qualified adviser.

Adapted from www.aglime.org.uk/technical05.htm

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 7.5t DM/ha at one time.

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

- For spring sown reseed the recommendation is 60kg per ha, with up to 30kg/ha being applied in the seedbed
- For autumn reseed the recommendations for moderate soil nitrogen supply situations is 0-30kg per ha depending on sowing date
- For grass and clover reseed have no requirement for nitrogen at establishment
- For phosphate and potash

P or K index	Phosphate (P ₂ O ₅) kg/ha	Potash (K ₂ O) 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 chlorpyrifos.

- 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 is 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 2019/20. 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 be found at www.britishgrassland.com/rgcl

An online tool is available at dairy.ahdb.org.uk. It can be used to compare perennial ryegrasses for various traits to help choose the correct varieties for the job.

Filters

- Maturity group**
 - ☒ All
 - ☐ Early
 - ☐ Intermediate
 - ☐ Late
- Ploidy**
 - ☒ Tetraploid
 - ☐ Hexaploid
- Production**
 - Total yield: -
 - Crackles: -
 - Ground cover: -
 - Moisture: -
- Disease resistance**
 - Crown rot: -
 - Dothideomycetes: -
 - Stem rot: -
 - Stem blight: -
 - Stem nematode: -
 - Stem rust: -
 - Stem weevil: -

* Rating from 1 to 9 where 9 = good

Compare **Close** **Apply**

Export current view to CSV

Production		Physical attributes		Disease resistance	
Grass name	Yield (kg/ha)	Crackles (kg/ha)	Ground cover (%)	Stem rot (%)	Stem blight (%)
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8
Archer	8	8	8	8	8

Recommended List of Early Perennial Ryegrass Varieties 2019/2020

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

		Simulated grazing management		Conservation management					
Variety	Heading date	Total annual yield	D-value	Total annual yield	D-value	Ground cover	Crown rust	Drechslera	Suitable for my farm
		Average = 100 at 9.95t DM/ha	Midsummer	Average = 100 at 15.41t DM/ha	2nd conservation cut				
		1 = poor 9 = good							
Diploids									
Genesis	10 May	98	76.4	103	72.3	6.7	6.9	5.8	
Moyola	12 May	101	76.1	102	72.0	6.5	6.4	4.3	
Kilian	16 May	98	76.9	99	72.6	7.0	8.7	[5.5]	
Glasker	18 May	99	77.1	101	71.9	6.5	7.6		
Tetraploids									
AberTorch	7 May	97	77.1	101	72.9	6.4	5.0	6.5	
Carraig	14 May	99	77.1	99	72.0	6.2	2.2	7.8	
Cooky	17 May	99	77.1	101	73.0	6.2	2.2	7.8	

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 2019/2020

		Simulated grazing management		Conservation management					
Variety	Heading date	Total annual yield	D-value	Total annual yield	D-value	Ground cover	Crown rust	Drechslera	Suitable for my farm
		Average = 100 at 9.95t DM/ha	Midsummer	Average = 100 at 15.41t DM/ha	2nd conservation cut				
		1 = poor 9 = good							
Diploids									
Boyne	20 May	102	75.3	106	70.3	6.5	7.6	5.5	
Galgorm	22 May	108	77.9	107	75.9	6.3	7.6	[5.2]	
AstonConqueror	24 May	103	76.9	102	75.1	6.9	4.2	[6.1]	
Nifty	24 May	104	77.4	103	72.1	6.6	7.1	5.2	
Moira	24 May	102	76.2	104	74.6	6.1	6.8	7.3	
AberDart	25 May	101	78.0	97	73.4	7.3	6.7	3.8	
Glenariff	25 May	103	75.3	101	73.1	6.6	8.2	5.8	
AberZeus	26 May	107	77.6	103	75.2	7.4	8.0	5.0	
AberWolf	28 May	102	78.1	103	73.1	7.2	6.2	4.4	
AberMagic	28 May	105	77.3	101	72.6	6.5	8.0	3.5	
Gosford	29 May	102	77.1	101	74.1	6.6	7.5	4.5	
Elyria	30 May	100	76.6	99	73.2	6.9	7.8	6.8	
Agaska	30 May	104	76.6	101	72.6	6.4	8.3	[5.8]	
AberGreen	30 May	105	77.8	103	74.0	7.0	7.7	5.1	

