# Bilding residence

Trust Germinal for expert advice and climate smart strategies for grassland management

Product Brochure 2023





# Contents

Introduction	02
– Meet the team	03
Planning your forage requirements	04
Aber High Sugar Grass (HSG) range	05
– General purpose, cutting and grazing	06 – 17
– Organic mixtures	19
– Overseeding	20
– Aber HSG for anaerobic digestion	21
Germinal Climate Smart Options	22 – 23
Clovers	24-26
– Red clover	24
– White clover	26
Alternative forage crops	27
– Puna II perennial chicory	28
– Tonic plantain	30
– Herb options	31
– Lucerne	33
– Forage brassicas	34–38
– Brassica mixtures	39

# Growing on-farm resilience

With high on-farm costs during 2022 and continuing pressure to implement sustainable farming practices, the financial and environmental advantages of producing high-quality homegrown forage have become even more important.

Last year also demanded resilience against changing weather patterns, with many areas seeing prolonged dry periods, emphasising the need to adapt.

Germinal is supporting farmers through these changes offering grass and forage seed varieties of the highest quality bred to fit today's requirements.

The Aber High Sugar Grass (HSG) range, highly rated for its ME yield, balances energy and protein to maximise meat and milk production, giving livestock farmers the edge.

Alongside high-quality grasses, interest in clovers and the use of more diverse swards has never been greater. Their enhanced nutritional profile together with the environmental advantages of fixing nitrogen, drought tolerance and increasing soil nutrients mean they are an obvious choice for progressive farmers.

Germinal is at the forefront of research and development in this area, helping farmers take the guesswork out of establishing multi-species successfully, and more about our innovative clover breeding is found on page 22/23.

As well as detailing our latest varieties and specialist mixtures, throughout this catalogue farmers share how they're using Germinal products to support their business.

To connect with a Germinal expert and learn more about how Germinal's products can help your farm, visit: germinal.co.uk or follow @wearegerminal on Facebook or @GerminalUKAgri on twitter.

## Ben Wixey

Agricultural Director Germinal GB & Ireland

# Meet the team

This year's 2023 Product Brochure reinforces the technical information and practical insight into our products provided by our expert team in the field.

## **Ben Wixey**

Agricultural Director 07990 578550 ben.wixey@germinal.com

Ben has worked in the seed trade for almost all of his career since graduating with a degree in agriculture. He is passionate about on-farm productivity from good grassland management and believes improvements can always be made in forage production and utilisation.

## William Fleming

Scotland and North East England 07971 640428 william.fleming@germinal.com

William spent 25 years on his family farm near Lanark, gaining valuable experience to complement his agricultural qualifications. He maximised production from forage through regular reseeding and maintaining high-quality leys; a policy he now helps farmers adopt with Germinal.

## **Helen Mathieu**

Central, Eastern and North West England and North Wales 07866 456056 helen.mathieu@germinal.com

Helen is a qualified agronomist with 30 years specialist experience. Much of her time is spent sharing her knowledge and practical know-how with livestock farmers to bring about positive changes on farm to boost productivity and long-term profitability.

## **Paul Morgan**

Southern England and South Wales 07713 878069 paul.morgan@germinal.com

Paul comes from a mixed farming background in Monmouthshire with 12 years' experience in the agricultural supply trade. His in-depth knowledge of high sugar grasses helps farmers make forage improvements to benefit their livestock production.









# Planning your forage requirements



local Germinal grass and forage technical expert, see page 03 for details.



# Aber High Sugar Grass (HSG)

As the name suggests, Aber High Sugar Grass (HSG) varieties contain higher levels of water-soluble carbohydrates (sugars), and therefore energy, than conventional ryegrass.

This readily available energy helps rumen bacteria convert more of the protein in forage into meat and milk. It also reduces the ammonia and methane produced when protein is wasted.

Aber HSG varieties dominate those most highly rated for metabolisable energy (ME) yield/ha, a key determinant of livestock performance. Any improvement in ME can produce important increases in milk production and liveweight gain.

Every product in the Aber HSG range contains a carefully selected combination of Aber varieties to fit specific requirements.



High Sugar Grass

General Purpose	Aber HSG 1 Milk and Meat Production Aber HSG 4 Dairy System
Grazing	Aber HSG 3 Long-Term Grazing AberXtend HSG Extended Grazing Aber HSG Multi-Species
Cutting	Aber HSG 2 Early Cut Aber HSG 2 Later Cut Aber HSG 2 Multi Cut Aber HSG Multi-Species Aber Red 5 HSG Quality Silage
Overseeding	Aber HSG Short-Term Overseeding Aber HSG Long-Term Overseeding
Anaerobic digestion	Aber HSG for AD Short-Term Aber HSG for AD Medium-Term Aber HSG for AD Long-Term







AVAILABLE WITHOUT CLOVER

AVAILABLE



WITH TONIC PLANTAIN AVAILABLE

PLANTAIN

WITH CHICORY AND TONIC



LONG-TERM

# Aber HSG 1 Milk and Meat Production

# Aber HSG 1 is your best choice when looking for a high-performance general-purpose ley.

Well suited to set-stock grazing by dairy and beef cattle, sheep and finishing lambs and offers potential for a heavy, high-quality silage cut in late May.

Aber HSG 1 contains a mixture of high sugar grasses for increased digestibility and dry matter intakes. It produces a dense sward, which resists poaching. Aber HSG 1 is best cut 5-10 days before its heading date and with good management maintains a quality sward for 5-7 years. A white clover blend is included as standard. Chicory and plantain can be included for added drought tolerance and sward variety.

#### **Benefits of Aber HSG 1**

- High digestibility to drive dry matter intakes
- Suitable for all grazing stock (NB. unsuitable for horses)
- Long-term sward with options for a variety of farm requirements
- Outstanding grazing yield and grazing D-value
- Lower ammonia and methane excretion reducing environmental impact
- 100% high-ranking Aber HSG perennial ryegrasses

#### Fig 01.

### Aber HSG 1 Milk and Meat Production:

T = Tetraploid

Kg / acre	Variety	Туре	Heading Date
3.00	AberZeus	Perennial Ryegrass	27 May
4.00	AberWolf	Perennial Ryegrass	28 May
3.00	AberGreen	Perennial Ryegrass	30 May
4.00	AberGain	Perennial Ryegrass (T)	05 Jun
1.00	AberDairy	White Clover Blend	
15.00			

Heading date average for Aber HSG 1 Milk and Meat Production is 30<sup>th</sup> May for central Britain. When cutting for silage, aim to cut 5 - 10 days before average heading date for optimum quality. Optimum spread of heading dates within mixtures for grazing and cutting results in better performance of the leys.

