

Supplied by:  
**Farm Equip**

SUPERIOR GRASS & FODDER CROPS 2017

**HF**  
**Seeds**

SCOTLAND

Tel: Mobile 07881 804442







HF Seeds have been at the forefront of grass seed innovation for almost 60 years. Farmers have come to rely on HF Seeds for high quality seeds leading to excellent livestock performance, whether cut or grazed.

The very best varieties, in terms of dry matter production, sward density, winter hardiness and feeding value are carefully selected to combine together into our famous grass seed mixtures. You can feel confident that purchasing an HF Seeds mixture is a good start to establishing a new grass sward, leading to the most cost effective means of ruminant animal production.

HF Seeds have been part of DLF since 1996. DLF are the world's largest grass and clover breeder with over 800 employees worldwide, of which 80 are directly employed in grass breeding. This grass breeding and development programme is at the core of what we do and what we have done since 1906. In recent years we have developed varieties with higher levels of digestible fibre – Digestible neutral detergent fibre (DNDF) for greater live weight gain per kilogram of dry matter eaten as well as seed treatments to improve the success of overseeding and deeper rooting more stress tolerant festuloliums or Advanced™ Grasses.

Hailes Farm at Didbrook in Gloucestershire is the home of our UK trials work. Here we have 8500 grass and clover plots on trial as well as over 70 mixture trial plots. This allows us to assess how well individual varieties perform when sown along with other varieties and species. In Ireland we have 2200 plots sown at our Faithlegg site near Waterford, as well as 150 mixture plots, all of which adds to the information used to formulate our mixtures.

With the backing of DLF, HF Seeds continues to go from strength to strength.



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Leading the field for over 50 years

Sowing grass seed is an investment for the future, so it is important to try and get it right and I have used HF Cutsward for many years. It consistently gives me a dense productive sward providing two quality cuts of silage and aftermath grazing for cows and calves in the autumn (this years sow out is after peas and it is looking tremendous). I will continue to use HF because I have confidence in their product.

Hugh Dunlop  
Mains of Glasswell,  
Kirriemuir





HF Mixture Quality

Good grass mixture design begins with the assessment of individual variety characteristics and then uses this information to combine mixture components in different proportions to produce the best possible mixture for the intended duration and purpose of the final sward.

High yields of dry matter will always be one of the most important considerations, along with sward density and digestibility. It is important to also consider the ability of the mixture to perform under stress, drought or otherwise, its palatability and how resistant the mixture is to certain diseases – such as crown rust, mildew and increasingly dreschlara. Winter hardiness and density are the two main contributing factors leading to good persistency. HF Seeds mixtures are renowned for their persistency across harsh northern areas and their longevity, due to consistent performance over many years.

04

Germination

There is a minimum germination for all certified seed used in the UK, but these standards are actually quite low. HF Seed varieties are selected from our own seed stocks that are at least 10% higher germination than the UK certification minimum standard. More live seeds in every bag is very important in producing dense, long lasting swards.

Species	UK Minimum Germination	HF Minimum Germination
Italian Ryegrass	75.0%	90.0%
Perennial Ryegrass	80.0%	90.0%
Timothy	80.0%	90.0%

Purity

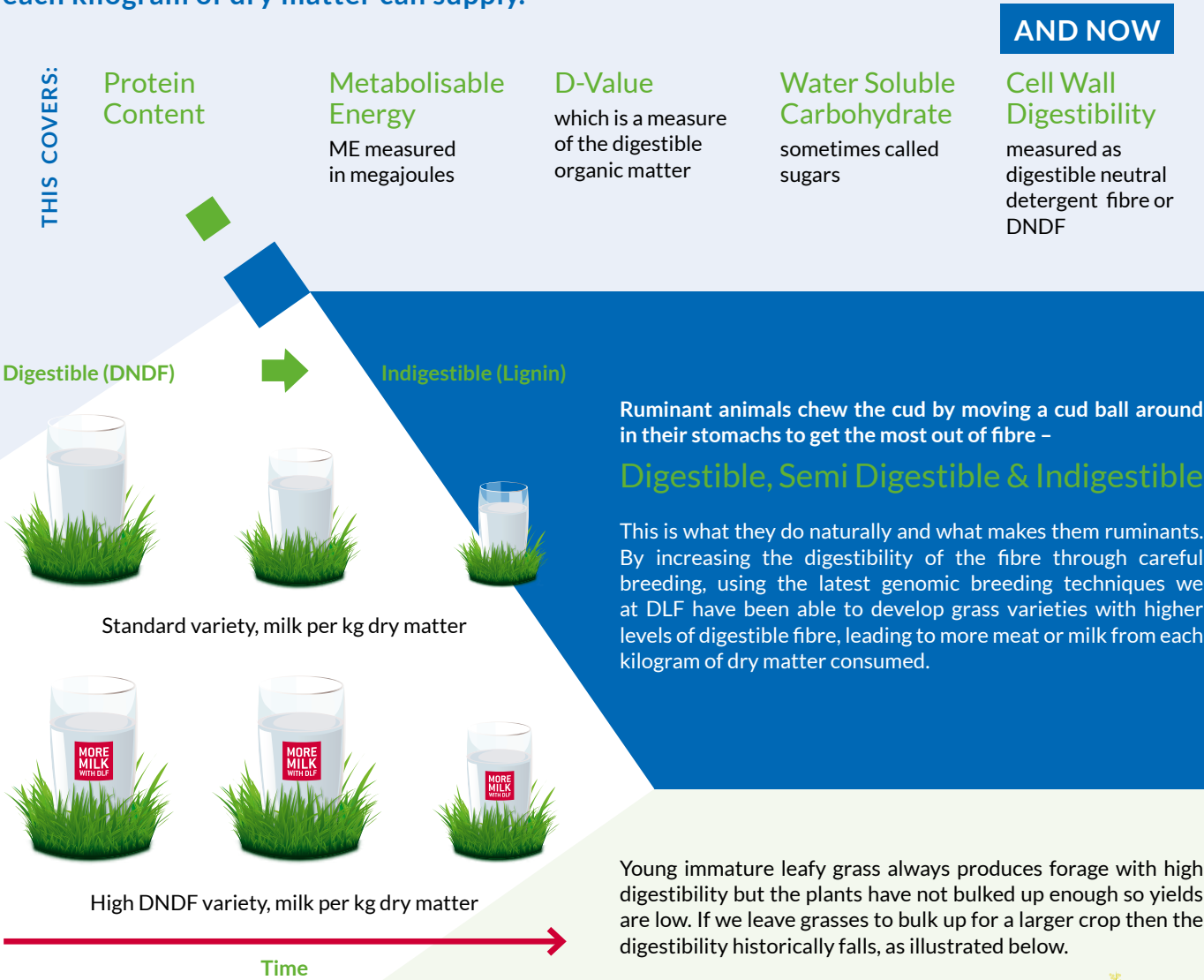
UK grass seed certification also allows the possibility of the presence of relatively high levels of serious grassland weeds. At HF Seeds we impose our own freedom from weeds standards, which are unequalled elsewhere.

