



Proudly supporting Northern Irish farmers

- We breed our grasses in Loughgall, Northern Ireland (in partnership with AFBI)
- Our grasses are tried, tested and proven with British farmers (including at our own Cropvale Research Site)
- We have over 3,500 hectares of British farmland producing our grass seed
- All our mixtures are designed and formulated to ensure continuous improvement for British farming





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Good quality grazed grassland is the cheapest feed for ruminant livestock and is the base upon which profitable farming is built.

Around 70% of utilisable agricultural land in the UK is given over to grass – making it one of our nations' most important crops.

To help UK farmers get more from their grassland, we have created a series of enterprise and application specific guides that set out a clear and compelling case for proactively managing grassland performance, whatever the farm focus.

Recognising that market conditions have been difficult for some time, and that farmers have more forage options available to them than ever before, our guides are designed to help UK farmers make the right choices and pick the right products as they work to achieve their grassland goals.

Each guide contains useful information about grassland growth and practical advice on perfecting grassland performance and looking after leys long-term. There are also details about the different grassland management techniques, and varieties and species available to UK farmers.

	nterprise and Advid grass into gold.	e Guides
☐ Dairy Guide	Good Grass Guide	Silage Guide
Sheep Guide	Beef Guide	☑ Forage Crops



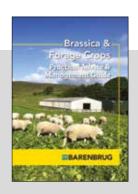
Long-term it is essential to maintain swards in the best possible condition to ensure consistently good yields.

This means measuring and monitoring growth regularly and getting up close with your grass. Many fields look good at a glance and it is not until you get right up to the sward that you can spot problems. Most farms will have fields at different stages of maturity – and this variation can make it difficult to know which tasks to prioritise.

To help farmers decide where to focus their efforts, we have devised a simple field indexing system to monitor field performance, which can be employed regardless of grass type or management technique. The system is easy to use and draws on the stock conditioning method that many farmers use to grade their livestock. It provides a five-step scoring system that enables farmers to grade grass and decide what, if any, action is required to keep fields productive.









The BarForage range of herbal leys are designed to bring a range of benefits to forage, livestock health and soil health and fertility. As well as the contributions made by grasses and clovers, the inclusion of forage herbs like plantain and chicory will provide minerals in the sward helping to improve liveweight gains and increase milk production. As if that isn't enough, the herbs will improve soil health by feeding microbes and help build soil fertility through the conversion of soil nitrogen thus reducing the need for or reliance on artificial fertiliser. BarForage Herbal leys are also designed to improve soil structure due to the deep rooting nature of the different plant types.

With a range of mixtures to choose from, farmers now have the choice of short or long-term crops that will ultimately extend the growing season, have improved drought tolerance and will help to reduce the worm burden in livestock due to their anthelmintic properties.

The BarForage herbal ley range includes:

Bar Finisher

A blend of chicory, red clover, white clover and plantain designed specifically for grazing all classes of livestock and can be used as a herbal addition to grazing swards.



Bar Herbal

A mixture including perennial ryegrasses, white clover, plantain and chicory. Its main purpose is to extend the shoulders of the grazing season whilst enhancing the yield and the quality of the sward. The deep rooting characteristics of the herbs and legumes will enhance the mineral content of their companion grasses due to their ability to source nutrients from deep within the soil. This will also help with soil structure and therefore increase water infiltration, resulting in extra grazing days when compared

Free Catalogues

Available online at www.barenbrug.co.uk

to conventional perennial ryegrass mixtures.

Bar GS4 Graze

Designed to comply with the GS4 Stewardship Scheme. A vigorous sward with abundant legumes and herbs, suitable for productive cattle and sheep, will also provide habitat and food for invertebrates, including crop pollinators, and improve soil structure and water infiltration.





A new face is now in charge at the AFBI perennial grass breeding programme at Loughgall. Dr Gillian Young takes over the programme from David Johnston, who retired in July 2018.

Gillian joined the grass breeding programme in 2016, working alongside David since then on what is a highly successful and productive programme at Loughgall. The programme, supported by the Department of Agriculture,

Environment and Rural Affairs, Northern Ireland, and Barenbrug, has produced over 40 new varieties for the Barenbrug catalogue, and has many more exciting and high quality additions in the pipeline to come.

Gillian started out her career as a plant pathologist and was appointed to the post of Senior Scientific Officer at AFBI in 2009. During her tenure as plant pathologist she had the opportunity to work with the now retired AFBI potato

Image above, left to right: Geoffrey Winter, Edwin Herron, David Linton, Gillian Young, Mhairi Dawson, Paul Johnson, Kyle Clarke, Samuel Carroll, Alan Houston

breeder Paul Watts, before being appointed as AFBI grass breeder in 2016. "Becoming a grass breeder was a really exciting opportunity," says Gillian, "And I relish the opportunity to produce innovative new varieties that can contribute to a better and more sustainable future for farmers across the UK".

Grass Breeding is a long process, and it can take more than 15 years to get a variety to market from the first cross, so it will be some time before Gillian's varieties are available. But in the meantime, Gillian will be hard at work selecting and testing current material coming from the programme. The future is bright, however. "Advances

in new technologies such as novel NIRS-based systems and genomics are making it possible to make more rapid advances in key perennial ryegrass traits such as digestibility, yield and persistency" says Gillian. "Also, key will be putting the focus on new traits that are likely to be vitally important in the future, such as nutrient efficiency and adaptation to stress". Gillian is also particularly interested in factors that affect grass intake and is keen to looks for ways to increase palatability and graze-out in swards. "The aim" she says, "is to produce nutritionally balanced, but sustainable varieties. possessing advances in important novel traits, but also well adapted for use in real-life conditions on farm".

The breeding and commercialisation of a new grass cultivar is a long and challenging business. The Story of Grass... Years 1-3: The Beginnin Years 4-6: The first stage is to: double what we want the Year 7: Isolation cultivar to achieve, then work selections based on desired begins in the greenhouse/polytunnel Years 8-10: Private Trials 5 First Multiplication familie, in fields, at sports arenus the very best varieties Year 16: Official Year 17: Registration Process Complete Years 12-15: Official Trials seed goes on sale. independent trials which determine if the variety's performance is sufficient to get it registered.



