

# NWF Grass & Forage Seed Brochure 2023



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

in partnership with the grass experts

 **BARENBRUG**

## Welcome to the 2023 NWF Grass & Forage Seed Brochure

NWF Agriculture is a national supplier of high quality dairy, beef and sheep feeds to UK farmers. Whatever your farming system, we can meet your needs for compound feeds, blends and straights. All of our feeds are backed by our extensive technical services to ensure livestock perform to their potential. Our extensive range of grass mixtures has been specifically designed to suit all livestock farming requirements. Our grass seed range is bred, grown, blended and packaged by Barenbrug UK, one of the largest grass seed breeders and producers in the UK and Europe.

Barenbrug are internationally renowned grass breeders dedicated to ensuring farmers achieve the maximum return from grass growth. Their expertise and skills have led to the development of a superb range of quality grass seed mixtures for NWF Agriculture. Supporting British farmers, Barenbrug UK breed their agricultural grasses in Britain (in partnership with AFBI).

Their grasses are tried, tested and proven with British farmers at their Cropvale Research Site in Worcestershire. There are over 2,000 hectares of British farmland producing the grass seed. All the mixtures are designed and formulated to ensure continuous improvement for British farming.



in partnership with the grass experts

**BARENBRUG**

### Disclaimer

Any information provided in this grass and forage seed catalogue is given in good faith and to the best of our existing knowledge. Any advice should therefore be taken as a general guide only and not relied upon for all conditions and circumstances. We cannot accept any legal liability for information provided within the catalogue. In any instance where there are shortages in specified varieties we reserve the right to substitute equivalent varieties.

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## Re-seeding Guidance



### 1 - Yield

- Yield from a ley established this summer
- Potential yield 15 t/ha DM from two cuts then grazed
- Based on data from 2022 RGCL list
- Compared to a Good Grass Guide Index 3 sward of 50% weed grasses with potential as low as 7 t/ha DM
- At DM value £140/t the extra yield is worth £1120/ha in the first year of sowing

### 2 - Energy

- Yield from the two cuts could have an energy value of 187,420MJ
- This is capable of producing – over 35,362 litres of milk, over 3987kg of lamb or over 3987kg of beef
- When cut at the optimum growth stage, would achieve a 1st cut of 71D (11.3ME) and a 2nd cut of nearly 74D (11.7ME)
- Old swards not only yield less, but also have poorer feed value
- A typical old sward could have a D value of 60-65D, which would have an ME of between 9.6 and 10.4
- By introducing modern, high-quality varieties, this could be increased significantly
- By cutting at the optimum growth stage, a 72D silage is achievable and should have an ME of 11.5

### 3 - N Efficiency

- 1st step in reseeded - make sure soils are in optimum health & condition
- Even the best ryegrasses will not realise their potential when expected to grow in soil which has poor structure, is deficient in P & K and / or has a below optimum pH
- Start thinking of grass as a crop
- Aim to maintain a soil pH of AT LEAST 6; pH6.5 where clover is being sown
- P (Phosphate) and K (Potash) indices of 2
- In ideal conditions, the major benefit of young Ryegrass swards in terms of efficiency is with nitrogen
- Ryegrass species are all 100% Nitrogen efficient
- Weed grasses like annual meadow grass are only 17% efficient
- Meaning £83 of N is wasted for every £100 worth of N applied





## Barenbrug UK Grass Experts

A leading grass seed developer, breeder and grower for UK amenity and agriculture.

Established in the UK in 1983, Barenbrug UK is now recognised as the grass seed expert, distributing more than 4,500 tonnes of clean, certified, and quality grass seed each year for UK amenity and agriculture. As part of the wider Barenbrug Group, grass experts since 1904, their research network across the globe and UK trial both agriculture and amenity varieties and mixtures. With Barenbrug UK's network of growers, research, distribution, regional technical experts, production, and manufacturing sites across the UK, Barenbrug UK are firmly rooted in the UK.

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.

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.