This table shows the potential number of weed seeds which could be sown (per acre) each time a field is reseeded. The advantages of HF Seeds rigorous purity standards are easy to see.

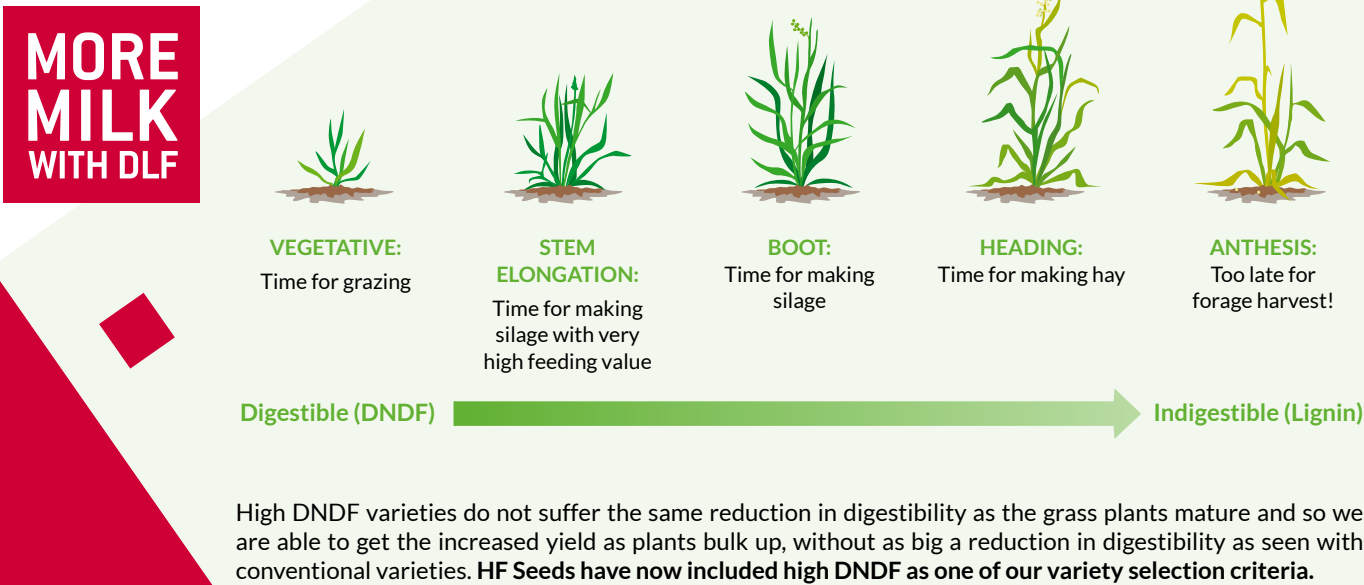
Possible Weed Seed Numbers per acre	UK Minimum Purity Standard	HF Minimum Purity Standard
Docks	1,250	0
Couch	30,000	2,500
Blackgrass	25,000	2,500

HF Forage Quality

The forage quality of grass refers to a range of measurements for different aspects of what each kilogram of dry matter can supply.



05





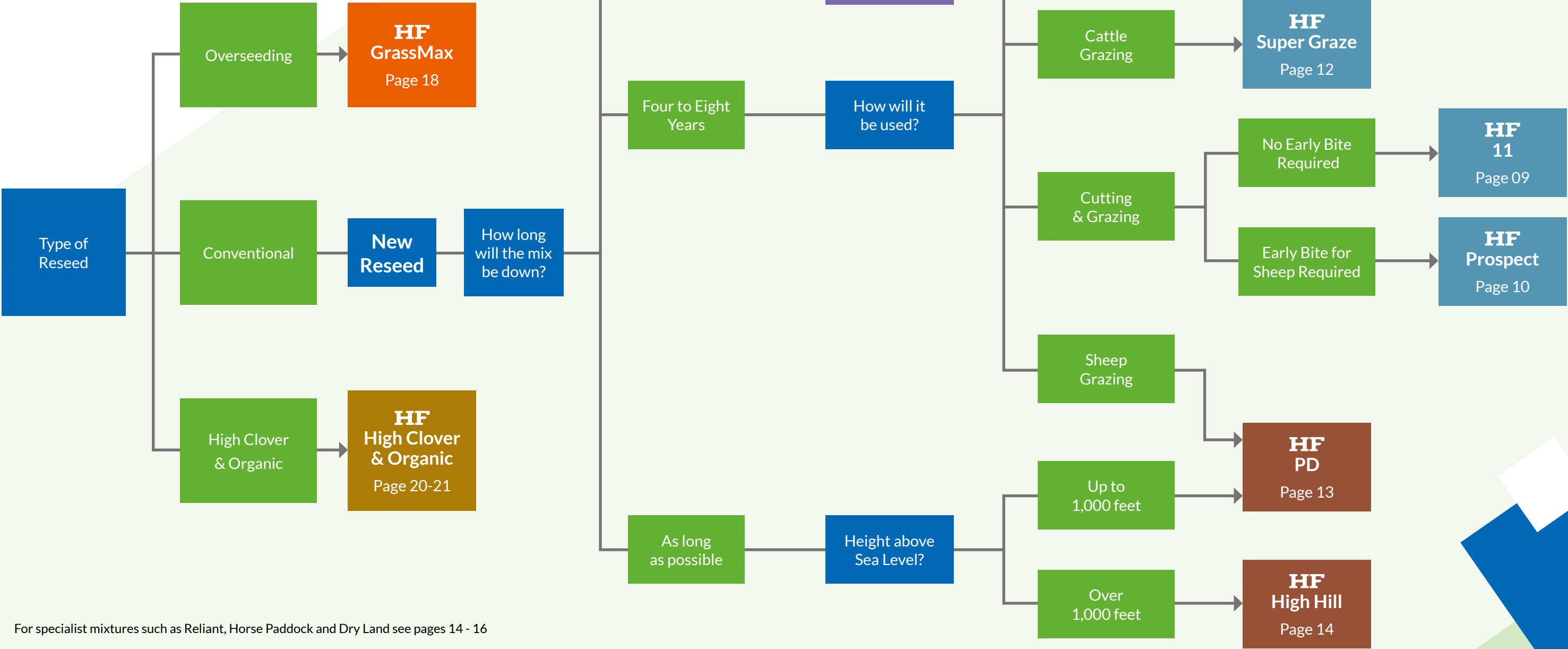
HF Mixture Selector

HF mixtures are designed and formulated to meet specific sward uses.