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

		Simulated grazing management		Conservation management					Suitable for my farm 
Variety	Heading date	Total annual yield <i>Average = 100 at 9.95t DM/ha</i>	D-value Midsummer	Total annual yield <i>Average = 100 at 15.41t DM/ha</i>	D-value 2nd conservation cut	Ground cover	Crown rust	Drechslera	
Tetraploids									
Fintona	20 May	104	77.4	108	74.8	5.6	3.7	8.4	<input type="checkbox"/>
Malone	20 May	99	77.3	102	74.8	5.7	4.2	7.7	<input type="checkbox"/>
Glenstal	22 May	102	77.1	103	72.6	5.9	3.5	7.7	<input type="checkbox"/>
Seagoe	22 May	102	76.9	108	73.5	5.8	7.8	7.8	<input type="checkbox"/>
Nolwen	22 May	101	77.3	103	74.3	6.2	9.0	[8.2]	<input type="checkbox"/>
AberClyde	24 May	99	77.9	101	73.6	6.3	8.0	7.6	<input type="checkbox"/>
Eurostar	26 May	99	77.2	102	73.5	6.2	6.1	7.9	<input type="checkbox"/>
AstonVision	26 May	103	77.7	100	75.7	6.2	8.3	[7.3]	<input type="checkbox"/>
AstonBonus	29 May	99	76.5	100	74.2	5.5	7.7	7.2	<input type="checkbox"/>
AberSpey	29 May	105	77.9	104	75.4	5.7	7.4	[7.7]	<input type="checkbox"/>
Dunluce	30 May	103	77.6	104	73.7	5.6	3.8	7.7	<input type="checkbox"/>
Caledon	30 May	103	76.7	104	70.9	5.3	7.6	8.8	<input type="checkbox"/>
Diwan	30 May	98	76.8	105	72.6	5.4	8.5	8.2	<input type="checkbox"/>
Montova	30 May	101	75.7	104	71.7	6.0	5.6	7.6	<input type="checkbox"/>
Triwarwic	30 May	101	76.6	106	73.2	5.7	8.1	[6.6]	<input type="checkbox"/>
Pensel	30 May	100	75.6	105	71.0	5.6	7.8	8.5	<input type="checkbox"/>
Federer	30 May	101	77.2	103	73.8	6.1	8.2		<input type="checkbox"/>
AstonEnergy	1 Jun	100	78.2	98	76.1	5.0	8.2	8.4	<input type="checkbox"/>

[] Limited data.

Recommended List of Late Perennial Ryegrass Varieties 2019/2020

		Simulated grazing management		Conservation management		Ground cover	Crown rust	Drethslera	Suitable for my farm 
Variety	Heading date	Total annual yield	D-value Midsummer	Total annual yield	D-value 2nd conservation cut				
Average = 100 at 9.95t DM/ha		Average = 100 at 15.41t DM/ha							
1 = poor 9 = good									
Diploids									
Kendal	31 May	97	76.5	101	73.5	6.6	8.1	[7.4]	
Callan	1 Jun	103	76.2	102	73.3	6.3	6.1		
Toddington	2 Jun	95	76.0	96	72.8	6.6	8.1	6.3	
Dundrod	2 Jun	102	76.1	100	73.6	6.5	7.7	5.5	
AberAvon	2 Jun	99	77.8	94	74.6	7.2	7.8	3.9	
AstonKing	3 Jun	99	75.9	98	73.5	5.9	7.6	[3.9]	
Oakpark	3 Jun	102	76.6	98	73.0	6.6	5.5		
Romark	3 Jun	96	76.7	92	74.9	6.3	5.8	4.7	
Glenarm	4 Jun	98	77.0	101	74.6	6.3	7.7	3.9	
Drumbo	4 Jun	97	77.5	94	75.4	6.0	6.1	5.1	
Gleneagle	5 Jun	100	76.6	98	72.9	6.5	5.6	[6.3]	
Clanrye	5 Jun	96	75.4	99	71.2	6.3	6.1	6.1	
Cavendish	5 Jun	96	75.5	97	73.8	6.8	8.2	4.5	
Timing	5 Jun	98	75.6	98	72.8	6.4	8.1	5.5	
Smile	6 Jun	98	77.7	97	74.4	6.2	3.8	[6.4]	
AberBann	6 Jun	108	77.8	100	73.0	6.3	6.7		
AberLee	7 Jun	100	78.9	94	76.2	7.0	7.7	[6.2]	
AberChoice	9 Jun	103	77.3	98	72.8	6.0	5.0	3.0	
Cancan	11 Jun	99	76.2	93	73.6	6.5	4.2	5.3	
Bowie	17 Jun	102	75.9	94	72.2	6.4	6.2		