MAY | JUNE

**1 2 3 4 5** 6 7 8 9 10

	-	· · ·
L 1/	$\sim$	
		17.
	9 -	_
	_	

Aber HSG 1 Milk and Meat Production: Spread of heading dates

#### White Clover blend

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

OPTIMAL CUTTING WINDOW

The ability to fix nitrogen, reducing the requirement and cost of fertiliser applications, is a major benefit of including clover in a perennial ryegrass grass mixture. It also increases grass intakes by livestock through its influence on rumen digestion and promotes summer grazing when grass productivity might be slowing down in drier conditions. Clover also provides a source of added protein. The variety of clover used in the Aber HSG mixtures complements the sward's primary use. Aber HSG1 includes AberDairy for its suitability for grazing and cutting regimes.





## MEDIUM-TERM

# Aber HSG 2 Early Cut

# Aber HSG 2 Early Cut is ideal for a high-quality, high-yield silage early in the season from the end of April to mid-May.

An early first cut gives you the chance to capture the very best D-value and protein levels before they begin to drop in mid-May. Aber HSG 2 Early Cut also delivers good yield, overcoming the fear an early cut loses in quantity what it gains in quality. Delaying a first cut can miss a crop at its prime, jeopardising a potential increase in milk yield.

### Benefits of Aber HSG 2 Early Cut

- Delivers quality and yield over 3 4 years
- Optimum heading date range: 16th 25th May
- Outstanding metabolisable energy (ME) yield
- Early vigour and spring growth
- · Performs under medium and high nitrogen levels

#### Fig 03.

Aber HSG 2 Early Cut:

T = Tetraploid

Kg / acre	Variety	Туре	Heading Date
6.00	AberClyde	Perennial Ryegrass (T)	25 May
4.00	AberEcho	Hybrid Ryegrass (T)	17 May
5.00	AberEdge	Hybrid Ryegrass (T)	23 May
15.00			

Heading date average for Aber HSG 2 Early Cut is 20<sup>th</sup> May for central Britain.

When cutting for silage, aim to cut 5 - 10 days before average heading date for optimum quality. Optimum spread of heading dates within mixtures for grazing and cutting results in better performance of the leys.

#### Fig 04.

APRIL

Aber HSG 2 Early Cut: Spread of heading dates

30	01				09	10	11	12	13	14	15	16	17	18	19	20	21	23	24	25			
						C	OPTI	MAL WIN	DOV	TTIN V	G												

#### AberClaret Red Clover

Traditional red clovers only last two to three years in cutting leys. AberClaret red clover is the first of a generation of new long-term red clovers bred at Germinal Horizon, where scientists have dramatically extended the life of red clover leys. AberClaret can persist for 4 - 5 years under cutting and is significantly more tolerant of grazing by dairy cattle.

# Aber HSG



LONG-TERM

Aber HSG 2

Later Cut

# Aber HSG 2 Later Cut gives good mid-season growth and maintains performance for a high-quality crop in mid-to-late May.

This straight grass mixture's heading date in early June makes it ideally suited for later silage cuts.

Choose Aber HSG 2 Later Cut + AberClaret red clover to increase the protein content of your silage, reduce protein losses in the clamp and benefit from red clover's nitrogen-fixing ability.

## Benefits of Aber HSG 2 Later Cut

- Produces up to four high-quality, high-yielding silage cuts
- · Quality and yield maintained for at least five years
- ٠ 100% high-ranking Aber HSG perennial ryegrasses
- Works well with red clover

Fig 05.

Aber HSG 2 Later Cut:

T = Tetraploid

Kg / acre	Variety	Туре	Heading Date
6.00	AberGain	Perennial Ryegrass (T)	05 Jun
4.00	AberBite	Perennial Ryegrass (T)	05 Jun
5.00	AberBann	Perennial Ryegrass	07 Jun
15.00			

Heading date average for Aber HSG 2 Later Cut is 6th June for central Britain.

When cutting for silage, aim to cut 5 - 10 days before average heading date for optimum quality. Optimum spread of heading dates within mixtures for grazing and cutting results in better performance of the leys.

	MAY JUNE
Fig 06.	15 16 17 18 19 20 21 22 23 24 25 <b>26 27 28 29 30 31</b> 01 02 03 <b>04 05 06 07</b> 08 09 10 11 12 13 14 14 15
Aber HSG 2	
Later Cut: Spread of	OPTIMAL CUTTING WINDOW
heading dates	

### AberClaret Red Clover

Traditional red clovers only last two to three years in cutting leys. AberClaret red clover is the first of a generation of new long-term red clovers bred at Germinal Horizon, where scientists have dramatically extended the life of red clover leys. AberClaret can persist for 4 - 5 years under cutting and is significantly more tolerant of grazing by dairy cattle.





AVAILABLE WITH RED CLOVER

## LONG-TERM

# Aber HSG 2 Multi Cut

Aber HSG 2 Multi Cut produces large quantities of leafy, highquality silage from multiple cuts during peak grass growth.

It is suited to cutting at four to five weekly intervals from late April with three cuts in the clamp by late June to early July. Quality and yield are maintained throughout the season with swards ideal for late season or winter grazing if required.

## Benefits of Aber HSG 2 Multi Cut

- · Ideal for early season cutting, avoiding stemmy later season growth
- Exceptional metabolisable energy (ME) yield
- Narrow heading date range allowing close control of silage production and quality
- Excellent ground cover maintained for soil protection and prevention of weed ingress
- Aber High Sugar Grass content enhances silage fermentation
- Using a multi-cut system gives consistent leafy production

Kg / acre	Variety	Туре	Heading Date	
3.50	AberSpey	Perennial Ryegrass (T)	30 May	
4.00	AberZeus	Perennial Ryegrass	27 May	
3.50	AberAvon	Perennial Ryegrass	03 Jun	
4.00	AberGain	Perennial Ryegrass (T)	05 Jun	
15.00				

Heading date average for Aber HSG 2 Multi Cut is 31st May for central Britain.

When cutting for silage, aim to cut 10 - 15 days before average heading date for optimum quality. Optimum spread of heading dates within mixtures for grazing and cutting results in better performance of the leys.

MAY | JUNE

Fig 08.					
Aber HSG 2	09 10 11 12 13 14 15 16 17 18	19 20 21 22 23 24 25 26	27 28 29 30 <b>31</b>	01 02 03 04 05	
Multi Cut:		OPTIMAL CUTTING			
Spread of		WINDOW			
heading dates					

#### AberClaret Red Clover

Traditional red clovers only last two to three years in cutting leys. AberClaret red clover is the first of a generation of new long-term red clovers bred at Germinal Horizon, where scientists have dramatically extended the life of red clover leys. AberClaret can persist for 4 - 5 years under cutting and is significantly more tolerant of grazing by dairy cattle.

