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**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](http://www.barenbrug.co.uk).

 **BARENBRUG**

Make Life Beautiful



**2021 Guide**

**Scotland  
Grass & Forage**

[www.katesimpsonart.uk](http://www.katesimpsonart.uk)



 **BARENBRUG**

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**Proudly Supporting British Farmers**

Barenbrug research, breed and develop UK agricultural grasses across UK research sites

Barenbrug grasses are tried, tested and proven with UK farmers and at trial sites across the UK

Over 3,500 hectares of UK farmland produces Barenbrug UK grass seed

All Barenbrug UK mixtures are designed to deliver productivity and success for UK farmers



## About the cover artist

The breath-taking backdrop of Northumberland's unspoilt countryside inspired Kate to paint the animals which inhabit England's border county. Kate has turned her talent to capturing the character of the animals that live and work on the farm. Her original take on livestock and domestics animals has made Kate's work very collectable.

[www.katesimpsonart.uk](http://www.katesimpsonart.uk)

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## About Us

**A leading grass seed developer, breeder and grower for amenity and agriculture. Supporting British Farming and Managers of Green Spaces.**

Established in the UK in 1983, Barenbrug is now recognised as a leading grass seed breeder and grower in the UK, producing and distributing more than 4,500 tonnes of UK clean, certified, and quality grass seed each year for both amenity and agriculture.

The Barenbrug name has been synonymous with innovative UK grass seed solutions and is raising the standard in the research and breeding of agriculture and amenity grasses in the UK. As part of the wider Barenbrug Group, grass experts since 1904, our research network across the globe and UK trial both agriculture and amenity varieties and mixtures, providing a solid testing ground for our solutions and drawing on knowledge and expertise from across the globe.

Increasingly focused on sustainability, Barenbrug UK is determined to minimise any negative impact on the environment and meet the aims of increasing farming productivity, environment, biodiversity and the enjoyment of green spaces.

Grass offers a huge number of benefits to farms, from highly productive and healthier livestock, greater management and flexibility, with increased profitability, as well as remarkable environmental benefits such as providing a diverse range of habitats through the season for a wide range of species, cover crops and enhancing soil health and fertility.

With our network of growers, research, distribution, regional technical experts, production, and manufacturing sites across the UK, we are a business firmly rooted in the UK.

Learn more about the UK grass seed expert and discover our range of grass seed mixtures for UK agriculture.

**Rooted in the UK**



## Research & Development

### Our Research Sites

Developing grasses and forage legumes is at the heart of what we do, and we continually focus on offering our customers maximum added value, which means that we never rest in our search for innovation.

Barenbrug's R&D innovation is tied to our commitment to total product satisfaction, and it is driven by our faith in customer-centricity. Our innovations are tested and supported by numerous official trials, and we reach top positions across the world on recommended variety lists. In other words: if we claim it, we deliver it.

Breeding of grasses and forage crops is our core competence; it is the lifeblood of our business and our brand. Long-term investment in grass seed research and development remains at the forefront of innovation, coupled with consistent investment in people and training to develop the next generation of grass seed specialists.

We are proud of our most recent innovations that made this a reality:

**NutriFibre** is the latest grass technology for silage production. The foundation of NutriFibre is soft-leaf tall fescue, an innovation hailing from the Royal Barenbrug Group's international breeding programme and aiming for grass for highly productive dairy cattle. NutriFibre technology combines mineral efficiency; high protein production; digestible, effective fibre-rich cell walls and rooting intensity.

### All grasses are equal but some are more equal than others

Barenbrug UK aim to produce all grass seed to the Higher Voluntary Standard (HVS), which is unique to the UK, guaranteeing a higher level of purity than European Union standards. We are part of an industry helping to feed the nation.

Barenbrug varieties are bred, tried and tested in the UK.



AFBI Research Site, Loughgall

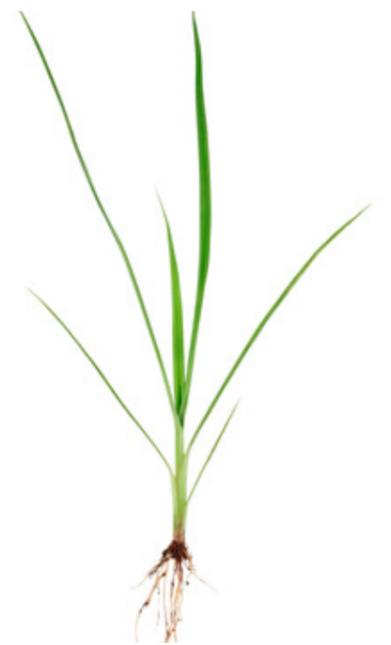
### Cropvale

Our dedicated trial site, over 15 acres, has been testing the performance, palatability and resistance to disease of Barenbrug UK's agriculture grass varieties and mixtures bred for use by UK farmers for over a decade. It is also one of only two sites in the UK testing for grass diseases.

### AFBI

For 30 years we have been the breeding partner of AFBI in Northern Ireland, one of the most prolific grass breeding organisations, and we currently have 19 ryegrass varieties listed on the E&W Recommended Grass and Clover List & 26 SRUC 1st choice recommended.

Visit [www.barenbrug.co.uk/r&d](http://www.barenbrug.co.uk/r&d) for more information





## The Science of Good Grass

The UK has the ideal climate for growing grass. Ryegrass grows best at between 5°C to 25°C, and most of the UK is between these temperatures 95% of the time.

Making up 65% of utilisable agricultural land, grass is our national crop. Like all other crops, growing grass requires careful management to maximise yields, enhance the environment, increase biodiversity, offer animal health and utilisation. It is a science – but a relatively simple one to grasp once you have a basic understanding of plant as well as animal physiology.

Armed with information about how grass grows and the different species and management techniques available, it is easy for farmers to make informed choices about what kind of grass to grow; when to sow it; when to graze it; how long to graze it for; and what to do to ensure its performance long-term.

## The Benefits of Grass

Having grass and forage crops in your rotation and a grassland management plan can bring about a huge number of benefits to your farm and farming businesses. The specific benefits will depend on what you sow but can include:

Flexible options to fit your rotation length and feed requirements – grass can be simple!

Increased Nitrogen efficiency either by using N responsive species (better N utilisation) or by increasing the use of legumes (reduced bought in N requirement).

Improved soil health by prevention of leaching and soil erosion therefore protecting water quality.

Improved organic matter content, improvement of soil structure, better nutrient retention, improved soil stability and improved water retention and/or filtration therefore mitigating droughts/floods.

Well managed, healthy soil promotes high populations of soil microbial and insect populations whilst sward diversity can significantly influence the whole farm ecosystem by encouraging insect, pollinator, mammal, and bird populations.

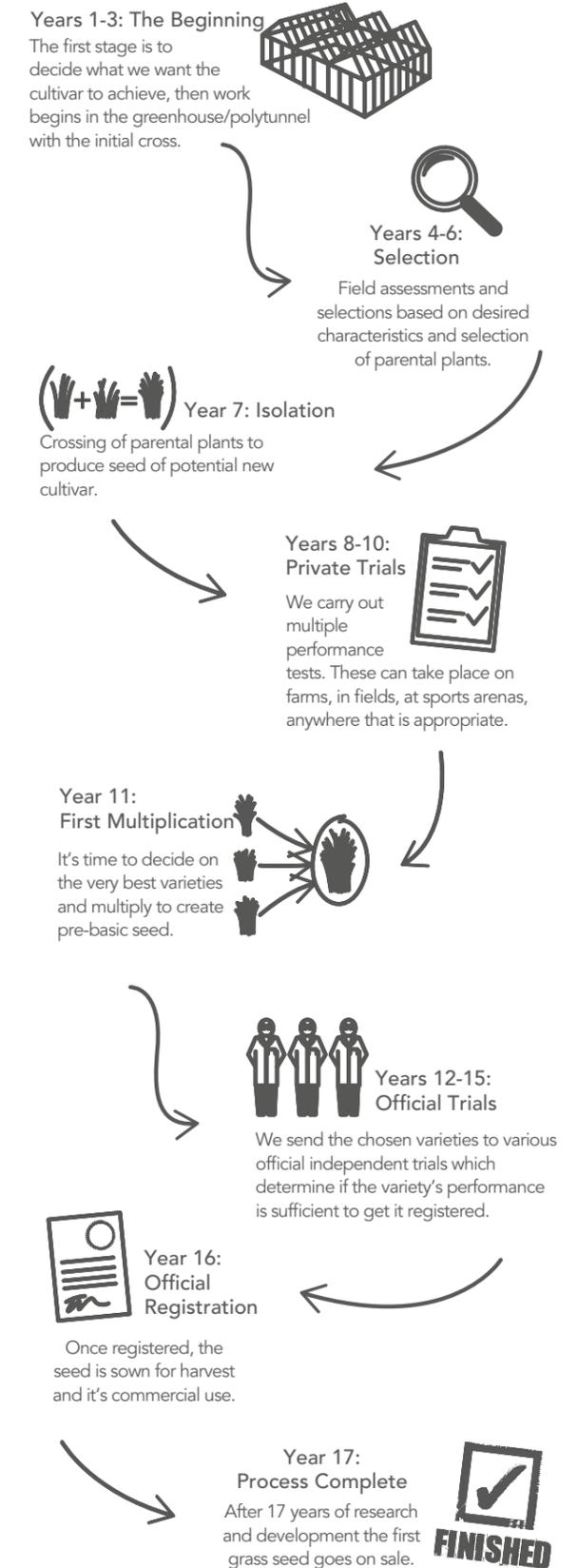
Perennial grass swards will improve volumes of stored Carbon over short term crops.

Healthier livestock and diverse nutrient rich, high-quality forage diet. Deep rooting grass species can access different trace elements from further down the soil profile and some species also have anthelmintic properties. A well-managed grazing platform can extend the grazing season, satisfying the 5 freedom welfare requirements.

Increased yield of higher nutrient quality grass (sugar/digestible fibre/protein/trace nutrient), increased grazing days, better meat and milk productivity, both in terms of yield and quality/components, can have a very positive impact on enterprise profitability. Attention to detail in management terms can also reduce inputs such as anthelmintics, herbicides and fertiliser requirements which is both environmentally and financially beneficial.

## The Story of Grass...

The breeding and commercialisation of a new grass cultivar is a long and challenging business.



# New Varieties

## Gracehill

Gracehill is a late heading tetraploid perennial ryegrass; such varieties are now increasingly sought after for use on intensive grazing platforms. Gracehill has proven to be an excellent all-round performer right across the growing season, producing superb annual yields of high digestibility grass under both grazing and silage management along with extremely high metabolizable energy (ME) yields per hectare (+108% and +104% of the mean of all other late tetraploid varieties on the list).