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


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

		Simulated grazing management		Conservation management		Ground cover	Crown rust	Drechslera	Suitable for my farm 
Variety	Heading date	Total annual yield <i>Ave. = 100 at 9.95t DM/ha</i>	D-value Midsummer	Total annual yield <i>Ave. = 100 at 15.41t DM/ha</i>	D-value 2nd conservation cut				
1 = poor 9 = good									
Tetraploids									
Ballintoy	31 May	101	77.9	105	72.7	5.5	3.9	[6.2]	
Bijou	1 Jun	101	75.8	103	72.0	5.9	8.4	7.4	
Alfonso	1 Jun	98	77.6	100	74.0	5.9	7.8	7.1	
Weldone	2 Jun	103	77.7	101	73.5	5.8	7.4	[8.5]	
Meiduno	2 Jun	103	76.8	102	74.4	5.0	7.2	7.9	
Calao	2 Jun	100	78.0	102	73.5	6.0	8.0	[7.2]	
Hurricane	2 Jun	97	77.3	102	73.4	6.0	7.9	7.3	
Dundrum	3 Jun	97	77.6	102	73.3	5.6	3.5	6.9	
Aspect	3 Jun	100	77.6	101	73.6	6.0	5.5	7.5	
Novello	4 Jun	99	77.2	96	73.4	5.7	7.2	7.7	
AberGain	3 Jun	106	78.5	107	72.8	5.7	7.7	7.4	
Nashota	4 Jun	105	77.9	105	74.5	6.4	7.7		
AberBite	4 Jun	101	77.9	100	74.6	5.6	7.3	7.3	
Twymax	5 Jun	98	77.8	100	74.6	6.1	5.5	7.1	
AstonPrincess	6 Jun	98	77.3	99	74.5	5.9	5.9	7.3	
Youpi	5 Jun	99	77.2	98	73.7	5.9	8.9	8.6	
Thegn	5 Jun	104	77.3	101	73.5	6.1	7.4		
Solas	7 Jun	101	77.2	100	73.8	5.7	2.3	7.9	
Hopi	9 Jun	103	76.9	100	73.4	6	8	[8.2]	

[] Limited data.

Recommended List of Italian Ryegrass Varieties 2019/2020

Good for silage production and cattle rotational grazing.

Variety	Heading date	Total annual yield <i>Ave. = 100 at 17.44t DM/ha</i>	D-value 2nd conservation cut	Early spring growth 1st harvest year <i>Ave. = 100 at 1.73t DM/ha</i>	1st Conservation cut <i>Ave. =100 at 6.72t DM/ha</i>	Ground cover	Ryegrass Mosaic Virus resistance	Mildew resistance	Suitable for my farm 
						1 = poor 9 = good			
Diploids									
Shakira	18 May	100	66.6	101	102.6	3.5	6.2	6.6	<input type="checkbox"/>
Muriello	20 May	100	66.9	104	92.8	4.0	3.3	7.4	<input type="checkbox"/>
Fox	21 May	100	67.0	102	96.6	4.0	3.8	6.9	<input type="checkbox"/>
Meribel	21 May	98	67.1	99	95.7	3.6	3.8	6.8	<input type="checkbox"/>
Steel	21 May	99	66.9	103	100.7	3.9	7.4	6.6	<input type="checkbox"/>
Alamo	21 May	100	67.6	100	96.9	4.3	4.6	7.1	<input type="checkbox"/>
Abys	22 May	100	66.9	101	97.4	4.0	3.8	7.6	<input type="checkbox"/>
Melprimo	23 May	101	66.4	107	95.0	4.2			<input type="checkbox"/>
Belluna	23 May	100	67.1	98	93.8	4.1	5.7	7.4	<input type="checkbox"/>
Davinci	23 May	102	67.3	97	95.5	4.1	5.4	6.9	<input type="checkbox"/>
Javorio	24 May	99	67.2	98	100.2	3.5	5.5	6.9	<input type="checkbox"/>