Fig 07.

#### Aber HSG 2 Multi Cut:

T = Tetraploid

## **Rheinallt Harries**

To increase milk production on his tenanted Carmarthenshire farm, Rheinallt Harries concentrated on the metabolisable energy (ME) yield of his grass not just dry matter production.

"Our entire system is dependent on highly nutritious grass. We have increased dry matter yields from 10 tonnes DM/ha to nearer 14 tonnes, but it's the improvements in grass quality which have impacted milk yields the most. ME is over 12 for all our fresh grass samples.

"Converting the farm from a mixed sheep and dairy operation, we've increased grass performance through a comprehensive reseeding programme.

"We've used Aber HSG varieties across most of our grazing land to provide the high-quality, high-energy grass we need. We use Aber Xtend HSG on the drier parts of the farm for grazing when other areas are too wet and have introduced the Aber HSG Multi-Species mix for drought tolerance and to reduce inputs.

"Our nitrogen use has decreased from 210kg/ha to 160kg/ha without compromising growth thanks to the nitrogen-fixing clovers in the diverse swards.

"I see reseeding as a vital investment for tenant farmers."

## Farm details

- Llwynmendy Farm, Bethlehem, Carmarthenshire
- 40 ha grazing platform, plus 52 ha off-farm for silage and youngstock
- 165 spring block-calving herd of New Zealand Friesians with Jersey cross and Holsteins
- Average yield 6,400 litres, with 4,353 litres from forage
- 4.6% butterfat, 3.6% protein







AVAILABLE WITH CHICORY

AVAILABLE WITHOUT CLOVER





AVAILABLE WITH CHICORY AND TONIC PLANTAIN

## Fig 09.

Aber HSG 3 Long-Term Grazing:

## LONG-TERM

# Aber HSG 3 Long-Term Grazing

# Aber HSG 3 is a high-performance grazing ley for both cattle and sheep in rotational and set-stocking systems.

It contains a mixture of diploid Aber HSG varieties to produce a dense sward with high stock-carrying capability. Aber HSG 3 comes in five varieties with options tailored to specific farm requirements.

## Benefits of Aber HSG 3 Long-Term Grazing

- High digestibility to drive dry matter intakes
- Suitable for all grazing stock (NB. unsuitable for horses)
- Outstanding grazing yield and grazing D-value
- · Lower ammonia and methane excretion reducing environmental impact
- Persists for up to 10 years

Kg / acre	Variety	Туре	Heading Date
3.00	AberZeus	Perennial Ryegrass	27 May
2.00	AberMagic	Perennial Ryegrass	28 May
3.00	AberGreen	Perennial Ryegrass	30 May
3.00	AberThames	Perennial Ryegrass	08 Jun
3.00	AberBann	Perennial Ryegrass	07 Jun
1.00	AberPasture	White Clover Blend	
15.00			

Heading date average for Aber HSG 3 Long-Term Grazing is 1<sup>st</sup> June for central Britain.

## Julian Bowers

Moving from intensive beef production to an extensive low-input system embracing multispecies has seen Julian Bowers transform his farm and thinking.

"We moved from milking dairy cows to raising dairy bull calves, but when feed prices started escalating, we knew it wasn't sustainable.

"When I looked at how I could improve my soils to support our plans to finish Angus cross cattle outside, diversity and the use of herbal leys came into it more and more.

"I established the multi-species in 2021 and started grazing it in May 2022. We direct-drilled into cereal stubble and it took brilliantly. Having always had clean pasture and grown clovers successfully, we have good plant numbers within the sward.

"We're trying to achieve great daily liveweight gains using less bought-in feed while looking after the soils with less reliance on fertilisers and chemicals.

"I think grazing a high-end quality animal outside on a multi-species ley without fertiliser is the future."

## Farm details

- Top House Farm, Cockshutt, Shropshire
- 89 ha including 33 ha GS4 herbal leys
- 200 Angus/Longhorn cross bull calves
- Min till/no till approach

# Aber HSG



AVAILABLE WITH RED CLOVER



AVAILABLE WITHOUT RED CLOVER



AVAILABLE WITHOUT CLOVER

## LONG-TERM

# Aber HSG Multi-Species

# Aber HSG Multi-Species is a specialist mixture for lower input systems where improving soil health is a priority.

A mixture of Aber HSG varieties, timothy, herbs and legumes, including red and white clover, each component brings specific qualities to improve soil health, boost dry matter production and increase animal performance. Aber HSG Multi-Species produces a dense sward which resists poaching.

## **Benefits of Aber HSG Multi-Species**

- Superior sward performance through complementary plant species
- Improved soil structure and fertility
- Increased drought tolerance
- Lower ammonia and methane excretion reducing environmental impact
- Reduced reliance on nitrogen fertilisers
- · Higher nutrient levels driving improved animal performance

Kg / acre	Variety	Туре	Heading Date
3.00	AberGreen	Perennial Ryegrass	30 May
3.00	AberZeus	Perennial Ryegrass	27 May
3.00	AberClyde	Perennial Ryegrass (T)	25 May
1.00	Comer	Timothy	08 Jun
0.75	Tonic	Plantain	
0.25	Puna II	Chicory	
0.25	Endure	Chicory	
1.00	AberPasture	White Clover Blend	
1.50	AberClaret	Red Clover	
13.75			

Kg / acre	Variety	Туре	Heading Date
3.00	AberGreen	Perennial Ryegrass	30 May
3.00	AberZeus	Perennial Ryegrass	27 May
3.00	AberClyde	Perennial Ryegrass (T)	25 May
1.00	Comer	Timothy	08 Jun
0.75	Tonic	Plantain	
1.00	AberDairy	White Clover Blend	
0.75	AberClaret	Red Clover	
0.75	Avisto	Red Clover	
0.75	Crimson	Clover	
4.00	Vetch	Vetch	
1.00	FixatioN	Balansa Clover	
19.00			

### Fig 10.

Aber HSG Multi-Species Grazing:

T = Tetraploid

Fig 11.

### Aber HSG Multi-Species Cutting:

T = Tetraploid

# Mark Housby

When Mark Housby took on the management of a 256-hectare tenancy with Robert and Jackie Craig, one of the first things he did was reseed all the grass leys.

"We knew quality grass was going to drive our system, so we reseeded using Aber HSG 4 with white clover, knowing we'd invested in the best seeds we could. We like the combination of tetraploid and diploid varieties, and the cows find the sugars hugely palatable, driving performance and milk solids. It's a great mix, delivering quality feed and performance for cutting and grazing.