Significant differences between mixtures are not always obvious but even small differences can change the way in which the final sward behaves. Selection of the wrong mixture will inevitably mean that the sward will not perform up to expectations simply because it is the wrong mix for the job.

The HF mixture selector is designed to help answer many of the common questions in mixture selection, however it is not possible to cater for every situation and if in doubt contact HF Seeds for further advice.

01506 674800 FOR ALL YOUR FORAGE SOLUTIONS



For specialist mixtures such as Reliant, Horse Paddock and Dry Land see pages 14 - 16

**DISCLAIMER**  
Any information provided in this 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. HF Seeds cannot accept any legal liability for information given in this guide. In any instance where there are shortages of specified varieties HF Seeds reserves the right to substitute equivalent varieties.



## HF Bonus

1 to 2 year mixture

**MERIBEL**  
Italian Ryegrass

**HUNTER**  
Tetraploid  
Italian Ryegrass

**PERSEUS**  
Advanced™ Italian Ryegrass

**LOFA**  
Advanced™ Hybrid Ryegrass

**CITELIAC**  
Tetraploid  
Hybrid Ryegrass

Mainly Cutting Mixture

**Bonus is designed for maximum yield over two full production years**

- The top yielding mixture
- High tetraploid content ensures high quality silage
- Capable of 3 or 4 quality cuts per year
- Not suitable for undersowing a cereal as too aggressive

**Recommended sowing rate:**  
13-14 kg/acre 32-35 kg/HA



“

With milk quotas now gone in Ireland I have increased the herd size by 20% and have plans for further expansion. My expansion plans are based on maximising yields of top quality forage. Particular attention to silage quality has really paid off with silage this year cut on 20th May showing a D-value of 78.8, a record for the farm. I put at least some of that down to HF's selection of top quality varieties. HF quality also transfers into their grazing mixtures with dense, persistent and high yielding swards.

**Frankie Crinion**  
Beaupark, Navan,  
County Meath

Mainly Cutting Mixture

**Surecrop is a high performance mixture suitable for Cutting or Grazing**

- Contains a high proportion of Advanced™ Grasses for big yields and stress tolerance
- Will provide 3 full years of quality silage or grazing
- High tetraploid content for rapid fermentation in the pit or grazing palatability
- HF CUTTING White Clover blend included at low percentage rate but may be changed to Red Clover

**Recommended sowing rate:**  
13-14 kg/acre 32-35 kg/HA

## HF Surecrop

3 year mixture

**PERSEUS**  
Advanced™ Italian Ryegrass

**LOFA**  
Advanced™ Hybrid Ryegrass

**SOLID**  
Tetraploid  
Hybrid Ryegrass

**CITELIAC**  
Tetraploid  
Hybrid Ryegrass

**SEAGOE**  
Tetraploid  
Intermediate Perennial Ryegrass

**HF CUTTING CLOVER BLEND**  
White Clover

## HF 11

4 to 6 year mixture

**BOYNE**  
Intermediate Perennial Ryegrass

**NIFTY**  
Intermediate Perennial Ryegrass

**SOLOMON**  
Intermediate Perennial Ryegrass

**DIWAN**  
Tetraploid  
Intermediate Perennial Ryegrass

**SEAGOE**  
Tetraploid  
Intermediate Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**GLENCAR**  
Tetraploid  
Late Perennial Ryegrass

**KINTYRE**  
Tetraploid  
Late Perennial Ryegrass

**DOLINA**  
Timothy

**PROMESSE**  
Timothy

**HF DUAL PURPOSE CLOVER BLEND**  
White Clover

Dual Purpose Mixture

**A flexible, rotational mixture renowned for its consistent yield and performance, under different management regimes**

- Scotland's bestselling mixture
- Contains the very best and most productive varieties
- Persistence is ensured by top class sward density and winter hardiness
- Specifically formulated for high DNDF forage, giving increased meat or milk production per kg of dry matter

**Recommended sowing rate:**  
13-15 kg/acre 32-35 kg/HA

“

HF 11 is sown on all the farm except for 2 fields which have been earmarked for reseeded. I use it on the grazing platform and the silage ground, swards are dense, persistent and I really like it. I milk 110 spring calving cows alongside 100 ewes so early grass is money made or at least saved! Concentrates are kept under 950kg per head along with top quality silage. I cut early and 3 times over the season, running the ewes early over the silage ground really improves the quality of silage.

**James Steel**  
Islandmagee





HF  
Prospect

4 to 8 year mixture

<b>GENESIS</b> Early Perennial Ryegrass
<b>BOYNE</b> Intermediate Perennial Ryegrass
<b>SOLOMON</b> Intermediate Perennial Ryegrass
<b>DIWAN</b> Tetraploid Intermediate Perennial Ryegrass
<b>SEAGOE</b> Tetraploid Intermediate Perennial Ryegrass
<b>ASTONCHIEFTAIN</b> Late Perennial Ryegrass

<b>GLENROYAL</b> Late Perennial Ryegrass
<b>GLENCAR</b> Tetraploid Late Perennial Ryegrass
<b>KINTYRE</b> Tetraploid Late Perennial Ryegrass
<b>DOLINA</b> Timothy
<b>PROMESSE</b> Timothy
<b>HF DUAL PURPOSE CLOVER BLEND</b> White Clover

Dual Purpose Mixture

Similar to HF 11 but containing early Perennial Ryegrass for early bite

- Specifically formulated for early spring growth
- Designed for early sheep grazing, prior to first cut silage
- Offers great flexibility to beef and sheep farms
- High inclusion of 7% White Clover, the same as HF 11