- **Heading dates:** REE 47
- **Most suited to:** Spring growth & excellent grazing for early turnout or silage
- **Digestibility\*:** Grazing 76.5D average
- **Attributes:** Excellent spring growth | High quality forage from both silage and grazing management | Crown rust resistance is 7.9 | Drechslera resistance 8.7 | Mildew resistance 8.0 | Average of 290,000 seeds per kilogram
- **Yield\*:** Cutting average: 16.27 t DM/ha | Grazing :10.36 t DM/ha | High summer yields - 111% | High autumn yields - 119%
- **Type:** Late perennial ryegrass - tetraploid

Found in Cut & Graze, Adapt, Supreme, Barmix

## Bannfoot

Hybrid ryegrass variety, Bannfoot has been proven to show increased performance and has been bred for use in specific situations as part of high-performing cutting and grazing mixtures. Bannfoot can supply extra yielding capacity especially during the silage cutting season; it combines the useful characteristics of the perennial and Italian ryegrass parents and is especially useful in multi-cut silage and haylage production systems.

- **Heading dates:** REE 31
- **Most suited to:** Medium term for silage
- **Digestibility\*:** 1st cut 71.9D, 2nd cut 73.4D (the highest in the group)
- **Attributes:** Crown Rust resistance of 6.9 | Brown Rust resistance of 8.9 | Mildew resistance of 7.9 | Extended growing season, with growth as low as 6 °c | Average of 269,000 seeds per kilogram
- **Yield\*:** Cutting average up to: 15.52t DM/ha | Grazing up to: 18.18 t DM/ha | Third year yield figure 105%
- **Type:** Hybrid ryegrass – tetraploid

Found in Overseeder



**New for 2021**

**Bred and produced in the UK**



## Breeding grasses of the future



## Galgorm

Galgorm, first listed in 2018, it has remained in top position for total yield in both grazing and silage management ever since. No other intermediate diploid variety on the list produces more ME yield per hectare under grazing management (106% of the mean of all intermediate diploid varieties on the list) and it is very persistent in grazing swards.

- **Heading dates:** REE 36
- **Most suited to:** Early silage and grazing
- **Digestibility\*:** Grazing 78.1D average | Very high yielding 2nd cut 75.4D
- **Attributes:** Under grazing, the highest spring, summer and autumn growth | Crown rust resistance 7.5 | Mildew resistance of 7.4 | Average of 600,000 seeds per kilogram | Excellent winter hardiness and good ground cover
- **Yield\*:** Cutting up to 18.01 t DM/ha in the first year | Grazing up to 17.26 t DM/ha | Highest yielding under early spring grazing 112%. | Highest yielding intermediate diploid on the SRUC GCVG 2020/2021 for both cutting and grazing
- **Type:** Intermediate perennial ryegrass - diploid

Found in Cut & Graze, Adapt, Highlander and Hybrid Cut & Graze

\*figures based on best performance across the UK

# Your Mixture Selector

Our grass seed mixtures have been carefully designed using species and varieties to suit your farm's requirements from livestock to environment. The make-up of each mixture and its subsequent management can have impacts on the environment, longevity, livestock health and levels of production you can achieve.

If you need further help, contact your local Barenbrug supplier, one of our support teams throughout the UK or visit our website for a range of tools to help you get the best from your grassland at [www.barenbrug.co.uk/agriculture](http://www.barenbrug.co.uk/agriculture) for further details.

## How to use this tool

To help ensure you get the best mixture for your enterprise, decide how long the ley will last, either **short** (typically 1-2 years), **medium** (typically 3-5 years), or **long** (typically 5+ years) followed by what it needs to deliver. Mixtures can be identified by what they are suited to; **graze** and **silage**, for all livestock class, **cover crop**, **AD** or listed for the **specific livestock** class they are designed for.

Barenbrug UK is a leading organisation within the Recommended Grass and Clover lists, which are drawn up after rigorous testing for attributes such as yield, persistency, quality and disease resistance. With data coming from Barenbrug UK's own trial site, Cropvale, and evaluated by a panel of experts, these lists can help to decide which variety will suit your requirements. Visit [www.barenbrug.co.uk/rgcl](http://www.barenbrug.co.uk/rgcl) to see the latest lists.

## Long term

### Barmix

Beef and sheep grazing



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Beef, Sheep

### Highlander

Durable upland solution



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Graze, Silage

### Supreme

Intensive grazing and silage



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Graze, Silage

### Cut & Graze

Top quality silage production with grazing



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Graze, Silage

### Adapt

Dual purpose mixture without clover



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Graze

### NutriFibre

Drought prone soil grass solution



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Silage, AD

## Short term

### High D Italian

Highly productive silage and yield



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Silage, AD

### Barbumber

Catch, cover and grazing crop



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Graze, Silage, Cover

### Prota Plus

High protein grass & clover blend



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Graze, Silage, Cover

## Medium term

### Prota Sile

High output, protein grass & clover blend



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Silage

### Hybrid Cut & Graze

Hybrid spring growth blend



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Graze, Silage

### Barmix Renew

Restoring productivity to beef and sheep swards



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Overseeding, Beef, Sheep

### Overseeder

Rapidly restore your grass ley



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Overseeding, Graze, Silage

Dedicated overseeding mixtures

# Barmix

**A highly successful, persistent, drought tolerant, protein rich 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.

## 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. With a lower proportion of ryegrass, this mixture will thrive on more marginal land and under a clover only or under lower fertility conditions and low nitrogen usage.

## When to cut

Produces one or two exceptional silage cuts of extremely nutritious forage. BARMIX can be shut off mid-season after spring grazing for a big bale silage, haylage or hay cut.

## 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 is strongly recommended to tightly graze the sward from late winter. This stops the grass becoming too strong, allowing it to remain highly palatable to grazing animals or giving the best combination of quality and quantity when conserved.

In the bag	Kg	Species	REE
Toddington	2.5	Perennial Ryegrass Late Dip.	49
Gracehill	3	Perennial Ryegrass Late Tetr.	47
Bardoux	2.5	Tall Fescue	22
Barelite	3	Tall Fescue	22
Archibaldi	1	Cocksfoot	15
Comer	1	Timothy	
Prota White	1	White Clover	

Pack size: 14kg



**Low input, high output  
for beef and sheep**

Sowing rate: 14 kg per acre  
Sowing rate seeds: 2814 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >8°C  
Min. cutting/grazing height:  
1500kg DM/ha or ~8 cm

Available without clover



- An innovative mixture developed to offer an alternative option for beef and sheep enterprises looking for low input, high output.
- ARCHIBALDI, BARDOUX and BARELITE are proven in on-farm grazing trials to be highly palatable due to their soft leaves.
- Ryegrasses in the sward are highly productive, contributing to the total performance.
- Tall fescue is a winter-active species, thereby extending the growing season. They add excellent drought tolerance due to their deep rooted, persistent nature but are also more tolerant of waterlogged soils.
- Cocksfoot grows earlier in the spring than other species, delivering that vital early bite for lambing.

# Cut & Graze

## Top quality silage production with grazing

A long-term, persistent, highly flexible mixture with clover blend for nitrogen fixation, increased protein content and persistency.

### 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 graze & cut

Produces highly digestible forage from a late May first cut with the mixture averaging over 70% D value throughout the season ensuring that this mixture is ideal for all enterprises.

This dual-purpose mixture has the ability to be grazed from early spring through to late summer. If it is being used for both cutting and grazing, the mixture will deliver two exceptional silage cuts and summer grazing, making it truly flexible.

## Key benefits

- Balanced for season-long performance with intermediate and late perennial ryegrasses
- White clover for nitrogen fixation and increased protein content
- Season-long performance with GRACEHILL for exceptional early spring growth (122%) and GOSFORD for its late summer growth (119%)
- Maximum production from top yielding variety FINTONA
- Contains only first choice SRUC varieties

In the bag	Kg	Species	REE
Galgorm	3	Perennial Ryegrass Inter Dip	36
Gosford	2	Perennial Ryegrass Inter Dip	42
Fintona	2	Perennial Ryegrass Inter Tetr.	32
Toddington	3.5	Perennial Ryegrass Late Dip.	49
Gracehill	2.5	Perennial Ryegrass Late Tetr.	47
Comer	1	Timothy	53
Prota White	1	White Clover Blend	

Pack Size: 15kg

Sowing rate: 15 kg per acre  
Sowing rate seeds: 2903 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >8°C  
Min. cutting/grazing height:  
1500kg DM/ha or ~8 cm

## Galgorm

Galgorm has remained in top position for total yield in both grazing and silage management, with cutting yields up to 16.52T dry matter per ha



# Highlander

## Durable upland solution

Designed for upland areas and less favoured areas with the inclusion of extra Timothy and strong creeping red fescue to provide a strong sole to the sward. High plant population and use of high ground cover species improves sward density and carrying capacity.

### 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 graze & cut

Provides excellent early spring growth, making it ideal for outdoor lambing or cattle turnout. Excellent early season grazing can be followed by a baled silage or hay crop then autumn grazing or a full season of grazing. Up to two cuts can be achieved after early grazing. When cut, this mixture will produce good, conserved fodder for winter feed.

## Key benefits

- Contains only first choice SRUC varieties
- Outstanding persistency varieties with proven durability and winter hardiness
- White clover blend for nitrogen fixation and increased protein content
- MOYOLA is the highest yielding grazing early diploid variety on the SRUC recommended list (114% of control varieties) coupled with the highest early spring growth (123%) and best quality grazing
- Includes GALGORM with exceptional grazing performance throughout the growing season

In the bag	Kg	Species	REE
Moyola	2	Perennial Ryegrass Early Dip.	25
Galgorm	2	Perennial Ryegrass Inter Dip	36
Seagoe	2	Perennial Ryegrass Inter Tetr.	35
Drumbo	2.75	Perennial Ryegrass Late Dip.	50
Ballintoy	2	Perennial Ryegrass Late Tetr.	46
Comer	1.25	Timothy	53
Dipper	2	Slender Creeping Red	
Prota White	1	White Clover Blend	

Pack Size: 15kg

Sowing rate: 15 kg per acre  
Sowing rate seeds: 3368 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >8°C  
Min. cutting/grazing height:  
1500kg DM/ha or ~8 cm

Available without clover

## Drumbo

A good all round, high-quality and superior sward density ley that is excellent under grazing



# Adapt

## Dual purpose mixture

**A long-term, top class, highly flexible, dual purpose mixture without clover, which produces top quality forage suitable for cutting and grazing.**

This blend of yield and palatability creates a very flexible ley meaning you will get long-term production from this highly persistent ley. The omission of clover allows for cost effective weed control.