Proudly Supporting British Farmers  
Bred, produced and distributed in the UK

## Technical 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.

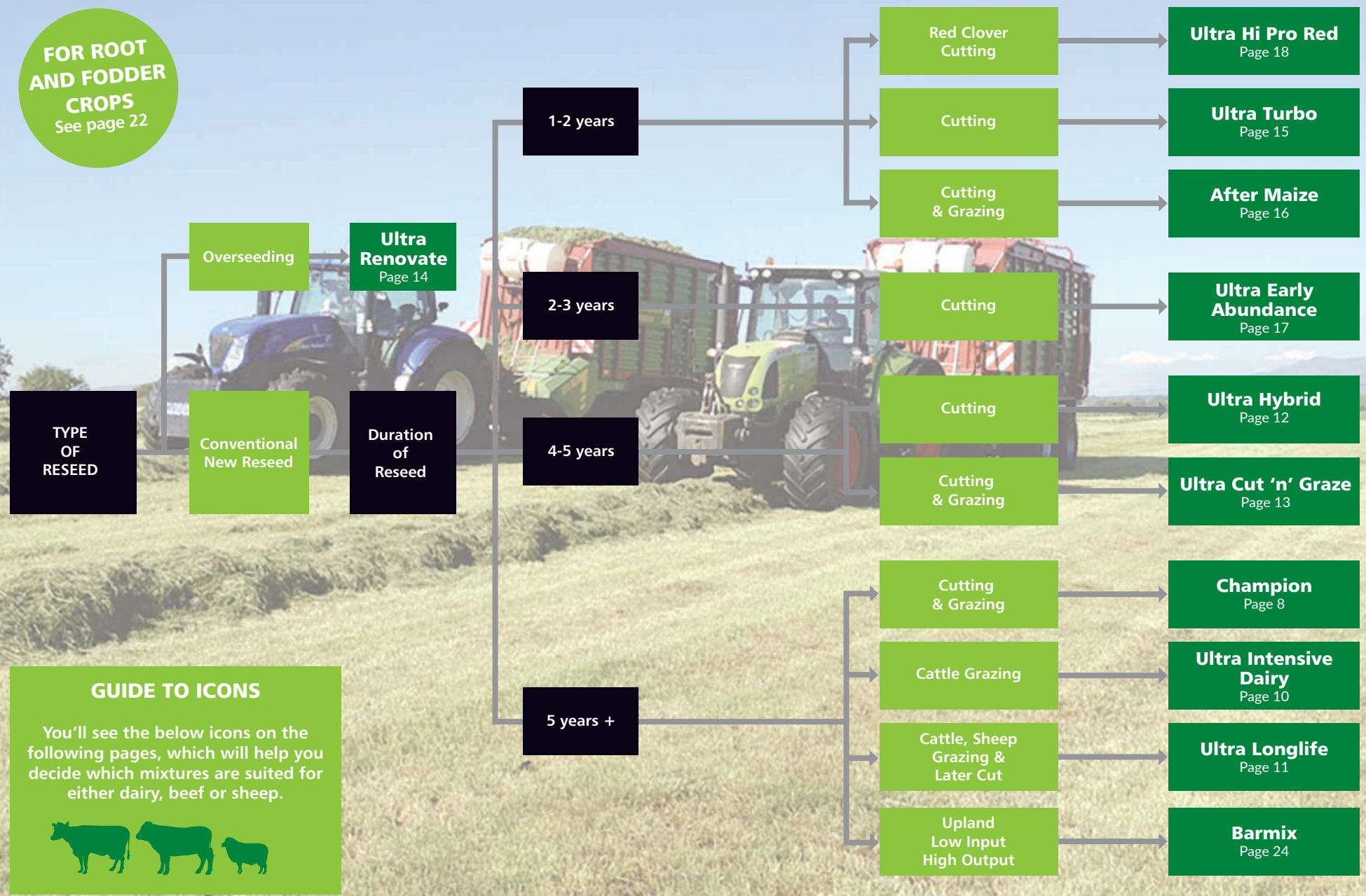


### Good Grass Guide

The Good Grass Guide is broken down into 4 simple steps, walking you through our phased approach to make your grassland a success.

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)

**FOR ROOT AND FODDER CROPS**  
See page 22



**GUIDE TO ICONS**

You'll see the below icons on the following pages, which will help you decide which mixtures are suited for either dairy, beef or sheep.



# Champion with or without Clover™



#1 BEST SELLER

**Our number one selling mixture. A proven long-term top class dual purpose mixture which produces excellent quality forage production whether cut or grazed**

- Ultimate proven ley for milk and meat production
- Very productive and flexible 5+ year ley
- 15kg seeding rate for rapid sward density
- This ley includes the very best season-long production varieties available
- Suitable for both intensive cutting and grazing, with good persistence
- PROTA WHITE contributes both protein and minerals, to ensure maximum performance from the grazing animal
- The correct proportion of Tetraploids in the ley give very good animal intakes
- Includes FINTONA highly digestible varieties with extremely high yields
- FINTONA is the highest yielding perennial ryegrass ever listed in the UK
- GALGORM holds top position for total yield in both grazing and silage management. 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 is very persistent in grazing swards
- CALLAN combines an excellent mean cutting yield with a high grazing yield and exceptional spring growth. CALLAN excels on all three recommended lists

**Designed for:**

- Top quality forage production whether cut or grazed
- Long-term production from a highly persistent ley
- Maximum production by using the top yielding varieties

**Benefits:**

- The use of later heading varieties means that any topping can be kept to a minimum
- The varieties used have been selected for their persistence as well as their palatability and mid-season digestibility to produce a long lasting, productive sward
- Champion combines the benefits of high yields of quality mid-May silage production, with excellent sward density and outstanding mid-season digestibility for highly palatable grazing, thus creating a highly flexible ley
- Available without clover as Champion No Clover

**Sward management:**

Cut when the first ears emerge, around the 20th May and this ley will produce grass of 70D plus and if cutting is delayed 10 days, it will still produce grass of 67D. This ley is capable of being spring grazed, giving two highly productive silage crops and an autumn grazing, or alternatively being grazed for a full season.

## Champion™ with Clover

Kg	Variety	Species
2kg	GALGORM	Intermediate Perennial Ryegrass (DIP)
3kg	FINTONA	Intermediate Perennial Ryegrass (TET)
2kg	GLENARM	Late Perennial Ryegrass (DIP)
2kg	CALLAN	Late Perennial Ryegrass (DIP)
3kg	BALLYVOY	Late Perennial Ryegrass (DIP)
2kg	BALLINTOY	Late Perennial Ryegrass (TET)
1kg	PROTA WHITE	White Clover Blend

15kg per acre, 2,089 seeds/2m<sup>2</sup>

## Champion™ without Clover

Kg	Variety	Species
2kg	GALGORM	Intermediate Perennial Ryegrass (DIP)
3kg	FINTONA	Intermediate Perennial Ryegrass (TET)
2kg	GLENARM	Late Perennial Ryegrass (DIP)
3kg	CALLAN	Late Perennial Ryegrass (DIP)
3kg	BALLYVOY	Late Perennial Ryegrass (DIP)
2kg	BALLINTOY	Late Perennial Ryegrass (TET)