Variety	Heading date	Total annual yield <i>Ave. = 100 at 17.44t DM/ha</i>	D-value 2nd conservation cut	Early spring growth 1st harvest year <i>Ave. = 100 at 1.73t DM/ha</i>	1st Conserv-ation cut <i>Ave. =100 at 6.72t DM/ha</i>	Ground cover	Ryegrass Mosaic Virus resistance	Mildew resistance	Suitable for my farm ✓
						1 = poor 9 = good			
Tetraploids									
Itarzi	17 May	100	67.6	97	104.4	3.8	5.5	6.2	<input type="checkbox"/>
Udine	18 May	100	67.9	96	105.5	3.9	6.0	7.5	<input type="checkbox"/>
Hunter	19 May	101	67.2	102	104.5	3.4	5.2	7.0	<input type="checkbox"/>
Barmultra II	20 May	101	67.5	102	104.7	3.8	4.1	6.2	<input type="checkbox"/>
Kigezi 1	20 May	100	67.1	99	104.6	3.6	4.4	6.6	<input type="checkbox"/>
Gemini	20 May	101	68.0	101	100.0	3.4	3.8	7.4	<input type="checkbox"/>
Cazzano	20 May	101	68.5	98	100.4	3.5	[4.5]	8.1	<input type="checkbox"/>
Messina	21 May	103	68.0	108	104.3	3.7	[6.9]	7.0	<input type="checkbox"/>
Barimax	21 May	102	67.1	96	105.9	3.4			<input type="checkbox"/>
Danergo	23 May	98	67.4	91	101.2	3.4	5.1	6.7	<input type="checkbox"/>

[] Limited data.

Recommended List of Hybrid Ryegrass Varieties 2019/2020

Good for silage production and cattle rotational grazing.

Variety	Heading date	Total annual yield <i>Ave. = 100 at 15.88t DM/ha</i>	D-value 2nd conservation cut	Early spring growth 1st harvest year <i>Ave. = 100 at 1.45t DM/ha</i>	Ground cover	Ryegrass Mosaic Virus resistance	Mildew resistance	Suitable for my farm ✓
					<i>1 = poor 9 = good</i>			
Diploids								
Pirol	21 May	101	66.6	115	3.8	3.9	3.9	<input type="checkbox"/>
Barsilo	25 May	97	68.9	115	3.4	3.7	7.4	<input type="checkbox"/>
Barclamp	25 May	98	67.3	112	3.9	[6.7]	6.3	<input type="checkbox"/>
Tetraploids								
AberEcho	16 May	102	72.0	103	4.3	5.7	6.9	<input type="checkbox"/>
Solid	17 May	97	72.3	81	4.9	7.4	6.6	<input type="checkbox"/>
AstonCrusader	19 May	102	71.1	108	4.2	6.8	7.6	<input type="checkbox"/>
Bannfoot	20 May	101	72.9	73	4.5	7.8	7.6	<input type="checkbox"/>
Enduro	20 May	100	71.5	96	4.3	6.8	6.9	<input type="checkbox"/>
Tetragraze	20 May	99	71.4	76	4.6	6.7	7.0	<input type="checkbox"/>
Novial	21 May	100	71.9	97	4.2	7.6	7.2	<input type="checkbox"/>
AberNiche #	22 May	100	67.2	114	3.6	6.6	7.6	<input type="checkbox"/>
Kirial	22 May	101	71.8	98	4.0	7.9	7.5	<input type="checkbox"/>
Bahial	23 May	100	71.5	96	4.3	7.5	6.3	<input type="checkbox"/>
Amalgam	24 May	99	71.9	81	4.8	7.7	5.1	<input type="checkbox"/>
Perseus #	24 May	101	69.4	93	4.1	7.1	6.7	<input type="checkbox"/>

[] Limited data. # Festulolium type variety.

Recommended List of Timothy Varieties 2019/2020

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

		Simulated grazing management		Conservation management				Suitable for my farm 
Variety	Heading date	Total annual yield	D-value Midsummer	Total annual yield	D-value 2nd conservation cut	Ground cover	Winter hardiness	
		<i>Ave. = 100 at 10.66t DM/ha</i>		<i>Ave. = 100 at 13.77t DM/ha</i>				
						<i>1 = poor 9 = good</i>		
Presto	7 Jun	101	73.9	101	66.2	5.0	7.2	<input type="checkbox"/>
Comer	8 Jun	103	72.2	103	65.2	4.8	7.2	<input type="checkbox"/>
Dolina	8 Jun	101	72.2	101	64.8	4.4	7.2	<input type="checkbox"/>
Promesse	8 Jun	95	74.0	96	66.0	5.4	6.9	<input type="checkbox"/>
Comtal	9 Jun	101	72.8	98	65.5	5.1	7.0	<input type="checkbox"/>
Winnetou	10 Jun	96	74.5	99	66.6	5.2	6.7	<input type="checkbox"/>
Moverdi	11 Jun	101	73.6	98	67.0	4.0	6.6	<input type="checkbox"/>
Motim	16 Jun	96	73.2	97	65.6	5.8	6.8	<input type="checkbox"/>

Recommended List of White Clover Varieties 2019/2020

Good for grazing and cutting.