"More recently we've overseeded a third of the farm with a multi-species mix to address the farm's dry conditions. The different species within the diverse swards work with nature increasing our resilience to drought while still producing valuable food for the cows. We've also reduced nitrogen fertiliser by 50% and looking to reduce this further next year."

## Farm details

- Peepy Farm, Bywell, Stocksfield, Northumberland
- 480 Irish and NZ Friesians x Jerseys cows
- 50:50 spring/autumn block
- Average yield 6,500 litres with 4,000 from forage
- First Milk supplier
- Grass measured weekly: best paddocks approximately 16.5tDM/ha
- Soil sampled regularly

2





LONG-TERM

# Aber HSG 4 Dairy System

Aber HSG 4 Dairy System is ideal if you are looking for one or two cuts of high-quality silage before focusing on rotational grazing.

It produces a first cut in mid to late May with an optional second cut five to six weeks later, before providing rotational grazing mid to late season as well as through the winter.

## Benefits of Aber HSG 4 Dairy System

- · High-quality silage and outstanding aftermath grazing
- Dense and persistent sward maintaining excellent ground cover for soil protection and prevention of weed ingress
- 100% Aber HSG varieties
- High digestibility to drive dry matter intakes
- · Lower ammonia and methane excretion reducing environmental impact
- Outstanding grazing yield and grazing D-value
- Includes AberDairy clover blend to fix nitrogen, feed companion grasses and reduce fertiliser costs

Kg / acre	Variety	Туре	Heading Date
2.00	AberWolf	Perennial Ryegrass	28 May
3.00	AberGreen	Perennial Ryegrass	30 May
3.00	AberGain	Perennial Ryegrass (T)	05 Jun
2.00	AberBite	Perennial Ryegrass (T)	05 Jun
4.00	AberBann	Perennial Ryegrass	07 Jun
1.00	AberDairy	White Clover Blend	
15.00			

Heading date average for Aber HSG 4 Dairy System is 31st May for central Britain.

When cutting for silage, aim to cut 5 - 10 days before average heading date for optimum quality. Optimum spread of heading dates within mixtures for grazing and cutting results in better performance of the leys.

		MAY	JUNE	
Fig 13.	14 15 16 17 <b>18 19 20 21 22 23 24</b> 25 26 2	7 28 29 30 31	01 02 03 04 05 06 07	08 09 10 11 12 13 14
Aber HSG 4		20 20 00 01		
Dairy System:	OPTIMAL CUTTING			
Spread of	WINDOW			
heading dates				

Fig 12.

Aber HSG 4 Dairy System:

T = Tetraploid

## MEDIUM-TERM

# **Aber Red 5 HSG Quality Silage**

# Aber Red 5 HSG is designed specifically to produce highquality, high-protein silage.

By containing red clover, Aber Red HSG increases protein production on farm while reducing the requirement for applied nitrogen and bought-in feed.

Aim for a first cut between red clover's early flower bud and 50% flowering stage in mid to late May, with subsequent cuts at five to six weekly intervals.

## **Benefits of Aber Red 5 HSG**

- Improved protein content of silage
- Outstanding grazing yield and grazing D-value
- Performance maintained for 4 5 years
- Lower ammonia and methane excretion reducing environmental impact
- ٠ 100% Aber HSG varieties with long-lasting red clovers
- Excellent aftermath grazing for finishing lambs

	17
I IU	14.
0	

Aber Red 5 HSG **Quality Silage:** T = Tetraploid

Kg / acre	Variety	Туре	Heading Date
2.00	AberZeus	Perennial Ryegrass	27 May
3.00	AberWolf	Perennial Ryegrass	30 May
4.00	AberGain	Perennial Ryegrass (T)	05 Jun
3.00	AberClaret	Red Clover	
12.00			

Heading date average for Aber Red 5 HSG is 31st May for central Britain. For optimum forage quality, aim to cut red clover silage when 25% of red clover plants are in flower.

											MA		NE			
Fig 15.																
Aber Red 5 HSG	07 08 09 10			8 19	20 2	1 22 2	3 24	25 26	27	28 29	30 <b>3</b> 1	1 01	02 (	)3 04	4 05	
Quality Silage:					0	PTIMAL	CUTT	ING								
Spread of						WIN	DOW									
heading dates																

#### AberClaret Red Clover

Red clover is a high-quality, cost-effective source of home-grown protein, potentially reducing the reliance on bought-in feed. It has good environmental credentials too, fixing nitrogen at a rate of 150kg N/ha, reducing the need for nitrogen fertiliser. But one of its shortcomings has been its relatively short persistence, typically remaining in the sward for just two to three years. The new generation Germinal red clovers, including AberClaret, bred at Germinal Horizon, have overcome this problem. It lasts at least four years in a cutting sward and is significantly more tolerant of grazing.

Aber HSG



## MEDIUM / LONG-TERM

# AberXtend HSG Extended Grazing

AberXtend HSG Extended Grazing offers a high-performing sward for dairy, beef and sheep over a longer grazing period with exceptional growth during the shoulders of the season.

Its mix of Aber HSG varieties produces high-quality grazing from mid-February, while the white clover increases digestibility and dry matter intakes. With good management, the sward maintains quality for at least seven years under grazing regimes.

## Benefits of AberXtend HSG Extended Grazing

- High-quality grazing from early spring to autumn
- Exceptional grazing and metabolisable energy (ME) yield
- High digestibility to drive dry matter intakes
- 100% Aber HSG varieties with Germinal white clovers
- · Lower ammonia and methane excretion reducing environmental impact
- Suitable for all grazing stock (NB. unsuitable for horses)

Kg / acre	Variety	Туре	Heading Date
5.00	AberMagic	Perennial Ryegrass	28 May
5.00	AberZeus	Perennial Ryegrass	28 May
4.00	AberGain	Perennial Ryegrass (T)	05 Jun
1.00	AberPasture	White Clover Blend	
15.00			

Heading date average for AberXtend HSG Extended Grazing is 29th May for central Britain.

AberXtend HSG Extended Grazing: T = Tetraploid

## ORGANIC MIXTURES

# **Organic mixtures**

A range of mixtures designed specifically to perform on organic farms.