15kg per acre, 2,089 seeds/2m<sup>2</sup>



# Ultra Intensive Dairy™



## A highly productive grazing ryegrass mixture that will give season long quality forage

- Very late heading dense leafy mixture
- Large “window” to cut 70+D silage
- Exceptionally versatile, suitable for both cutting and grazing
- Produces a dense, productive ley, for high quality grazing
- Including quality white clovers CRUSADER and BARBLANCA contributes both protein and minerals, to ensure maximum performance from the grazing animal
- New variety GRACEHILL is 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

### Designed for:

- Intensive production from grazing a highly palatable, very digestible ley
- Creating a tight persistent sward that is highly resistant to poaching
- Season long grazing from early spring to late autumn

### Benefits:

- Ultra Intensive Dairy produces a dense leafy sward that is easily managed
- The use of late heading varieties means that production is always of the highest quality
- The varieties used have been selected for their persistence as well as their palatability and mid-season digestibility to produce a long lasting, productive sward

### Sward management:

This ley was initially designed as a dairy paddock grazing mixture, but has been cut and grazed very successfully on all types of farms. Tight heading date grouping make it easily manageable and reduces the need for topping. Grass growth from this mix stays in front of the cows not ahead. This means cows are always grazing optimum quality grass. Cut at first ear emergence, in late May, this ley will produce grass of 70+D.

Kg	Variety	Species
2kg	BALLYVOY	Late Perennial Ryegrass (DIP)
2kg	YOUPI	Late Perennial Ryegrass (TET)
3kg	GRACEHILL	Late Perennial Ryegrass (TET)
3kg	GLENARM	Late Perennial Ryegrass (DIP)
3kg	BALLINTOY	Late Perennial Ryegrass (TET)
1kg	PROTA WHITE	White Clover Blend

14kg per acre, packed in 14kg bags, 1,705 seeds/m<sup>2</sup>

# Ultra Longlife™



## A permanent pasture mixture, with the option to take later cuts of quality silage

- A permanent pasture mixture
- Exceptionally versatile, suitable for both cutting and grazing
- Produces a dense, productive ley, for high quality grazing
- Including quality white clovers CRUSADER and BARBLANCA contributes both protein and minerals, to ensure maximum performance from the grazing animal
- The very high yielding Timothy, COMER, gives mid-season production and variety to the sward
- COMER Timothy increases spring growth by 34% and persistence under extreme conditions

### Designed for:

- Intensive production from grazing a highly palatable, very digestible ley
- Creating a tight persistent sward that is highly resistant to poaching
- Season long grazing from early spring to late autumn

### Benefits:

- Ultra Longlife produces a dense leafy sward that is easily managed. The use of early, intermediate and late heading varieties means that production is season long
- The varieties used have been selected for their persistence as well as their palatability and mid-season digestibility to produce a long lasting, productive sward

### Sward management:

Ultra Longlife is designed to give fantastic spring growth as well as season long production utilising a combination of early intermediate and late heading perennial ryegrass varieties and Timothy. Therefore it is ideal for farms where early spring grazing is important. Giving later fields a chance to get going. It can then be shut up for 1 or 2 cuts of silage (or hay) followed by grazing for the rest of the season.

Kg	Variety	Species
2.5kg	MOYOLA	Early Perennial Ryegrass (DIP)
2kg	GLENARIFF	Intermediate Perennial Ryegrass (DIP)
2kg	SEAGOE	Intermediate Perennial Ryegrass (TET)
2kg	BALLYVOY	Late Perennial Ryegrass (DIP)
3kg	BALLINTOY	Late Perennial Ryegrass (TET)
0.75kg	COMER	Timothy
0.75kg	PROTA WHITE	White Clover Blend

13kg per acre, 2,369 seeds/m<sup>2</sup>

# Ultra Hybrid™



A high yielding cutting ley containing 3 of the best Hybrid ryegrass varieties available. Designed as an intensive cutting ley producing high quality silage for 3-5 years. It fits well into medium term rotations, is suitable for multi cut systems and AD plants

- Designed for a mid-May first cut
- Available with clover if required
- Barclamp has very high yields in its first season, excellent early spring growth and high crown rust resistance
- New variety Bannfoot produces improved yields with high D value along with excellent persistency. It also has a good all round disease profile

**Benefits:**

- Will produce 10-15% more yield than Perennial ryegrass leys due to the ability to use Nutrients efficiently via its long season growth
- Ultra Hybrid delivers a superb silage mixture for farmers. It has a tight heading date range and excellent disease resistance offering strong silage production throughout the season
- Offers multiple entries for slurry / digestate application, making the most of home produced nutrients

Hybrid ryegrasses grow at soil temperatures as low as 5-6°C. This lower temperature growth means the grasses get away earlier in the spring and grows later in the autumn extending the growing season and therefore production of the ley. This also allows the sowing window for Ultra Hybrid to be lengthened.