Exceptional grazing and silage yields

102% compared with controls England & Wales Recommended Grass & Clover List **104% compared with controls** SRUC Grass & Clover list (Scotland)

- First Cut yield 111%
- Early Spring Growth 125%

Quality

- 1st Cut 70D
- 2nd Cut 72.7D
- Grazing 75.1D

(Figures from SRUC Grass & Clover Recommended List 2019-20)

Now available in BarForage Cut & Graze and Barmix mixtures



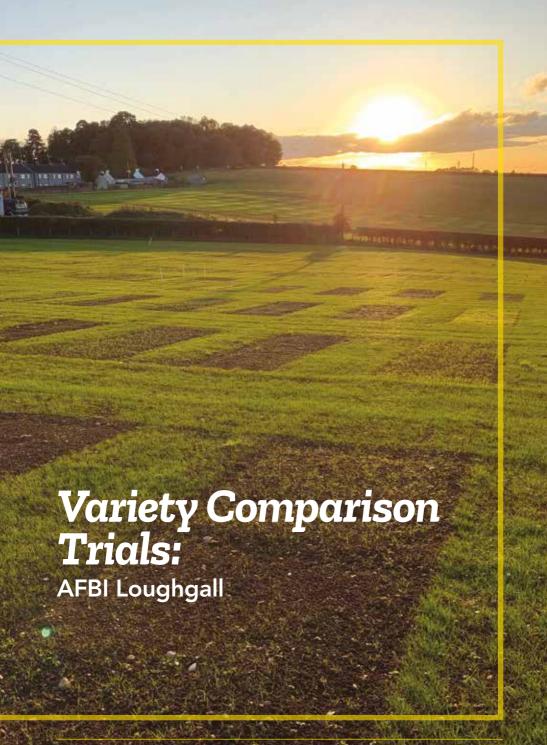
Highly productive silage yields

99% compared with controls England & Wales Recommended Grass & Clover List **100% compared with controls** SRUC Grass & Clover list (Scotland)

Excellent quality (D-value of 72.1)

- Good persistency
- Early Spring Growth 112%
- Exceptional Ground Cover
- Latest Heading Hybrid variety in England and Wales as well as Scotland on SRUC
 Recommended List

Now available in BarForage Hybrid 4x4 mixture



As part of the development and commercialisation of the BarForage range of mixtures, in September 2017 Barenbrug established 100 grass plots at AFBI Loughgall and are running concurrent cutting and grazing trials on our varieties as well as demonstrating our BarForage mixture portfolio.

Variety comparison trials have been sown annually since 2017 at the Agri-Food and Biosciences Institute (AFBI), Loughgall. The data shown in the tables overleaf are an accumulation from an over-years data matrix from multiple trials, including both Barenbrugmarketed and competitor varieties from established UK recommended lists. The number of years of data representing each variety depends on the number of trials in which the varieties have been entered to date. Trials are evaluated over two growing seasons, and are managed either for silage (4 cut system) or simulated grazing (8-10 cut system). Spring Yield refers to the yield in t/ ha DM available by the end of April, Summer Yield refers to the yield in t/ha DM available from the beginning of May until the end of September, whereas Autumn Yield refers to the yield in t/ ha DM available after the beginning of



October. For yield figures, 100 equals the average yield for the varieties included in the table as shown. For example, if a variety has a yield of 110, it is above average. If it has a yield of 90, it is below average. D value refers to quality and is a measurement of the percentage of the dry matter that can be digested by the animal, with a higher value indicating higher quality. The D value shown for silage refers to the average quality across cuts 1 and 2, whereas the D value for simulated grazing represents the average quality across the months of April, May, June and July. Ground cover is assessed at the end of the 1st harvest year, on a 0-9 scale of increasing density. Ratings above 6.0 for diploid and 5.0 for tetraploid ryegrasses indicate a high level of persistence.

See tables on the following pages for data from the trials...





variety	Floidy	Yield	Cut Yield	D value	Refleading	Dieclisiera	Ground cover	
						1	=poor 9=good	
Intermediate Maturity								
Fintona	Tetraploid	111	126	64.7	5.4	6.2	3.0	
Dunluce	Tetraploid	105	98	65.0	5.6	4.2	4.0	
Seagoe	Tetraploid	104	115	65.3	5.7	4.8	4.3	
Moira	Diploid	101	105	62.1	7.3	6.0	4.0	
Gosford	Diploid	96	90	62.7	6.7	5.0	4.0	
Glenariff	Diploid	94	88	61.0	6.3	5.5	4.8	
Variety	Ploidy	Total Annual Yield	Total First Cut Yield	D value	Reheading	Drechsle	era Ground cover	
Variety	Ploidy			_		Drechsle	cover	
Variety Late Matu	,			_			cover	
•	,			_			cover	
Late Mate	urity	Yield	Cut Yield	value		1 = poor 9 = <u>c</u>	cover	
Late Matu	urity Diploid	Yield 105	Cut Yield	value 63.8	6.0	1 = poor 9 = g	cover good	
Late Matu Glenarm Drumbo	urity Diploid Diploid	105 102	Cut Yield 123 80	63.8 62.5	6.0	1 = poor 9 = g 5.5 5.0	cover good 4.5 3.7	
Late Matu Glenarm Drumbo Ballintoy	Diploid Diploid Tetraploid	105 102 104	123 80 122	63.8 62.5 65.6	6.0 6.8 6.5	1 = poor 9 = 9 5.5 5.0 5.7	4.5 3.7 3.4	
Late Mate Glenarm Drumbo Ballintoy Tyrella	Diploid Diploid Tetraploid Diploid	105 102 104 95	123 80 122 121	63.8 62.5 65.6 64.2	6.0 6.8 6.5 7.0	5.5 5.0 5.7 5.7	4.5 3.7 3.4 4.5	

Variety

Ploidy

Total Annual

Total First

D value Reheading Drechslera Ground cover



Variety	Maturity	Total Annual Yield	Total Spring Yield	Total Summer Yield	Total Autumn Yield	D value	Drechslera	Ground cover
							1=poo	or 9=good
Diploids								
Moira	Intermediate	103	120	102	95	69.1	5.2	5.1
Gosford	Intermediate	103	107	102	98	70.1	6.0	5.8
Moyola	Early	102	126	100	106	68.0	6.1	5.3
Callan	Late	100	77	102	105	69.0	3.9	6.3
Glenarm	Late	99	85	100	95	70.9	3.6	6.9
Glasker	Early	99	135	97	104	72.0	5.8	6.2
Clanrye	Late	98	52	102	95	69.5	3.7	6.6
Drumbo	Late	98	59	101	98	72.0	4.1	5.6
Glenariff	Intermediate	97	96	96	95	69.8	5.1	6.3
Tyrella	Late	90	78	91	93	71.9	4.2	6.4
Tetraploid	s							
Caledon	Intermediate	104	137	101	100	72.0	4.6	5.8
Dunluce	Intermediate	103	91	103	106	73.6	3.4	6.0
Youpi*	Late	102	93	105	76	72.6	2.8	6.0
Fintona	Intermediate	101	132	99	96	71.4	5.1	5.0
Ballintoy	Late	101	112	99	105	72.7	4.3	6.1
Seagoe	Intermediate	100	144	97	97	71.9	4.6	6.7
Dundrum	Late	96	63	98	94	74.4	4.9	5.1
*Limited t	*Limited trial data							

Braemar Farm Grass Into Gold

Braemar Farm in Castlerock, Co. Londonderry has been in the Pollock family for three generations and is a successful enterprise managed today by husband and wife team Ian and Ruth.