# **Bio Cutting**

Kg / acre	Variety	Туре	Heading Date
2.80	AberWolf Organic	Perennial Ryegrass	28 May
3.50	AberClyde HSG Organic	Perennial Ryegrass (T)	25 May
3.00	AberSpey Organic	Perennial Ryegrass (T)	30 May
3.50	AberEdge	Hybrid Ryegrass (T)	23 May
0.20	AberGreen	Perennial Ryegrass	30 May
1.00	AberDairy	White Clover Blend	
14.00			

# **Bio Dual**

Kg / acre	Variety	Туре	Heading Date
2.00	AberGreen Organi	Perennial Ryegrass	30 May
3.00	AberClyde Organic	Perennial Ryegrass (T)	25 May
2.00	AberWolf Organic	Perennial Ryegrass	28 May
2.80	AberLee Organic	Perennial Ryegrass	07 Jun
3.20	AberGain	Perennial Ryegrass (T)	05 Jun
1.00	AberPasture	White Clover Blend	
14.00			

# **Bio Pasture**

Kg / acre	Variety	Туре	Heading Date
3.00	AberGreen Organic	Perennial Ryegrass	30 May
2.90	AberClyde Organic	Perennial Ryegrass (T)	25 May
3.90	AberChoice Organic	Perennial Ryegrass	10 Jun
1.60	AberLee	Perennial Ryegrass	07 Jun
0.80	AberGain	Perennial Ryegrass (T)	05 Jun
0.80	AberAvon	Perennial Ryegrass	03 Jun
1.00	AberPasture	White Clover Blend	
14.00			

# **Bio Red 5**

Kg / acre	Variety	Туре	Heading Date
2.40	AberGreen Organic	Perennial Ryegrass	30 May
4.00	AberClyde Organic	Perennial Ryegrass (T)	25 May
2.00	Solid Organic	Hybrid Ryegrass (T)	17 May
0.60	AberEdge	Hybrid Ryegrass (T)	23 May
2.00	AberClaret	Red Clover	
1.00	Avisto	Red Clover	
12.00			

Fig 17.

**Bio Cutting:** T = Tetraploid

Fig 18.

**Bio Dual:** T = Tetraploid

Fig 19.

**Bio Pasture:** T = Tetraploid

Fig 20.

**Bio Red 5:** T = Tetraploid

# Aber HSG



AVAILABLE WITH ABERDAIRY WHITE CLOVER

# Aber HSG Overseeding

If you are looking to boost your grassland production in the short to medium term and see an early return on investment, overseeding can provide a quick fix.

Overseeding offers the chance to rejuvenate swards with minimal time out of production. The Aber HSG Overseeding mixtures are specifically designed for this purpose, establishing rapidly by blending with existing grass in your leys.

Available as Aber HSG Short-term Overseeding and Aber HSG Long-Term Overseeding.

## **Benefits of Aber HSG Overseeding**

- Rapid establishment
- Increased dry matter yields and D-value
- Reduced requirement for bought-in feed
- 100% Aber HSG varieties
- Suitable for all grazing stock (NB. unsuitable for horses)

Kg / acre	Variety	Туре	Heading Date
3.00	AberSpey	Perennial Ryegrass (T)	30 May
3.00	AberGain	Perennial Ryegrass (T)	05 Jun
3.00	AberBite	Perennial Ryegrass (T)	05 Jun
1.00	AberDairy	White Clover Blend	
10.00			

Kg / acre	Variety	Туре	Heading Date
5.00	AberEcho	Hybrid Ryegrass (T)	17 May
5.00	AberNiche	Festulolium	23 May
10.00			

Fig 21.

Aber HSG Long-Term Overseeding:

T = Tetraploid

Fig 22.

Aber HSG Short-Term Overseeding: T = Tetraploid



# Aber HSG for AD

# Grass provides a cost-effective, environmentally sustainable feedstock for anaerobic digesters.

Compared to crops requiring annual cultivations, grass leys allow more opportunity to spread the liquid or solid waste product from digesters without the need to plough back in.

The Aber HSG mixtures for AD offer a distinct advantage over other grassland varieties with their high water-soluble carbohydrate (sugar) content generating a higher yield and rate of biogas production whether ensiled or a fresh crop.

# Aber HSG mixtures for AD

g 23.	Ka Looro	Variatu	Turce
D Short-Torm	ng / acre	variety	Type
T = Totroploid	4.00	AberClyde	Perennial Ryegrass (T)
	5.00	AberEve	Hybrid Ryegrass (T)
	5.00	AberNiche	Festulolium
	14.00		

Fig 24.	Ka / acre	Variety	Туре
AD Modium-Torm		Valiety	ijpe
	6.00	AberEve	Hybrid Ryegrass (T)
ι – τεταρισία	8.00	AberWolf	Perennial Ryegrass
	14.00		

Fig	25.
AD	Long-Term:

T = Tetraploid

Kg / acre	Variety	Туре
5.00	AberWolf	Perennial Ryegrass
4.00	AberGreen	Perennial Ryegrass
5.00	AberBite	Perennial Ryegrass (T)
14.00		

the state

# Germinal Climate Smart Options

Germinal is harnessing the opportunities science brings to improve efficiencies in agriculture, making a positive contribution to the future of farming.

Germinal Horizon, our research and innovation team, has scientists at world-leading grassland research centre, the Institute of Biological, Environmental and Rural Sciences (IBERS) at Aberystwyth University, and researchers on our own Germinal Horizon R&D farm sites.

This team of specialists are applying research through trials and education bridging the gap between pure science and real life on-farm application.

# **Climate smart forage solutions**

Germinal's extensive knowledge of forage seed development combined with science is allowing us to truly innovate in plant breeding and bring world-first climate smart products to farmers.

Climate smart seed varieties help farmers adapt to climate change and its impacts while remaining productive and profitable. These varieties are more efficient, require fewer inputs and reduce the impact on the land and water.

Climate smart options are high performance products with environmental and economic benefits.



# Aber HSG

Our **Aber High Sugar Grass (HSG)** range is a climate smart leader scientifically proven to reduce livestock emissions. Over the last 20 years, **Aber HSG** varieties have been sown across 4.6 million acres.



# DoubleRoot

**DoubleRoot** is the first hybrid clover with improved persistency and resilience by combining the growing traits of white clover and Caucasian clover making them suitable for a wider range of climates and soils.

Joining weather resilient roots below the ground with the strength of stolons or 'runners' formed above ground, DoubleRoot clover varieties are more drought and cold tolerant than standard clover.

This novel root system also benefits soil health and structure and reduces the need for applied fertiliser due to clover's natural nitrogen-fixing ability.



# LandStrong

**LandStrong** mixtures increase soil fertility, boost biodiversity and reduce fertiliser inputs to support sustainable farming systems.

The range includes Germinal's Countryside Stewardship multi-species mixes carefully formulated to protect and restore wildlife habitats and the natural environment. The mixtures are specific to the requirements of current government grants.

In development

# DeepRoot

A performance ryegrass with a deeper taproot that resists cold and drought and gives additional spring growth.