Kg	Variety	Species
5kg	BARCLAMP	Hybrid Ryegrass (DIP)
4.5kg	BANNFOOT	Hybrid Ryegrass (TET)
4.5kg	KIRIAL	Hybrid Ryegrass (TET)

14kg per acre, 1,168 seeds/m<sup>2</sup>

# Ultra Cut 'n' Graze™



An excellent cutting and grazing ley for up to 5 years. Will produce top quality high yielding silage cuts. Gives the option to graze after cutting

- Outstanding early spring growth
- Produces very high quality silage from an early cut
- Will produce three good cuts per year
- Grazing can be combined with cutting for a fully flexible ley
- Combines the massive yields of hybrid ryegrass with the persistence of perennial ryegrass

**Designed for:**

- Excellent early season growth, ideal for early lambing or extended grazing of dairy cows
- Intensive cutting, up to three cuts per year, combined with high quality grazing
- Combines the yield of hybrids with the quality and persistence of perennial ryegrass

**Benefits:**

- A flexible, productive ley, ideal for those looking for early grass for sheep or cattle grazing, followed by two or three cuts of quality silage
- When cut only, it will produce up to three prolific cuts of leafy, productive forage
- The varieties in the ley have been selected for their digestibility and palatability, which ensures maximum animal output
- Contains FINTONA, the highest yielding perennial ryegrass ever listed in the UK

**Sward management:**

Hybrids lower temperature growth will give excellent early spring grazing. An early spring grazing can be followed by two cuts of quality silage or a cut of hay plus aftermath grazing. The ley will also produce extremely long-season productive grazing, capitalising on the early spring and late autumn growth of the hybrid ryegrasses.

Kg	Variety	Species
3kg	BANNFOOT	Hybrid Ryegrass (TET)
3kg	BARCLAMP	Hybrid Ryegrass (DIP)
2kg	GALGORM	Intermediate Perennial Ryegrass (DIP)
3kg	SEAGOE	Intermediate Perennial Ryegrass (TET)
3kg	BALLINTOY	Late Perennial Ryegrass (TET)

14kg per acre, 1,361 seeds/m<sup>2</sup>

# Ultra Renovate™



# Ultra Turbo Mix™



## Ideal to improve the productivity of a low performing tired ley for 3-5 years

- Renovate is a 100% ryegrass blend for areas of good fertility
- Uses varieties which are aggressive enough to establish in an existing sward yet easy to manage
- Specifically designed to work best with specialist overseeding techniques

### Benefits:

- Includes varieties which are vigorous enough to establish in an existing sward
- Easy to manage
- Can be used spring or autumn to repair and renovate swards
- Increases the proportion of productive grasses in a sward

### Designed for:

- Restoring productivity into underperforming leys
- Re-introducing vigorous highly productive grasses into a sward
- Improving the quality of a sward for better animal performance
- Repairing damage caused by poaching
- Use with specialist overseeding techniques

### Sward management:

Existing sward should be topped or grazed short and harrowed to remove any dead material and to create some tilth for the new grass seed. Soil fertility (Ph, P,K Mg status) and structure should also be assessed to identify any underlying field issues.

Kg	Variety	Species
7kg	BANNFOOT	Hybrid Ryegrass (TET)
3kg	FINTONA	Intermediate Perennial Ryegrass (TET)
3kg	CALEDON	Intermediate Perennial Ryegrass (TET)
7kg	BIJOU	Late Perennial Ryegrass (TET)

10kg per acre packed in 20kg bags, 707.00 seeds/m<sup>2</sup> @10kg/acre

## A highly productive short term Italian ryegrass blend

- A highly productive Italian ley
- Grows at temperatures as low as 3°C soil temperature, extending the growing season for store lambs or wintering hogs
- Contains high ranking BARMULTRA II which has excellent spring grazing and silage yields
- High response to nitrogen inputs and high fertility situations. Ultra Turbo Mix will produce 20% more yield than perennial ryegrass leys
- Capable of producing four cuts of high quality, high yielding silage

### Benefits:

- Fits well into cereal crop rotation
- Ideal for following maize and giving a two year break
- Gives high quality aftermath grazing

### Sward management:

Grows at temperatures as low as 3°C, so the farm must be able to use this early growth. A first cut at the end of May, following a spring grazing will produce 70+ D value silage, with a second cut five weeks later. Will yield up to 17tDM/ha in its first year under high input management and will achieve up to six cuts a year.

### Designed for:

- Producing maximum amounts of quality forage under a high input/high fertility system
- A first cut at the end of May, producing 70+D value silage with a second cut five weeks later
- Giving a very long growing season it is ideal for early turnout or lamb finishing

Kg	Variety	Species
6kg	ABYS	Italian Ryegrass (DIP)
3kg	BARMULTRA II	Italian Ryegrass (TET)
3kg	MESSINA	Italian Ryegrass (TET)

12kg per acre, 1,216 seeds/m<sup>2</sup>



# After Maize – Fast Grass™



# Ultra Early Abundance™



## Delivering a high quality grass crop after maize has been harvested

- Very quick establishment
- Rapid growth at cool temperatures
- Flexibility of duration with 12, 18 or 24 month production
- Can be established after a spring cereal harvests

### Designed for:

- Ability to germinate at lower temperatures than conventional leys
- Safe sowing throughout October
- Ability to establish faster and better than other leys even in adverse conditions of cold wet seed beds

### Benefits:

- Using the concept of “germination energy” a faster establishment rate of 20% above the average ryegrass is achieved
- Over winter grazing
- Stability of soils over winter – reducing soil erosion and run off
- Gives an early silage cut in spring enabling entry back into maize / cereals

### Sward management:

Over winter grazing will produce a dense sward with full potential for an early silage cut in spring.