Ian is in charge of the 220-acre farm and its 140-strong herd of Holstein cows. The cattle produce around 8,000 litres of milk a year – some of which is supplied to Green Pastures with the remainder heading straight to the Pollock's award winning artisan ice cream business, which Ruth runs from a purpose built unit on site.

lan said "For Green Pastures and our own ice cream business, it's essential that our milk comes from pasture grazed cows – it really enhances the flavour of the end-product. Luckily we are located in one of the best dairy areas of Ireland with our cows grazing 30 acres of fields overlooking the sea towards Scotland. We've also got 190 acres that we use to produce silage – achieving over 3,000 bales last year. Since we started in the Grass into Gold scheme, we have managed to increase our first cut



silage yields, something which was vital considering the weather we have had in Autumn 2017. With a marked improvement in our grass quality and sward density we can already see the benefits of healthier, better performing swards."

Traditionally the Pollocks re-seeded every eight to nine years. However, the results of their last re-seed were disappointing. Ian contacted Barenbrug to provide advice on mixture choice and re-seeding options. David Linton, Regional Manager for Barenbrug in Northern Ireland, said: "I first visited Ian and Ruth in late April 2015 and we walked some of the swards lan wanted to rejuvenate. The swards, while only three or four years old, were severely depleted and Ian felt their production just wasn't up to scratch. lan's cows are not turned out early in spring so maximising first cut potential is essential to ensure he has enough quality forage to see him through winter. He felt his existing swards were too slow in spring and producing more silage in the second cut than the first - so we needed a solution that would maximise output early on in the growing season."



lan and Ruth were nervous about ploughing their fields in case it took them out of production for too long. As the fields were level and in good condition, it was agreed that lan would burn off the existing sward and stitch new seeds into the ground using a specialist seed drill.

David recommended a mixture that would give maximum production but be easy to manage. Barenbrug's COMBI mixture was picked. This gives top quality grass when it is most needed, with maximum production throughout the year, but extra emphasis on the first cut. Ian sowed the Combi mixture in early June and growth each year since has been very good. David continued: "COMBI is a popular choice for many farmers across Northern Ireland as it is

one of the highest producing mixtures from a perennial ryegrass sward."
Four years ago lan moved from making clamp silage to bales. Using COMBI, he now feels he can cut when necessary – getting the best quality silage from his swards, without having to wait for all his fields to be ready at one time. This takes the pressure off when it comes to waiting for contractors, who can get delayed at other farms.

The Barenbrug partnership with Braemar farm doesn't end there. At the RUAS Winter Fair every year at Balmoral Park, Ruth has been on the Barenbrug stand serving Braemar farm ice cream to visitors with Barenbrug's compliments. A great example of a finished product from quality grass and proof that we really can turn "Grass into Gold".









Mixture Selector Which is right for you?

Our grass seed mixtures have been formulated carefully using species and varieties that should suit almost any circumstance in Northern Ireland.

We don't just put grass seed in a bag and put it on a shelf. As well as developing a range of mixtures suited to different farm management focuses we have a full support team throughout the UK and a range of tools to help you get the best from your grassland.

The make-up of each mixture and its subsequent management can have

significant impacts on the longevity and levels of production you can achieve.

Deciding how long the ley will last and what it needs to deliver will help ensure you get the best mixture for your enterprise. Each mixture is formulated for a specific job, which you'll find detailed on each product page.

If you are in any doubt, contact your local supplier or one of our team who can advise you on the merits of a mixture for the requirements of the job.

Short-term up to 4 years







Medium to Long-term







Sheep, Silage

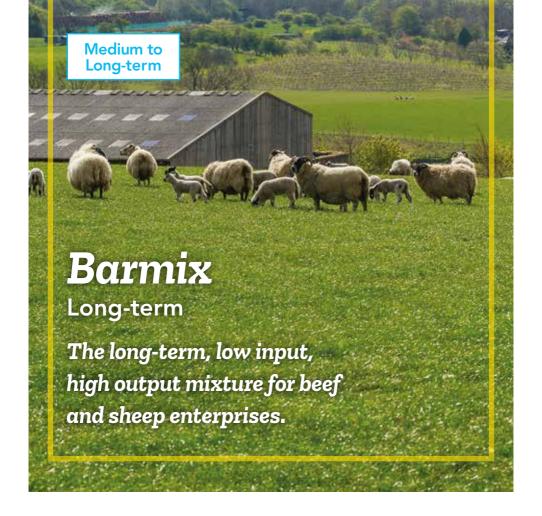












A highly successful, persistent, drought tolerant, high protein sward for beef and sheep production from a clover-based sward. BARMIX uses the best new cocksfoot and tall fescues to produce a highly palatable, very productive ley. As a result it produces considerably more grass than conventional ryegrass leys especially under low fertility conditions and low fertiliser usage.

In the	e bag	
2.50kg	Callan	Late Perennial Ryegrass (DIP)
3.00kg	Ballintoy	Late Perennial Ryegrass (TET)
2.50kg	Bardoux	Tall Fescue
3.00kg	Barelite	Tall Fescue
1.00kg	Baraula	Cocksfoot
1.00kg	Comer	Timothy
1.00kg	Ensign	White Clover Blend
14kg po	r acro Cowing:	2.814.soods/m²

When to sow

Sow when soil temperature is above 8°C. The mixture has been designed to deliver exceptional late winter and early spring growth. This mixture has a lower proportion of ryegrass, so will thrive on more marginal land and under a clover only or very low nitrogen system.

When to cut

Produces exceptional silage cuts of extremely nutritious forage. BARMIX can be shut off mid season for a big bale silage cut or can be grazed all year.

When to graze

This mixture can be grazed all year.

Tall fescue and cocksfoot grow very rapidly, particularly in early spring, so to maintain the sward in its optimum condition, it's strongly recommended to tightly graze the sward from late winter.

This stops the grass becoming too strong, and remaining highly palatable to grazing animals or giving the best combination of quality and quantity when conserved.

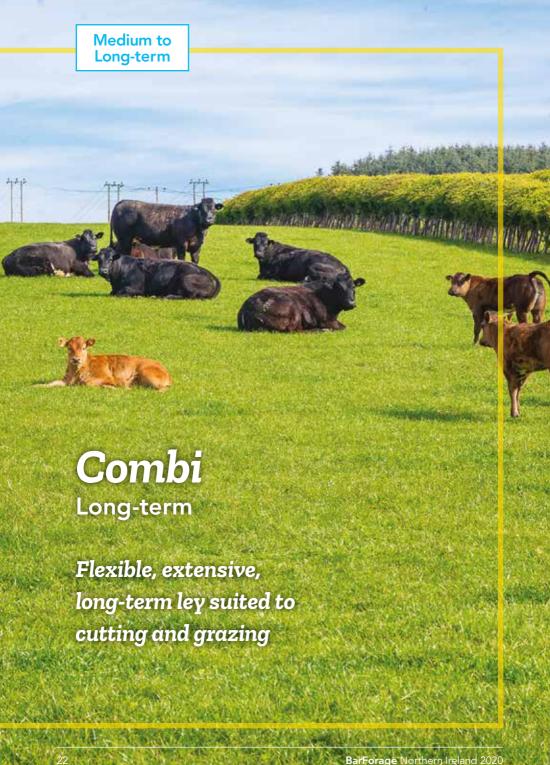
This innovative mixture has been developed by us to offer an alternative mixture for beef and sheep enterprises looking for a low input, high output mixture.