Recommended sowing rate:  
13-15 kg/acre 32-35 kg/HA

HF  
Cutsward

4 to 8 year mixture

<b>BOYNE</b> Intermediate Perennial Ryegrass
<b>SOLOMON</b> Intermediate Perennial Ryegrass
<b>DIWAN</b> Tetraploid Intermediate Perennial Ryegrass
<b>SEAGOE</b> Tetraploid Intermediate Perennial Ryegrass
<b>GLENVEAGH</b> Late Perennial Ryegrass
<b>ASTONCHIEFTAIN</b> Late Perennial Ryegrass

<b>KINTYRE</b> Tetraploid Late Perennial Ryegrass
<b>GLENCAR</b> Tetraploid Late Perennial Ryegrass
<b>ALFONSO</b> Tetraploid Late Perennial Ryegrass
<b>DOLINA</b> Timothy
<b>PROMESSE</b> Timothy
<b>HF CUTTING CLOVER BLEND</b> White Clover

Dual Purpose/Cutting Mixture

Cutsward is a high performance mixture suitable for Cutting or Grazing

- Designed with later heading varieties for later areas
- Varieties selected for high cutting yield and quality
- Slightly higher inclusion of Timothy for colder and later areas
- Excellent winter hardiness and sward density

Recommended sowing rate:  
14-15 kg/acre 32-35 kg/HA

HF  
Super Silage

3 to 6 year mixture

<b>LOFA</b> Advanced™ Hybrid Ryegrass
<b>BOYNE</b> Intermediate Perennial Ryegrass
<b>SOLOMON</b> Intermediate Perennial Ryegrass
<b>SEAGOE</b> Tetraploid Intermediate Perennial Ryegrass
<b>DIWAN</b> Tetraploid Intermediate Perennial Ryegrass
<b>GLENVEAGH</b> Tetraploid Intermediate Perennial Ryegrass
<b>GLENCAR</b> Tetraploid Late Perennial Ryegrass
<b>ALFONSO</b> Tetraploid Late Perennial Ryegrass
<b>HF CUTTING CLOVER BLEND</b> White Clover

Intensive Gutting Mixture

Specifically designed for 3 or 4 cuts

- Formulated for high yields at first cut and subsequent cuts
- Designed for fast regrowth and quality, leafy silage
- Contains a substantial proportion of High DNDF varieties
- High sugar grasses and no Timothy ensures top quality silage

Recommended sowing rate:  
13-15 kg/acre 32-35 kg/HA

“

We run a 364 acre farm with 550 housed dairy cows and 200 beef. We operate a 3 cut silage system with aftermath grazing 800 store bought lambs. I use HF Seeds as it is top quality and very reliable, nearly all our farm is sown out with HF Prospect which provides lots of forage, we find that the mixture has a tight group on heading dates which is very important to us when trying to get the grass cut.

Paul Greening  
Waverbank, Cumbria



## HF Super Graze

4 to 8 year mixture

**BOYNE**  
Intermediate Perennial Ryegrass

**NIFTY**  
Intermediate Perennial Ryegrass

**SEAGOE**  
Tetraploid  
Intermediate Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**TODDINGTON**  
Late Perennial Ryegrass

**PASTOUR**  
Late Perennial Ryegrass

**KINTYRE**  
Tetraploid  
Late Perennial Ryegrass

**HF GRAZING CLOVER BLEND**  
White Clover

### Intensive Grazing Mixture

The ultimate cattle grazing mixture

- High tillering varieties selected for a dense, leafy sward
- Formulated to even out grass production for the whole grazing year
- Palatable, high sugar varieties with excellent sward density and with good levels of DNDF
- A high inclusion of HF Grazing White Clover blend and no Timothy leads to improved animal performance

Recommended sowing rate:  
13-15 kg/acre 32-35 kg/HA



I milk 70 cows and have switched to a Zero Grazing system. Milk from forage has increased from 2500 to 4500lts. Total production stands at 9500 lts.

I find HF Super Graze ideal for my system. Last year I was out from the 10th of March till Mid November. Shoulder growth is excellent but it's the density I like best. I aim for an 18-20 day rotation and that's the key for more milk from forage.

This year I have kept to the reseeding plan with more supergraze put down and for the first time I have overseeded with ProNitro® in 2 silage fields that were becoming very open. Soil moisture was ideal just after cutting so I went straight in, now there's many new germinating plants.

**Matthew Davidson**  
Magheralin, Co. Armagh

Matthew also rears in excess of 500 calves per year under contract for Linden Foods, Dungannon.

## HF PD

8 year+ mixture

**GENESIS**  
Early Perennial Ryegrass

**SOLOMON**  
Intermediate Perennial Ryegrass

**BOYNE**  
Intermediate Perennial Ryegrass

**SEAGOE**  
Tetraploid  
Intermediate Perennial Ryegrass

**DIWAN**  
Tetraploid  
Intermediate Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**GLENCAR**  
Tetraploid  
Late Perennial Ryegrass

**DOLINA**  
Timothy

**PROMESSE**  
Timothy

**MAXIMA**  
Creeping Red Fescue

**HF DUAL PURPOSE CLOVER BLEND**  
White Clover



We farm 16000 acres of Dunalastair Estate with 1800 ewes and 100 beef cows, a large portion of which is rough grazing. HF High Hill was sown in early June and I was happy with how fast it established and the huge amount of clover that came. We grazed it incredibly hard and it recovered remarkably well. Persistency and longevity are key to us so that is why we selected HF High Hill.

**Finlay McIntyre**  
Dunalastair Estate

### Permanent Mixture

The famous versatile long term mixture giving quality forage for many years

- A dual purpose mixture which has become synonymous with quality permanent grass
- Very persistent and winter hardy which contribute to its longevity
- Includes high levels of White Clover and Timothy, as well as a little creeping red fescue for increased density
- Will produce plenty of early grass, even in harsher parts of Scotland

Recommended sowing rate:  
14-16 kg/acre 35-40 kg/HA



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## HF High Hill

8 year+ mixture

**BOYNE**  
Intermediate Perennial Ryegrass

**SOLOMON**  
Intermediate Perennial Ryegrass

**NIFTY**  
Late Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**TWYMAX**  
Tetraploid  
Late Perennial Ryegrass

**DOLINA**  
Timothy

**PROMESSE**  
Timothy

**MAXIMA**  
Creeping Red Fescue

**HF GRAZING CLOVER BLEND**  
White Clover

### Permanent Mixture

#### The long term grazing mixture

- Designed to survive in harsh upland areas and to produce high grazing yields
- Ingredients are selected for cold, snow tolerance and winter hardiness
- Contains a high inclusion of dense, leafy late Perennial Ryegrasses
- High content of both HF Grazing Clover blend and Timothy for lower input situations