### When to sow

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

### When to graze & cut

Produces highly digestible forage from a late May first cut with the mixture averaging over 70% D value throughout the season ensuring that this mixture is ideal for all enterprises.

This mixture can be grazed from early spring through to late summer. If it is being used for both cutting and grazing, the mixture will deliver two exceptional silage cuts and summer grazing, making it truly flexible.

In the bag	Kg	Species	REE
Galgorm	4	Perennial Ryegrass Inter Dip	36
Gosford	2	Perennial Ryegrass Inter Dip.	42
Fintona	2	Perennial Ryegrass Inter Tetr.	32
Toddington	3.5	Perennial Ryegrass Late Dip.	49
Gracehill	2.5	Perennial Ryegrass Late Tetr.	47
Comer	1	Timothy	53

Pack Size: 15kg

## Key benefits

- Designed to perform especially well in early summer with over 10% more yield than SRUC control varieties during the season
- Balanced for season-long performance with intermediate and late perennial ryegrasses
- Maximum production by using the top yielding varieties including FINTONA & GALGORM, both top of their classes for yield
- Timothy is beneficial where increased ground cover is needed and where overwinter grazing occurs
- Contains only first choice SRUC varieties

Sowing rate: 15 kg per acre  
Sowing rate seeds: 2604 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >8°C  
Min. cutting/grazing height: 1500kg DM/ha or ~8 cm



# Supreme

## Intensive grazing and silage

**SUPREME is a dense, productive, long-term, intensive grazing mixture, designed to give the option of taking later cuts of top-quality silage. Intensive production from a highly palatable, very digestible ley that will give maximum dry matter intake**

### When to sow

Sow when soil temperature is above 8°C; clover will germinate at 10°C.

### When to graze & cut

The mixture has been designed to match traditional cattle turnout times and provide season-long grazing from a mid spring turnout. The later maturing crop will also match well with environmental schemes stipulating silage cannot be made before July.

## Key benefits

- Contains Timothy and a higher diploid ryegrass percentage for ground cover and persistence
- Delivers a long grazing season which matches demand from turnout to late autumn
- Tight persistent sward which is highly resistant to poaching with DRUMBO rated A for ground cover
- White clover blend for nitrogen fixation and increased protein content
- Contains only first choice SRUC varieties

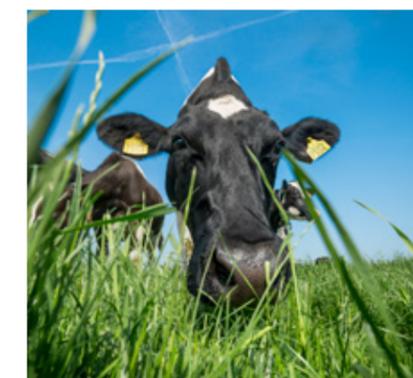
In the bag	Kg	Species	REE
Toddington	4	Perennial Ryegrass Late Dip.	49
Drumbo	6	Perennial Ryegrass Late Dip.	49
Gracehill	3	Perennial Ryegrass Late Tetr.	47
Comer	1	Timothy	53
Prota White	1	White Clover Blend	

Pack Size: 15kg per acre

## Drumbo

A good all round, high-quality and superior sward density ley that is excellent under grazing

Sowing rate: 15 kg per acre  
Sowing rate seeds: 2979 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >8°C  
Min. cutting/grazing height: 1500kg DM/ha or ~8 cm





# NutriFibre

The foundation of NutriFibre is the Soft-leaf tall fescue, a development stemming from the Royal Barenbrug Group's international breeding programme. NutriFibre technology combines mineral efficiency, high protein production, digestibility, effective fibre-rich cell walls and drought tolerance from the deep rooting ability of the Soft-leaf tall fescue.

NutriFibre is the perfect solution for grass production on dry land and drought prone soils.

- Up to 30% more yield
- Massive forage, energy & protein
- Drought tolerant
- Nutrient efficient
- Rich, effective fibre
- Excellent AD crop

## The technology

The Soft-leaf tall fescue grass with a strong, impressive root system and nutritious, protein rich leaves offers larger advantages over grasses traditionally grown by dairy farmers. The Soft-leaf tall fescue in NutriFibre is tolerant to long periods of drought as the grass is able to absorb water from deeper layers in the soil.

In the coming decades the probability of dry, hot summers will increase and NutriFibre is designed to meet these demands by being highly tolerant to these periods of drought thanks to its deep rooting ability. It is ideal for dry, light land and drought prone soils as its roots can reach depths of more than 100cm allowing it to reach deep layers of soil storing water, even absorbing the most water from its roots that are 20-30cm in depth compared to perennial ryegrass at only 10cm. (Figure 1).

## Key benefits

- High-yielding and rich in protein
- Drought tolerant from deep roots
- Nutrient efficient grass from mineral use deep in the soil
- Effective fibre giving optimal roughage in the diet
- Better capacity to survive periods of wet weather, limiting damage to the grass
- High digestibility from Hemicellulose cell structure

## When to sow

The soil temperature should be above 8°C at the time of sowing; it is advisable to sow NutriFibre between March 1st and September 15th.

After sowing, NutriFibre puts a lot of energy into the development below the ground, within its root system, resulting in a slower visible start than other grasses. After developing a solid underground system, the grass yield is higher due to the extra root structure.

## When to cut

Cutting times are flexible because the quality of the feed value of NutriFibre decreases more slowly when the crop matures than with perennial ryegrass or festulolium. This makes farmers less dependent on the weather, providing a better guarantee for making successful silage.



Sowing rate: 14 kg per acre  
 Sowing rate seeds: 1860 per m<sup>2</sup>  
 Sowing depth: up to 10mm  
 Soil temperature: >8°C  
 Min. cutting/grazing height:  
 1500kg DM/ha or ~8 cm

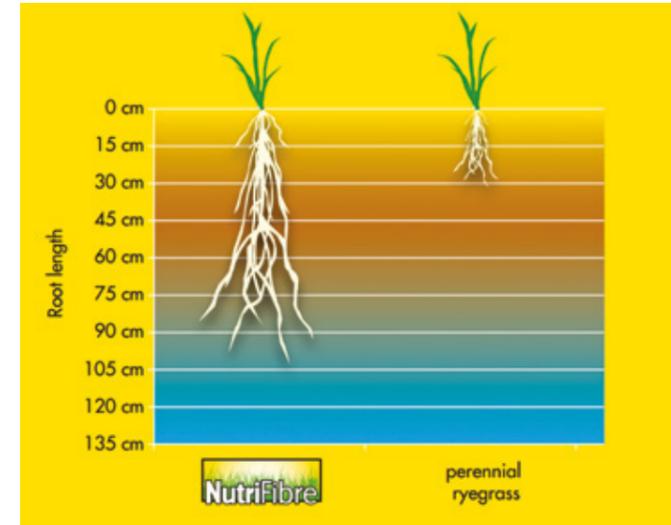
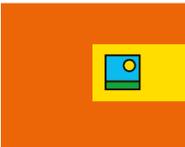


Figure 1. Difference in root length between NutriFibre and perennial ryegrass.

In the bag	Kg	Species	Heading date
Seagoe	6	Perennial Ryegrass Inter Tetr.	22 May
Bardoux	3	Tall Fescue	12 May
Barelite	5	Tall Fescue	12 May

Pack Size: 14kg





# NutriFibre Technology

## Excess rainfall resistant

During extremely wet periods, NutriFibre's long roots have a draining effect, allowing for excellent drainage of fields planted with NutriFibre so the grass stays in a better condition.

## Efficient nutrient utilisation

NutriFibre's deep roots make efficient use of nutrients available in deeper soil layers and can help reduce leaching through optimal fertiliser utilisation deep in the soil layers. Its long roots allow the crop to intake 15% more nutrients and convert this into extra growth.

Research in Europe demonstrates that NutriFibre produces more high-protein grass per hectare than other grasses, with the same nitrogen input. NutriFibre enables you to economise on the purchase of nitrogen or high-protein feed or concentrates after sowing. (Figure 2).

Fertiliser N/ha	200kg	400kg
Dry matter yield tonne/ha		
Perennial Ryegrass	10.3	12.2
NutriFibre	13.8	14.3

Figure 2. Difference in dry matter yield

## Effective fibre

NutriFibre stimulates rumination activity in cows, which is indispensable to healthy rumen activity, and healthy cows produce more milk. NutriFibre's effective fibre is in its leaves, therefore it does not depend on flowering for high fibre content and can be harvested before flowering.

## High digestibility

The structure of the soft leaf tall fescue grass in NutriFibre means cows get a large part of the energy from the cell walls itself, making NutriFibre more easily digestible than other grasses. Joint research with a global leader in animal nutrition, Nutreco and Barenbrug, showed that with NutriFibre rumination increases, compared to varieties of grass low in cell walls such as Italian and perennial ryegrass. (Figure 3).

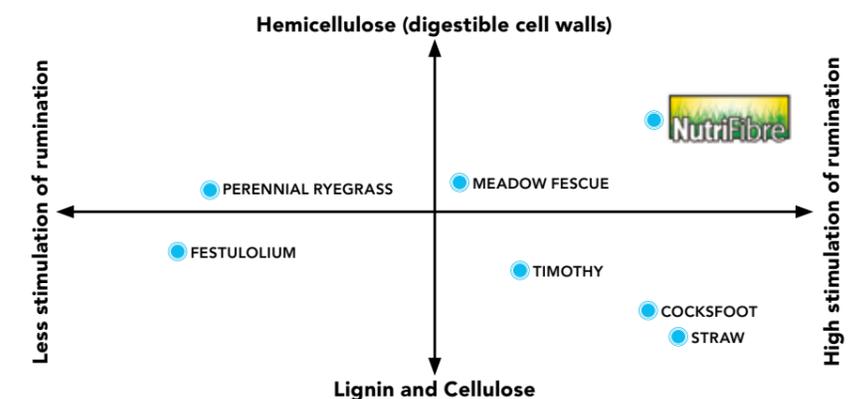
The grass in NutriFibre has cell walls that consist mostly of **hemicellulose**, the most effective grass cell wall; this explains the high feed value and high digestibility in combination with effective fibre. Other 'effective fibre' products have a lower digestible hemicellulose rate, causing a large part of the feed to fail to convert into milk.