BARAULA (cocksfoot),
BARELITE and
BARDOUX (tall fescues)
are proven in on-farm
grazing trials to be
highly palatable
due to their soft leaves.

The ryegrasses in the sward are highly productive, contributing to the total performance.



Tall fescue is a winter active species and cocksfoot grows earlier in the spring than other species, delivering that vital early bite for lambing. Tall fescues BARELITE and BARDOUX add excellent drought tolerance due to their deep rooted, persistent nature. They are also more tolerant of waterlogged soils.



COMBI is a clover-free version of CUT & GRAZE, giving all the benefits of a top grass sward for situations where high nitrogen input is common practice or if docks are a problem.

Its blend of the best recommended intermediate and late heading ryegrasses is designed to produce a very high-yielding, flexible, dense, palatable, long-term, top class cutting mixture which will also produce quality grazing.

In the bag		
4.00kg	Boyne	Intermediate Perennial Ryegrass (DIP)
3.00kg	Fintona	Intermediate Perennial Ryegrass (TET)
4.00kg	Glenarm	Late Perennial Ryegrass (DIP)
3.00kg	Youpi	Late Perennial Ryegrass (TET)

When to sow

Perennial ryegrass germinates at 8°C; ensure this is sown when soil temperature is above 8°C.

When to cut

COMBI combines the benefits of high quality mid-May silage production with excellent sward density. Produces exceptional silage cuts of extremely nutritious forage.

When to graze

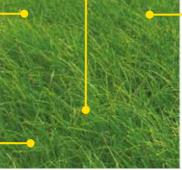
COMBI is ideal as a top quality cutting ley that will also produce a high quality, dense, palatable grazing sward.

This mixture is a blend of top performing varieties which is designed to produce a very high yielding, flexible cutting and grazing mixture.

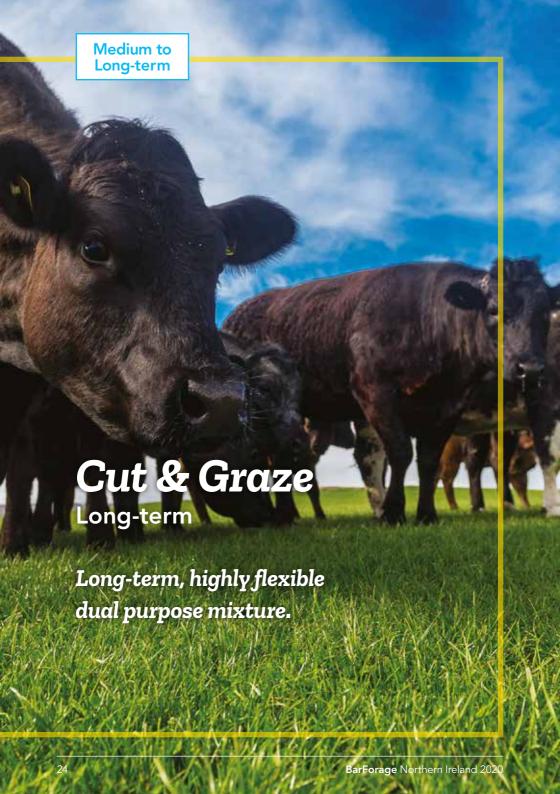
14kg per acre. Sowing: 1,616 seeds/m²

YOUPI provides a highly digestible sward suitable for cutting or grazing which performs best early in the season with well balanced growth for the rest of the year.

The high proportion of tetraploid varieties ensures better drought resistance and higher water soluble carbohydrate content.



FINTONA is the highest yielding perennial ryegrass ever in the UK with unrivalled spring grazing yields and impressive sward density for the type. As the highest yielding 2-cut silage diploid perennial, BOYNE provides maximum yield potential for silage production.



CUT & GRAZE is a long-term, top class, highly flexible, dual purpose mixture with clover, which produces top quality forage suitable for cutting and grazing.

It produces highly palatable forage, thus creating a highly flexible ley with clover.

When to sow

Sow when soil temperature is above 8°C, clover will germinate at 10°C. The mixture has been designed to provide season-long production, with exceptional early spring and late summer growth.

When to cut

Produces highly digestible forage from a late May-early June first cut with the mixture averaging over 70% D value throughout the season.

In the	e bag	
2.50kg	Moira	Intermediate Perennial Ryegrass (DIP)
2.50kg	Fintona	Intermediate Perennial Ryegrass (TET)
3.00kg	Callan	Late Perennial Ryegrass (DIP)
3.00kg	Glenarm	Late Perennial Ryegrass (DIP)
2.00kg	Ballintoy	Late Perennial Ryegrass (TET)
1.00kg	Ensign	White Clover Blend

14kg per acre. Sowing: 1,838 seeds/m²

When to graze

This top-quality dual purpose mixture has the ability to be grazed from early spring through to late summer. If it's being used as cut and graze, the mixture will deliver two exceptional silage cuts and early summer grazing, making it truly flexible.

The high proportion of tetraploid

This mixture delivers maximum production by using the top yielding varieties including CALLAN with its excellent first silage cut.

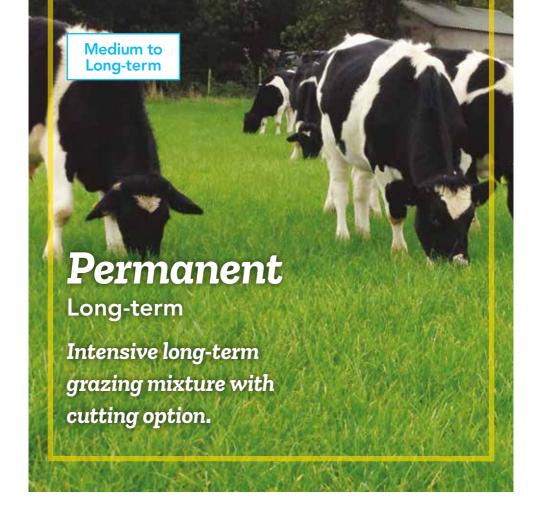
varieties ensures better drought resistance and higher water soluble carbohydrate content.

ENSIGN white clover blend is included for nitrogen fixation and increased protein content.



BALLINTOY produces excellent silage yields and digestibility and provides quality grazing swards throughout the year.

Contains only AFBI bred grass varieties.



PERMANENT is a blend of perennial ryegrass, Timothy and white clover designed to give season-long production from a dense, prolific ley.

This long-term mixture gives the option of taking later cuts of top quality silage. Trials at Moorepark in Eire have shown that cows grazed on this type of ley will produce more milk - ask us to see the fascinating report.

In the	e bag	
3.00kg	Gosford	Intermediate Perennial Ryegrass (DIP)
3.00kg	Caledon	Intermediate Perennial Ryegrass (TET)
3.00kg	Drumbo	Late Perennial Ryegrass (DIP)
2.00kg	Glenarm	Late Perennial Ryegrass (DIP)
1.50kg	Dundrum	Late Perennial Ryegrass (TET)
0.50kg	Comer	Timothy
1.00kg	Ensign	White Clover Blend

14kg per acre. Sowing: 2,373 seeds/m²



When to sow

Perennial ryegrass germinates at 8°C; ensure this is sown when soil temperature is above 8°C, clover will germinate at 10°C.

