



Monarch

.....

Ley Mixtures



From



Why Choose Monarch Leys?

When it comes to picking the right grass mixture, you need to be sure that your choice offers the best balance of performance and value available.



Index

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The combination of the factors below, together with the experience and knowledge of our authorised distributors, means Monarch customers can be sure they have nothing but the best.

So what makes Monarch a cut and a bite above the rest?

First Class Seed Quality

Ensuring more viable seeds in every bag

Innovative Seed Treatment

Headstart® GOLD ensures rapid germination and stronger, healthier plants

Tetraploid Power

Optimum levels of tetraploid grasses means high sugars and improved intakes

Top Performing Varieties

We include varieties endorsed by the UK Recommended Lists

Unrivalled Customer Service

Expert advice from our team of seed specialists enables growers to make the most of our products

Now Includes LG Animal Nutrition Mixtures



Unique mixtures designed to be superior in their nutritional quality, leading to improved production and ultimately more profit

Terms & Conditions of Sale

All varieties and products listed in this catalogue are offered strictly subject to safe harvest, final certification and remaining unsold on receipt of orders. All other Terms & Conditions of Sale will be advised by your individual Monarch stockist.

Why Reseed?

Why is reseeding so important?

Good grass leys contribute hugely to lowering production costs, but as a sward ages, its yield and feed quality decreases significantly. This is caused largely by the ingress of lower yielding, lower quality weed grasses. Reseeding gives the opportunity to replace older varieties and weed grasses with the newest genetics that offer a multitude of benefits.

Benefits of reseeding

Improved Feed Quality

- Higher ME
- More digestible
- Higher sugars
- Increased protein

Increased Palatability

- Increased voluntary Intakes

More Forage

- Increased silage yields
- Increased grazing yields
- Better disease resistance

Better Stock Holding Capacity

- Extended growing season
- Increased drought tolerance

More efficient use of Inputs

- Better yield response to fertilisers
- Nitrogen fixation from clovers



Value of Reseeding

Reduced feed bills

The table below shows how the yield and energy content of a typical ley changes over time and how this can

lead to increased concentrate costs. A regular reseeding programme reduces money spent on bought-in feeds.

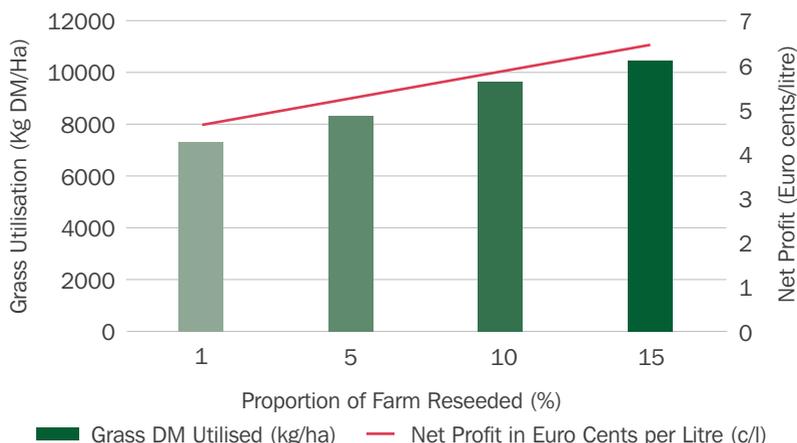
Age of Sward (years)	Ryegrass Content (%)	Yield (t DM/Ha)	Herbage ME (MJ/kg DM)	Lost ME Grown (MJ/ha)	Concentrate cost to replace lost ME (£/ha)
2	95	13.5	12.0	-	-
3	90	12.6	11.8	13,320	197
5	80	11.2	11.5	33,200	491
7	70	9.8	11.3	51,260	759
9	60	8.4	11.0	69,600	1,030
11	50	7.0	10.8	86,400	1,279

Source: AHDB

Increased profitability

Studies carried out at Teagasc in Ireland have shown that increasing the area of the farm reseeded each

year, increases the amount of grass produced and utilised. This leads to improved farm net profit.



Source: Shalloo et al 2011

Seed Quality

The UK has two quality standards of grass seed, with many mixtures only meeting EU minimum standards.

Some mixtures adhere to the Higher Voluntary Standard (HVS) which has more stringent purity requirements.

It is our aim to supply Monarch leys at quality levels that exceed both of these standards



Purity

	EU Quality	Monarch Quality
Pure Seed	96%	98%
Inert Matter	3.2%	2%
Weed Species	0.8%	Trace



A 13kg acre bag from other grass suppliers could contain over 0.5kg of inert material and weed seeds!

Germination

Species	EU Legal Minimum	HVS Standard	Monarch Target
Perennial Ryegrass	80%	80%	90%
Italian Ryegrass	75%	75%	85%
Hybrid Ryegrass	75%	75%	85%



A 13kg acre bag from other grass suppliers could contain less than 10kg of viable seed!

How to establish a new ley

Follow these steps to successfully establish your Monarch ley

1. Resolve drainage and compaction problems
2. Soil test to assess pH and nutrient levels. The optimum requirements are:
 - pH 6.0 (6.5 for clover)
 - P indices of 2
 - K indices of 2-

Consult AHDB's nutrient management guide (RB209) or obtain advice from a FACTS qualified advisor to correct deficiencies

3. Choose your sowing date. Soil moisture and temperature are the key factors. Typical drilling dates would be:

Spring:

March-April for grass swards

April-May for grass and clover swards

Autumn:

August-September for grass swards

July-August for grass and clover swards

4. Prepare a firm, fine seedbed 5-8cm deep. Ring rolling prior to seeding helps ensure adequate moisture and an even drill depth
5. Seed using a harrow/seedler or by direct drilling. If broadcasting, field should be lightly harrowed. Seed should be no deeper than 6mm
6. Roll again to ensure good soil to seed contact



Seed Treatment

HEADSTART® GOLD

Get your grass off to a flying start



Faster establishment



Stronger seedlings



Higher plant numbers



HEADSTART® GOLD is the latest in performance-enhancing seed treatments, developed using the latest scientific research and field experience.