Recommended sowing rate:  
14-16 kg/acre 35-40 kg/HA

## HF Scotshay

4 to 8 year mixture

**SOLOMON**  
Intermediate Perennial Ryegrass

**BOYNE**  
Intermediate Perennial Ryegrass

**GLENVEAGH**  
Late Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**LAURA**  
Meadow Fescue

**DOLINA**  
Timothy

**PROMESSE**  
Timothy

**HF DUAL PURPOSE CLOVER BLEND**  
White Clover

### Hay Making Mixture

#### A modern mixture for traditional Haymaking

- A mixture of species used specifically in hay making
- Big yields of easily won hay (no tetraploid Ryegrasses)
- High Timothy inclusion
- Good winter hardiness ensures consistent bulk for many years

Recommended sowing rate:  
13-15 kg/acre 32-37 kg/HA

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## HF Reliant

8 year+ mixture

**GENESIS**  
Early Perennial Ryegrass

**SOLOMON**  
Intermediate Perennial Ryegrass

**MAGICIAN**  
Tetraploid  
Intermediate Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**GLENCAR**  
Tetraploid  
Late Perennial Ryegrass

**DOLINA**  
Timothy

**PROMESSE**  
Timothy

**DONATA**  
Cocksfoot

**MAXIMA**  
Creeping Red Fescue

**HF GRAZING CLOVER BLEND**  
White Clover

### Permanent Mixture

#### A traditional mixture for more extensive or drought prone areas

- Contains Cocksfoot for early grass, winter survival and drought tolerance
- Formulated to provide season long production and outstanding persistency
- Can be closed off and cut for hay or silage
- Varieties and species selected for very good sward density

Recommended sowing rate:  
14-16 kg/acre 35-40 kg/HA

## HF Horse Paddock

4 to 8 year mixture

**SOLOMON**  
Intermediate Perennial Ryegrass

**PREMIUM**  
Intermediate Perennial Ryegrass

**TODDINGTON**  
Late Perennial Ryegrass

**MAXIMA**  
Creeping Red Fescue

**PROMESSE**  
Timothy

### Equine Use Mixture

#### A hard wearing, persistent sward designed for horses

- Ryegrasses selected for top sward density ratings
- Formulated with attractive but low sugar forage to avoid laminitis
- Creeping Red Fescue binds the sward and helps repair poaching
- High Timothy content for grazing horses and to boost haymaking if required

Recommended sowing rate:  
15 kg/acre 37 kg/HA

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## HF Dryland

3 to 5 year mixture

**PERSEUS**  
Advanced™ Italian Ryegrass

**LOFA**  
Advanced™ Hybrid Ryegrass

**MAGICIAN**  
Tetraploid  
Intermediate Perennial Ryegrass

**GLENCAR**  
Tetraploid  
Late Perennial Ryegrass

**DONATA**  
Cocksfoot

### Drought Prone Areas Mixture

A specialist mixture for sandy/light soils

- All species are very deep rooting
- Will produce a large bulk of forage, even in drought prone soil
- Excellent disease resistance particularly crown rust which can be a big problem in hot, dry conditions
- Suitable for cutting or grazing

Recommended sowing rate:  
15 kg/acre 37 kg/HA



## HF CC

Over winter/early spring mixture

**MERIBEL**  
Italian Ryegrass

**EMERALD**  
Forage Rape

**GREEN GLOBE**  
White Turnip

### Sheep Grazing Mixture

Designed to produce autumn and spring grazing

- Green Globe is a white fleshed, green skinned turnip providing good winter forage
- Do not leave it to grow too tall or the Italian Ryegrass will suffer
- A highly productive catch crop mixture
- Can be used for ewes or fattening lambs

Recommended sowing rate:  
9 kg/acre 22 kg/HA

“

Our grass reseeds follow Winter Barley to give a clean entry. HF Seeds are our mixtures of choice to supply forage to 120 dairy cows & follower. We cut in the middle of May and these mixtures deliver high quality crops and superb regrowth for second cut. Good silage and grazing is essential for us and HF mixtures deliver what we need, when we need it.

**JW & AE Faulkner**  
Smerills Farm, Radbourne,  
Kirk Langley, Derbyshire



## HF Multipurpose Landscaper

Long term mixture

**GLENVEAGH**  
Late Perennial Ryegrass

**MAXIMA**  
Creeping Red Fescue

### Landscaping Mixture

Ideal for riverbanks, verges, fruit farms and orchards

- Extreme sward density and good wear tolerance
- Designed to be low maintenance
- Much lower sowing rate than an amenity type mixture
- Has an attractive appearance with a good dark green colour

Recommended sowing rate:  
25 kg/acre 65 kg/HA

“

Our buyers come back year after year to source their grass fed shearlings from Hilton of Culsh because our naturally fed tups last longer. We have been using HF mixtures for over 20 years and have found that they can consistently grow tups without needing any hard feed.

**W A Brown**  
Hilton of Culsh Farm



## HF CD

Over winter/early spring mixture

**MERIBEL**  
Italian Ryegrass

**EMERALD**  
Forage Rape

### Sheep Grazing Mixture

Similar to HF CC, but without the white turnips

- Our most popular catch crop mixture
- Great early spring growth from the Italian Ryegrass
- Graze early to avoid damaging the Italian Ryegrass
- Can be used for ewes or fattening lambs

Recommended sowing rate:  
9 kg/acre 22 kg/HA







**CITELIAC**  
Tetraploid  
Hybrid Ryegrass

**LOFA**  
Advanced™ Hybrid Ryegrass

**GLENCAR**  
Tetraploid  
Late Perennial Ryegrass

**HF CUTTING CLOVER BLEND**  
White Clover

#### Overseeding Mixture

##### For cutting fields

- Ryegrass content is 100% large tetraploid seeds which establish aggressively and boost sugar content
- Designed to improve silage yields in tired or open swards, sow after the last cut of the season
- Is also available in a Red Clover option, with 30% inclusion (HF GRASSMAX RED)
- Has 10% HF White Clover Cutting blend as a standard, but also available as a no clover option

**Recommended sowing rate:**  
10 kg/acre 25 kg/HA



**SEAGOE**  
Tetraploid  
Intermediate Perennial Ryegrass

**TWYMAX**  
Tetraploid  
Late Perennial Ryegrass

**ALFONSO**  
Tetraploid  
Late Perennial Ryegrass

**HF GRAZING CLOVER BLEND**  
White Clover

#### Overseeding Mixture

##### For grazing fields

- Varieties specifically selected for their grazing yield
- High sugar grasses used to increase palatability and improve livestock performance
- Can be drilled at any time during the grazing season
- Has 10% HF Grazing White Clover as standard, but also available as a no clover option