Kg	Variety	Species
12.5kg	ABYS	Italian Ryegrass (DIP)
8.75kg	BANNFOOT	Hybrid Ryegrass (TET)
3.75kg	SEAGOE	Intermediate Perennial Ryegrass (TET)

12.5kg per acre packed in 25kg bags, 980 seeds/m<sup>2</sup>



## The ultimate high yielding high quality short term cutting

- Very high yielding two-three year predominantly cutting mixture
- Responds to high inputs by producing 20% more than long term leys
- A ley that will produce forage very early and late in the season
- Includes ABYS and BARMULTRA II some of the very best Italian ryegrasses available
- New variety Bannfoot produces improved yields with high D value along with excellent persistency. It also has a good all round disease profile
- Good digestibility is combined with excellent palatability and high sugars

### Benefits:

- A highly productive ley, which will give exceptional crops for silage, grazing or hay, from a high input system
- A mixture for the farmer who wants to maximise their own production from a short term grass crop in a rotation

### Sward management:

A first cut in the middle of May will produce 70+ D value silage, with a second cut six to eight weeks later. Hybrid and Italian ryegrass responds positively to high levels of fertility, by producing 20% more yield than Perennial Ryegrass

### Designed for:

- Intensive production over an 18-36 month period
- Up to four silage cuts with over winter grazing
- Long grazing season from early spring to late autumn
- Ideal as a catch crop, will give excellent production from an early spring or late summer sowing

Kg	Variety	Species
3kg	BARCLAMP	Hybrid Ryegrass (DIP)
3kg	BANNFOOT	Hybrid Ryegrass (TET)
4kg	BARMULTRA II	Italian Ryegrass (TET)
3kg	ABYS	Italian Ryegrass (DIP)

13kg per acre, 991 seeds/m<sup>2</sup>

# Ultra Hi-Pro Red™



## An outstanding high yielding high protein cutting ley

- Highly productive two-three year high protein ley
- The red clover both fixes nitrogen and gives a high protein feed
- Suitable for both hay and silage production
- High sugar production from grass
- The most profitable legume/grass mixture for silage production

### Designed for:

- High protein forage production
- Two or three cuts can be followed by high quality, productive autumn grazing
- Long production season, grows early spring to late autumn

### Benefits:

- A highly productive, high protein cutting ley, giving the maximum quantity and quality
- Ideal for those looking to produce home grown protein crops, red clover has a protein content of between 16 and 20%
- Red clover/grass silage is highly palatable, giving increased intakes
- Prota Red is a new unique mixture of red clovers. The blend of varieties balances production through the growing season, while maintaining excellent persistency and disease resistance

### Sward management:

Needs to be sown in spring or by early September to allow the clover to establish well enough to survive the winter. A first cut in the middle of May will produce 70D + silage, with a second cut seven to eight weeks later. The first cut will tend to be more grass with red clover being the larger part of the later cuts.

Kg	Variety	Species
2kg	BARMULTRA II	Italian Ryegrass (TET)
5kg	BARCLAMP	Hybrid Ryegrass (DIP)
3kg	BANNFOOT	Hybrid Ryegrass (TET)
3kg	PROTA RED	Red Clover Blend

13kg per acre, 1,060 seeds/m<sup>2</sup>

# Proterra Maize and Prota Plus

## Proterra Maize

Proterra Maize offers a quick and easy under sowing solution for maize crops in your rotation, producing a green cover which doesn't compete with the crop. Green manure crops are indispensable to maintain healthy soil, provide ground cover, reduce nutrient leaching and reduce soil erosion while ensuring a good yield of maize or other crop. This environmentally friendly product combines successful undersowing with significant advantages.

### Benefits:

- Longer sowing window
- Lower competition with the maize crop
- More biomass underground
- Less risk of structural damage from harvest machinery
- More resistant to extreme weather conditions
- Proterra Maize is composed of carefully selected grass varieties
- Reduces soil erosion and nutrient leaching

Kg	Variety	Species
9kg	BARELITE	Tall Fescue
16kg	BARDOUX	Tall Fescue

10-15kg per hectare

## Prota Plus

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
- 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
- Persian clover is a more prostrate type multi-cut annual species

Kg	Variety	Species
6kg	BARMULTRA II	Italian Ryegrass (TET)
4.5kg	CRIMSON CLOVER	Legume
1.5kg	PERSIAN CLOVER	Persian Clover

12kg per acre

# Prota White Clover Blend

## Why use a blend of clover types?

- Different varieties of white clovers are best suited to different management; small leaf varieties are most suited to sheep grazing, whereas large leaf varieties are most suited to silage production
- By using a blend of different varieties there is always at least two that are best suited to whatever the management being applied to the sward
- The use of a blend of different clovers broadens the genetic diversity, disease and pest resistance of the clover content of the sward

## How will animals perform on a clover/grass sward?

- Animals prefer to graze a clover/grass sward; this results in higher voluntary intakes and better animal performance
- In trials cattle grazed on a clover/grass sward had an intake of 9.2kg of dry matter per day and a liveweight gain of 1.1kg per day, compared with those grazed only on grass of 6.7kg intake and 0.8kg/day liveweight gain
- Trials with dairy cows have shown that for each 10% increase of the white clover content of the pasture, milk yield

increases of between 0.3 and 0.45kg per cow per day

- Therefore a sward which has a 30% clover content, which is an average for mid-summer, can be producing up to 1.35kgs of milk per cow per day more from the clover

## Are there any other benefits of white clover?

- White clover fixes atmospheric nitrogen making it available as a nutrient to feed the clover as well as the companion
- It is estimated that white clover will fix between 100 and 280 kg N per hectare per year. The quantity of nitrogen fixed depends on soil type and husbandry
- Grass/clover swards without fertiliser nitrogen can produce yields similar to those of pure grass swards receiving around 200kg N per hectare per year
- The presence of white clover will reduce the development of crown rust in the grass portion of the sward

The inclusion of white clover in a sward will improve the nutritive value of the pasture markedly, with increases in voluntary food intake and nutrient supply, particularly protein.