Grass cell wall structure is built from three different components:

- **Lignin**, which is indigestible and without feed value
- **Cellulose**, of which dairy cows only digest one-third
- **Hemicellulose**, which breaks down in eight hours, enabling cows to digest it completely

Figure 3.

Difference between digestibility of cell walls and stimulation of rumen activity



# Prota Sile

## High output, protein grass & clover silage

An excellent low input, high output and high protein grass and clover cutting ley for three to four years, with the option to graze.

An intensive cutting mix that will produce up to four prolific cuts of leafy, high protein forage per year, with the option to graze cattle or finish lambs (although it's not advisable for breeding sheep due to phytoestrogen production). Animals fed on red clover/grass silage will eat more and perform better than those fed on grass silage alone due to increased intakes and protein levels.

### When to sow

PROTA SILE will grow at soil temperatures of down to 5°C, enabling the growing season to be extended. Clover will germinate at 10°C.

### When to utilise

Three cuts of high protein forage can be taken from this highly productive mixture. Both grass and clover heading dates have been matched to ensure a consistent, quality crop of silage.

Post-cutting grazing is ideal for finishing lambs or grazing young cattle. Breeding sheep should avoid all red clover sources for six weeks pre-tupping until six weeks after tupping as phytoestrogens can affect the breeding cycle and conception rates.

### Cover Crop

An ideal cover crop for arable rotations, helping to improve soil quality, organic matter and provide other benefits. Cover crops can bring agronomic and environmental benefits with the active growth, rooting, ground cover and habitat provision providing benefits in rotations over a bare fallow and helping to reduce nutrient losses via run-off and leaching. Cover crops can also benefit soil physical and biological characteristics, leading to benefits in soil structure, potentially reducing erosion.

In the bag	Kg	Species	REE
Barclamp	2	Hybrid Ryegrass Dip	39
Kirial	4.75	Hybrid Ryegrass Tetr.	34
Fintona	4	Perennial Ryegrass Inter Tetr.	32
Prota Red	3	Red Clover Blend	
Barblanca	0.25	White Clover Large Leaved	

Pack Size: 14kg

## Key benefits

- Combining the yield of the grasses with the additional protein from the clover blend
- Contains BARCLAMP, with good persistency, excellent early spring growth of 112%, exceptional ground cover and the latest Heading Hybrid variety on SRUC Recommended List
- 'Fixes' up to 200kg/Ha of nitrogen meaning it grows with no applications of bagged nitrogen
- Trials have shown a 3% improvement in kill out percentage for lambs finished on red clover
- The high clover content will benefit from a pH of 6 or more and close attention to P and K levels

Sowing rate: 14 kg per acre  
Sowing rate seeds: 1381 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >5°C  
Min. cutting/grazing height: 8cm post cutting or 6cm post grazing. Red clover should be overwintered between 4-6cm



# Hybrid Cut & Graze

## Designed to give excellent forage cuts with the option to graze

An excellent cutting and grazing ley using the most persistent hybrid varieties for up to five years' production. Designed to provide excellent spring growth, enabling an early first cut or early grazing. Great for medium-term rotations and mixed livestock units.

### When to sow

Sow when soil temperature is above 6°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 graze & cut

Produces highly digestible forage from a mid-to-late May first cut with the mixture averaging over 70% D value throughout the season. Can produce three-four cuts a season for up to five years.

This top-quality dual purpose mixture has the ability to be grazed from early spring through to late autumn. Hybrid ryegrasses grow at 6°C, therefore extend the growing season. This makes HYBRID CUT & GRAZE a very flexible mixture for mixed enterprises who need cutting and grazing opportunities

## Key benefits

- Contains BARCLAMP diploid hybrid ryegrass for improved ground cover
- The high proportion of tetraploid varieties ensures better drought resistance and higher water soluble carbohydrate content
- Close heading date pattern to ensure uniform crop quality
- SEAGOE is a top yielding variety with a 1st cut of 110% and a total silage yield of 107%
- Contains only first choice SRUC varieties

In the bag	Kg	Species	REE
Barclamp	6.5	Hybrid Ryegrass Dip.	39
Galgorm	2	Perennial Ryegrass Inter Dip	36
Seagoe	5	Perennial Ryegrass Inter Tetr.	35
Alice	0.5	White Clover Large Leaved	

Pack Size: 14kg

Sowing rate: 14 kg per acre  
Sowing rate seeds: 1418 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >6°C  
Min. cutting/grazing height: 1500kg DM/ha or ~8 cm

Available without clover

## Galgorm

Galgorm has remained in top position for total yield in both grazing and silage management, with cutting yields up to 16.52T dry matter per ha



# Barmix Renew

## Restoring productivity to beef and sheep swards

A highly palatable, multispecies option for restoring productivity to upland, lower input beef and sheep swards and for more challenging soil types.

### When to sow

Sow when soil temperature is above 8°C; clover will germinate at 10°C.

### When to graze & cut

The mixture has been designed to provide season-long production, with exceptional early spring growth, making it ideal for outdoor lambing or early cattle turnout. It will also provide good late season growth.

Once established, the sward should be tightly grazed in spring followed by either a full season of grazing, or one, possibly two, cuts of baled silage, haylage or hay.

## Key benefits

- Increases the proportion of productive species in the sward
- Improves the quality of the grass for better animal performance
- Increases or replaces the white clover content of the sward
- Tolerant of more challenging soil types
- Repairs the damage caused by poaching of grazing swards
- Designed to work best with specialist overseeding techniques
- Includes varieties which are aggressive enough to establish in an existing sward, yet easy to manage, providing they are tightly grazed in spring

Sowing rate: 10 kg per acre  
Sowing rate seeds: 2604 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >8°C  
Min. cutting/grazing height: 1500kg DM/ha or ~8 cm

BARMIX RENEW is a multispecies overseeding mixture for beef and sheep production in lower fertility areas

In the bag	Kg	Species	REE
Seagoe	6	Perennial Ryegrass Inter Tetr.	35
Dundrum	10	Perennial Ryegrass Late Tetr.	48
Comer	2	Timothy	53
Archibaldi	1	Cocksfoot	15
Prota White	1	White Clover	

Pack Size: 20kg



# OverSeeder

## Restores productivity to a long-term ley

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

### When to sow

Sow when soil temperature is above 6°C but preferably over 8°C.

### When to graze & cut

OVERSEEDER is 100% ryegrass mixture for use with specialist overseeding techniques in areas of high fertility. OVERSEEDER is flexible and can be used on fields for cutting or grazing or a mixture of both and it is suitable for any class of livestock.

## Key benefits

- 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
- New variety BANNFOOT produces improved yields with high D value along with excellent persistency. It also has a good all-round disease profile
- FINTONA is the highest yielding perennial ryegrass ever listed in the UK with unrivalled spring grazing yields and impressive sward density for the type
- Includes varieties which are aggressive enough to establish in an existing sward, yet easy to manage

Sowing rate: 10 kg per acre  
Sowing rate seeds: 664 per m<sup>2</sup>  
Sowing depth: up to 10mm  
Soil temperature: >6°C  
Min. cutting/grazing height: 1500kg DM/ha or ~8 cm

Available with clover

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

Read our Overseeding technical guide on page 53 for our top tips

In the bag	Kg	Species	REE
Bannfoot	6	Hybrid Ryegrass Tetr.	31
Fintona	7	Perennial Ryegrass Inter Tetr.	32
Youpi	7	Perennial Ryegrass Late Tetr.	52

Pack Size: 20kg



# High D Italian

A highly productive Italian ley, which will give exceptional crops for silage.

HIGH D is ideal for growers who want to produce the maximum amount of stored forage possible from their own land. It grows for longer in the season and 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.

## When to sow

Grows at temperatures as low as 4°C so the farm must be able to make use of this early growth.

## When to cut & graze

Depending on how it is managed High D Italian can be ready for a first cut at the end of April / early May. If grazed hard over winter and early spring this can be set back to mid May. It will produce 70+ D value silage, if cut at the optimum growth stage for quality (25% ear emergence). The ultimate silage mixture which will yield up to 20t DM/ha in its first year under high input management. For maximum production up to six cuts a year under high N systems. Early grazing for turnout of ewes and lambs or finishing long keep store lambs.

## AD

Grass crops can be grown specifically for biogas production in anaerobic digestion (AD), for stabilising or supplementing other feed stocks such as low yielding slurries or variable quality food waste. Grass crops can be incorporated effectively into existing crop rotations and won't impact on food production as they can be grown on lower fertility soils and on land which is not suitable for the production of food crops.

- Grass Silage yields 160-200 M<sup>3</sup>/tonne of biogas at 28% DM
- Enables efficient utilisation of digestate
- Lower environmental impact
- Ability to sequester carbon into the root matrix
- Improves soil health and structure
- Reduced soil erosion and nutrient leaching
- Lower production costs



**A highly productive short-term Italian ley**

Sowing rate: 14 kg per acre  
 Sowing rate seeds: 1242 per m<sup>2</sup>  
 Sowing depth: up to 10mm  
 Soil temperature: >4°C  
 Min. cutting/grazing height: 1500kg DM/ha or ~8 cm

- HIGH D is a better option than sowing a single Italian ryegrass variety.
- It will provide massive amounts of clean, quality forage throughout the year without any loss of production mid-season.
- HIGH D grows down to 4°C soil temperature extending the growing season for store lambs or wintering sheep.
- Responds very positively to high levels of fertility and will produce 20% more yield than perennial ryegrass leys.

In the bag	Kg	Species	REE
Javorio	7	Italian Ryegrass Dip.	36
Gemini	7	Italian Ryegrass Tetr.	30

Pack Size: 14kg

# Prota Plus

## Grass & clover rich protein blend

**PROTA PLUS is an exceptionally versatile mixture of clover and grass, which can provide a number of benefits. It is an ideal break crop in any arable rotation or an exciting alternative to brassicas in livestock systems.**

### How it works

- BARMULTRA II provides high yields of high quality grass into the second year
- CONTEA Crimson clover is an erect type single-cut annual clover, which will grow from seed to flowering in around 120 days. It should be cut before flowering for maximum quality
- LIGHTENING Persian clover is a more prostrate type multi-cut annual species

### Animal benefits

- Suitable for any livestock class including breeding sheep
- High yields of high protein (20%), high ME (12-14MJ) silage achievable
- Very long growing season
- Can shorten finishing period and lower winter feeding requirements compared to grass only

### Environmental benefits

- Requires no Nitrogen applications in the first year
- Can leave up to 50kg N/ha in the soil for subsequent crops
- Attractive to bees and other insects
- Cleaner ground conditions than traditional brassica feeding systems and no bare soil over winter
- Aggressive root system can improve soil structure and contribute to soil organic matter

In the bag	Kg	Species	REE
Barmultra II	6	Italian Ryegrass Tetr.	30
Contea	4.5	Crimson Clover	
Lightening	1.5	Persian Clover	

Pack Size: 12kg per acre

### Cover Crop

An ideal cover crop for arable rotations, helping to improve soil health, structure, fertility and organic matter, resulting in improved yields and financial savings as well as providing other benefits. Cover crops can bring agronomic and environmental benefits with the active growth, deep rooting, ground cover and habitat provision providing benefits in rotations over a bare fallow and helping to reduce nutrient losses via run-off and leaching and soil erosion.