HEADSTART® GOLD uses a combination of enzymes, seaweed extracts and trace

elements to stimulate root formation, development and growth.

A stronger root system during the seedlings critical start-up phase leads to better access to moisture and nutrients; producing stronger, more stress resistant plants.

HEADSTART® GOLD comes as standard on Monarch mixtures where you see the HEADSTART® GOLD logo.

HEADSTART® GOLD

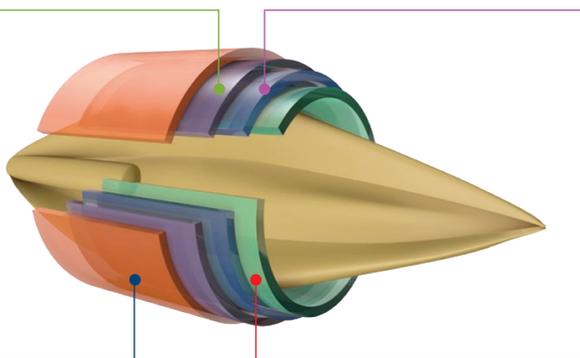
How it Works

Biostimulants

- Promotes the supply of nutrients
- Ensures efficient use of nutrients
- Prevents deficiency of trace elements

Enzyme Activity

- Stimulates growth of roots/shoots
- A catalyst for photosynthesis



Trace Elements

- Copper, Molybdenum, Phosphorous and Sulphur - all essential for rapid rooting and initial seedling growth

Seaweed Extract with High Cytokinin Content

- Promotes cell division & metabolism
- Leads to faster germination

What is LG Animal Nutrition?



The LG Animal Nutrition (LGAN) accreditation is used to denote varieties and mixtures that deliver superior nutritional value, whilst maintaining excellent agronomic qualities and yield.

Independent trials conducted by leading scientific institutes have shown clear increases in animal performance using LG Animal Nutrition products - look out for the logo.

More Efficient Production

Feeding grass with improved quality allows producers to maximise efficiency and reduce production costs. Animal feed, whether in the form of bought-in concentrates or home-grown forage,

makes up a significant proportion of production costs. Increasing the nutritional quality of this feed will help increase milk and meat production.

For more information on the LGAN concept visit lgseeds.co.uk/lgan



Animal Feeding Trials



Work carried out at the Schothorst Research Institute in the Netherlands, compared cows fed a diet including a high quality LGAN grass mixture, with a group fed a control mixture. The animals

fed the LGAN mixture produced an **additional 1.4 litres of milk per day**, worth an **additional £118** a year, per cow, at a milk price of 28 pence per litre.

Schothorst Institute Animal Feeding Trials	Control Mixture	Mixture
Feed Efficiency Milk production per kg fed	1.24	1.30
Milk Yield Litres per cow per day	28.5 litres	29.9 litres
Extra Milk Per Cow Per Year Assuming 300 milking days	-	+420 litres
Extra Profit Per Cow Per Year Assuming 28p per litre	-	+£118

5% Higher Feed Efficiency • 5% More Milk • An Extra £118 Per Cow

Forage Quality Trials

Dartington Forage Quality Trials 2014/15	Control Mixture	Intensive Grazing Mix	Benefit
Dry Matter Yield (t/Ha)	9.81	11.59	+1.78
Energy Content (MJ/Kg)	13.69	13.82	+0.13
Energy Yield (MJ/Ha)	134,508	160,202	+25,694

19% Higher Energy Yield • More Sugar and Digestible Fibre • An Extra £1,357 per Ha

Grass mixture trials carried out at NIAB TAG in Dartington, Devon, tested the forage quality of LGAN grass mixtures against a control mixture of recommended varieties. The results showed that using recommended varieties is not a guarantee

of forage quality. The LGAN mixture produced significantly more energy than the control mix. An additional 25,694 MJ/Ha is equivalent to **an additional 4,848 litres of milk, worth £1,357/Ha**, at a milk price of 28 pence per litre.

Mixture Selection Chart

Mainly Cutting



Short
Term

Grass Booster

18 months value silage mix

p10



Quality Silage

2 years high energy silage

p11

Clovercut

2-3 years silage, with red clover

p10



Medium
Term



Protein Silage

4 years maximum protein

p12

Maxicut

4+ years early cut quality silage

p13



Long
Term

Multicut

5+ years flexible quality silage

p13

Key To Abbreviations Used In The Mixture Descriptions

EPRG: Early Perennial Ryegrass **IPRG:** Intermediate Perennial Ryegrass

LPRG: Late Perennial Ryegrass **Tet:** Tetraploid **WC:** White Clover

Mainly Grazing



Matrix 40

p15

Matrix 70

p16

Matrix with Timothy

p17

Matrix Sheep & Lamb

Medium to long term
extended grazing

p17



Intensive Grazing

Quality grazing mixture for
maximum production

p18



Multigraze

Dense mixture for
intensive grazing

p19

Dual Purpose

Hymax

Short term, high yielding,
dual purpose mix

p20



Silage & Grazing

Versatile cutting and
grazing mixture

p21

Flexiscot

Medium to long term mix for
Scotland and Northern England

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Greensward

Value long term dual purpose mix

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Permanent Pasture

Long term dual purpose
with Timothy

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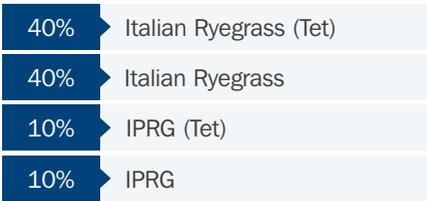


Grass Booster (Blended Ryegrass)

Short Term

This mixture uses Italian ryegrasses to provide tremendous yields and fast regrowth over an 18 month period.