When to cut

Although a grazing mixture, there is the option of taking later cuts of top quality silage if required.

When to graze

Designed for intensive grazing between early summer and autumn, with the aim of providing balanced production from turnout to late autumn.

PERMANENT produces a dense, leafy, persistent and easily managed ley that produces highly palatable and digestible grass.

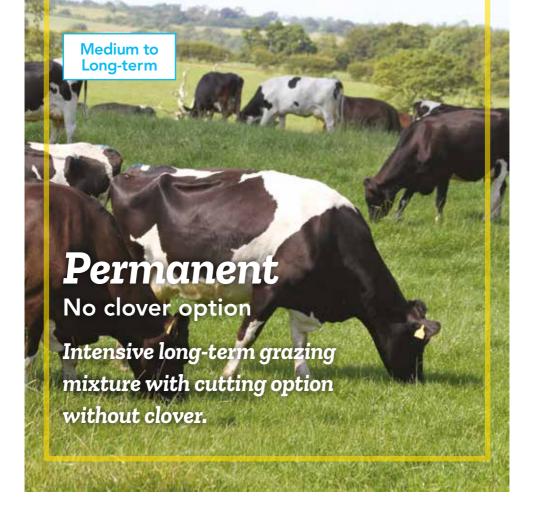
The tetraploid varieties in PERMANENT have been carefully selected to ensure higher water soluble carbohydrate content while not sacrificing sward density.

Includes GLENARM, one of the highest yielding late heading perennial ryegrass (100% of control varieties).

Contains all Northern Ireland bred perennial ryegrass varieties.



Contains GOSFORD, an Intermediate heading diploid perennial, which is already proving its worth with high silage and grazing yields combined with excellent sward density.



PERMANENT (NO CLOVER) is a blend of perennial ryegrass and Timothy designed to give season-long production from a dense, prolific ley.

The omission of clover in the mixture allows for cost effective weed control. This long-term mixture gives the option of taking later cuts of top quality silage.

In the	e bag	
3.00kg	Gosford	Intermediate Perennial Ryegrass (DIP)
2.00kg	Caledon	Intermediate Perennial Ryegrass (TET)
3.00kg	Glenarm	Late Perennial Ryegrass (DIP)
4.00kg	Drumbo	Late Perennial Ryegrass (DIP)
1.50kg	Dundrum	Late Perennial Ryegrass (TET)
0.50kg	Comer	Timothy

14kg per acre. Sowing: 2,112 seeds/m²



When to sow

Perennial ryegrass germinates at 8°C; ensure this is sown when soil temperature is above 8°C.

When to cut

This long-term mixture allows the option of taking later cuts, from late May, of top quality silage.

When to graze

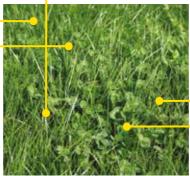
Designed for intensive grazing between early summer and autumn, with the aim of providing balanced production from turnout to late autumn.

PERMANENT (NO CLOVER) produces a dense, leafy, persistent and easily managed ley that produces highly palatable and digestible grass.

Includes CLANRYE, one of the highest yielding late heading perennial ryegrass (100% of control varieties).

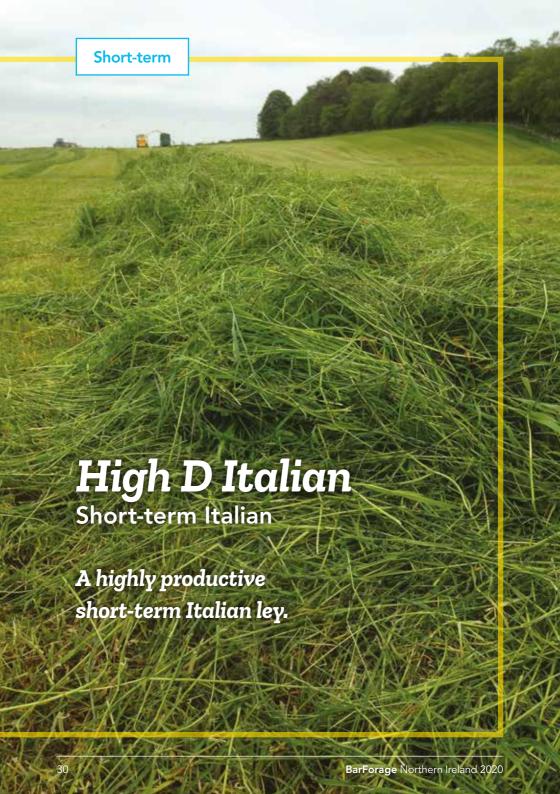
Includes CALEDON, a firm favourite in mixtures for marginal land, a dense growing variety that brings all the benefits of a tetraploid but maintain its quality should grazing or cutting be delayed.

The tetraploid varieties in PERMANENT (no clover) have been carefully selected to ensure higher water soluble carbohydrate content while not sacrificing sward density.



Contains GOSFORD, with excellent silage and grazing yields combined with impressive sward density.

Contains all Northern Ireland bred perennial ryegrass varieties.



HIGH D is a highly productive Italian ley, which will give exceptional crops for silage, hay or grazing from a high input system. It's ideal for growers who want to produce the maximum amount of forage possible from their own land.

HIGH D has a very long growing season; its exceptional spring growth makes it ideal for lamb finishing or early turnout. An early grazing can be followed by up to four cuts of quality silage and a late flush for grazing.

In the bag

4.00kg	Steel	Italian Ryegrass (DIP)
6.00kg	Barmultra II	Italian Ryegrass (TET)
4.00kg	Abys	Italian Ryegrass (DIP)

14kg per acre. Sowing: 1,216 seeds/m²

When to sow

Grows at temperatures as low as 3°C so the farm must be able to make use of this early growth.

When to cut

A first cut at the end of May, following a spring grazing, will produce 70+ D value silage, with a second cut, five weeks later. The ultimate silage mixture which will yield up to 17tDM/ha in its first year under high input management. For maximum production up to six cuts a year under high N systems.

When to graze

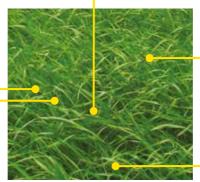
Early grazing for turnout of ewes and lambs or finishing long keep store lambs.

HIGH D is a better option than sowing a single Italian ryegrass variety.

Includes three Italian ryegrasses, which perform very well compared to their rivals.

It will provide massive amounts of clean, quality forage throughout the year without any loss of production mid season.

HIGH D grows down to 3°C soil temperature extending the growing season for store lambs or wintering hoggets.



High ranking BARMULTRA
II has excellent spring
grazing and silage yields.

Responds very positively to high levels of fertility and will produce 20% more yield than perennial ryegrass leys.



HYBRID 4x4 is a highly productive hybrid ryegrass cutting ley, designed to last for four years and providing four cuts each year.

It's designed for a three or four year rotation system, delivering 20% higher yield than traditional perennial ryegrass mixtures. A key benefit of this mixture is that it offers multiple exits and entries for slurry/digestate application, using home produced nutrients more efficiently, saving valuable time and resources.