### Utilisation

Graze, cut or both with a minimum height: 8cm post cutting or 6cm post grazing

### Sowing Period

Spring, soil  $\geq 10^{\circ}\text{C}$

### Utilisation Period

Up to 18 months after sowing



# Barbumper

## Forage booster & ideal cover crop solution

**BARBUMPER establishes quickly to provide a catch and cover crop with rapid growth, even at cool temperatures, offering production early spring and late into autumn, delivering extra grazing opportunities over winter.**

### When to sow

It gives total flexibility for up to 18 months production potential that can fit into different regimes, where extra forage is required immediately and could also be established after a spring cereal harvest, or where an autumn crop has been prevented from being planted giving a short term opportunity to bring rotations back into sync.

This specialist ryegrass mix will produce up to 30% more forage than a newly sown perennial ryegrass ley and is designed to give maximum bulk, instantly producing leafy quality forage from now all the way through to next winter.

BARBUMPER has been developed using the concept of 'germination energy'. It can grow in down to  $3^{\circ}\text{C}$  soil temperature and will utilise the nutrients that are available in the soil even after a dry summer. It has the ability to make use of existing nutrients in the soil after the previous crop soaking up N, thus decreasing winter leaching.

### When to utilise

BARBUMPER is equally at home being used as a winter grazing mixture, 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 perennial ryegrass.

In the bag	Kg	Species	REE
Barmultra II	12.5	Italian Ryegrass Tetr.	30
Barspectra II	12.5	Westerwold	

Pack Size: 25kg

## Key benefits

- 20% faster establishing than the average ryegrass
- Can assist with prevention of winter soil erosion
- Strong autumn-winter-spring growth
- High quality, high quantity forage production from 2-18 months
- Adds organic matter to the soil improving its quality, structure and nutrient holding capacity
- Delivers up to 30% more yield in the first year compared to a perennial ryegrass ley

### Cover Crop

Helps to improve soil quality, organic matter and provides other benefits through active growth, rooting, ground cover and habitat provision for arable rotations over bare fallow, reducing nutrient losses via run-off and leaching.

Sowing rate: 12-15 kg per acre  
Sowing rate seeds: 840 per  $\text{m}^2$   
Sowing depth: up to 10mm  
Soil temperature:  $>3^{\circ}\text{C}$   
Min. cutting/grazing height: 1500kg DM/ha or ~8 cm





# Specialist mixtures from Barenbrug UK



## Nutrifibre

*Silage grass for dry and drought prone soils*

NutriFibre includes the latest grass technology for silage production. The foundation of NutriFibre is the deep rooting soft-leaf tall fescue, an innovation hailing from the Royal Barenbrug Group's international breeding programme 'Grass for highly productive dairy cattle'.



### Specifications

- High-yielding
- Drought tolerance
- Nutrient efficient
- Effective fibre-rich cell walls
- High protein leaves
- Mineral efficiency
- Digestible
- Strong, deep rooting intensity

Silage

**For full details visit page 18**

## OverSeeder

*Restore your grazing grassland productivity*

Bring your under performing cutting and grazing leys back to maximum productivity. Ideal for farmers who need to improve grassland performance to help boost yields.



### Specifications

- 100% ryegrass blend
- Increase productive ryegrass in current sward
- Improves the Nitrogen efficiency of the sward
- Repairs the damage caused by poaching of grazing swards

Repair

**For full details visit page 25**



## Brassica & Forage

Brassica forage crops are a valuable tool for meeting the changing feed and energy requirements throughout the year to supplement a grass diet.

Feed supply and stock performance can be manipulated through the use of different brassica crops. 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 brassicas, legumes and forage crops

- Strategic crop in pasture renovation – makes reseeded easier i.e. less weed pressures
- 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%
- Use of legumes reduces requirement for artificial nitrogen
- Use of deep-rooted species stabilises light soils helping to reduce erosion and run-off as well as providing drought tolerant solutions for lower rainfall areas.
- Improved soil quality for water and nutrient retention/flow
- Increase of trace element diversity in the diet

### Reasons to invest

Whatever the size of your enterprise, maximising home-grown feed provides major health benefits for animals. As well as improvements in live weight gains, home-grown feed can have a positive impact on farm finances. It can also be beneficial to the environment and for arable rotations.

Brassica forage crops are grown widely throughout the UK both as a supplement and as an alternative to pastures in animal production systems. Brassicas are important because they can produce high yields of high-quality forage that can be fed on farm from early summer through to late winter. As well as being a feed substitute to pasture, brassicas can act as a break crop during pasture renewal. They can help with weed, pest and disease reduction and create better soil conditions and cleaner seedbeds for establishing new pastures.

#### Which crops to sow?

Picking the right forage crop can feel confusing. Where do you start? Here are some key considerations to bear in mind:

- Maturity date – How long do you have to the first grazing?
- Identify feed deficit and when feed is required and select options based on the appropriate maturity date
- Do you need a single grazed option? Perhaps bulk feed over a short period (e.g. turnips)
- Would a multi-grazed later maturing option work (e.g. forage rape) i.e. a crop that is planted in late summer or autumn for winter feed later than turnips.
- Could a high yielding, single grazed winter crop (e.g. kale) be useful?

As with most things, planning is the key to success. A simple planning checklist will help you achieve your goals and can be kept simple.

Getting the correct crop for the right livestock class is also important and should play a big part in your decision making.

Sowing & Utilisation Guide	January	February	March	April	May	June	July	August	September	October	November	December
STUBBLE	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				

For further help and advice, discover our Forage Crops Guide online at [www.barenbrug.co.uk/forage](http://www.barenbrug.co.uk/forage)

# Brassicas

## Stubble Turnip

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



Samson



### 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

### Expert advice

Plant two-thirds of the cropable area in this early maturing SAMSON stubble turnip and one-third with a late maturing variety, such as BARCOLI forage rape, 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 - 3kg/acre (7.5kg/ha) for high leaf percentage | Autumn - 2kg/acre (5kg/ha) for larger bulb percentage. **Pack sizes:** 5kg or 25kg

- Sow spring & autumn
- 60-90 days to maturity
- Graze in situ
- Utilise summer & winter



## Forage Rape

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

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



Barcoli



### 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

### Expert advice

Plant two-thirds of the cropable area in early maturing SAMSON stubble turnip and one-third in this late maturing variety BARCOLI forage rape, 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:** 10kg or 25kg

- Sow spring & early summer
- 90-110 days to maturity
- Graze in situ
- Utilise autumn & winter

## Kale

### Caledonian, Keeper & Pinfold

A well-proven, highly adaptable fodder crop which consistently provides very high yields of succulent green fodder. Three varieties are available. High-yielding giant type kale with potential yield of 18,000kg DM/ha



### Caledonian

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

### Keeper

A medium height kale with excellent leaf to stem ratio (greater than 50% leaf). Suitable for sheep and cattle grazing.

### Pinfold

A medium height, leafy, fast growing kale for autumn or winter use. Suitable for sheep and cattle.

### Advantages

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

**Sowing rate:** Drilled: 1-2kg/acre (2.5-5kg/ha) Broadcast: 3kg/acre (7.5kg/ha). **Pack sizes:** 5kg or 25kg (untreated), 2kg (treated)

- Sow spring & early summer
- 170-220 days to maturity
- Zero & graze in situ
- Utilise autumn & winter

# Legumes

## Lucerne

### Artémis

A highly nutritious forage for livestock, combining good digestibility with high protein, providing excellent milk yields and daily live weight gains.

Well managed, this perennial crop can persist for up to 5 years and performs well in free draining, drier environments due to tap roots.



#### Advantages

- Dual purpose
- A more mature hay crop is suitable for feeding young stock
- >300 - 500 g/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

#### Expert advice

Lucerne is one of the most underrated and underutilised forage crops available to livestock farmers in the UK. To get the best from your Lucerne crop ensure a minimum 50% of the tallest stems have a flower prior to the first grazing/cutting. If the stand is weedy at establishment it should be grazed/cut once if it is 15-20cm tall and then left to flower to a minimum of 50%

**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 size:** 25kg



Sow spring



40 days to maturity



Grazing/Silage



Utilise year-round

## Vetch

### Barvicos

Delivers rapid soil coverage, highly productive and rich in protein.

With vigorous growth, this vetch is winter-hardy and will establish and grow well on most soil types, helping to soak up nutrients and hold in the soil for use by spring cropping or reseedling.



#### Advantages

- Deep rooting and improves soil structure
- Rapid soil coverage
- Highly productive and protein rich forage variety
- Can be sown either as monoculture or as part of mixtures with other species, such as clovers and annual grasses
- Good resistance to colder temperatures
- Good resistance against diseases

#### Expert advice

BARVICOS fixes large amounts of nitrogen and it can be used for green manuring and annual forage production either alone or in a mixture with grasses. It can be typically used 70-100 days after sowing, when 30-50% of the plants have flowered.

**Sowing rate:** Sown on own: 16-20kg/acre (40-50kg/ha)  
Companion plant: 8-10kg/acre. It is recommended to sow a vetch at a depth of 2-3cm **Pack size:** 25kg



Sow spring & autumn



70-100 days to maturity



Cut, Silage, Cover



Utilise summer & winter

# Clover Blends

## Benefits of including clover

**Clover offers remarkable environmental and sustainability benefits as well as a highly productive, nutrient and protein rich forage for livestock.**

In recent years, the price of farming inputs have fluctuated drastically. The inclusion of a high clover ley can provide a range of benefits enabling farmers to become more resilient; reducing the cost of production and replacing some purchased feed in favour of a home grown source of protein while maintaining a higher quality pasture under lower Nitrogen fertiliser usage.

Clovers can serve as feed for all livestock classes although care should be taken with red clover and breeding sheep. Generally, white clovers make for better grazing and thrive mid-season when companion grasses are not at their optimum, improving overall digestibility and protein levels of the sward. Red clovers are best suited to silage or growing youngstock.