Kg	Variety	Species
50%	<b>BUDDY</b>	White Clover
30%	<b>DUBLIN</b>	White Clover
20%	<b>BARBLANCA</b>	White Clover

1kg per acre

# Prota Red Clover Blend

## Prota RED is a new unique mixture of red clovers

The blend of varieties balances production through the growing season, while maintaining excellent persistency and disease resistance.

Red clover swards, managed correctly and used in the right circumstances can meet the forage requirements of many farms and significantly improve the protein content and overall feeding value of the winter forage. It is better suited to silage production than white clover because of much more erect growth habit, up to 80cm and its significantly higher forage yields.

- Red clover silage has a high crude protein content of 16% to 20% and a ME content of 10 to 12MJ/KG DM
- Because red clover is high in phyto-oestrogen, breeding sheep should be kept off for six weeks either side of tupping
- Store/fat lambs can be fattened very effectively on red clover silage aftermaths
- Low levels of structural carbohydrate in the leaf result in higher intakes, better feed conversion and therefore improved animal performance
- Sowing rate: 2-3kg per acre





# Brassicas

## 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. We are proud to supply products specifically bred for UK systems.

### Stubble Turnip - BARKANT

Within the Brassicas family, turnips are the quickest species to establish. This multi-purpose forage & catch crop offers excellent autumn & winter feed potential.

The very vigorous Barenbrug-bred diploid turnip, combines higher leaf production and a purple tankard root, with high sugar and dry-matter content.

#### Advantages

- Bred by Barenbrug for leaf production, it out yields most other turnip varieties available
- Deep root system to rich essential nutrients deep in the soil
- High sugar & dry matter content for a low cost feed solution

#### Expert advice

BARKANT has the potential of being grazed multiple times. The first grazing however, will be the most important one. Both sheep and cattle can graze turnips. Strip-grazing prevents both yield and quality losses due to trampling and polluting. It is also important not to overfeed the cattle when they are allowed to graze the turnips at first. Extreme high dry matter intake of Turnips (and other Brassicas) can cause health problems. Therefore, cattle should be allowed to adjust to the change of diet.

**Sowing rate:** Drilled/broadcast: 3-5kg/ha  
**Pack sizes:** 5kg or 25kg

- ✓ Sow spring or summer
- ✓ Strip graze
- ✓ 60-90 days to maturity
- ✓ Utilise autumn or winter

# Brassicas

### Forage Rape - BARCOLI

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.

#### 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 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) percentage.  
**Pack sizes:** 10kg or 25kg

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

### Kale - CALEDONIAN & KEEPER

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

Two 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.

#### 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

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

# 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.

Kg	Variety	Species
2kg	BALLYVOY	Late Perennial Ryegrass (DIP)
3kg	GRACEHILL	Late Perennial Ryegrass (TET)
4kg	BARDOUX	Tall Fescue
2kg	BARELITE	Tall Fescue
1kg	ARCHIBALDI	Cocksfoot
1kg	BARONAISE	Timothy
1kg	PROTA WHITE	White Clover Blend

14kg per acre, 2,752 seeds/m<sup>2</sup>

Sowing rate: 14kg per acre

Sowing rate seeds: 2814 per m<sup>2</sup>

Sowing depth: up to 10mm

Available without clover

Soil temperature: >8°C

Min. cutting/grazing height:

1500kg DM/ha or ~8 cm

# Bar GS4 STEWARDSHIP



## 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.

### Advantages

- 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

Kg	Variety	Species
3kg	BANNFOOT	Hybrid Ryegrass (TET)
3kg	CALLAN	Late Perennial Ryegrass (DIP)
1kg	COMER	Timothy
2kg	BARDOUX	Tall Fescue
0.9kg	LAURA	Meadow Fescue
1kg	DASCADA	Cocksfoot
2kg	GARRANT	Red Clover Blend
0.5kg	SAINFOIN	Legume
0.1kg	BIRDSFOOT TREFOIL	Legume
0.1kg	ALSIKE CLOVER	Legume
0.15kg	COMMANDER	Chicory
0.15kg	CAPTAIN	Plantain
0.05kg	YARROW	
0.05kg	SHEEPS PARSLEY	

Sowing rate: 14kg per acre Pack size: 14kg

# Bar Finisher GRASS & HERB BLEND



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

Kg	Variety	Species
2kg	 PROTA RED	Red Clover Blend
1.5kg	 PROTA WHITE	White Clover Blend
0.75kg	CAPTAIN	Plantain
0.75kg	COMMANDER	Chicory

Sowing rate: 5kg per acre Pack size: 10kg

# Bar Herbal GRASS & HERB BLEND







A specialist grass & herbal 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

- Highly palatable, providing an excellent feed for high live weight gains
- 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

Kg	Variety	Species
2kg	 GALGORM	Intermediate Perennial Ryegrass (DIP)
1.5kg	 GOSFORD	Intermediate Perennial Ryegrass (DIP)
2kg	 SEAGOE	Intermediate Perennial Ryegrass (TET)
2kg	 CALLAN	Late Perennial Ryegrass (DIP)
3kg	 BALLINTOY	Late Perennial Ryegrass (TET)
0.75kg	 BARONAISE	Timothy
1kg	PROTA WHITE	White Clover Blend
0.75kg	COMMANDER	Chicory
1kg	CAPTAIN	Plantain

Sowing rate: 14kg per acre Pack size: 14kg



# AB9 WINTER BIRD FOOD

A spring sown mixture of small seed producing species to provide cover for farmland birds along with producing seed which gives a source of food throughout the autumn and winter

AB9 provides important food resources for farmland birds, especially in autumn and winter.

