



Handbook

Recommended Grass and Clover Lists for England and Wales



2018/19





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.

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these days would want to use bull or ram genetics from the 1950s in their livestock breeding, yet they continue to use outdated varieties in their grassland.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

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



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 eg 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 recommendations 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 2018/19. They are provided to help producers to check and formulate seed mixtures in conjunction with their merchant.

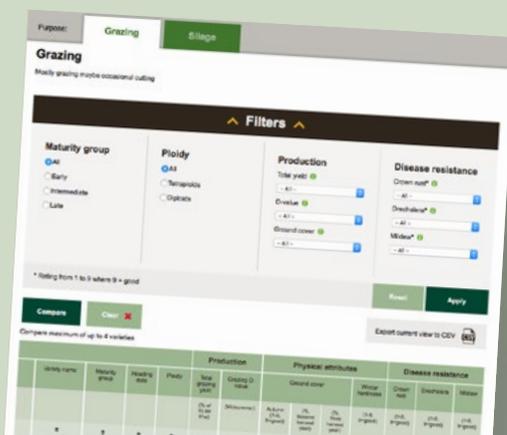
The data produced are based on cutting trials in North Yorkshire, Shropshire, Oxfordshire, Gloucestershire, Devon and Ceredigion, plus additional information from Northern Ireland and Scotland. Each variety is sown for two or more seasons.

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.



Recommended List of Early Perennial Ryegrass Varieties 2018/2019

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

Variety	Heading date	Simulated grazing management		Conservation management		Ground cover	Crown rust	Drechslera	Suitable for my farm ✓
		Total annual yield Average = 100 at 10.25t DM/ha	D-value Midsummer	Total annual yield Average = 100 at 15.56t DM/ha	D-value 2nd conservation cut				
Diploids									
Genesis	10 May	99	76.5	104	71.9	6.9	7	6	<input type="checkbox"/>
Moyola	12 May	101	76.4	103	71.8	6.7	7	4	<input type="checkbox"/>
Kilrea	14 May	94	76.1	97	71.5	7.1	4	5	<input type="checkbox"/>
Kilian	14 May	100	76.6	99	72.2	7.1	9		<input type="checkbox"/>
Glasker	17 May	100	77.0	101	71.4	6.7	8		<input type="checkbox"/>
Tetraploids									
AberTorch	7 May	98	77.2	100	72.3	6.6	6	6	<input type="checkbox"/>
Anaconda	7 May	94	77.1	97	71.1	6.2	4	9	<input type="checkbox"/>
Carraig	15 May	100	77.2	101	71.6	6.6	2	8	<input type="checkbox"/>

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.

() Some data derived from intermediate trials. [] Limited data.

Recommended List of Intermediate Perennial Ryegrass Varieties 2018/2019

Variety	Heading date	Simulated grazing management		Conservation management		Ground cover	Crown rust	Drechslera	Suitable for my farm
		Total annual yield Average = 100 at 10.25t DM/ha	D-value Midsummer	Total annual yield Average = 100 at 15.56t DM/ha	D-value 2nd conservation cut				
Diploids									
Solomon	17 May	99	76.3	103	72.1	6.5	7	7	☐
Boyne	19 May	102	75.7	106	69.7	6.7	8	5	☐
Galgorm*	22 May	108	78.3	107	75.5	6.3	8	[5]	☐
AstonConqueror	22 May	103	77.3	103	74.7	6.9	5		☐
Moira	23 May	102	76.3	104	74.1	6.2	7	7	☐
Nifty	23 May	104	77.7	102	71.6	6.6	8	5	☐
AberDart	24 May	99	78.1	96	73.3	7.1	7	3	☐
Glenariff	25 May	102	75.8	100	72.7	6.7	8	5	☐
AberZeus	25 May	107	78.3	103	74.7	7.4	8	[5]	☐
AberStar	25 May	103	77.4	97	72.5	6.8	8	1	☐
AberWolf	27 May	102	78.4	103	72.7	7.4	7	4	☐
AberMagic	27 May	105	77.6	100	72.3	6.5	8	3	☐
Gosford	28 May	101	77.3	101	73.5	6.5	8	[4]	☐
Elyria	29 May	99	76.7	99	72.7	7.0	8	7	☐
Agaska	29 May	104	77.0	100	72.3	6.5	9	[6]	☐
AberGreen	29 May	104	78.0	103	73.4	7.0	8	5	☐