Clovers also offer huge **environmental benefits**. They fix nitrogen in the soil, help to maintain soil moisture, suppress certain weeds, create stable organic compounds that nourish surrounding plants and enhance the levels of minerals including calcium, magnesium, cobalt and selenium in the sward. Many clover species thrive in a variety of soils and climates and can withstand winter conditions. Some grow quickly, making them an ideal catch crop. When sown at an appropriate ratio with grass, dependant on the species, clovers can reduce or even eliminate the need for nitrogen fertiliser. Pollinators and other insects benefit from a clover ley, supplying food, water and shelter as well as nourishing earthworms, important stewards of soil health.

### Expert advice

Red clover is high in phytoestrogen and all breeding sheep should be kept off for six weeks either side of tugging. Store lambs can be fattened very effectively on red clover silage aftermaths. Always maintain a soil pH of at least 6.0 and P & K indices of 2 for optimal clover content and health.

## Key benefits

- Higher quality pasture under low fertiliser
- Improves digestibility
- Fix up to 200kg N/ha/year
- White clover offers a mid-season high protein sward
- Improves grass health and resilience against disease
- Increased intakes resulting in higher milk yields and daily liveweight gain.
- Reduce bought in nitrogen and leave residual nitrogen for a subsequent crop
- Improved soil health
- Promotes pollinators and insects

Always maintain a soil pH of at least 6.0 and P & K indices of 2 for optimal clover content and health.

**The Barenbrug UK clover blends are now known as Protas**

## Protas Plus

An exceptionally versatile mixture which can provide a number of benefits. It is an ideal break crop in any rotation or an exciting alternative to brassicas in livestock systems.



## Protas Sile

Low input, high output, high protein cutting ley. An intensive cutting mix that will produce up to four prolific cuts of leafy, high protein forage per year, with the option to graze cattle or finish lambs.



For full details about these unique protein rich mixtures visit pages 22 & 28.

## Protas White

**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.**



- Exceptionally long growing season
- Fixes free nitrogen from the atmosphere, up to 150kg N/ha
- By using a blend of different varieties there is something best suited to whatever the management being applied to the sward
- Animals prefer to graze a clover / grass sward, resulting in higher voluntary intakes and better animal performance

Pack sizes: 5kg or 25kg | Sowing rate: 1kg per acre

## Protas Red

**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.**



- Suited to silage production because of a more erect growth habit
- Potential nitrogen fixation for red clover up to 200kg N/ha
- Red clover silage has a high crude protein content of 16% to 20% and a ME content of 10 to 12MJ/kg DM
- Has a long taproot to draw nutrients and minerals from deep in soil
- Low levels of structural carbohydrate in the leaf result in higher intakes, better feed conversion and therefore improved animal performance

Pack sizes: 5kg or 25kg | Sowing rate: 2.5kg per acre

## Protas Duet

**A unique mixture of red and white clovers, developed to meet the need for rapid nitrogen fixation to feed new leys. The red clovers establish faster than white and are able to make nitrogen available to the ley as the white clover establishes which brings additional benefits.**



- Increased yield of 5% in the first year after sowing, worth around £100.00 per hectare (£40.00/acre)
- Second harvest year yield increase, 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%

Pack sizes: 5kg or 25kg | Sowing rate: 2.5kg per acre

# Herbal Leys

## Benefits of including herb blends

The Barenbrug range of herb and clover leys are designed to bring a range of benefits to livestock health, soil health and soil fertility.

The inclusion of herbs like plantain and chicory provide minerals in the sward, helping to improve liveweight gains and increase milk production as well as improve soil health by feeding microbes and helping to build soil fertility through the conversion of soil nitrogen thus reducing the need for artificial fertiliser. Our 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, environmental benefits and will help to reduce the worm burden in livestock due to their anthelmintic properties.

As well as breeding and trialling grass varieties, we create and trial biodiversity mixtures at our trial site, Cropvale, looking to find the next generation of 'herbal ley'.

The aim of our biodiversity trials is to create mixtures suitable for a wide range of farms throughout the UK. With optimum blends of legumes, herbs and grasses, that will produce large volumes of high quality forage for livestock farmers to increase meat and milk yields, and enhance farm biodiversity.

Including legumes in a biodiversity blend is one way to achieve this. Legumes have great nitrogen (N) fixing potential, which means less artificial nitrogen needs to be added to the soil to grow the crops. Deep-rooted species are also employed to improve soil structure while flowering species are utilised to help pollinating insects do their job. Due to the nature of the species involved, weed control in our biodiversity trials is very limited so we score the plots for their natural weed suppression abilities, which will add to the persistency and quality of a mixture in the field. The following are our top performing herbal ley mixtures.

## Key benefits

- Nitrogen fixing potential
- Anthelmintic properties of chicory can reduce the need for anthelmintics in lambs improving liveweight gains and reducing finishing time
- Use of deep-rooted species stabilises light soils helping to reduce erosion and run-off as well as providing drought tolerant solutions for lower rainfall areas.
- Improved soil quality for water and nutrient retention/flow
- Increase of trace element diversity in the diet
- Increased species diversity provides habitat/food sources for more varied insect life

## Blends to boost biodiversity



## Bar GS4

A true multispecies legume, grass, wildflower and herb rich sward for increased biodiversity.

This vigorous sward, with abundant legumes and herbs, will provide habitat and food for a huge variety of insects and wildlife need for your farm to thrive and improve soil structure and water infiltration. It is also suitable for productive cattle and sheep.

- This diverse mixture has been proven to provide a hardy, long grazing season for livestock with the multi legume species to fix nutrients and sustain year-long production.
- Including flowering species, this mixture provided vital beneficial pollinators feed and shelter.
- Deep penetrating roots will improve soil structure and have the ability to make the best use of the available soil nutrients, moisture and minerals.



In the bag	Species	Kg
Glasker	Perennial Ryegrass Early Dip.	1.75
Callan	Perennial Ryegrass Late Dip.	1.75
Comer	Timothy	0.50
Motim	Timothy	0.50
Barelite	Tall Fescue	2.00
Cosmonaut	Meadow Fescue	1.00
Dascada	Cocksfoot	1.50
Alice	White Clover Large Leaved	0.25
Crusader	White Clover Medium Leaf	0.25
Discovery	Red Clover Late	1.50
Sainfoin	Legume	0.10
Birdsfoot Trefoil	Legume	0.10
Barvicos	Legume	0.80
Commander	Chicory	0.15
Tonic	Plantain	0.15
Yarrow	Herb	0.05
Sheeps Parsley	Herb	0.05
Burnet Salad	Herb	0.10

Sowing rate: 12.5kg per acre | Pack Size 12.5 kg

## Bar Finisher

A blend of herb, clover and plantain designed specifically for grazing all classes of livestock and can be used as an addition to grazing swards.

Producing a leafy, high quality feed over spring, summer and autumn when traditional pastures can decrease in quality, BAR FINISHER can be used as a six month or two-year crop depending on the farm system and grazing management approach.

Clover in the mix will provide nitrogen to feed the crop, also filling space not occupied by herbs. The red clover component, alongside the herbs, will provide high quality feed through a dry season, helping to reduce risk in summer dry areas.



### Advantages

- Highly palatable, providing an excellent feed for high live weight gains
- High quality summer feed that recovers quickly after grazing
- High protein option for dairy farmers
- Clover provides fixed nitrogen
- High mineral content, particularly zinc, potassium and copper

In the bag	Kg	Species
Prota Red	3	Red Clover Blend
Prota White	2	White Clover Blend
Tonic	3	Plantain
Commander	2	Chicory

Sowing rate: 5kg per acre | Pack sizes: 10kg

## Grass & Herb Blend

## Bar Herbal

A specialist mixture designed to extend the shoulders of the grazing season whilst enhancing the yield and the quality of the sward.

A mixture containing grass, clover, plantain and chicory. 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 to conventional perennial ryegrass mixtures.

Animals prefer to graze a mixed species sward, resulting in higher voluntary intakes and better animal performance.



### Advantages

- Exceptionally long growing season
- Fixes free nitrogen from the atmosphere, up to 150kg N/ha
- Chicory and Plantain are rich in minerals and trace elements

In the bag	Kg	Species
Glenarm	1.75	Perennial Ryegrass Late Dip.
Gosford	1.75	Perennial Ryegrass Inter Dip.
Seagoe	2	Perennial Ryegrass Inter Tetr.
Drumbo	2	Perennial Ryegrass Late Dip.
Ballintoy	3	Perennial Ryegrass Late Tetr.
Comer	0.5	Timothy
Prota White	1	White Clover Blend
Commander	1	Chicory
Tonic	0.75	Plantain

Sowing rate: 13.75kg per acre | Pack sizes: 13.75kg

## Grass & Herb Blend

## Chicory

A mineral rich herb with long taproot capability, aiding drainage and crop root development, making an ideal cover crop. Commander produces significant yields of high protein forage, especially when mixed with red clover, that lasts more than one year. The potential yield is >300 g/hd/d when rotationally grazed.



### Advantages

- Improved soil health and aid drainage
- Recovers quickly after grazing
- Deep tap root, delivering drought tolerance
- Can be grown alone or with other crop
- Performs better in dry conditions
- High mineral content
- High protein content of 17-18%
- Ideal to fatten lambs
- Tolerant to frost
- Anthelmintic properties useful to ruminant livestock

### Expert advice

- Limited cool season DM production/grazing
- Ideally left in situ for at least two years
- Seed head control
- Needs a nitrogen source; ideally establish with clover blends
- Shallow sown at around 1cm deep

Sowing rate: 3kg/acre (7.5kg/ha) as a straight and with clover | Pack sizes: 5kg or 25kg



Sow spring & summer



Utilisation - eight weeks post-sowing



Graze before crop reaches 20cm. Leave 5cm residual

## Plantain

Used to boost summer milk production and to finish lambs. Historically used in grassland mixtures, Tonic is suited to many soil types and can increase daily intakes during the summer.



## Tonic

### Advantages

- When fresh, feed value is greater than ryegrass/clover
- Tolerates frequent grazing
- High in protein (up to 23%)
- Feed quality (at times) similar to ryegrass
- Potential for pasture species alone!
- Tap rooted herb that withstands drought and higher temperatures in the summer

### Expert advice

- Plantain is not as drought tolerant as chicory or red clover

Sowing rate: 2kg/acre (5kg/ha) in a grassland mixture, 8-10kg/acre (19-24kg/ha) as a special purpose crop |

Pack sizes: 5kg or 25kg



Sow spring & autumn



60-90 days to maturity



Utilise summer & winter



Graze before crop reaches 20cm. Leave 5cm residual



## Environment

British farmers work hard and play a vital role to enhance the British countryside, maintain habitats for native plants and animals, protect watercourses and support wildlife.