%	Variety
50%	SPRING TRITICALE
30%	SPRING BARLEY
3%	WHITE MILLET
8%	KALE
3%	LINSEED
6%	FODDER RADISH

Sowing rate: 20kg per acre

This is a general purpose mix. If a specific bird has been specified please contact us for a relevant mix.

### Advantages

- Produces an abundant and available supply of small seeds during the autumn and winter months
- Farmland birds feed on the seeds from October
- When flowering during the summer months will attract beneficial insects including bumblebees, solitary bees, butterflies and hoverflies.
- Establish between 15th February and 15th June
- Complies with environmental stewardship scheme AB9



# AB15 TWO YEAR SOWN LEGUME FALLOW

A mix designed to provide food for farmland wildlife, such as pollen and nectar for pollinators, and invertebrate chick food for farmland birds. It can also be a useful part of a rotation aimed at reducing blackgrass populations

The mix needs to be sown and established as soon as possible after harvest and before the 15th September. To stop blackgrass heading this needs to be cut at least twice during the first 12 months and the scheme stipulates you can only cut between 1st March and 31st October.

### Advantages

- Reduction in flowering blackgrass and an abundant supply of sown pollen and nectar-rich flowers between early and late summer
- Pollinating and beneficial insects such as bumblebees, solitary bees, butterflies and hoverflies
- Adult farmland birds and chicks foraging in and around the sown fallow between April and July

%	Variety
10%	ALSIKE CLOVER
5%	BIRD'S-FOOT TREFOIL
5%	BLACK MEDICK
50%	VETCH
15%	LUCERNE
15%	RED CLOVER

Agreements starting on or after 1 January 2022, sow in the autumn, at 15-20 kg/ha with the lower seed rate on light/medium soils and the higher seed rate on heavier soils. Retain for 2 years before re-establishment:

## Artémis Lucerne

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

This perennial crop can persist for up to 5 years and performs well in free draining, drier environments due to tap roots. A more mature hay crop would be more suitable for feeding young stock.

- Artémis Lucerne is top of Recommended Lucerne Lists across Europe and the best variety available in the UK today
- Excellent yield
- Extreme persistent – especially in dry or cold areas
- LUCERNE is a highly nutritious forage for livestock
- It combines good digestibility with high protein, providing excellent milk yields and daily live weight gains

Artémis seeds are coated with Barenbrug's Yellow Jacket Rhizobium technology. The Barenbrug Yellow Jacket system embeds high levels of Rhizobia in a protective polymer matrix that coats individual seeds. This matrix includes a nutrient booster that contains all the essential minerals and trace elements needed to get a lucerne crop off to the very best start.

### Expert Advice

- 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 of 50% of the tallest stems have a flower prior to the first grazing/cutting.

- If the stand is weedy at establishment it can be grazed/cut ONCE if it is 15-20cm tall and then left to flower to a minimum of 50%

### Advantages

- Dual purpose
- Perennial - Well managed crops can persist for up to 5 years
- Performs well in free draining, drier environments due to tap roots
- >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
- For more information and advice on management, please contact us for the guide

Sow - spring | Use - Grazing/Silage | 40 days to maturity | Utilise - year-round

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

**Pack sizes:** Available in pack sizes 25kg

**Find out how to manage, grow and harvest lucerne at [barenbrug.co.uk/lucerne](http://barenbrug.co.uk/lucerne)**



## Vetch

Highly productive and rich in protein with rapid soil coverage. With vigorous growth, this vetch is winter-hardy and will establish and grow well on most soil types, helping to soak up and hold nutrients in the soil for use by spring cropping or reseeded. BARVICOS fixes large amounts of nitrogen and it can be used for green manuring and annual forage production either alone or in mixtures with grasses.

## Chicory

A mineral rich herb with a long taproot, aiding drainage and crop root development, making an ideal cover crop. COMMANDER produces excellent yields of high protein forage. Works well in grass and clover mixtures. The potential yield is >300 g/hd/d when rotationally grazed. Has beneficial anthelmintic properties.

## Plantain

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

intakes during the summer. Proven to reduce ammonia levels in urine. Used to add diversity to grass mixtures along with Chicory and clovers.

## Wildflowers

Establishing flower-rich margins on the edges of fields can be hugely beneficial, helping farmers maintain a healthy ecosystem and attracting beneficial insects, which in turn can help to pollinate crops and predate pests.

## Gamecover Mixtures

A range of game cover mixtures are available please contact us for more information.

## Whole Crop Mixtures

Offer a flexible alternative or complimentary feed to grass and maize silage. Producing high dry matter yields and high levels of protein. These mixtures in particular cereals can be grown almost anywhere in the UK. With the short growing time (12-14 weeks) they offer an early entry for the following grass reseed. The most popular mix is a 60% Barley 40% Pea blend. Other mixtures are available please contact us for more information.





**SOIL ANALYSIS KIT**  
From £15 for pH, P, K & Mg

## NWF Silage Additives

**NWF silage additives help create intelligent silage that best suits the needs of livestock. The range includes additives for grass, whole crop and maize silage, all formulated to produce quality silage with a balanced acid profile**

### NWF Sila-Guard 50

A high-quality additive containing quick acting bacteria and enzymes that convert crop carbohydrates into energy for milk production. The additive has been formulated to produce a high-energy and high-quality stable silage with a complimentary balanced acid profile for livestock.