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

Variety	Heading date	Simulated grazing management		Conservation management		Ground cover	Crown rust	Drechslera	Suitable for my farm
		Total annual yield Average = 100 at 10.25t DM/ha	D-value Midsummer	Total annual yield Average = 100 at 15.56t DM/ha	D-value 2nd conservation cut				
Tetraploids									
Fintona	19 May	105	77.7	108	74.2	5.6	4	8	☐
Malone	20 May	99	77.4	101	74.6	5.7	5	8	☐
Glenstal	21 May	102	77.1	102	72.3	5.8	4	8	☐
Nolwen	22 May	100	77.7	103	74.6	6.2	9		☐
Seagoe	22 May	101	77.0	108	72.7	5.7	8	8	☐
Ramore	22 May	102	76.8	108	73.2	5.9	4	9	☐
AberClyde	24 May	99	78.2	101	73.3	6.3	8	8	☐
Eurostar	25 May	99	77.4	101	73.1	6.2	6	8	☐
AstonVision	26 May	103	78.1	100	75.3	6.3	9	[7]	☐
AstonBonus	28 May	99	76.7	100	73.9	5.5	8	7	☐
AberSpey	29 May	105	78.2	102	74.8	5.7	8		☐
Dunluce	29 May	103	77.8	103	73.4	5.7	4	8	☐
Caledon	29 May	104	76.9	(105)	(70.6)	(5.2)	8	[9]	☐
Triwarwic	30 May	101	76.9	106	72.8	5.7	8		☐
Pensel	30 May	101	76.3	104	70.8	5.6	8	9	☐
Diwan	30 May	98	77.2	105	72.4	5.3	8	[9]	☐
Montova	30 May	100	76.0	103	71.4	6.1	6	7	☐
Federer	30 May	101	77.5	102	73.5	6.1	8		☐
AstonEnergy	31 May	100	78.4	98	75.8	5.0	8	8	☐

[] Limited data. () Data derived from late trials. * Name not confirmed.

Recommended List of Late Perennial Ryegrass Varieties 2018/2019

Variety	Heading date	Simulated grazing management		Conservation management		Ground cover	Crown rust	Drechslera	Suitable for my farm
		Total annual yield <i>Average = 100 at 10.25t DM/ha</i>	D-value Midsummer	Total annual yield <i>Average = 100 at 15.56t DM/ha</i>	D-value 2nd conservation cut				
Diploids									
Callan	1 Jun	103	76.5	102	73.1	6.2	6		<input type="checkbox"/>
Toddington	1 Jun	97	76.5	97	72.3	6.5	8	6	<input type="checkbox"/>
AberAvon	1 Jun	99	77.8	94	74.5	7.3	8	4	<input type="checkbox"/>
Romark	3 Jun	96	77.1	93	74.6	6.3	5	4	<input type="checkbox"/>
Oakpark	3 Jun	102	76.9	98	72.8	6.6	6		<input type="checkbox"/>
Glenarm	3 Jun	98	77.4	101	74.4	6.4	8	3	<input type="checkbox"/>
Drumbo	3 Jun	97	77.8	95	75.3	6.0	7	5	<input type="checkbox"/>
Clanrye	4 Jun	96	75.8	99	70.9	6.2	6	6	<input type="checkbox"/>
Cavendish	4 Jun	96	75.9	98	73.7	6.7	[8]	4	<input type="checkbox"/>
Timing	5 Jun	97	76.2	99	72.6	6.4	8	5	<input type="checkbox"/>
Smile	5 Jun	99	78.0	97	74.3	6.2	5		<input type="checkbox"/>
AberBann	6 Jun	108	78.1	100	72.8	6.3	7		<input type="checkbox"/>
AberLee	6 Jun	100	79.1	95	76.0	7.0	8		<input type="checkbox"/>
AberChoice	9 Jun	103	77.7	98	72.5	6.0	6	3	<input type="checkbox"/>
Cancan	11 Jun	99	76.7	94	73.2	6.4	5	5	<input type="checkbox"/>
Bowie	17 Jun	102	76.2	94	72.0	6.4	6		<input type="checkbox"/>