**Recommended sowing rate:**  
10 kg/acre 25 kg/HA

“

*I've been using HF mixtures for many years and I'm always delighted with the quality and quantity of silage, as well as first class aftermath grazing.*

**Iain McKenzie**  
Brora

(Seed supplied by  
W and A Geddes, Wick)



**CITELIAC**  
Tetraploid  
Hybrid Ryegrass

**SEAGOE**  
Tetraploid  
Intermediate Perennial Ryegrass

**KINTYRE**  
Tetraploid  
Late Perennial Ryegrass

**HF DUAL PURPOSE CLOVER BLEND**  
White Clover

#### Overseeding

##### For cutting and grazing fields

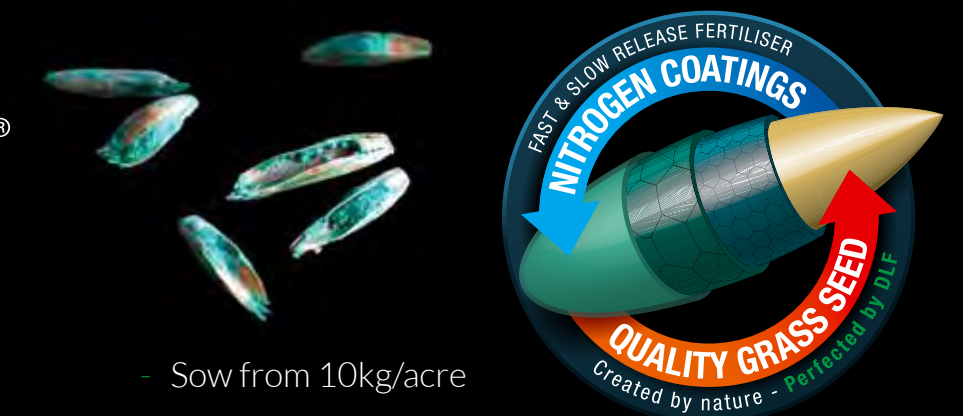
- The top selling Overseeding mixture for cutting and grazing fields
- Ryegrass varieties are selected for performance under both cutting and grazing
- Very good resistance to all the main grass diseases
- Has 10% HF Dual Purpose White Clover as standard. Also available as a no clover option

**Recommended sowing rate:**  
10 kg/acre 25 kg/HA

**HF ProNitro®**  
READY TO GROW

HF GrassMax™ overseeding mixtures are all available with ProNitro® seed treatment. Every seed is coated with nitrogen fertiliser in both fast and slow release forms to form a coating to give the seed an extra boost.

This unique, precision targeted fertiliser coating feeds only the sown seed and not the surrounding sward, resulting in less weeds and improved establishment vigour at the most crucial stage in the overseeding process.



- Sow from 10kg/acre
- Feeds the seed and not the surrounding grass giving up to 34% more viable plants and up to 30% increase in root growth
- Can increase forage yield and therefore lead to more meat and milk production
- Targeted nutrient application which can reduce losses to the environment by up to 50%

ALL HF GRASSMAX™ MIXTURES ARE AVAILABLE WITH PRONITRO®



All the HF High Clover Mixtures are available as Organic Mixtures (70% Organic Content)



“

We need lots of high quality grass right through the year as we have both dairy cows and sheep. Mixtures must be flexible so that we can utilise grass for cow grazing, sheep grazing and for silage. We sow our mixtures after winter barley and rotationally graze with sheep to thicken up the sward for future years.

I am very satisfied with HF grass mixtures.

**Johnathan Stalker**  
Ratten Castle, Sowerby Row, Carlisle  
(Seed supplied by Stephen Walker)

## HF High Clover SHORT TERM

2 to 3 year mixture

**SOLID**  
Tetraploid  
Hybrid Ryegrass

**CITELIAC**  
Tetraploid  
Hybrid Ryegrass

**LOFA**  
Advanced™ Hybrid Ryegrass

**PERSEUS**  
Advanced™ Italian Ryegrass

**HF RED CLOVER BLEND**  
Red Clover

Mostly Cutting Mixture

### A High Performance Red Clover Mixture

- Red Clover is included at the optimum 25% rate to produce lots of high protein silage
- Contains aggressive, fast growing species that can compete with the Red Clover
- High sugar varieties included to give good fermentation
- Can give up to 3 cuts per year and can last for 3 full years

Recommended sowing rate:  
12-14 kg/acre 30-35 kg/HA

## HF High Clover GRAZE

5 year+ mixture

**NIFTY**  
Intermediate Perennial Ryegrass

**TODDINGTON**  
Late Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**PASTOUR**  
Late Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

**ALFONSO**  
Tetraploid  
Late Perennial Ryegrass

**TWYMAX**  
Tetraploid  
Late Perennial Ryegrass

**HF GRAZING CLOVER BLEND**  
White Clover

Mostly Grazing Mixture

### Leafy, dense swards

- Varieties are selected for their grazing performance
- Contains mostly late Perennial Ryegrass that can withstand heavy grazing
- High DNDF varieties leading to excellent animal performance
- The small and medium leaf clovers are selected for their persistency under grazing

Recommended sowing rate:  
14-15 kg/acre 35-37 kg/HA

## HF High Clover DUAL PURPOSE

4 to 8 year mixture

**SOLOMON**  
Intermediate Perennial Ryegrass

**DIWAN**  
Tetraploid  
Intermediate Perennial Ryegrass

**MAGICIAN**  
Tetraploid  
Intermediate Perennial Ryegrass

**GLENROYAL**  
Late Perennial Ryegrass

**ASTONCHIEFTAIN**  
Late Perennial Ryegrass

A Dual Purpose Mixture

### A very flexible mixture

- Contains high DNDF varieties with excellent forage quality
- High percentage of tetraploids to help fermentation and aid the growth of clovers
- Small Red Clover inclusion to help with nitrogen fixation in the early years
- HF Dual Purpose Clover is included at 12% for increased production

Recommended sowing rate:  
14-15 kg/acre 35-37 kg/HA

**TWYMAX**  
Tetraploid  
Late Perennial Ryegrass

**ALFONSO**  
Tetraploid  
Late Perennial Ryegrass

**PROMESSE**  
Timothy

**AMOS**  
Red Clover

**HF DUAL PURPOSE CLOVER BLEND**  
White Clover

“

I have been using HF Seeds for many years and I'm very pleased with the way they establish. This years field is sown at 1,100 feet and is an excellent sward of grass and clover.