As custodians of the land, farmers and land managers aim to protect it for future generations by enhancing the environment, including arable buffer strips, managing grassland and wild bird mixes, which can form a valuable addition to any farming rotation and benefit soil organic matter and blackgrass control. Not only is soil health a big part of farming nowadays, increasing soil biology, improved air, water and soil quality and increased biodiversity are playing a huge role, benefiting both the environment and the farm. With changes in the management of land for the environment stewardship will become ever more important for farmers.

## Ecological Focus Areas (EFAs)

An EFA is an area of land where agricultural practices that are beneficial for the climate and environments are conducted. There are seven different options, all of which aim to improve biodiversity. The most common options are opposite.

You must put 5% of your arable area into at least one EFA if:

- You have more than 15 ha of arable land
- You have less than 75% of total land area in grass or forage
- You have less than 75% of that arable area in grass, forage, fallow or legume then 5% of the arable area must be put into one or more EFA.

Certified or converting organic land is exempt from EFA requirements.

## EFA Fallow Land (EFAFAL)

Supreme is our late heading mixture of grass and clover designed to suit later cutting dates. The later heading dates mean the sward can be higher in quality when the first cut is taken in July. Supreme has a high seeds/m<sup>2</sup> rate for resilience and persistency. White clover feeds the sward whilst no nitrogen fertilisers are permitted.

- This arable land must have no agricultural production or grazing between 15th January and 15th July
- Timothy can add some structure to lift the sward helping with mowing of later crops
- A high diploid ryegrass percentage promotes a very dense sward to prevent weed ingress



## EFA Catch Crop (EFACC) & Margins (EFAM)

Under EFACC, the arable land will be a cereal crop which has been undersown in spring with any recognised grass seed mix. Arable silage is NOT eligible for EFACC. The catch crop can be grazed after the cereals are harvested but must be maintained until 31st December.

- Under EFAM, the arable land must have margins between 1m and 20m wide maintained for a full calendar year. The sward can be grazed or cut after 15th July.
- The ideal short term option is Barbumper; however any grass seed mixtures could be used, see our Mixture Selector Tool on page 10.



## EFA Green Cover (EFAGC)

A short-term crop should be established in the autumn to prevent soil erosion and improve soil structure. The crop should be established by 1st November and maintained until 31st December and should not be harvested or grazed at all but incorporated into the soil following 31st December. A mix of at least two crops from a specified list must be established.

- Sow a mix of Barvicos Vetch with barley or oat seed. Other species can be used alongside cereals; Artemis Lucerne, Prota Red Clover or Prota White Clover (Late season establishments in Scotland are not ideal for these species).
- Legumes could fix nitrogen and leave residuals for the following crop. It has a deep tap root for soil stability and is winter hardy and quick to establish, providing quick soil coverage.



## EFA Nitrogen Fixing Crops (EFANFC)

You must establish at least 2 leguminous species. Mixtures with no leguminous species can be used however the legume content MUST be dominant by weight and crops should not be harvested before 1st August. EFANFC can only account for a maximum of 75% of your EFA requirement.

- The following products are amongst those permissible for this option: Prota White, Prota Red, Prota Duet, Artemis Lucerne, Barvicos Vetch.



# Crops for Farmland Birds

## Brassica Blend

Crops play an important role in biodiversity on the farm, providing cover, habitats and feed for a range of species.

Brassica crops are an important seed food source for a wide range of farmland birds including game birds. The crops can also provide cover for birds and hares and nesting habitats for skylarks and lapwings where it is maintained through the following spring. These crops can become a haven for insects, birds and small mammals alike.

Straights of forage rape such as Barcoli, stubble turnips such as Samson and kale, on pages 34-35, or swedes can be used or, if a mixture is preferred this Barenbrug UK Farmland Bird Mix is an excellent choice.



In the bag	Kg	Species
Barcoli	9	Forage Rape
Samson	0.75	Stubble Turnip
Keeper	2.25	Kale

Sowing rate: 4kg per acre | Pack sizes: 12kg

### Expert Advice

The crops should be established in spring or summer as per the requirements of the species chosen but it must be retained untouched until 1st March in the following year after which date it can be cultivated or grazed.

The information printed is to the best of our knowledge at the time of print. All advice should be taken as general guidance and scheme compliance should always be confirmed with your local agricultural advisor before ordering. We cannot accept any legal liability for the information provided.



# Wildflowers

It is estimated that around 95% of British wildflower meadows were lost after the Second World War but thankfully, we are now seeing increased interest in native wildflowers, thanks in part to environmental stewardship schemes. Establishing flower-rich margins on the edges of fields can be hugely beneficial, helping farmers maintain a healthy ecosystem and attracting insects, which in turn can help to pollinate crops.

With around 1,500 different wildflowers available in the UK, it can be hard for farmers to know which wildflowers to grow. To make it easier, Barenbrug has added 21 wildflower mixtures to the range of seeds it offers.

To demonstrate the value of wildflowers, we have been trialling some of the mixtures at our research and development site, Cropvale, adding colour and interest to the site as well as improving its biodiversity.

If you are interested in adding wildflowers to your margins, August and September are the ideal months to sow seeds. Our range of wildflowers include both annual and perennial mixtures and can be pure wildflower or mixed with grass to satisfy a range of situations and requirements.

Explore all our wildflower ranges online by visiting [www.barenbrug.co.uk/wildflower](http://www.barenbrug.co.uk/wildflower)

### Facts

1,500 different wildflowers in the UK

21 Barenbrug wildflower mixtures

Explore all our Wildflower ranges online by visiting [www.barenbrug.co.uk/wildflower](http://www.barenbrug.co.uk/wildflower)



Wildflower advice

BARENBRUG GRASS EXPERTS SINCE 1904

WILDFLOWERS ADVICE

# Equestrian

## Hunters

Young, well managed grass can provide most of a horse's feed requirement and the Barenbrug mixtures are designed especially for horses.

### 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, reducing the risk of laminitis
- Produces a good, spring, dense turf
- Strong grass plant rooting system, making the sward dense, hard wearing and persistent
- Yields good levels of effective roughage, ideal for a fit and healthy equine gut

### 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

## General Purpose

In the bag	
70%	Perennial Ryegrass
16%	Strong Creeping Red Fescue
8%	Meadow Fescue
6%	Timothy



## Traditional Meadow

In the bag	
25%	Tall Fescue
25%	Strong Creeping Red Fescue
20%	Meadow Fescue
15%	Timothy
15%	Smooth-stalked meadow grass

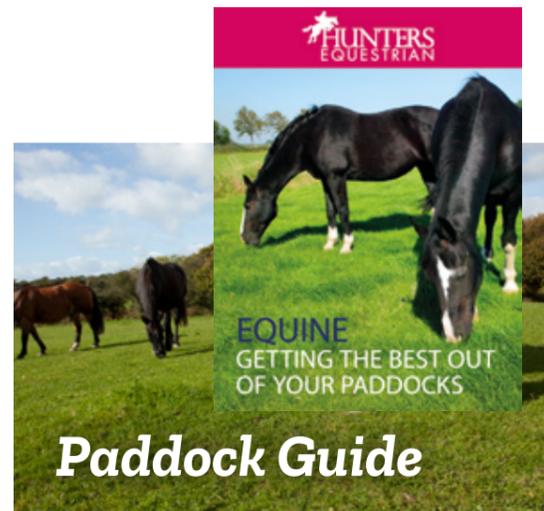


Pack sizes: 10kg | Sows up to 0.7 acre | Repairs 1 acre



For further details on the **HUNTERS** range or to order a copy of the brochure visit

[www.barenbrug.co.uk/equine](http://www.barenbrug.co.uk/equine)



## Paddock Guide

# Landscaping

## Green Velvet

GREEN VELVET® Lawn Seed is produced by Barenbrug UK and our experience and specialist knowledge means that when you buy GREEN VELVET® Lawn Seed mixtures you can be confident you are buying the very best. Designed to meet your every gardening need, each GREEN VELVET® lawn seed range is created to deliver a unique solution for your garden: The All Rounder, The Shady One, The Mow Saver, The Perfectionist, The Action Hero, The Easy Fixer.

### The All Rounder

A multipurpose, hardwearing grass seed that is ideal for creating new lawns, overseeding or repairing worn patches. Great for an everyday lawn for the rough and tumble of family use, which withstands heavy foot traffic. The rapid germination and establishment along with attractive appearance make this a great all-rounder.

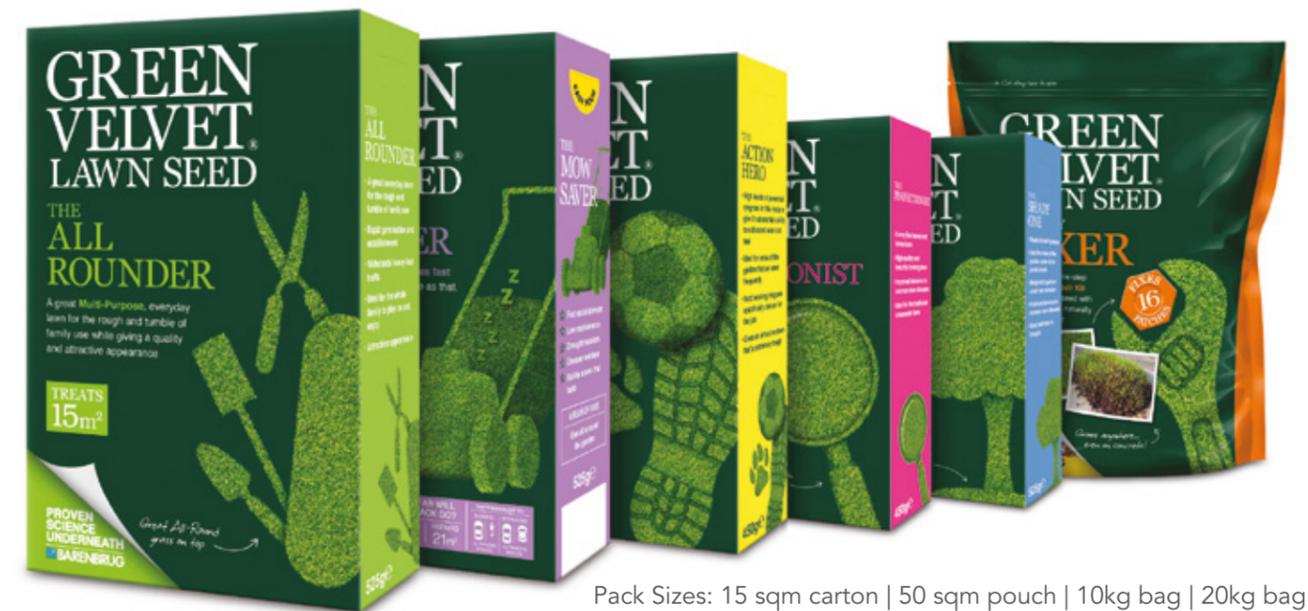
### The Perfectionist

A luxury traditional lawn seed mixture for a very fine leaved and dense lawn, offering a high quality and beautiful looking lawn. With improved tolerance to common lawn diseases, this is ideal for the traditional ornamental lawn.