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		Conservation management		Ground cover	Crown rust	Drechslera	Suitable for my farm
		Total annual yield <i>Ave. = 100 at 10.25t DM/ha</i>	D-value Midsummer	Total annual yield <i>Ave. = 100 at 15.56t DM/ha</i>	D-value 2nd conservation cut				
Tetraploids									
Ballintoy	31 May	101	78.1	106	72.3	5.4	4		<input type="checkbox"/>
Bijou	1 Jun	101	76.3	(103)	(72.0)	(5.4)	8	7	<input type="checkbox"/>
Alfonso	1 Jun	98	77.6	101	73.7	5.9	7	7	<input type="checkbox"/>
Meiduno	2 Jun	103	76.9	103	74.1	5.0	7	8	<input type="checkbox"/>
Calao	2 Jun	101	78.2	103	73.3	6.0	8		<input type="checkbox"/>
Hurricane	2 Jun	98	77.7	102	73.1	6.1	7	7	<input type="checkbox"/>
Dundrum	3 Jun	97	77.9	103	73.0	5.5	4	7	<input type="checkbox"/>
Aspect	3 Jun	100	77.7	101	74.0	5.9	5	7	<input type="checkbox"/>
AberGain	3 Jun	107	78.6	108	72.6	5.7	8	7	<input type="checkbox"/>
Ironadal	4 Jun	98	77.7	100	73.9	6.1	8	7	<input type="checkbox"/>
Novello	4 Jun	100	77.5	96	73.3	5.7	7	8	<input type="checkbox"/>
Nashota	4 Jun	105	78.3	105	74.3	6.4	8		<input type="checkbox"/>
AberBite	4 Jun	101	78.2	100	74.2	5.5	7	7	<input type="checkbox"/>
Youpi	5 Jun	99	77.4	99	73.4	5.8	9	9	<input type="checkbox"/>
Twymax	5 Jun	98	78.0	100	74.3	6.1	6	7	<input type="checkbox"/>
Thegn	5 Jun	104	77.6	101	73.3	6.1	8		<input type="checkbox"/>
AstonPrincess	6 Jun	98	77.4	99	74.3	6.0	6	7	<input type="checkbox"/>
Xenon	6 Jun	103	77.3	97	73.6	6.3	5	7	<input type="checkbox"/>
AberPlentiful	6 Jun	100	77.7	99	73.4	5.4	8	7	<input type="checkbox"/>
Solas	7 Jun	101	77.5	101	73.7	5.7	2	8	<input type="checkbox"/>
Ideal	9 Jun	92	78.1	97	74.1	6.3	7	7	<input type="checkbox"/>

() Data derived from intermediate trials. [] Limited data.

Recommended List of Italian Ryegrass Varieties 2018/2019

Good for silage production and cattle rotational grazing.

Variety	Heading date	Total annual yield <i>Ave. = 100 at 18.06t DM/ha</i>	D-value 2nd conservation cut	Early spring growth 1st harvest year <i>Ave. = 100 at 1.87t DM/ha</i>	1st Conservation cut <i>Ave. = 100 at 6.98t DM/ha</i>	Ground cover	Ryegrass Mosaic Virus resistance	Mildew resistance	Suitable for my farm
						1 = poor 9 = good			

Diploids									
Shakira	16 May	100	65.9	101	103	3.4	6	6	<input type="checkbox"/>
Muriello	18 May	100	66.3	107	92	4.0	3	7	<input type="checkbox"/>
Fox	19 May	99	66.0	99	95	3.8	4	7	<input type="checkbox"/>
Meribel	19 May	98	66.7	101	96	3.4	4	7	<input type="checkbox"/>
Steel	20 May	99	66.2	103	101	3.9	7	7	<input type="checkbox"/>
Alamo	20 May	101	66.9	101	96	4.5	5	7	<input type="checkbox"/>
Abys	21 May	99	66.0	102	95	4.0	4	8	<input type="checkbox"/>
Davinci	22 May	102	66.6	97	95	4.0	5	7	<input type="checkbox"/>
Belluna	22 May	100	66.6	99	92	4.0	6	7	<input type="checkbox"/>
Javorio	23 May	100	66.4	98	100	3.5	6	7	<input type="checkbox"/>

Variety	Heading date	Total annual yield <i>Ave. = 100 at 18.06t DM/ha</i>	D-value 2nd conservation cut	Early spring growth 1st harvest year <i>Ave. = 100 at 1.87t DM/ha</i>	1st Conservation cut <i>Ave. = 100 at 6.98t DM/ha</i>	Ground cover	Ryegrass Mosaic Virus resistance	Mildew resistance	Suitable for my farm
						1 = poor 9 = good			

Tetraploids									
Itarzi	16 May	100	66.7	99	106	3.9	6	6	<input type="checkbox"/>
Udine	16 May	100	67.3	99	106	3.9	6	8	<input type="checkbox"/>
Hunter	18 May	101	66.4	102	106	3.4	5	7	<input type="checkbox"/>
Barmultra II	19 May	101	66.6	103	106	3.9	4	6	<input type="checkbox"/>
Kigezi 1	19 May	100	66.2	98	107	3.7	4	7	<input type="checkbox"/>
Gemini	19 May	102	67.2	101	102	3.1	4	8	<input type="checkbox"/>
Cazzano	19 May	101	67.7	99	100	3.7	[5]	8	<input type="checkbox"/>
Messina	20 May	103	67.4	111	104	3.7	[7]	7	<input type="checkbox"/>
Barimax*	20 May	102	66.4	97	105	3.4			<input type="checkbox"/>
Danergo	22 May	99	66.5	92	101	3.5	5	7	<input type="checkbox"/>

[] Limited data. * Name not confirmed.

Recommended List of Hybrid Ryegrass Varieties 2018/2019

Good for silage production and cattle rotational grazing.