# **Clovers** Red clover

Red clover is a high-quality, cost-effective source of homegrown protein able to be grazed or cut and with the ability to fix nitrogen reducing the need for both bought-in feed and N fertiliser.

When cut, it typically has a dry matter (DM) percentage, metabolisable energy (ME) content and crude protein level above that of grass silage. With a protein content of 16-20% and containing an enzyme reducing protein breakdown in the clamp, it is an attractive option for feeding high-performing livestock.

Red clover also performs well in severe weather, its long taproot increases its resilience to cold and drought. In the dry summer of 2022, red clover was still producing 10-15 tonnes DM/ha in many areas. The long taproot also benefits soil structure and fertility.

One of its shortcomings has been its relatively short persistence in the sward but the new generation Germinal red clovers, including AberClaret, have overcome this problem. Bred at Germinal Horizon in Aberystwyth, AberClaret lasts at least four years in a cutting sward and is significantly more tolerant of grazing. This longer productive life makes it more compatible with medium to long-term leys.

# Tony Ball

# Tony and Michael Ball sowed their first field of red clover in 2018 and are now growing 125 acres in a rotation.

"We'd been growing white clover successfully so wanted to see what benefits red clover could bring. We found it performed very well so as fields came back into grass, we added more red clover.

"We're really pleased with the silage yields, aiming for a first cut in early May to coincide with making grass silage so we're not opening the clamp more than necessary. We expect to take three or four cuts.

"We find in the very dry periods when grass growth slows the red clover just keeps on going, so we've used it to graze youngstock. We also let it go into flower at least once in the dry so it can build up its root reserves for winter.

"As we try to reduce the intervals between cuts to gain the best quality silage, using red clover within our Aber HSG 2 Multi Cut mix automatically appealed and has performed well.

"We're certainly putting down less nitrogen fertiliser. Unsure in the first year we probably didn't pull it back as much as we could have done, but now use minimal amounts. A little early on (40kg/ha) with some sulphur (45kg/ha) to give the grass a boost, and a bit of slurry after first cut, but nothing more after that."

## Farm details

- Vernon's Oak Farm, Sudbury, Derbyshire
- 750 acres, with 620 acres as forage over two sites
- Established 500 cow dairy herd, all-year-round calving
- Average milk yield 10,000 litres
- 3,000-3,500 litres from forage
- 3.9% butterfat, 3.3% protein (liquid contract)
- Separate 200 cow, autumn block calving herd on an additional 300 acres
- Average milk yield 8,000 litres
- 4.5% butterfat, 3.35% protein (cheese contract)

# **Clovers** White clover

White clover increases the nutrient intake of livestock, particularly during the summer when grass productivity may be slowing down.

A high-quality source of protein, it supports constituent levels in dairy cows and drives performance in sheep and cattle.

Its strong, creeping stem makes white clover tolerant of grazing and enables the plant to store energy and protein over winter and into spring. It is also able to fix nitrogen, reducing the need for N fertiliser applications.

The Germinal white clover blends are leading the way in producing higher yields and lasting longer. Newer varieties are achieving optimum targets of a 30 - 35% contribution to total sward dry matter under a range of management systems, with five Germinal varieties found on the latest recommended grass and clover list.

Aber HSG mixtures are offered with clover as standard and additional white clover seed blends available to suit particular requirements\*. The small leaf varieties found in AberSheep are best for continuous sheep grazing whereas the larger varieties of AberDairy are better suited to grazing cattle. The medium varieties found in AberPasture suit a rotational system.

\* Specific blends are available on request

## Benefits of clover blends

- Increased output of milk and meat from forage
- · Improved soil structure and grazing quality
- Balanced grass/clover sward
- · Suitable for a wide range of soil types and management systems

%	Variety
11	AberHerald (medium leaf)
11	Liflex (medium leaf)
45	AberSwan (medium - large leaf)
33	AberDai (medium leaf)

%	Variety
15	Liflex (medium leaf)
10	AberPearl (small - medium leaf)
20	AberDai (medium leaf)
15	AberLasting (small - medium leaf)
5	AberAce (small leaf)
35	AberSwan (medium - large leaf)

%	Variety
50	AberLasting (small - medium leaf)
20	AberAce (small leaf)
15	AberPearl (small - medium leaf)
15	Rivendel (small leaf)

Fig 26.

AberDairy: High production grazing and cutting

Fig 27.

AberPasture: Cattle set stocking and rotational sheep grazing

Fig 28.

AberSheep: Continuous or rotational grazing, upland and lowland

# Alternative forage crops

Growing alternative forage crops is all about cost efficiency, helping to cut bought-in feed costs and fill feeding gaps. They complement efforts to improve grassland and produce high-quality grazing and grass silage, as a companion, break or following crop.

The wide variety of available brassicas ranges from leafy kales and forage rapes to root crops, including stubble turnips and swedes. They are a versatile feeding solution to fill summer grazing gaps, extend autumn grazing, or support outwintering systems taking the pressure off conserved forage stocks.

When used between grass leys, brassicas are an effective break crop, disrupting the life cycle of pests able to damage newly established leys.

Herbs such as chicory and plantain can be used in a mixed grazing sward to provide a high-quality feed rich in valuable minerals while protein-rich lucerne offers an alternative cutting crop.

Germinal also produces a range of seed mixtures which support farmers aiming to protect and enhance the natural environment and comply with government environmental schemes.

# **Puna II**

# **Benefits of Puna II** Perennial Chicory

# Puna II is a forage crop for use as a pure stand or part of a mixed sward in medium to long-term rotational grazing.

Puna II perennial chicory is the superior choice of chicory when seeking a broad-leaved forage crop as part of a mixed sward with grass and clover or grown alone in a pure stand. It can boost growth rates and productivity to finish stock earlier. This perennial variety, bred in New Zealand, gives greater persistency lasting 2 - 5 years, longer than the short-lived common chicory.

## Benefits of Puna II perennial chicory

- · High digestibility to drive growth and productivity
- · Capable of producing 10 tonnes dry matter/ha/year
- High-quality feed throughout the summer
- Valuable mineral content for optimal growth and development
- Suitable for finishing stock, calves and flushing ewes
- Long persistency of 2 5 years
- Rapid regrowth after grazing
- Tolerance to drought and disease
- Improved soil structure
- Good compatibility with perennial ryegrass



mixtures



Fig 29.