### The Action Hero

A very hardwearing 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 so is ideal for areas of the garden that are used frequently.

The premium lawn seed from Barenbrug UK is now available



Pack Sizes: 15 sqm carton | 50 sqm pouch | 10kg bag | 20kg bag



For further details on the **Green Velvet** range or to order a copy of the brochure visit

[www.greenvelvetlawnseed.co.uk](http://www.greenvelvetlawnseed.co.uk)

# Technical Guides

## Grass Management - Looking after your leys

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.

### Our Guides

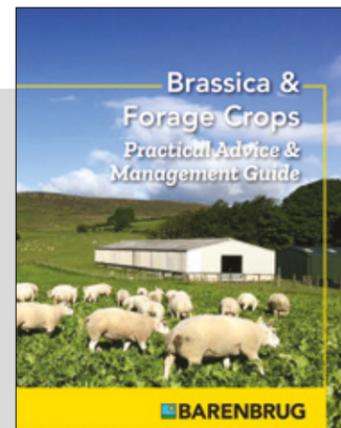
Good quality grazed grassland is the cheapest feed for livestock and is the base upon which profitable farming is built. To help UK farmers get more from their grassland, we have created our series of farming guides with advice and tips from the UK grass experts on how to make the most of your grassland.

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 grass, herb and forage leys. There are also details about the different grassland management techniques, and varieties and species available to UK farmers.

Our three livestock guides offer unique and specific grassland management advice suited for your farming enterprise. While the silage guide offers advice to produce the best quality silage from the grass crop you have grown, providing exceptional quality feed throughout winter.

Brassicas and forage crops can play an integral role in UK farming and we explore the benefits of forage crops and how to plan their use and manage their growth to maximise yields and profitability.



## Our Guides

- Good Grass
- Dairy
- Beef
- Sheep
- Silage
- Lucerne
- Brassica

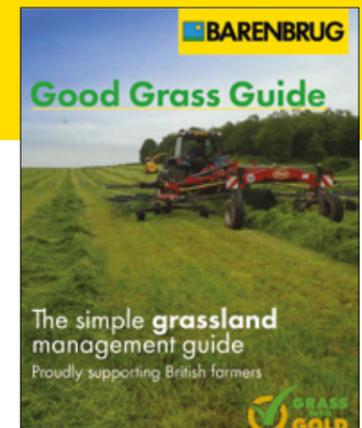


*dedicated to you*

## Good Grass Guide

To help farmers decide where to focus their efforts, we have devised the **Good Grass Guide**, including a simple field indexing system to monitor field performance. The **Good Grass Guide** is broken down into 4 simple steps, walking you through our phased approach to make your grassland a success.

Field indexing 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.



Explore all our technical advice guides online or register to receive these in the post  
[www.barenbrug.co.uk/guides](http://www.barenbrug.co.uk/guides)



# Overseeding

## How to restore productivity to your grassland

Overseeding is ideal for farmers who need to improve grassland performance to help boost profits but, understandably, feel nervous about investing in a full reseed or taking a field out of rotation. While a brand-new sward will always outperform older grasses, overseeding can help to increase dry matter yields short-term, reducing farm reliance on expensive bought-in fodder and even improving live weight gains. Implemented carefully, overseeding has the potential to improve pasture productivity by between 30 to 40% for between three to four years, depending on field quality.

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

### How to Guide

1. Dig a soil assessment pit to look for compaction and plant rooting structure which should go 30cm deep in a Perennial ryegrass/Timothy sward. Address compaction with aerators or sub-soilers as needed.
2. Soil testing (4" deep) would also be advantageous as high levels of water can leach nutrients and reduce pH significantly. Assess what plants are there – learn to identify what species you want to have e.g. PRG/Timothy. Check for weed grasses, they are usually shallow rooted and pull out very easily. If they make up more than 30% of the sward, harrow hard to remove them. With a sward of more than 70% weed grasses the best option is to reseed the sward.
3. Minimise competition to new seedlings by grazing tightly with sheep or taking a silage cut. DO NOT fertilise before overseeding.
4. Control perennial weeds before seeding by spraying with a selective herbicide.
5. Use a spring tine harrow to remove any dead stalks, thatch and shallow rooted weed grasses. Make sure that the tines are working the top 1cm of the soil as this will create the seedbed for the new seeds.
6. Sow when the soil conditions are neither excessively dry nor wet and use a specialist mixture designed to establish rapidly.
7. Roll the sward to ensure good seed contact with the soil to conserve moisture.
8. Graze lightly when the seedlings are 10cm high and continue at frequent intervals until the plants are well established. All the best things start from the ground up and it's important you choose a mixture designed for the job.

For further details  
on overseeding visit

[www.barenbrug.co.uk/  
overseeding](http://www.barenbrug.co.uk/overseeding)



Find out more about our dedicated overseeding mixtures on pages 24 & 25



# Reseeding

## For fields beyond repair and needing rejuvenation

### Why?

Reseeding grassland can feel like a major investment, but with care and attention in the first year, the value of an improved yield and grass quality can be worth: Over 12,500 litres of milk, over 1000kg of lamb, or over 1200 kg of beef. The return on investment has the potential to be more than 500% of the cost.

### What with?

Just as one cow is not the same as another cow, one grass seed mixture is not the same as another. As with feed, you should always ask 'What is in the bag?' and not just 'How much is an acre of grass?'

### How to Guide

Follow the advice in the Good Grass Guide to identify the worst performing field on the farm; this is the priority for remedial work and is not necessarily the oldest field. Our simple guide includes:

#### 1. Understand

- What state is the farm's grass platform in? Use the Good Grass Guide to condition score your grass fields and identifying the worst performing field on the farm.

#### 2. Focus on the Soil

- Assess soil quality and structure with regular soil samples and soil pits. Address any issues as soon as possible especially where you plan to reseed.

#### 3. Make a Forage Plan

- Aim for a 15% reseeding rate annually.
- Know your forage requirements for the year and plan where and how to achieve this goal. How many tDM are required? What quality for what stock class? What are your climatic and / or geographical restrictions?
- Match grass seed mixture choice to fit your specific requirements. This may be different mixtures for different fields and not necessarily what you had last year.
- Create a clean, fine, firm seedbed with available P & K and adequate moisture. Manage the establishing sward carefully. Consider your grassland as a crop, not just a field that is green. Reseeds are the future of farm productivity in the same way as heifers or ewe lambs are.

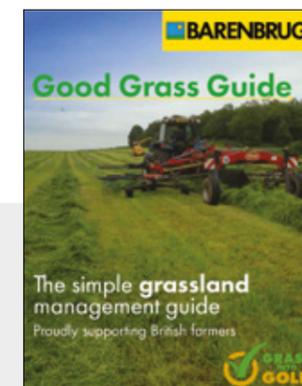
#### Did you know?

In order to just maintain the status quo with your grassland management, you should, ideally, reseed a minimum of 10% of your grass every year. A 15% reseeding rate will start to deliver real gains and make a difference to your bottom line. Conversely, fields that are not reseeded will quickly become overrun with species with little or no nutritional value if they are not closely monitored and well managed'.

For further details  
on reseeding visit

[www.barenbrug.co.uk/reseeding](http://www.barenbrug.co.uk/reseeding)

The **Good Grass Guide** is broken down into 4 simple steps, walking you through our phased approach to make your grassland a success. Visit the website to find out more: [www.barenbrug.co.uk/goodgrassguide](http://www.barenbrug.co.uk/goodgrassguide).



# Soil Health

**Achieving and maintaining good soil health is increasingly important to make the UK grass crop more efficient, productive, and profitable.**

There is a saying, "it isn't the animal or the bag that feeds the crop, it's the soil". Looking after soil fertility and structure are the two key fundamentals of any good grassland management scheme. Soil structure affects root penetration, water availability and soil aeration - so it's important to take time to look at your soil structure and make sure it is healthy and capable of giving your grass exactly what it needs.

Good soil structure has many benefits. It allows the roots of crops to go much deeper into the earth, providing a better supply of water and allowing crops to access the full range of benefits from the soil. Land with a good soil structure will drain more quickly in the spring and take longer to wet up in the autumn, giving you a longer, safe working period on the land.

**Poor soil structure can lead to increased surface water run-off, poor yields and excessive use of nutrients and pesticides. There are many ways to tackle poor soil structure. These need to be tailored to the unique needs of each field.**

Ideally soil sampling should be conducted every 3 - 5 years to help maintain healthy soil conditions and correct any issues that arise. Soil sampling can take place at any time of year but is best done when the soil is moist. If the soil is too dry or too wet it is difficult to obtain a representative sample. Roots are best seen in an established crop or for some months after harvest. Ideally, you should soil sample six months before reseeding to allow time for any deficiencies to be rectified before sowing valuable seed.

Our advice is to prioritise grass health and soil fertility now and take time to walk the field as soon as possible. Immediate soil sampling and addressing soil compaction as soon as conditions allow will speed up the recovery of grass crops from the winter damage. It is likely that soil mineral Nitrogen levels will be low so following soil sampling and compaction reduction effort, timely applications of spring fertiliser in the correct soil and climate conditions will be crucial for yield and quality for spring grazing and first cut silage whilst minimising losses which are costly and potentially polluting.

## Top tips

- Get soil structure and soil fertility right to optimise grass growth and quality
- Regularly dig soil assessment pits to examine soil structure and check for compaction
- Soil sampling should be conducted every 3 - 5 years and any deficiencies addressed

Healthy soils are critical to the long-term productivity of farmland

Find out about our dedicated environment and biodiversity mixtures on page 44, page 40 for our herbal leys, page 37 for Vetch & Lucerne and see the grass mixtures available as a cover crop with our mixture selector.



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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, environmental and sustainable crops.

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.

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