- Ideal catch crop sown after maize, arable silage or wholecrop
- Helps prevent winter soil erosion and mops up nutrients to help prevent leaching
- Fast spring growth suited to an early silage cut
- A great budget short term ley option



Pack size: 25kg



- Tetraploid Ryegrass
- Diploid Ryegrass

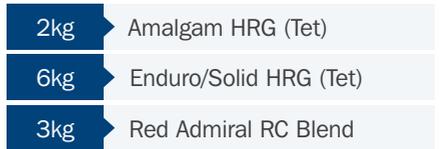
Clovercut

Short Term



A 2/3 year cutting mixture consisting of tetraploid grasses and red clover to give top quality, highly nutritious silage.

- Gives big yields of high energy, high sugar and high protein silage
- Fixes atmospheric nitrogen
- Designed for cutting but aftermath can be grazed
- Good drought tolerance
- Now treated with HEADSTART® GOLD for improved establishment



Pack size: 11kg



- Tetraploid Ryegrass
- Red Clover



Quality Silage



Short Term

A high energy, highly digestible silage mixture, giving improved production from conserved grass.

- Good D-Value, DNDf and energy content to maximise production
- Good sugar content for quick silage fermentation and efficient conservation of nutrients
- Very high yielding - up to four cuts per year for two years
- Well suited to zero grazing or multicut systems

4kg ▶ Gemini IRG (Tet)

2kg ▶ Davinci IRG

2kg ▶ Meribel IRG

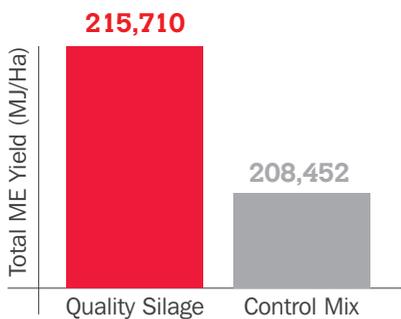
2.5kg ▶ Amalgam HRG (Tet)

2.5kg ▶ Scapino HRG (Tet)

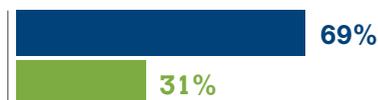
Pack size: 13kg

Trial Results

Energy Yield



NIAB TAG Trials 2014/15



■ Tetraploid Ryegrass

■ Diploid Ryegrass





Protein Silage



Medium Term

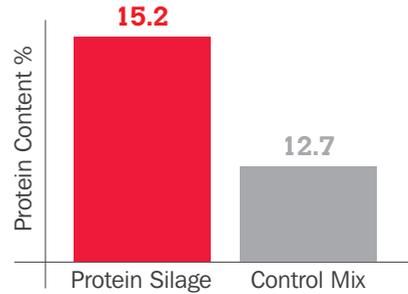
Produces a protein rich silage that minimises the need for supplementation of protein in the diet.

- The ideal complement to high energy feeds such as LG Animal Nutrition maize silage
- Includes red and white clovers to increase digestibility and palatability
- High sugar tetraploid grasses balance the high protein clovers and improve silage fermentation
- Includes Violin; the highest yielding white clover on the Recommended List

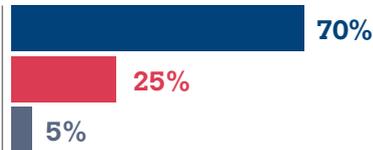
4.2kg	Trintella IPRG (Tet)
4.2kg	Pensel IPRG (Tet)
0.6kg	Violin WC
3kg	Red Admiral RC Blend

Pack size: 12kg

Trial Results Protein Content



NIAB TAG Trials 2014/15



- Tetraploid Ryegrass
- Red Clover
- White Clover



Maxicut

Medium Term

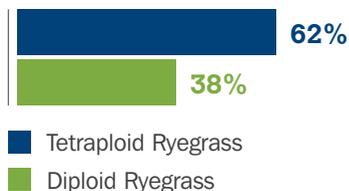


A medium term cutting mixture designed to give high yields of early cut, top quality silage over a 4 year period or longer.

- Rapid spring growth ensures early first cut
- Close heading dates for high quality silage
- Suits all cutting regimes
- High sugars for improved fermentation

4kg	Montova IPRG (Tet)
4kg	Aston Bonus IPRG (Tet)
2kg	Copeland IPRG
3kg	Solomon IPRG

Pack size: 13kg



Multicut

Long Term

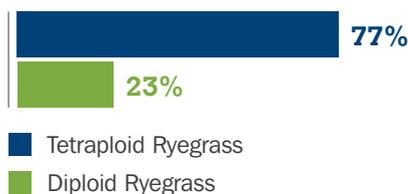


Multicut is a long term cutting mixture which offers excellent yields of high quality silage with more flexible heading dates, combined with excellent leafy aftermath grazing.