When to sow

Grows at temperatures as low as 5°C so the farm must be able to make use of this early growth.

When to cut

Up to four cuts per year which can take place in May, July, August and October. This is the ultimate silage mixture, yielding up to 20t DM/ha in its first year and exceeding 16t DM/ha in its second year.

In the	bag	
2.00kg	BarClamp	Hybrid Ryegrass (DIP)
4.00kg	Kirial	Hybrid Ryegrass (TET)
4.00kg	Aston Crusader	Hybrid Ryegrass (TET)
4.00kg	Novial	Hybrid Ryegrass (TET)
14ka na	racre Sowing: 1	025 seeds/m²

HYBRID 4x4 delivers a superb silage mixture to farmers. It has a very tight heading date range and excellent resistance to disease offering strong silage production throughout the season

Multiple exits and entries for slurry/ digestate application, using home produced nutrients more efficiently. This mixture does not contain clover, so is inexpensive to clean up sward.



Perfect if three and four year rotation is required.

Will produce 20% more yield than perennial ryegrass leys, due to its ability to use all nutrients very efficiently via its long season growth and usage of deep rooting varieties.



FAST GRASS establishes quickly to provide winter cover and rapid growth even at cool temperatures offering production late into autumn, delivering extra grazing opportunities over winter.

It gives total flexibility with 12, 18 or 24 month production potential and could also be established after a spring cereal harvest.

Later production = winter grazing option

Thanks to its ability to germinate at lower temperatures than conventional leys meaning it can be sown safely throughout October, being developed using the concept of 'germination energy'.

This concept means it will establish faster and better than other leys, even in the adverse conditions of cold, wet seed beds which appear later in the year.



20% faster establishing than the average ryegrass

By measuring the germination rate under low temperatures of 7-10°C, similar to those found in the field throughout October and selecting those which give the best germination in the shortest time, the result is an establishment rate of over 20 percent above the average ryegrass.

FAST GRASS is a very flexible product that can fit into different regimes as required.

In the	e bag
50%	Westerwolds
25%	Italian Ryegrass (TET)
25%	Italian Ryegrass (DIP)

It is equally at home being used as an early spring cut before being ploughed out for a spring sown crop or used as a sacrifice field for early spring grazing as a more cost effective alternative to ryegrass.

- Can assist with prevention of winter soil erosion
- It has the ability to make use of existing nutrients in the soil after previous crop soaking up N, thus decreasing winter leaching
- Can add organic matter to the soil improving its quality, structure and nutrient holding capacity
- Blending Italian ryegrass with hybrid and perennial ryegrasses ensures the mixture delivers a rounded performance with very rapid establishment, a bottom to the sward, making it denser and very tight heading dates
- Delivers over 18% more in the first year compared to a perennial ryegrass ley

Sowing rate: 12-15kgs per acre



Overseeding Guide

Livestock farmers in two minds about whether or not to reseed their grass should check out latest industry figures, which provide compelling financial reasons for investing in a new sward.

Grass value

Using new industry numbers, we have calculated that farmers that don't reseed this autumn could be missing out on grass dry matter worth around £360 per hectare (ha) on a two-cut silage system.

A sward established at the end of the 2019 grass-growing season has the potential (in 2020) to produce around 11.63 tonnes (t) of dry matter (DM) per ha from two cuts. That's around 2.6 tDM/ha more grass than an old field made up of 50% weed and 50% productive species, which would typically yield around 9 tDM/ha. Costs are based on the assumption that DM is valued at £140/t and gains calculated do not take into account any additional cuts or autumn grazing that could increase yields further.

Energy value

When it comes to energy the value of a reseed becomes even more convincing. The yield from two cuts of a new sward could have an equivalent energy value of 133,320MJ. That's enough energy to produce 25,150 litres of milk; more than 2050 kg of lamb, or around 2400 kg of beef.

With a new grass ley, cut at the optimum growth stage, a 72D silage with an ME of 11.5 should be easily achievable. In comparison, an old sward would have a D value of between 60-65D and ME levels of between 9.6 and 10.4. Compared to a new sward, that's a potential energy loss of 43,320 MJ. In lost production and profit potential that equates to approximately: 8,170 litres of milk – at 26.7 pence per litre that's >£2181

More than 785 kg of beef – at 364 pp/kg that's >£2,857

More than 665 kg lamb – at 461 pp/kg that's >£3,065

New ryegrass swards will also use nitrogen (N) more efficiently. Ryegrass species are 100% N efficient while weed grasses such as annual meadow grass are only 17% efficient. This means that for every £100 of N applied to an old sward up to £83 could be wasted.



Forage production is expensive get your sward back into maximum, long-term productivity by over seeding.

In the bag					
8.00kg	Glenariff	Intermediate Perennial Ryegrass (DIP)			
6.00kg	Fintona	Intermediate Perennial Ryegrass (TET)			
6.00kg	Youpi	Late Perennial Ryegrass (TET)			

Supplied as 20kg, two acre packs. Sowing: 709 seeds/m²

OVERSEEDER is a 100% ryegrass blend for areas of high fertility.

- Increases the proportion of productive ryegrass in the sward
- Improves the quality of the grass for better animal performance
- Improves the Nitrogen efficiency of the sward
- Repairs the damage caused by poaching of grazing swards
- Specifically designed to work best with specialist overseeding techniques
- Includes varieties which are aggressive enough to establish in an existing sward, yet easy to manage



ENSIGN is a blend of white clovers, which gives better animal performance, higher milk yields and better live weight gains. It also produces a better quality sward, with fewer weeds and less disease.

In the bag

50% Crusader White Clover
30% Alice White Clover
20% Barblanca White Clover

Minimum pack size: 5kg Sowing rate: Up to 1kg per acre. 2kg per acre for overseeding It has an exceptionally long growing season and 'fixes' free nitrogen from the atmosphere for maximum production.

- By using a blend of different varieties there are always at least two that are best suited to whatever the management being applied to the sward
- Animals prefer to graze a clover/ grass sward - this results in higher voluntary intakes and better animal performance
- Potential nitrogen fixation for white clover up to 150kg N/ha



ENSIGN RED is a blend of red clovers, which balances production through the growing season, while maintaining excellent persistency and disease resistance. Red clover swards managed correctly can meet the forage requirements of many farms and significantly improve protein contents and overall feed value of winter forage.

It's better suited to silage production than white clover because of a more erect growth habit and its significantly higher forage yields.

In the bag	
Discovery	Red Clover
Lemmon	Red Clover

Minimum pack size: 5kg Sowing rate: Up to 1kg per acre. 2kg per acre for overseeding

- Red clover silage has a high crude protein content of 16% to 20% and a ME content of 10 to 12MJ/kg DM
- Because red clover is high in phytoestrogen, breeding sheep should be kept off for six weeks either side of tupping
- Store/fat lambs can be fattened very effectively on red clover silage aftermaths
- Low levels of structural carbohydrate in the leaf result in higher intakes, better feed conversion and therefore improved animal performance
- Potential nitrogen fixation for red clover up to 200kg N/ha



ENSIGN DUET is a unique mixture of red and white clovers, developed to meet the need for rapid nitrogen fixation to feed new leys.