**George McConachie**  
Cromdale





Variety	Specie	Description	SAC	AFBI	NIAB
PERENNIAL RYE GRASSES					
Genesis	Early	Later heading within the group, exceptional quality & grazing yields	1	✓	✓
Solomon	Intermediate	Great all round variety, with high DNDF & D-value	1	✓	✓
Nifty	Intermediate	New variety with exceptional grazing qualities and high DNDF	1	✓	✓
Premium	Intermediate	Good mid season growth, very good disease resistance	1		✓
Boyne	Intermediate	Very high yields, especially first cut. Very dense growth habit	1	✓	✓
Diwan	Intermediate (T)	New variety, exclusive to HF with excellent digestibity and high DNDF	1	N/A	✓
Magician	Intermediate (T)	Produces very high grazing yields throughout the growing season	1	✓	
Seagoe	Intermediate (T)	Outstanding variety with excellent growth and good forage quality	1	✓	✓
Glenstal	Intermediate (T)	Good all round variety offering good yields throughout the season	1		✓
Pastour	Late	High DNDF variety with no obvious weaknesses	1	✓	✓
Cancan	Late	Good grazing variety with very late heading date and high DNDF	2		✓
Glenroyal	Late	Good mid and late season growth, with a very dense sward rating	1		
Toddington	Late	Good dual purpose forage variety with good disease resistance	1		✓
Glenveagh	Late	Good mid to late season growth with high sward density	1		
AstonChieftain	Late	Dense, late heading and very high yielding. New to HF	1	N/A	
Kintyre	Late (T)	Great forage quality at first and second cuts	1	✓	
Twymax	Late (T)	Very dense sward for a tetraploid, high DNDF variety	1	✓	✓
Aspect	Late (T)	New variety with good growth throughout the growing season	1	✓	✓
Glencar	Late (T)	Superb cutting variety, outstanding spring growth	1	✓	
Alfonso	Late (T)	Good ground cover for a tetraploid, good spring growth	1		✓

Variety	Specie	Description	SAC	AFBI	NIAB
FESTULOLIUM					
Lofa	Hybrid Festulolium	Excellent stress tolerances, with fantastic early growth			
Perun	Italian Festulolium	Fast growing plant that produces very high quality forage		N/A	
Perseus	Italian Festulolium	Better persistence than a traditional Italian, exceptional early spring growth			
ITALIAN RYEGRASS					
Meribel	Italian	One of the highest yielding Italians on the UK market and very good sward denisty	1	✓	✓
Fox	Italian	New variety with high yields and great disease resistance	1	✓	✓
Gemini	Italian (T)	Top yielding variety with the best D-values on the list	1		✓
HYBRID RYEGRASS					
Hymer	Hybrid (T)	Fantastic yields and forage quality on its first cut	1		✓
Solid	Hybrid (T)	Good sward density with good mid season growth	2		✓
Citeliac	Hybrid (T)	Great yields with great early spring growth from a perennial type hybrid	2		✓
TIMOTHY					
Promesse	Timothy	Good autumn growth, compliments grass mixtures well without over powering	1	✓	✓
Dolina	Timothy	Excellent early and autumn growth	1	✓	✓
WHITE CLOVER					
Violin	White Clover - Medium/Large	Highest yielding clover on the recommended list, outstanding variety	1		✓
Buddy	White Clover - Medium/Large	High yielding clover on the recommended list, when grown with Ryegrass	1	✓	✓
Iona	White Clover - Medium	Excellent growth throughout the season recommended for use throughout the UK	1	✓	✓
Avoca	White Clover - Medium	Outstanding variety with excellent yield and persistency	1	✓	✓
Galway	White Clover - Small	Excellent persistence under both cutting and hard grazing	2		✓
RED CLOVER					
Magellan	Red Clover (T)	Very high yields of protein rich forage particularly in second and third cuts	1		✓
Sangria	Red Clover	Outstanding total yields for this new variety from RAGT	N/A	N/A	N/A
Amos	Red Clover (T)	Great persistence maintaining high yields from an early to intermediate variety	1		✓



# Swedes

Swedes are a full season crop that will last until the end of March or early April. They may be grazed in situ or lifted for stock feed or culinary use. They perform well in Scotland and the north producing 70 to 80 tonnes of fresh weight per hectare of high ME feed (12.8 to 13.1 MJ/kg DM).

Variety	Skin Colour	Flesh Colour	Dry Matter	Comments
Airlie	Light Purple	Creamy white	Low/Medium	Good disease resistance and very uniform
Gowrie	Purple	Yellow	Medium	Uniform, high yielding and has some club root tolerance and good mildew
Invitation	Purple/Bronze	Yellow	Very high	Very high yielding and winter hardy. Excellent resistance to club root and mildew
Kenmore	Bronze/Green	White	Medium	Good winter hardiness giving a wide window of utilisation. Big fresh yields
Lomond	Purple	Yellow	Medium/High	Good club root and mildew resistance
Marian	Purple	Yellow	Medium	A good culinary variety
Ruta Otofte	Dark Purple	Cream	Medium/High	Very popular variety with sheep farmers. Good winter hardiness

# Fodder Beet

High yielding and palatable. High dry matter varieties sit lower into the ground, are more frost tolerant but often have a higher dirt tare. Medium dry matter varieties sit out of the ground more, are easier to harvest and may be grazed. Good weed control is essential when establishing fodder beets.

Variety	Colour	Comments
Alpes	Yellow	Easy lifting variety, very clean, popular
Bangor	Yellow	High yielding variety, clean, grows above the ground
Troya	Yellow	An easy lifting variety, good disease resistance
Jamon	Orange	Very palatable. Can be grazed in situ
Enermax	White	A dual purpose variety, very high yields, clean
Kyros	White	A good value for money variety. High DM, low growing
Magnum	White	A well-known reliable variety. High DM, low growing
Nestor	White	A good value for money variety. High DM, low growing

# Kale

The highest yielding leafy brassica. Grazed by sheep and cattle and occasionally ensiled. Good frost tolerance, but MUST be looked after with good fertility, weed and pest control.