- High tetraploid content gives increased sugar levels and high ME silage
- Superb disease resistance and drought tolerance
- Late heading grasses boost aftermath grazing
- Also available with Ensign Plus white clover blend

4kg	Aston Bonus IPRG (Tet)
2kg	Meiduno LPRG (Tet)
4kg	Novello LPRG (Tet)
3kg	Timing LPRG

Pack size: 13kg





Matrix Enhanced[®] Ryegrass Mixtures



What is Matrix Enhanced[®] Ryegrass?

Matrix is a high quality grazing festulolium variety which gives a much extended grazing season and faster regrowth than a conventional ryegrass. Matrix was developed by Cropmark in New Zealand and is an inter-generic hybrid consisting of around 80% diploid perennial ryegrass and 20% meadow fescue.



Benefits of Matrix Enhanced[®] Ryegrass

- Begins growing at lower temperatures than ryegrass, giving up to **3 weeks extra growth in the spring**
- Continues to grow much later in the autumn than ryegrass, giving an **additional 3 weeks grazing**
- Very **rapid regrowth** in-between grazings
- Very dense, fine-leaved sward which resists **poaching and treading**
- Excellent **forage quality and digestibility**
- Unique growth characteristics perfectly **suited to paddock management or rotational grazing systems**



Matrix 40



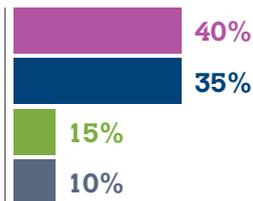
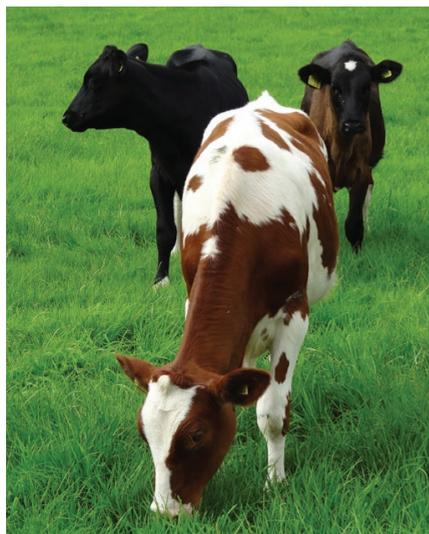
Medium Term

A grazing mixture that gives excellent nutritional value over an extended growing season.

- Good energy, protein, sugar and digestibility for maximum feed value
- Excellent ground cover for resistance to poaching and increased sward longevity
- The high percentage of white clover increases the protein content and reduces the need for applied fertiliser

40%	Matrix Enhanced® Ryegrass
35%	Xenon LPRG (Tet)
7.5%	Cancan LPRG
7.5%	Romark LPRG
10%	Ensign Plus White Clover Blend

Pack size: 25kg



- Matrix Enhanced® Ryegrass
- Tetraploid Ryegrass
- Diploid Ryegrass
- White Clover



Matrix 70

Medium Term



A high proportion of Matrix Enhanced® Ryegrass, together with the best late heading tetraploid perennial ryegrasses and clover.

- The pinnacle of modern grazing mixtures
- Exceptional yield and quality over an extended growing season
- Suited for warmer parts of the country, unless overseeding
- High white clover content

70% Matrix Enhanced® Ryegrass

20% Xenon LPRG (Tet)

10% Ensign Plus WC Blend

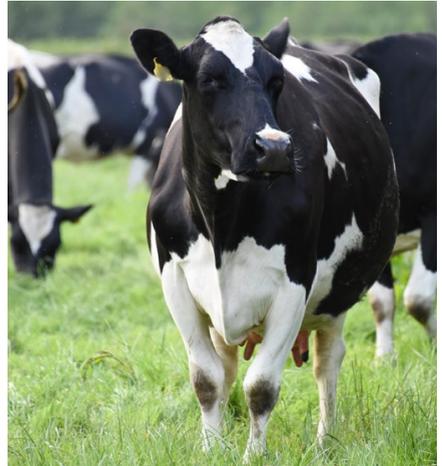
Pack size: 25kg



Matrix Enhanced® Ryegrass

Tetraploid Ryegrass

White Clover





Matrix With Timothy



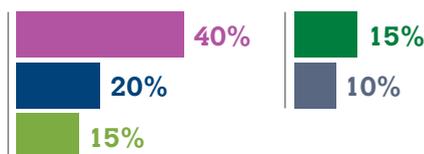
Medium Term

A mixture formulated as a result of our extensive product development trials.

- Matrix and Timothy both grow at a lower temperature, giving excellent growth on the shoulders of the season
- Superb spring growth allows earlier turnout
- The addition of Timothy adds winter hardiness
- The highest yielding grazing mixture in our recent trials



Pack size: 25kg



- Matrix Enhanced® Ryegrass
- Tetraploid Ryegrass
- Diploid Ryegrass
- White Clover
- Timothy
- White Clover

Matrix Sheep & Lamb



Medium Term

This Matrix Enhanced® Ryegrass mixture has been specially formulated for grazing sheep and lambs.

- Offers rapid regrowth and extended grazing
- Includes ryegrass varieties that tolerate very close grazing
- Stoloniferous small leaved white clovers persist well under sheep grazing



Pack size: 25kg



- Matrix Enhanced® Ryegrass
- Diploid Ryegrass
- Tetraploid Ryegrass
- White Clover



Intensive Grazing



Long Term

A mixture formulated to maximise voluntary intakes and increase animal production from grazed grass.