Red clovers establish faster than white and are able to make nitrogen available to the ley as the white clover is establishing and brings additional benefits.

In the bag

67% Ensign Red Red Clover Blend
33% Ensign White Clover Blend

Minimum pack size: 5kg Sowing rate: Up to 1kg per acre. 2kg per acre for overseeding

- Increased yield. Our mixture trials showed a yield increase of 5% in the first year after sowing, worth around £100.00 per hectare (£40.00/acre)
- The increase continued into the second harvest year, producing additional yields worth £75.00 per hectare (£30.00/acre)
- Increases the overall protein content of the sward - red clover's protein content is around 17% compared to grasses of around 12%
- Because red clover is high in phyto-oestrogen, breeding sheep should be kept from grazing for six weeks either side of tupping
- Red clover is excellent feed for growing and finishing stock
- Contains recommended Herbage Varieties Guide varieties



High yielding Italian and clover blend

PROTA PLUS is designed to deliver maximum production of a very high protein forage from spring sowing, followed by an autumn and winter grazing sward suitable for sheep and overwintering cattle. It also offers a flexible alternative to forage brassicas or westerwolds.

In the	e bag	
6.00kg	Barmultra II	Italian Ryegrass (TET)
4.50kg	Contea	Crimson Clover
1.50kg	Lightening	Persian Clover
121,000		

- BARMULTRA II is a very high yielding, high quality variety, producing 10% more from a spring sowing than other recommended varieties. By using Italian ryegrass rather than westerwolds, there is no risk of contaminating arable land with self seeded grass in the sowing year.
- CONTEA Crimson clover is a very high yielding single cut annual clover, which will grow from seed to flowering in around 120 days, but should be cut before flowering for maximum quality. Its forage has a protein content of around 20% and an ME of 12-14MJ. It's a tap rooted clover, so improves the soil structure and will "fix" over 40kg/h nitrogen.
- LIGHTENING Persian clover is a high quality, multi-cut species. It will survive in the sward, whether cut or grazed through the autumn. It has a fibrous rooting system that will improve soil organic matter.



Grass has to be the first priority for feeding livestock efficiently; however forage crops are a valuable tool for meeting the changing feed and energy requirements throughout the year.

Feed supply and stock performance can be manipulated through the use of different forage species. We recognise the integral role of brassicas, forage herbs and lucerne in breeding and research and we are proud to supply products specifically bred for UK systems.

Benefits of Brassica and Forage Crops

- Strategic crop in pasture renovation makes regressing easier i.e. less weed pressure
- Means of controlling spring surplus and shifting feed from spring into summer or autumn to winter
- Breaking up insect pest cycles to help renovate pasture
- High animal performance potential
- Many options with a lot of flexibility
- Consistently high quality ME 10.5-13, proteins 16-24%

Sowing & Utilisation Guide	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STUBBLE TURNIP	USE	USE		SOW	SOW		SOW	SOW	USE	USE	USE	USE
FORAGE RAPE						SOW	SOW	SOW		USE	USE	USE
KALE	USE	USE	USE	SOW	SOW	SOW				USE	USE	USE
LUCERNE	USE	USE	SOW	SOW	USE	USE	USE	USE	USE	USE	USE	USE
VETCH	USE	USE	SOW	SOW	SOW	USE	USE	USE	SOW	SOW	USE	USE
PLANTAIN	USE	USE	SOW	SOW					SOW	SOW	USE	USE
CHICORY				SOW	SOW	SOW	SOW	SOW				
Disco	Discover our Forage Crops Guide for management advice											



Graze in situ

Sowing Period

Spring & Autumn

Utilisation Period

Summer & Winter

Days to maturity

60-90 days

Stubble turnips have a high leaf to bulb ratio resulting in high levels of protein, and a tankard bulb shape to enhance utilisation.

BARABAS is a variety which has been very successful wherever it has been used throughout the UK and with some farmers proclaiming as the best stubble turnip variety they have encountered!

Advantages

- High leaf to bulb ratio resulting in high levels of protein
- Full-leaved late tetraploid bulbing with very good early vigour
- Proven very palatable to grazing animals with good disease resistance
- Early maturing (60-90 days) for excellent summer/winter feed

Management advice

Plant two-thirds of the crop area in early maturing BARABAS and one-third with a late maturing variety, such as BARCOLI, at the same time (not together). This will provide a high quality summer feed that can be grazed from 60-150 days after sowing.

Sowing rate:

Spring sown at 3kg/acre (7.5kg/ha) for high leaf percentage.

Autumn sown at 2kg/acre (5kg/ha) for larger bulb percentage.

Pack sizes:

Available in pack sizes of 5kg or 25kg.



Graze in situ

Sowing Period

Spring & Early Summer

Utilisation Period

Autumn & Winter

Days to maturity

90-110 days

A multi-purpose forage rape with excellent autumn/early winter feed potential.

BARCOLI is a flexible forage option. It can be spring sown for a late summer feed behind turnips or autumn sown for winter grazing.

Advantages

- Good regrowth potential with excellent winter keeping properties
- Good aphid tolerance
- Fast growing leafy catch crop
- High protein content
- Longer lasting than stubble turnips
- Flexible sowing period
- Sheep, dairy or beef production

Management advice

Plant two-thirds of the crop area in early maturing BARABAS and one-third in late maturing variety BARCOLI, at the same time (not together). This will provide a high quality summer feed that can be grazed from 60-150 days after sowing.

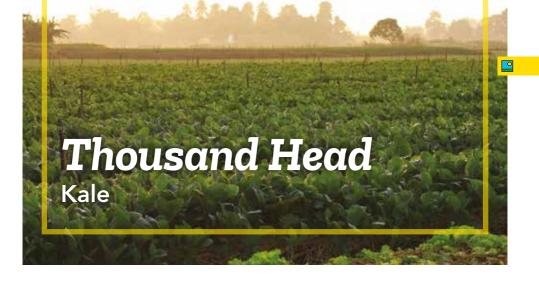
Sowing rate:

Drilled: 2.5kg/acre (6kg/ha).

Broadcast: 4kg/acre (10kg/ha).

Pack sizes:

Available in pack sizes of 10kg or 25kg.



Graze in situ & Zero Graze

Sowing Period

Spring & Early Summer

Utilisation Period

Autumn & Winter

Days to maturity

170-220 days

Kale is a well-proven, highly adaptable fodder crop which consistently provides very high yields of succulent green fodder.

THOUSAND HEAD

A medium height kale with excellent leaf to stem ratio (greater than 50% leaf).

Advantages

- Leafy type for sheep production
- Excellent crop utilisation due to highly digestible stem
- Superior animal production due to enhanced forage quality
- Good regrowth if lightly grazed during late summer

Limitations

Suited to smaller stock classes and warmer climates

Sowing rate:

Drilled: 1 - 2kg/acre (2.5-5kg/ha). Broadcast: 3kg/acre (7.5kg/ha).