Variety	Height	Use	Comments
Goldeneye	Very tall	Game cover	Strong stem and leafy top, club root tolerant
Gruner Angeliter	Very tall	Cattle	Winter hardy and very high yielding
Maris Kestrel	Medium short	Sheep	Popular leafy sheep grazing variety
Sovereign	Medium tall	Cattle and sheep	High leaf to stem ratio, winter hardy and club root tolerant. Our best selling kale

# Stubble Turnips

Stubble turnips are a fast growing catch crop that are ready to start grazing from 10 to 12 weeks after sowing. Bulbing types are more winter hardy than leafy types, which have better root systems.

Variety	Type	Comments
Barkant	Bulb	Very popular high yielding variety with some winter hardiness. Roots are slightly smaller, but highly digestible
Vollenda	Bulb	Large leaves on this fast establishing tetraploid variety. Good bulb size and palatability
Avalon	Leafy	A new variety. Very leafy and covers the ground quickly
Tyfon	Leafy	It is a cross between a Chinese cabbage and a stubble turnip. Fast growing with reasonable potential for regrowth
Green Globe	Maincrop	Very high fresh yields from large, well anchored and palatable roots. Can be utilised to the end of January

# Forage Rape and Hybrids

This fast growing crop can be utilised by cattle and sheep and has a wide period of utilisation (mid summer and autumn). Highly digestible energy crop which is very palatable and is relatively simple to establish.

Variety	Type	Comments
Emerald	Forage rape	Very popular, fast establishing and palatable. Good disease resistance. Proven over many years in all areas
Akela (organic)	Forage rape	Very late flowering with good winter hardiness. Only Organic seed available
Spitfire	Rape x kale cross	High DM yields of palatable leafy growth. Stems have a low DM so are often grazed. Has good regrowth potential
Zoom (Composite)	Hybrid brassica and rape	A mixture of Winfred hybrid brassica and forage rape which is exceptionally quick to establish and has excellent leaf to stem ratio





# Basic Payment Scheme – Greening

Greening has been introduced to improve the environmental performance of farming. It is mandatory for applicants to the Basic Payment Scheme BPS to comply with greening requirements, where relevant. There are three elements to Greening :-

Permanent Pasture

Land out of rotation for more than five years

Crop Diversification on Arable Land

Often called the “3 crop rule” (temporary grass is also arable)

Ecological Focus Areas (EFA)

6 different options to manage a weighted 5% of land as EFA

The basic principles of Greening are the same throughout the UK, but each region has its own specific requirements. Below are the Scottish Greening options. Please check the exact regulations within your own area.

Variety	Basic Guide	EFA Weighting	Suggested Mixtures
Fallow Land	(EFAFAL) Fallow Period 15th January to 15th July . No agricultural production between these dates. Wild bird mixtures & Nectar rich mixtures encouraged. Basal fertiliser may be applied to aid establishment and ground cover. The fallow period ends on the 16th of July and grass may then be cut or grazed. Plan ahead for next year and establish a late heading mixture for 2018.	1.0	EFA Fallow mixtures See opposite
Buffer Strips	(EFABUF) Period is 1st January to 31st December. Must be next to or run parallel with a water course or water body. Must be between 2m and 20m wide. Must not graze the buffer, but you may cut and remove hay or silage. You should be sympathetic to ground nesting birds by avoiding the nesting period. Wild flower, wild bird seed and normal grass seed mixtures may be established.	1.5	WBS mixtures BGM mixtures Wildflower mixtures Grass mixtures
Field Margins	(EFAFM) Period is 1st January to 31st December. They should be around the margin of a field or split 2 crops within a field. Must be between 1m and 20m wide. You must not cut or graze the margin. Basal fertiliser may be used to aid establishment and ground cover. Wild flower, wild bird seed and normal grass mixtures may be established.	1.5	WBS mixtures BGM mixtures Wildflower mixtures Grass mixtures
Catch Crops	(EFACC) Establish the crop between 1st March and 1st October. The only catch crop you can grow will be a cereal nurse crop with undersown grass. It should be a recognised grass seed mixture. The catch crop must be retained until at least the 31st December. You may graze the catch crop after harvest of the main crop.	0.3	Italian Catch Crop mixture Any undersown mixture
Nitrogen Fixing	(EFANFIX) You must ensure that all EFA nitrogen-fixing crops are surrounded by a claimed EFA field margin. Therefore you can not graze the margin of the field after harvest. You cannot harvest before 1st August to protect ground nesting birds. You must grow 2 of the following; beans, birdsfoot trefoil, chickpea, clover (all types), lentils, lucerne, lupins, peas and vetch (they should be grown independently of each other).	0.7	All Clovers Vetch Lucerne Peas Beans
Green Cover	(EFAGC) Establish the green cover crop between 1st March and 1st October inclusive. Maintain the green cover up to 31st December inclusive. Must incorporate the green cover as a soil conditioner before sowing next crop. It must be a mixture of 2 or more of the following; Barley, clover, lucerne, mustard, oats, phacelia, radish, rye, triticale and vetch.	0.3	N-Rich Cover mixture Any allowed combination

## HF Fallow Mixture No.1

35% Late Perennial Ryegrass (diploid)
50% Late Perennial Ryegrass (tetraploid)
10% Timothy
5% White Clover Blend
100%

- The Timothy and the late heading Perennial Ryegrasses will have kept their feed quality much better than a conventional mixture would have done
- Will give an easily won crop after 16th July
- As no fertiliser may be applied the clover is very important

Recommended sowing rate:  
12-14 kg/acre 30-35 kg/HA

## HF Fallow Mixture No.2

40% Late Perennial Ryegrass (diploid)
50% Late Perennial Ryegrass (tetraploid)
10% Timothy
100%

- This mixture has NO White Clover for situations where weed control may need to be carried out after 16th of July
- This should make a classic hay or haylage crop
- Low energy and low potash feed – ideal for dry cows

Recommended sowing rate:  
12-14 kg/acre 30-35 kg/HA

## HF Fallow Mixture No.3

40% Late Perennial Ryegrass (diploid)
55% Late Perennial Ryegrass (tetraploid)
5% White Clover Blend
100%

- This mixture has NO Timothy for lighter soils or where aftermath grazing is most important. Fertiliser may be applied after the end of the fallow period (16th July)
- Plenty of fresh clean grass at a really useful time of year

Recommended sowing rate:  
12-14 kg/acre 30-35 kg/HA

## HF Your Countryside

For further advice in the specialist area of game cover, environmental stewardship and fodder crops or to request an HF Countryside brochure please contact your HF distributor or phone HF Seeds direct on 01506 674800