- Highly palatable and highly digestible tetraploid grasses increase the rate of digestion, leading to improved voluntary intakes
- Outstanding energy content means more milk and meat from every bite
- High sugars and digestible fibre improve digestion efficiency

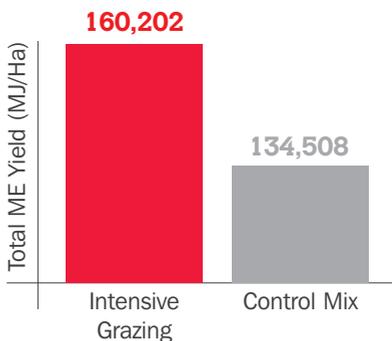


3kg	Drift LPRG (Tet)
3kg	Novello LPRG (Tet)
3kg	Xenon LPRG (Tet)
3kg	Twymax LPRG (Tet)
1kg	Ensign Plus WC Blend

Pack size: 13kg

Trial Results

Energy Yield



NIAB TAG Trials 2014/15



Multigraze



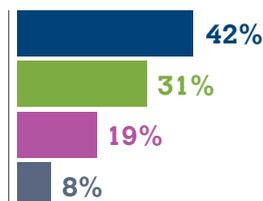
Long Term

A long term grazing mixture that delivers a top class, dense, leafy sward - ideal for sheep grazing.

- Now includes Matrix Enhanced® Ryegrass for earlier spring growth, improved sward density and faster regrowth
- Suitable for intensive grazing by all livestock
- Provides excellent ground cover during wet periods or on damper ground
- Late heading varieties ensure leafy, stem free growth for longer
- White clover content boosts protein and fixes atmospheric nitrogen

2.5kg	Xenon LPRG (Tet)
3kg	Drift LPRG (Tet)
2kg	Matiz LPRG
2kg	Romark LPRG
2.5kg	Matrix Enhanced® Ryegrass
1kg	Ensign Plus WC Blend

Pack size: 13kg



- Tetraploid Ryegrass
- Diploid Ryegrass
- Matrix Enhanced® Ryegrass
- White Clover





Hymax

Short Term

A very high yielding 3/4 year ley, capable of producing multiple cuts with aftermath grazing.

- Hybrid ryegrasses give early spring growth, fast regrowth and higher yields than perennial ryegrass
- High tetraploid content offers excellent palatability, high digestibility and increased production
- Can be supplied with white clover
- Perfect for use as a break crop in arable rotations



- Tetraploid Ryegrass
- Diploid Ryegrass



4kg	Hymer HRG (Tet)
3.5kg	Scapino HRG (Tet)
3kg	Enduro/Solid HRG (Tet)
2.5kg	Copeland IPRG

Pack size: 13kg





Silage and Grazing



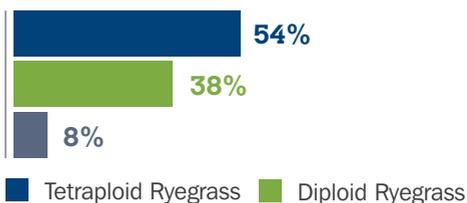
Medium Term

A versatile mixture with a perfect balance of nutritional qualities when cut or grazed.

- Includes varieties that express superior nutritional qualities under both grazing and conservation managements, to give improved animal performance
- High D-value and digestible fibre maximises nutrient availability and increases voluntary intakes
- High energy and sugars fuel milk and meat production
- Includes LG Animal Nutrition White Clover Blend to increase palatability, mineral and protein content

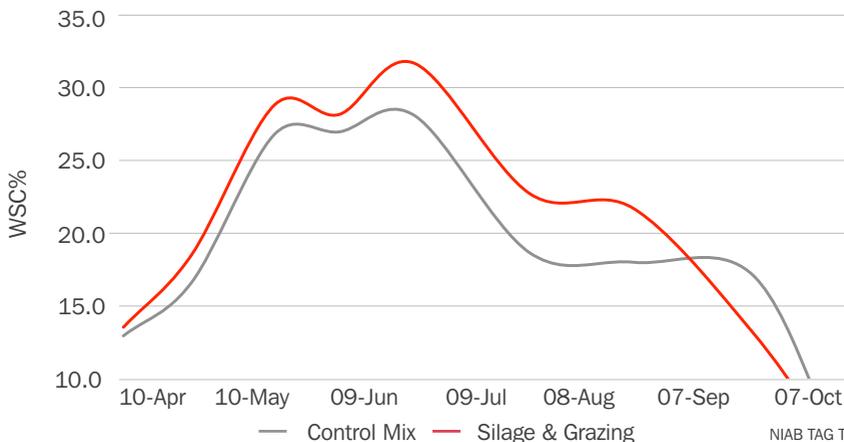
2.25kg	Pensel IPRG (Tet)
2.25kg	Trintella IPRG (Tet)
2kg	Solomon IPRG
2.5kg	Xenon LPRG (Tet)
3kg	Matiz LPRG
1kg	Ensign Plus WC Blend

Pack size: 13kg



Trial Results

Chart shows the excellent sugar (WSC) of Silage & Grazing mixture throughout the growing season compared with the control mixture.



NIAB TAG Trials 2014



Flexiscot

Medium Term

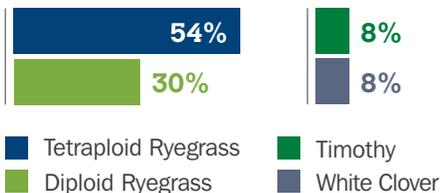


A medium/long term dual purpose mixture, tried and tested across Scotland and northern England.