Pack Sizes:

Available in pack sizes of 5kg or 25kg (untreated), 2kg (treated).



Graze in situ & Zero Graze

Sowing Period

Spring & Early Summer

Utilisation Period

Autumn & Winter

Days to maturity

170-220 days

Kale is a well-proven, highly adaptable fodder crop which consistently provides very high yields of succulent green fodder.

MARROW STEM

A high yielding marrow stem type kale with clubroot tolerance. Its huge yield makes it ideal for utilisation by dairy and beef cattle.

Potential

 High-yielding giant type kale with potential yield of 18,000kg DM/ha

Advantages

- Excellent tolerance to frost
- Good aphid tolerance
- Very high dry matter yields
- Good winter hardiness
- Good clubroot tolerance

Limitations

Suited to bigger cattle and colder climates

Sowing rate:

Drilled: 1-2kg/acre (2.5-5kg/ha). Broadcast: 3kg/acre (7.5kg/ha).

Pack Sizes:

Available in pack sizes of 5kg or 25kg (untreated), 2kg (treated).



Grazing and silage

Sowing Period

Spring

Utilisation Period

Year-round

Days to maturity

40 days

Lucerne is a highly nutritious forage for livestock. It combines good digestibility with high proteins providing excellent milk yields or daily live weight gains. A more mature hay crop would be more suitable for feeding young stock.

Advantages

- Perennial well managed crops can persist for up to 5 years
- Performs well in free draining, drier environments due to tap roots
- Dual purpose

Potential

- One of the most underrated and underutilised forage crops available to livestock farmers in the UK
- To utilise lucerne, ensure a minimum of 50% flowering (50% of the tallest stems have a flower) prior to the first grazing/cutting. If the stand is weedy at establishment it can be grazed/cut ONCE if it is 15-20cm tall and then left to flower to a minimum of 50%
- >300-500g/hd/d rotationally grazed or cut
- High MJME and high protein, which is easily digested

Limitations

- Legume pH 6.0 and high levels of P to establish
- Requires good management
- For more information and advice on management, please contact us for the guide

Sowing rate:

8-10kg/acre (20-25kg/ha). Drill at 5-12mm deep on normal soils or up to 25mm on light sandy soils.

Pack sizes:

Available in pack sizes of 25kg.



More reliable mixtures and individual varieties available on request.

QUALITY GAME MIXTURE

A traditional mixture of species specially selected for their feed and cover qualities.

- Will provide effective holding, feed and cover for all game birds
- Due to the variance in seed size, broadcast to achieve optimum establishment
- Establishment for set-aside under the wild bird cover option – suitable for ELS

COUNTRYSIDE MANAGEMENT WILD BIRD COVER

An alternative to the traditional game cover mixtures that will provide feeding and cover for all birds.

 Meets the requirements of stewardship schemes

In the	e bag
25%	Buckwheat
25%	Maize
20%	Sunflower
7.5%	Kale
7.5%	Forage Rape
5%	Mustard
5%	White Millet
5%	Red Millet

In the	bag
80%	Linseed
10%	Kale
10%	Quinoa
10kg per	acre

10kg per acre

EquestrianHunters Grass Seed

Young, well managed grass can provide most of a horse's feed requirement. Our mixtures are designed especially for horses. A herb mixture is also available.



GENERAL PURPOSE

Hardwearing general-purpose mixture designed to withstand the pressures of equestrian use and provide good quality grazing for horses.

- Grass varieties used have been specifically selected for roughage and low fructan content
- Produces a good, spring, dense turf
- The low fructan concentration reduces the risk of laminitis
- Strong grass plant rooting system, making the sward dense, hardwearing and persistent
- Paddock will deliver grazing and forage production
- Yields good levels of effective roughage, ideal for a fit and healthy equine gut
- Also available with herbs

In the bag			
70%	Perennial ryegrass		
16%	Strong creeping red fescue		
8%	Meadow fescue		
6%	Timothy		

10kg pack Sows up to 0.7 acre Repairs 1 acre

TRADITIONAL MEADOW

Formulated to recreate the nutritional characteristics of a natural habitat. The mixture is ryegrass free and uses species with a less aggressive growth habit to aid diversity.

- Swards sown with this mixture are likely to be lower in fructans than a ryegrass sward, reducing the risk of laminitis
- The healthiest pasture for your horse
- Helps prevent laminitis
- Effective fibre in your horse grass
- The optimum grass seed for your horse meadow
- Good horse pasture that can be effectively managed
- Also available with herbs

In the bag				
25%	Tall fescue			
25%	Strong creeping red fescue			
20%	Meadow fescue			
15%	Timothy			
15%	Smooth-stalked meadowgrass			

10kg pack
Sows up to 0.7 acre Repairs 1 acre



THE ALL ROUNDER

A multipurpose, hardwearing grass seed that's ideal for creating new lawns, overseeding or repairing worn patches.

- A great everyday lawn for the rough and tumble of family use
- Rapid germination and establishment
- Withstands heavy foot traffic
- Ideal for the whole family to play on and enjoy
- Attractive appearance

THE PERFECTIONIST

A fine and luxurious traditional lawn seed mixture.

- A very fine leaved and dense lawn
- High quality and beautiful looking lawn
- Improved tolerance to common lawn diseases
- Ideal for the traditional ornamental lawn

THE ACTION HERO

A very hard wearing mixture that contains tough wearing grasses which is ideal for playing areas with high traffic.

- High levels of perennial ryegrass in this mixture give it substantial ability to withstand wear and tear
- This tough mixture is ideal for areas of the garden that are used frequently
- Hard wearing ryegrass specifically chosen for the job
- Gives an attractive lawn that's extremely tough

The mixture

60% Perennial ryegrass40% Strong creeping red fescue

Sowing 25-35g per m² **Oversowing** 25-30g per m²

The mixture

40% Strong creeping red fescue30% Slender creeping red fescue30% Chewings fescue

Sowing 25-30g per m² **Oversowing** 25-30g per m²

The mixture

80% Perennial ryegrass

20% Strong creeping red fescue

Sowing 25-35g per m² **Oversowing** 25-30g per m²

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Barenbrug

Grass experts since 1904

Our profession is plant breeding; selecting and developing quality varieties with the essential, unique characteristics to meet the ever-increasing demands from farmers for top quality forage grass.

From its founding days in 1904 the Royal Barenbrug Group has grown into a global seed company with breeding and research stations on six continents.

Still privately owned, our knowledge and experience of grass seed is second to none.

We specialise in plant breeding, seed production and the international marketing of forage grass, forage crops and turf grasses.

With over 800 employees and operating companies in 20 countries on six continents, we have been the leading grass seed business in the world for over 100 years.

Barenbrug UK Ltd

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- E info@barenbrug.co.uk

www.barenbrug.co.uk









Conditions of sale

In case of unavailability Barenbrug UK Limited reserves the right to substitute any variety in any mixture with one of similar merit.

Any change will be detailed on the bag.

The placing of an order constitutes an acceptance of our terms and conditions of sale by the buyer.

Full terms and conditions can be found at www.barenbrug.co.uk.