Lamb Finisher:

# Kg / acre Variety Type 0.50 Puna II Perennial Chicory

0.50	Puna II	Perennial Chicory
0.50	Endure	Perennial Chicory
1.00	Tonic	Plantain
3.25	AberClaret	Red Clover
5.25		

## Key benefits in summary

• 2 - 3 years intensive finishing mixture

**Perennial Chicory** 

- Red clover can contribute up to 150kg N/ha
- Full production from May to September
- High protein forage suitable for finishing early lambs

Fig 3	30.
-------	-----

# Lamb Finisher with White Clover:

Kg / acre	Variety	Туре
0.50	Puna II	Perennial Chicory
0.50	Endure	Perennial Chicory
1.00	Tonic	Plantain
2.50	AberClaret	Red Clover
1.00	AberDairy	White Clover Blend
5.50		

## Key benefits in summary

- As Lamb Finisher, but with the added benefit of white clover to improve ground cover during late season
- 2 3 years duration

Kg / acre	Variety	Туре
4.00	AberWolf	Perennial Ryegrass
3.95	AberEve	Hybrid Ryegrass (T)
0.40	Puna II	Perennial Chicory
0.40	Endure	Perennial Chicory
1.00	Tonic	Plantain
1.50	AberDairy	White Clover Blend
11.25		

## Key benefits in summary

- 3 4 year medium term ley
- Ideal for lambs, flushing ewes, beef finishing youngstock (or calves)
- The grasses in this mixture offer improved grazing and ground cover in autumn

Fig 31.

**Livestock Grazer:** T = Tetraploid

# Tonic

# **Tonic** Plantain

Tonic plantain is an ideal forage herb in mixed species swards with Aber High Sugar Grasses and Germinal white and red clovers to boost growth and liveweight gain.

Tonic plantain is a protein and mineral-rich forage well suited to intensive or rotational grazing systems for dairy and beef cattle, sheep and finishing lambs. Its high protein and mineral content make it a nutritious addition to a mixed sward alongside Aber High Sugar Grasses and clovers. Tonic plantain offers good spring and autumn growth, allowing a longer productive season, and shows rapid regrowth post-grazing.

## **Benefits of Tonic plantain**

- Suitable for all grazing stock
- Excellent nursing crop for ewes post-lambing
- High digestibility to drive intakes and growth
- Stimulates milk production
- Outstanding protein content and D-value
- High mineral content, particularly selenium and copper
- Drought tolerant





AVAILABLE WITHOUT CHICORY AND TONIC PLANTAIN

Fig 32.

Soil and Animal Health Herbs Pack :

An effective multi-species sward will contain a balance of different plants with varying leaf and root architecture. This should increase the efficiency with which the sward captures light, water and nutrients and converts them into forage. Additional herbs can increase the diversity and further enhance the value of the sward.

# Soil and Animal Health Herbs pack

# Adding diversity to your leys with the Soil and Animal Health Herbs pack can increase the overall performance of a sward.

This pack's mixture of leguminous herbs helps you make the best use of the natural resources above and below ground. It will improve your soil health and structure by increasing the mixture of plants in your swards. The increased plant activity will also reduce your nitrogen losses and increase your carbon capture, improving your overall environmental benefits across the farm.

## **Benefits of Soil and Animal Health Herbs**

- Suitable for all grazing stock
- Increased performance from a mixed sward
- Improved soil health and structure
- Drought tolerant
- Lower nitrogen losses and increased carbon capture reducing environmental impact

Germinal offers a 1kg herb inclusion pack that includes the following:			
Puna II perennial chicory	Deep rooted, drought tolerant and mineral rich		
Endure perennial chicory	Deep rooted, drought tolerant and mineral rich		
Tonic plantain	Deep rooted, drought tolerant and mineral rich		
Burnet	Deep tap root and mineral rich		
Alsike clover	Nitrogen fixing legume		
Sheeps Parsley	Deep rooted and mineral rich		
Yarrow	Deep rooted and drought tolerant		
Birdsfoot Trefoil	Mineral rich, anthelmintic properties		
Black Medic	Low and prostrate nitrogen fixing legume		



## Chris Ruffley

Crops and Farm Operations manager Chris Ruffley finds lucerne consistently provides high-quality, high protein forage for the dairy herd on the Harper Adams University farm, growing around 40ha/year.

"We expect yields of 12-13t DM/ha with protein at 19-20%. The crops always last four years and usually five depending on the site. It also maintains high quality throughout the season. As long as it's cut at the correct time the fourth cut will be as good as the first.

"Its main nutritional benefit, and the reason we are so keen on it, is its structural fibre. The stems provide the 'scratch factor' important for rumen health.

"Over the years we have seen it is very tolerant to drought. A hot July or August sees grass burning off, but the lucerne keeps growing.

"We've also enjoyed its nitrogen-fixing properties reducing the amount of applied fertiliser we use and the residual nitrogen it leaves for following crops."

## Farm details

- Harper Adams University farm, Shropshire
- 647ha (1600 acres)
- 352ha forage crops (grass, lucerne, red clover and maize), 168ha arable crops (wheat, barley, potatoes and oilseed rape)
- 430 dairy cows
- 1100 Lleyn ewes
- Four cuts of lucerne taken each season
- 80kg potash applied prior to each cut
- Lucerne calculated to save 1kg/cow/day in protein blend equating to £55-60,000 per year

# Lucerne

# Milky-Max

# Lucerne offers the potential to provide an economic source of homegrown protein, reducing reliance on bought-in feed and fertiliser.

If you are looking for an alternative cutting crop, lucerne is certainly worth considering. It can also be grazed under specific conditions and, however you choose to use it, lucerne offers a highly digestible alternative for livestock farmers. It's best suited to free-draining soils, so avoid heavier land, and is able to thrive in dry conditions. Able to fix nitrogen, lucerne not only reduces the need for applied N fertiliser but leaves residual nitrogen in the soil for subsequent crops.

With good management, lucerne maintains quality for 4 - 6 years.

## **Benefits of lucerne**

- Highly palatable, protein-rich complementary feed to drive intakes
- Outstanding yield and D-value
- Good drought tolerance
- Lower ammonia excretion reducing environmental impact

#### Milky-Max variety selected for UK conditions.

It is supplied pre-inoculated and treated with Seed Applied Solution for better establishment and to stimulate early development

Fig 33.

Improved development of roots and foliage is seen in the lucerne seedlings on the right as a result of Seed Applied Solution seed treatment:





# Planning your brassica crops



#### 35

# Kale Maris Kestrel

# Maris Kestrel

# Kale is a high-quality, cost-effective winter feed for all classes of stock.

It can also help overcome grass shortages towards the end of summer. This high-yielding, high leaf-to-stem ratio variety is highly digestible so is suitable for grazing.

## Benefits of kale

- · High palatability driving intakes
- Good cold weather and frost tolerance
- Stems resistant to lodging
- Ideal for outwintering

## Variety

Maris Kestrel Sow at 2 - 3kg/acre from May to the end of June. Feed from July to the following February.