- Hybrid ryegrasses give early growth for spring grazing or first cut silage
- Successive growth pattern of varieties gives reliable, consistent growth throughout the growing season
- Excellent winter hardiness
- Suitable for all classes of livestock and for silage, grazing or hay production

1kg	Hymer HRG (Tet)
2kg	Carraig IPRG (Tet)
2kg	Montova IPRG (Tet)
1kg	Copeland IPRG
1kg	Drift LPRG (Tet)
1kg	Meiduno LPRG (Tet)
1kg	Pastour LPRG
2kg	Toddington LPRG
1kg	Comtal Timothy
1kg	Ensign Plus WC Blend

Pack size: 13kg



Greensward

Long Term

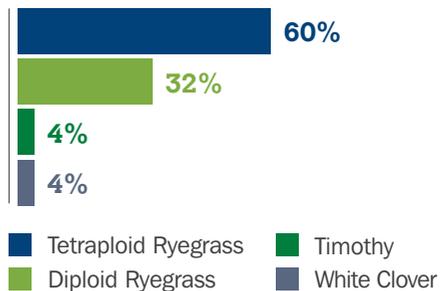


A long term dual purpose mixture which offers excellent value for money.

- Suitable for grazing, silage or hay and all classes of livestock
- Good winter hardiness
- Successive growth pattern of varieties offers great flexibility
- A cost effective solution

3kg	Carraig EPRG (Tet)
2.5kg	Aston Bonus IPRG (Tet)
2kg	Trintella IPRG (Tet)
1kg	Elyria IPRG
1kg	Copeland IPRG
2kg	Matiz LPRG
0.5kg	Comtal Timothy
0.5kg	Crusader WC

Pack size: 12.5kg





Permanent Pasture

Long Term

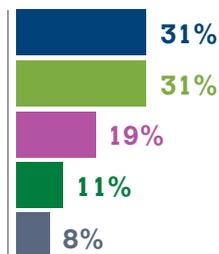
Permanent Pasture is a long term, dual purpose mixture that delivers outstanding performance over many years.

- Includes Matrix Enhanced® Ryegrass for earlier spring growth, improved sward density and faster regrowth
- The best selling mixture in the Monarch range
- Highly productive in varied growing conditions from fertile lowlands to cooler, more severe uplands
- Suitable for extensive or intensive management systems, across all livestock types



1.5kg	Carraig EPRG (Tet)
1.5kg	Copeland IPRG
1.5kg	Drift LPRG (Tet)
1kg	Novello LPRG (Tet)
1.5kg	Timing LPRG
1kg	Romark LPRG
2.5kg	Matrix Enhanced® Ryegrass
1.5kg	Comtal Timothy
1kg	Ensign Plus WC Blend

Pack size: 13kg



- Tetraploid Ryegrass
- Diploid Ryegrass
- Matrix Enhanced® Ryegrass
- Timothy
- White Clover





EQUIPADDOCK
QUALITY EQUESTRIAN GRASS MIXTURES





Equipaddock Original



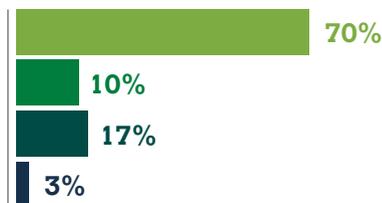
Long Term

Equipaddock Original is a flexible grazing or cutting ley designed specifically for use by horses and ponies.

- Forms a very dense rhizomatous sward, which is suited to hard grazing and has the ability to repair itself
- Capable of producing good yields of high quality horse hay
- Suitable for gallops, where good ground cover is beneficial
- Responds well to moderate use of nitrogen fertiliser to bulk up yields and aids with recovery after cutting

1.5kg	Early Perennial Ryegrass
3kg	Intermediate Perennial Ryegrass
2.5kg	Late Perennial Ryegrass
1kg	Timothy
0.25kg	Smooth Stalked Meadow Grass
1.75kg	Creeping Red Fescue

Pack size: 10kg



- Diploid Ryegrass
- Timothy
- Creeping Red Fescue
- Smooth Stalked Meadow Grass

Call
01472 370117
for our
Equipaddock
leaflet to see
the full range





Westerwolds

Short Term

Westerwolds is an annual crop that offers the highest yields of any ryegrass and is used to produce huge yields over 1 year.

- Very vigorous and quick to establish
- Spring crops are ready for silaging in just 9 to 10 weeks from sowing and are capable of producing 3 to 4 cuts
- Sowing after maize harvest prevents problems associated with bare stubbles, whilst increasing forage production
- Westerwolds can be added to longer term ley mixtures to give extra yield and earlier growth potential

Sowing Rate: 13-16kg/acre

32-40kg/Ha

Key Varieties

Peleton - A tetraploid variety, that has a larger seed size with increased vigour, giving the best opportunity for rapid establishment.

Prompt - bred for additional persistence, this variety has improved winter hardiness and is therefore suitable for autumn sowings.





Rejuvenator

Medium Term



Rejuvenator is an economical, medium term solution for repairing damaged pastures and boosting yields.

- Vigorous tetraploid grasses establish quickly and compete well with the existing sward
- Short term grasses give good early spring growth
- Longer term grasses offer good ground cover and persistency
- Sow at 10kg per acre for overseeding into existing pasture

30% Davinci IRG

25% Enduro HRG (Tet)

20% Carraig EPRG (Tet)

25% Montova IPRG (Tet)

Pack size: 10kg



- Tetraploid Ryegrass
- Diploid Ryegrass

Clover Rejuvenator

Medium Term



The perfect mixture to rejuvenate the grass and clover content of a sward, significantly improving forage production and quality of old or tired pastures.

- All of the benefits of Rejuvenator with added clover
- Ideal for adding in white clover after non-clover safe herbicide use
- Clover and larger seeded grasses make calibration of equipment and sowing easier than clover seed alone
- Helps reduce the fertiliser bill

57% Montova IPRG (Tet)

30% Xenon LPRG (Tet)

13% Ensign Plus WC Blend

Pack size: 10kg



- Tetraploid Ryegrass
- White Clover



Forage Chicory - Grasslands Choice

Why grow Forage Chicory?