Variety	Heading date	Total annual yield <i>Ave. = 100 at 16.29t DM/ha</i>	D-value 2nd conservation cut	Early spring growth 1st harvest year <i>Ave. = 100 at 1.57t DM/ha</i>	Ground cover	Ryegrass Mosaic Virus resistance	Mildew resistance	Suitable for my farm ✓
					1 = poor 9 = good			
Diploids								
Pirol	20 May	101	66.7	115	3.9	4	4	☐
Barsilo	23 May	97	68.7	114	3.4	4	7	☐
Barclamp	24 May	97	67.6	113	3.8	[7]	6	☐
Tetraploids								
AberEcho	15 May	102	72.2	103	4.3	6	7	☐
Solid	16 May	96	72.0	79	4.8	7	7	☐
AstonCrusader	18 May	102	70.8	106	4.1	7	8	☐
Bannfoot*	19 May	101	73.0	75	4.5	8	8	☐
Enduro	19 May	100	71.4	96	4.3	7	7	☐
Tetragraze	19 May	99	71.1	77	4.6	7	7	☐
Novial	19 May	100	71.9	96	4.2	8	7	☐
AberNiche #	21 May	100	66.9	113	3.5	7	8	☐
AberEve	21 May	96	71.9	93	3.9	7	8	☐
Kirial	21 May	102	71.6	100	4.0	8	8	☐
Bahial	22 May	100	71.2	95	4.3	8	6	☐
Amalgam	23 May	98	71.3	80	4.8	8	5	☐
Perseus #	23 May	101	69.5	94	4.1	7	7	☐

[] Limited data. # Festulolium type variety. * Name not confirmed.

Recommended List of Timothy Varieties 2018/2019

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

Variety	Heading date	Simulated grazing management		Conservation management		Ground cover	Winter hardiness	Suitable for my farm ✓
		Total annual yield <i>Ave. = 100 at 11.25t DM/ha</i>	D-value Midsummer	Total annual yield <i>Ave. = 100 at 14.10t DM/ha</i>	D-value 2nd conservation cut			
1 = poor 9 = good								
Presto	08 Jun	101	72.7	101	64.7	5.1	7.3	☐
Comer	09 Jun	102	71.1	103	63.6	4.8	7.2	☐
Dolina	09 Jun	101	71.5	101	63.4	4.2	7.2	☐
Promesse	10 Jun	95	73.0	95	64.6	5.8	7.0	☐
Comtal	10 Jun	101	71.9	98	64.1	5.1	7.0	☐
Winnetou	11 Jun	96	73.3	98	64.7	5.2	6.8	☐
Moverdi	11 Jun	100	72.8	98	65.5	3.6	6.6	☐
Motim	17 Jun	96	72.2	98	63.8	6.3	7.0	☐

[] Limited data.

Recommended List of White Clover Varieties 2018/2019

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 4.17t DM/ha	3rd harvest year Ave. = 100 at 11.64t DM/ha	3rd harvest year	3rd harvest year	After light defoliation	After hard defoliation	
AberAce	376	79	96	5.1	8.0			
Galway	495	77	94	4.4	7.4			
Aberystwyth S.184	568	80	95	5.2	8.0			
Grassland Demand	718	87	96	6.1	7.1			
AberHerald	757	115	102	7.4	5.9			
Iona	778	101	99	5.4	7.5			
Buddy	780	106	101	6.1	8.1			
Crusader	782	93	99	6.6	6.8			
Grassland Bounty	832	95	101	6.4	8.1			
AberDai	843	102	100	6.4	6.5			
AberSwan	847	121	104	7.0	7.1			
Dublin	991	112	105	7.4	6.1			
Violin	1003	120	107	7.7	7.4			
Katy	1017	111	101	6.0	5.8			
Alice	1019	107	101	6.0	5.5			
Barblanca	1041	115	102	7.5	6.9			
Aran	1357	113	102	6.4	5.0			
Brianna	1446	114	103	6.8	5.9			

Recommended List of Red Clover Varieties 2018/2019

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 Ave. = 100 at 5.16t DM/ha	Total annual yield Ave. = 100 at 12.83t DM/ha	Crude protein % in 1st cut of 1st harvest year	Ground cover % (2nd harvest year)	
Merviot	109	100	17.2	46	
Lemmon	103	101	17.3	49	
AberClaret	99	105	17.0	52	
AberChianti	86	98	16.9	53	
Avisto	99	100	17.0	47	
Harmonie	98	99	18.3	55	
Metis	96	98	16.7	55	
Discovery	106	96	16.8	43	
Hegemon	101	97	17.5	52	
Amos [#]	104	101	17.6	51	
Maro [#]	104	102	17.2	51	
Atlantis [#]	100	103	17.9	55	
Magellan [#]	95	98	17.7	49	

[#] Tetraploid.



Useful Contacts

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Pasture Improvement Flow Chart



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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 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