### NWF Sila-Guard 45

An exceptional additive that offers quality and value. The additive has been formulated to produce a high-quality stable silage with a complimentary balanced acid profile for livestock.

#### Features

- Designed for UK weather & UK Grass & Crops
- Rapid pH drop to inhibit growth of spoilage bacteria
- Exclusive lactic acid mix
- Microbial stimulants

### NWF Sila-Guard Maize

A high-quality premixture of technological additives perfectly suited to UK grown maize. The additive has been formulated to produce a high-quality stable silage with a complementary balanced acid profile.

### NWF Sila-Guard Whole Crop

A high-quality additive containing quick acting bacteria and enzymes that convert crop carbohydrates into energy for milk production. The additive has been formulated to produce a high-quality stable silage with a complementary balanced acid profile.

#### Benefits

- Improved Palatability
- Improved Yields (Edinburgh University trials)
- Stable silage with minimum nutrient loss
- More active bacteria once rehydrated

## NWF Soil Analysis

**The NWF soil analysis service provides accurate assessment of the key nutrients that should be applied to grassland, arable and forage crops**

Results enable nutrient levels to be identified and shortfalls can be corrected with the application of fertiliser for optimum grow and crop protection. The follow nutrient levels can be accurately measured:

- Phosphorus
- Potassium
- Magnesium
- pH
- Boron
- Sodium
- Molybdenum (Cobalt)
- Iron
- Manganese
- Copper
- Zinc
- Sulphur
- Calcium

Soil samples should be taken on all fields at least once every 2-4 years. The soil where other crops are grown may need to be tested annually to ensure the information is accurate and up to date.

For arable and grassland, soil samples can be taken at any time of the year, provided fertiliser has not been applied in the past 6 months. Where lime has been applied, 2 years should be allowed before samples are taken.

Fields of up to 10ha (25 acres) can be sampled as a single unit, providing the field is uniform (soil type, past crops, lime, fertiliser usage). Large and non-uniform fields should be subdivided and each sample labelled as separate.

### Taking Soil Samples

Adopting the 'W' pattern, take a representative sample from multiple points across the field, avoiding gateways, hedges, ditches and footpaths. We recommend 20 samples.

- 1 Remove the top 5cm of soil and discard.
- 2 Take a sample to a depth of 15cm for arable or 8cm for grass.
- 3 The samples should be mixed in a bucket, before being bagged.
- 4 Seal the bag securely and label before passing to your NWF Sales Specialist.





## NWF Fertiliser

Precise crop nutrition is essential if yields are to be maximised, soil fertility is to be preserved and environmental requirements are to be met

NWF supply a comprehensive range of high-quality fertilisers for grass, arable or mixed farms looking for optimum yields and the best return on investment.

The NWF sales team offer a soil analysis service to ensure the right nutrients are applied to crops in the most cost-effective way. The range includes ammonium nitrate, ammonium sulphate, straights, and blends, suitable for British grassland, arable and forage crops.

### NWF TOP YIELD BLENDS

NWF has a comprehensive range of high-quality standard and bespoke fertilisers supplied in 600kg bags. For balanced crop nutrition in grazing applications, choose from:

- 25-5-5
- 27-6-6
- 20-10-10

For optimum yields for silage crops the standard grades include:

- 24-0-15
- 24-0-13

\*All above available with or without sulphur.

### STRAIGHTS

NWF supply a range of straights for grassland, forage and arable crops including:

- Muriate of Potash (MOP)
- Triple Super Phosphate (TSP)
- Diammonium Phosphate (DAP)
- Ammonium Sulphate
- Granular Urea
- Granular Lime

### AMMONIUM NITRATE & SULPHATE

NWF has a comprehensive range of high-quality standard and bespoke fertilisers supplied in 600kg bags. For balanced crop nutrition in grazing applications, choose from:

- Imported Ammonium Nitrate, 34%N a highly reliable and consistent straight nitrogen fertiliser, spreading evenly to bouts of 24m
- 30N 20S<sub>0</sub><sub>3</sub>
- 27N 12S<sub>0</sub><sub>3</sub> (CAN Blend)
- 27N 9sS<sub>0</sub><sub>3</sub> (CAN Compound)



## NWF Technical Services

NWF Agriculture offer a wide range of technical services for livestock farmers and located at our head office in Cheshire is a state of the art accredited laboratory to analyse forage samples.

### NWF Technical Services

- Dairy Costings
- Beef Costings
- Ration Planning & Diet Formulation
- Dung & Diet Sieving
- Mineral Analysis
- Interherd Reports
- Soil Sampling
- Forage & Feed Analysis
- Cow & Calf Signals
- Clamp Capacity & Forage Management
- Body Condition & Mobility Scoring
- Mobility Score Monitor
- Youngstock Specialist Team & Services

The NWF Agriculture laboratory at the head office in Cheshire analyses:

- Fresh grass
- Silage – grass, maize & whole crop
- Haylage

FREE analysis for NWF customers with results processed within 48hrs\* of receipt of sample (\*72hrs during peak season).

NWF sales specialists work alongside farmers and in-house nutritionists to develop and sustain the correct diets to maximise herd health and output.

NWF Agriculture conforms to the Forage Analysis Assurance Scheme.



# NWF Grass & Forage Seed Brochure 2023



NWF Agriculture is a national supplier of high quality dairy, beef and sheep feeds to UK farmers. All compound feeds, blends, straights and associated products are supported by expert advice and solutions from sales and technical teams.

For further information and prices  
call your NWF Sales Specialist or call

**0800 756 2787**

or email [sales@nwfagriculture.co.uk](mailto:sales@nwfagriculture.co.uk)

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