- Increased milk production
- Higher liveweight gain in lambs and beef animals
- Good drought tolerance and mid-summer growth
- Elevated mineral and trace element content for healthy livestock
- Very high forage quality and digestibility

Management

- Drill into warm, well drained soils (10°C) at a depth of about 10mm.
- Can be sown in herbal strips or blocks, rather than throughout the ley, to simplify management. Please note; topping may be required to prevent bolting.
- Best rotationally grazed. Re-grazing should only be undertaken when 2 to 4 leaves per plant have fully re-grown.

Sowing Rate:

2-6kg/acre straight
1-4kg/acre in a grass/clover mix

Preferred Variety

Grasslands Choice is a cool season variety, most compatible with grasses in mixtures. It exhibits long season growth, only becoming dormant at near freezing temperatures.

Herb Mix

Mixed Herbs are a valuable addition to grazing mixtures, allowing their rooting systems to draw up minerals and trace elements, essential to the diet of sheep and cattle.

30% Sheeps Parsley

35% Chicory

10% Ribgrass

25% Burnet

Pack size: 10kg

Include at 1kg per acre



Red Clover

Red clover offers the opportunity to reduce reliance on purchased concentrate feeds, due to its big yields of very high protein forage. Sown straight or as part of a mixed grass/clover sward, red clover can produce up to 4 cuts a year with quality aftermath grazing. Like other leguminous plants, red clover also fixes atmospheric nitrogen, helping to bring down fertiliser costs.

Red Admiral Red Clover Blend

Red Admiral is a blend of diploid and tetraploid red clover varieties with a range of flowering dates, that has been proven to deliver consistently high yields for three harvest years. Red Admiral is included in **Clovercut** (Page 10) and **Protein Silage** (Page 12).

Why grow Red Clover?

- High yields of protein rich forage
- Predominantly used for silage but can also be grazed
- Much higher yielding than white clover
- Reduces N fertiliser use
- Improves soil structure
- Drought tolerant

Sowing Rate:

5-6 kg/acre straight
3kg/acre as part of grass/clover mix





White Clover

White clover is the most important forage legume currently grown in the UK. Whether you are milking dairy cows, finishing cattle or feeding sheep, this flexible species has an important part to play in the ley mixtures on your farm. White clover has the potential to improve the quality of any leys cut and conserved as silage or grazed in the field, whilst also fixing atmospheric nitrogen - reducing fertiliser costs.



Why Grow White Clover?

- High quality feed
- High protein and digestibility
- Rich in minerals
- Increased voluntary intakes and animal performance
- Good drought resistance and mid-season growth
- Can fix over 160kg/ha of nitrogen
- Reduced N fertiliser use
- Improves soil structure

Sowing Rate:

1kg/acre as part of a grass/clover mix



White Clover Blends

Why Grow White Clover Blends?

Ensign Plus White Clover Blend

Ensign Plus is a carefully designed white clover blend included in many mixtures in the Monarch range. It includes specially selected small, medium and large leaved clover varieties, making the blend suitable for a range of management types. This blend of varieties ensures optimum establishment, persistency and growth through the season.



Pictures show untreated clover seed (top) and CloverPlus pelleted clover seed (bottom)

CloverPlus Pelleted White Clover Blend

Overseeding clover into an existing ley has become a very popular method of improving productivity and CloverPlus is the perfect product for the job. CloverPlus is a white clover blend, coated in a pellet and treated with HEADSTART® GOLD. This unique product offers several significant benefits:

- The pellet increases the weight and size of the seed, making equipment calibration easier and giving a more consistent spread pattern if broadcast.
- The added weight ensures greater numbers of seed get down through the existing sward to give maximum soil/seed contact.
- In dry conditions, the pellet will protect the seed until there is sufficient moisture for germination.
- HEADSTART® GOLD seed treatment speeds up germination, giving young plants the best opportunity to compete with the existing sward.

Sowing Rate: 2kg/acre



Lucerne

Lucerne provides good yields of highly nutritious silage and is particularly useful in relatively dry conditions. Lucerne is very high in protein and minerals and its lower cell wall content means lucerne is highly digestible with high intakes.

Why Grow Lucerne?

- High protein forage
- Drought tolerant
- Four cuts per year possible
- 3 to 5 year potential
- Suitable for silage, big bales, hay or zero grazing
- Fixes atmospheric nitrogen

Please contact us
for a copy of our
comprehensive
lucerne growers
guide

01472 370117

Management

Lucerne can be sown from April through to August, though later sowings carry a greater risk of establishment failure, due to cooler weather and winter kill.

Seed should be treated with a Rhizobium inoculant to ensure root nodulation and efficient nitrogen fixing.

Sow at 8-15kg/acre into well drained soils with a neutral pH. Lucerne will not tolerate waterlogged or acidic soils. Drill into moisture in 10cm rows, no deeper than 1cm.

First cut will usually be in late April/May with subsequent cuts at approximately 40 day intervals.



No. 1 Organic Fertility Builder



This mixture of Italian and hybrid ryegrasses, along with highly productive red clover, will not only boost soil fertility but will also help increase soil humus levels, over the course of two years.



20%	Organic Italian Ryegrass
30%	Organic Italian Ryegrass (Tet)
20%	Organic Hybrid Ryegrass (Tet)
30%	Red Clover Blend

Sowing Rate: 13-16kg/acre

Pack size: 25kg



No.2 Organic Grazing



This grazing mixture differs from conventional mixtures in that it has a high white clover content and a more open sward, which enables the clover to thrive. The mixture also contains mid and late season perennials - including some very palatable tetraploids.