Variety	Leaf area (mm ²)	Total yield of clover	Total yield of grass + clover	Autumn ground cover 1 = poor, 9 = good		Suitable for my farm ✓
		3rd harvest year Ave. = 100 at 4.20t DM/ha	3rd harvest year Ave. = 100 at 11.35t DM/ha	After light defoliation	After hard defoliation	
AberAce	379	77	95	4.8	8.0	<input type="checkbox"/>
Aberystwyth S.184	602	80	95	5.6	8.1	<input type="checkbox"/>
Grassland Demand	758	86	96	6.1	7.0	<input type="checkbox"/>
Coolfin	773	101	100	6.7	7.6	<input type="checkbox"/>
Buddy	803	103	100	6.0	7.8	<input type="checkbox"/>
AberHerald	809	115	102	7.3	5.9	<input type="checkbox"/>
Iona	809	97	98	5.5	7.5	<input type="checkbox"/>
Crusader	827	90	98	6.5	6.7	<input type="checkbox"/>
Grassland Bounty	883	93	100	6.2	8.2	<input type="checkbox"/>
AberDai	886	100	100	6.5	6.5	<input type="checkbox"/>
AberSwan	901	119	104	7.0	7.1	<input type="checkbox"/>
Dublin	1044	112	103	7.4	6.3	<input type="checkbox"/>
Violin	1049	116	106	7.4	7.5	<input type="checkbox"/>
Alice	1097	102	100	6.2	5.6	<input type="checkbox"/>
Barblanca	1111	113	102	7.5	6.8	<input type="checkbox"/>
Aran	1396	108	102	6.5	4.9	<input type="checkbox"/>
Brianna	1499	117	104	6.9	6.0	<input type="checkbox"/>

Recommended List of Red Clover Varieties 2019/2020

Good for cutting and finishing stock in the autumn.



Red clover

Red clover has moved to Recommended List from a Descriptive List this year as the information from the extra sowings has been included.

Lucerne and Cocksfoot also have Descriptive Lists which are available at www.britishgrassland.com/rgcl.

Variety	Conservation management				Suitable for my farm ↙
	Yield of 1st cut in 1st harvest year <i>Ave. = 100 at 5.08t DM/ha</i>	Total annual yield <i>Ave. = 100 at 12.83t DM/ha</i>	Crude protein % in 1st cut of 1st harvest year	Ground cover % (2nd harvest year)	
Merviot	111	99	17.0	44	<input type="checkbox"/>
Lemmon	103	101	17.4	52	<input type="checkbox"/>
AberClaret	99	106	17.0	53	<input type="checkbox"/>
AberChianti	86	99	17.0	55	<input type="checkbox"/>
Avisto	99	100	17.2	49	<input type="checkbox"/>
Harmonie	100	100	18.3	55	<input type="checkbox"/>
Metis	99	98	17.2	51	<input type="checkbox"/>
Discovery	105	97	16.2	41	<input type="checkbox"/>
Hegemon	93	95	17.7	52	<input type="checkbox"/>
Sinope	115	105	17.8	52	<input type="checkbox"/>
Fearga	91	109	17.1	57	<input type="checkbox"/>
Amos*	104	101	18.0	51	<input type="checkbox"/>
Maro*	102	101	17.4	49	<input type="checkbox"/>
Atlantis*	101	102	17.7	53	<input type="checkbox"/>
Magellan*	97	99	17.8	49	<input type="checkbox"/>

* Tetraploid.



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 Hughes
Lincolnshire
LN6 9QJ
01522 868714

DLF Seeds Ltd

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

DSV

17 Lynn Road
Downham Market
Norfolk
PE38 9NJ
01366 388223

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 Minière
78280 Guyancourt
France
0033 130482300

Limagrain UK Ltd

Rothwell
Market Rasen
Lincolnshire
LN7 6DT
01472 371471

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 2019/20 RGCL, ten varieties have been added – eight grasses and two clovers. 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
Cooky	Early PRG (Tet)	9
Kendal	Late PRG (Dip)	12
Dundrod	Late PRG (Dip)	12
AstonKing	Late PRG (Dip)	12
Gleneagle	Late PRG (Dip)	12
Weldone	Late PRG (Tet)	13
Hopi	Late PRG (Tet)	13
Melprimo	Italian RG (Dip)	14
Coolfin	White clover	18
Fearga	Red Clover	19



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 Hybu Cig Cymru).

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



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