# **Hybrid brassicas** Swift and Redstart

Swift Redstart If you're looking for a flexible, cost-effective forage crop, hybrid brassicas are a new interspecies of kale and rape, ideal for high energy grazing of cattle and sheep.

The crop grows quickly and vigorously, offering grazing options from July to around the end of January depending on sowing date.

## Benefits of hybrid brassicas

- · High energy and protein
- Suitable for cattle and sheep
- Good cold weather and frost tolerance
- · Good late season yields

Variety	
Swift	Sow at 2 - 3kg/acre from May to the end of August. Feed from July to the following January.
Redstart	Sow at 2 - 3kg/acre from May to the end of August. Feed from July to the following January.

# **Grazing turnip** Appin

# Appin

# Grazing turnip offers a flexible feeding option reducing reliance on concentrates during the autumn and winter.

It can be used as a catch crop during summer shortfalls.

## Benefits of grazing turnip

- · High palatability and easy to digest driving intakes
- Suitable for cattle and sheep
- Fast growing with excellent regrowth potential offering versatile grazing
- Wide sowing window

## Variety

Appin Drill at 2kg/acre from March to mid-September. Feed from May to December.

# **Stubble turnip** Vollenda

# Vollenda

# Stubble turnip is another cost-effective feeding solution in summer, autumn or winter for sheep or cattle.

As well as providing a main crop, it can be used as a catch crop during summer grazing shortfalls.

## Benefits of stubble turnip

- High energy and protein
- Suitable for cattle and sheep
- · Easy establishment and quick growth
- Good clean grazing for lambs

## Variety

Vollenda Drill at 2 - 3kg/acre from May to the end of August. Feed from July to the following January.

Swede

Triumph



Stego

# A high-yielding feed suitable for outwintering all classes of stock.

## Benefits of swede

- High energy feed for cattle and sheep
- Outstanding dry matter yields
- Good cold weather tolerance

## Variety

Triumph Drill at 1kg/acre for natural seed drill from mid-May to end of June. Feed from December to March.

# Forage rape Stego

Rape is a fast-growing, high protein feed particularly well-suited to finishing lambs.

It also offers potential for extended grazing of cattle through summer, autumn and winter.

## Benefits of forage rape

- High leaf-to-stem ratio
- Excellent disease resistance
- Suitable for outwintering

## Variety

Stego Drill at 2.5kg/acre (or broadcast at 4kg/acre) from March to July. Feed from June to December.

## **Aled Evans**

Aled Evans' motivation for using a brassica crop is twofold. As well as a good break crop before a grass reseed, it provides a valuable source of homegrown, high-protein forage when demand is high.

"Adding a brassica crop into our rotational grazing system suits us well. To avoid taking land out of the grazing platform for too long, we use the hybrid brassica Redstart. Its ability to establish aggressively, achieving a good yield relatively quickly means we can start grazing it in just a few weeks.

"We aim to graze for 270 days a year, using a mixture of high-sugar grasses, white clover and plantain, alongside red clover and forage crops.

"If we buy in more store lambs, we plant the forage crop in autumn for use in January and February before a spring reseed. But if we have more breeding ewes, we sow a forage crop in spring, such as Vollenda stubble turnip or Redstart, to satisfy the lambs and ewes in the drier summer months. We then reseed in the autumn.

"Most recently we've followed the spring-sown Vollenda stubble turnips with an autumn reseed of Aber HSG, plantain, timothy, white clover and red clover."

## Farm details

- Rest Farm, Carmarthenshire
- 550 acres
- 650 cattle as part of beef rearing and finishing unit
- 750 New Zealand Romney and Highlander breeding ewes
- Additional store lambs
- 128 acres as a TechnoGrazing platform

# 39

# **Brassica** mixtures

# Brassica mixtures are an effective way of tailoring a grazing crop more precisely to specific circumstances.

Individual crops including kale, forage rape and turnips have their own strengths but also grow well in combination.

## Benefits of brassica mixtures

- Increased choice of forage for livestock
- Higher dry matter intakes
- Greater overall production per hectare

Kg / acre	Variety
1.00	Maris Kestrel kale
1.00	Swift hybrid brassica
2.00	
Main use • Out-wintering for all ruminant livestock	<ul><li>Key features</li><li>A winter-hardy blend of palatable fodder</li><li>Yield potential of over 12 tonnes DM/ha</li></ul>
Kg / acre	Variety
0.75	Swift hybrid brassica
0.75	Redstart hybrid brassica
0.65	Appin grazing turnip
0.10	Maris Kestrel kale
2.25	
Main use <ul> <li>Out-wintering for sheep or cattle</li> </ul>	Key features <ul> <li>Fast growing fodder for late sowing</li> </ul>
Kg / acre	Variety
0.50	Appin grazing turnip
1.00	Swift hybrid brassica
0.90	Stego rape
0.10	Maris Kestrel kale
2.50	

#### Main use

 Early lamb finishing Supplementary summer grazing for dairy or beef cattle

Kg / acre	Variety
1.25	Swift hybrid brassica
0.90	Appin grazing turnip
0.10	Maris Kestrel kale
2.25	

#### Main use

Late lamb finishing

- · Flushing ewes
- Improving late season grazing when grass growth is declining

#### Key features

Key features

A blend that combines the winter hardiness and quality feed value of Swift for later grazing and the rapid establishment of Appin grazing turnip

A blend of fast growing grazing turnips and forage rape with the added high yield, quality and regrowth potential of Swift
Regrowth potential

Fig 34.

Winter Feed:

Fig 35.

Late Sown Winter Feed:

Fig 36.

Summer **Multigraze:** 

Fig 37.

Autumn Multigraze:

# **Find out more**

Should you require any more information or to request a selection of free brochures and technical guides, please visit our website:

# germinal.co.uk



@GerminalUKAgri

Aber® is a registered trademark of Germinal Holdings Ltd.

DoubleRoot® is a registered trademark of Germinal Holdings Ltd.

LandStrong<sup>®</sup> is a registered trademark of Germinal Holdings Ltd.

The mixtures in this brochure are correct at the time of going to press and the supplies of the varieties used in the mixtures should be adequate for this season. If, however, we do run short of some, they will be replaced by the next best variety on the Recommended List.





**Germinal** Camp Road Witham St. Hughs Lincoln LN6 9QJ

T: +44 (0) 1522 868714 lincoln@germinal.co.uk

G\_GB\_AGRI\_221104\_Product Catalogue 2023



Germinal is committed to an environmentally sustainable future. This brochure is made from entirely bio-degradable products. **Please recycle this brochure.**