10%	Organic Intermediate Perennial Ryegrass
10%	Organic Intermediate Perennial Ryegrass (Tet)
20%	Organic Late Perennial Ryegrass (Tet)
30%	Organic Late Perennial Ryegrass
20%	Late Perennial Ryegrass
10%	White Clover Blend
Sowing Rate: 13-16kg/acre	

Pack size: 25kg

No.3 Organic Cutting



This 4+ years organic mixture has been designed to give that slight edge to silage quality at each cut.

The choice of varieties with close cutting dates mean all grasses are at their optimum quality, at the same time.

Despite its name, Organic Cutting mixture also doubles up as a good quality grazing mixture in mid summer, with leafy grass regrowth.

40%	Organic Intermediate Perennial Ryegrass
20%	Organic Intermediate Perennial Ryegrass (Tet)
10%	Organic Late Perennial Ryegrass (Tet)
20%	Late Perennial Ryegrass
10%	White Clover Blend
Sowing Rate: 13-16kg/acre	

Pack size: 25kg



No.4 Organic General Purpose



This long term organic ley mixture is highly versatile, being well suited to a range of soil types and growing conditions. Organic General Purpose will produce high quality silage from one or two cuts with aftermath grazing. Conversely, if used as a grazing ley, the white clover blend will enhance digestibility, as well as inputting soil nitrogen. Organic General Purpose is suitable for all classes of livestock.

20%	Organic Intermediate Perennial Ryegrass
25%	Organic Intermediate Perennial Ryegrass (Tet)
10%	Intermediate Perennial Ryegrass
15%	Organic Late Perennial Ryegrass
10%	Late Perennial Ryegrass (Tet)
10%	Organic Timothy
10%	White Clover Blend
Sowing Rate: 13-16kg/acre	

Pack size: 25kg

No.5 Organic Long Term



This mixture utilises a range of species which will thrive in lower fertility conditions and less favourable soil types. Meadow fescue can, for example, outyield ryegrass in lower fertility soils and timothy will often produce more palatable herbage than perennial ryegrass when grown on wetter, heavy soils. This mixture is ideal for land that you would prefer not to plough too often.

25%	Organic Intermediate Perennial Ryegrass (Tet)
15%	Organic Late Perennial Ryegrass (Tet)
15%	Late Perennial Ryegrass (Tet)
15%	Organic Late Perennial Ryegrass
15%	Organic Timothy
5%	Meadow Fescue
10%	White Clover Blend
Sowing Rate: 13-16kg/acre	

Pack size: 25kg

SR2: For Cover, Catch, Forage Crops & Leys



SR2 is a soil conditioning package of Mycorrhizal fungi and Rhizobacteria proven to give significant yield benefits in newly sown leys.

Arbuscular Mycorrhizal Fungi (AMF) grow into the establishing grass roots, increasing the uptake surface area by up to 700 times. This increases nutrient availability and uptake by the plant and improves drought tolerance. Plant defence mechanisms are also improved by the partnership.

Plant Growth Promoting Rhizobacteria (PGPR) are a group of bio fertilisers able to fix atmospheric nitrogen and unlock

soil-borne phosphorous that can then be efficiently transported to the plant by the AMF. PGPR support a robust plant immune system and produce plant hormones aiding growth and development.

Put simply, plants grown in SR2 treated soils are:

- Higher yielding
- Healthier
- More drought tolerant
- More efficient at collecting nutrients from the soil

	Relative DM Yield		
	Untreated	Treated with SR2	% Yield Increase
Tetraploid Ryegrass*	100	139	39%
Diploid Ryegrass**	100	134	35%

Source: LG replicated trials 2016 *100% = 6.40t/Ha over 4 cuts **100% = 3.22t/Ha over 3 cuts

Application rate:

10kg/Ha

Application Method:

- Granules must be as close to the seed as possible

Apply by:

- Mixing with seed at drilling
- Using granular applicators
- Broadcasting and incorporating into seedbed



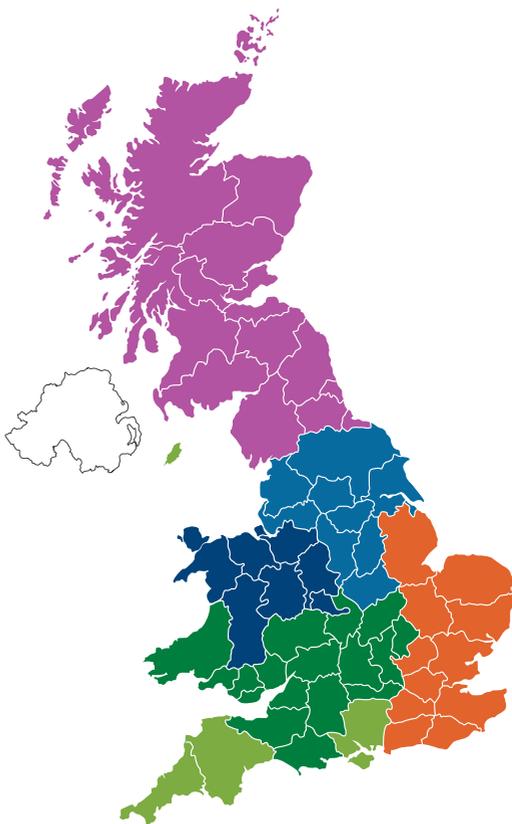
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Contacts

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2018



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