

# The cutting edge of forage

Germinal is a grass and forage seed specialist.

A sixth-generation family company with innovation, research and knowledge-sharing at its heart.

Our unique knowledge of seed development means we're well placed to help farmers improve productivity and profitability, while addressing environmental impact.

Good grassland management is a powerful tool in efforts to increase carbon capture and protect soil carbon storage. But grass must also produce food efficiently and this needs high performing, 'climate smart' varieties. Grass varieties which require fewer inputs and result in reduced greenhouse gas emissions from grazing livestock.

Germinal is addressing this challenge by driving innovation in seed production. We are not just part of the supply chain, but a plant breeder with vital knowledge in seed development. As well as our own research and innovation team, Germinal Horizon, we work closely with Teagasc and the Agri-Food and Biosciences Institute in Northern Ireland (AFBI). Read more about Germinal Horizon's latest work on p.14/15.

Germinal's product range includes specialist grass mixtures for a variety of cutting and grazing systems. Keeping grass swards performing to their full potential through regular reseeding means grass remains a cost-effective and nutritious feed. This year's catalogue details our full range of products, representing a powerhouse of forage crops helping you support the environment, food security and your farming business.

To connect with a Germinal expert and learn more about how Germinal's climate smart products can help your farm, visit: **germinal.ie** or follow **@wearegerminal** on Facebook or **@Germinal\_Ire** on twitter.

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# Planning your forage requirements



Germinal Varieties 2022 0

### **Germinal mixtures**

Germinal's grass seed range includes the most profitable varieties with the highest quality, yield and silage performance in the 2022 Teagasc Pasture Profit Index (PPI) and Irish Grass Recommended List. The varieties show outstanding performance across the most important traits for Irish grass-based production systems.

Our mixtures are formulated using these traits to produce high-quality, high-yielding, palatable swards tailored specifically to meet all your needs on farm.

**Intensive grazing** Top 5 Extend

**Dual purpose** Top 5 Grazing – cut and graze

**Specialist grazing** Multi-Species Mixture

Sheep Mixture Horse Mixture Difficult Soils

**Intensive silage** Top 5 Silage

Red Clover Intensive Silage

Hybrid Silage

**Overseeding** Tetraploid Mixture





## Top5 Extend



Top 5 Extend is a high-quality intensive grazing mix designed to meet the demands of intensive grassland farmers. Suited to grazing by dairy and beef cattle, sheep and finishing lambs.

Top 5 Extend is your best choice when looking for a high-performance intensive grazing sward. It is a highly palatable mixture producing good quality forage. Primarily offering a premium grazing mixture, Top 5 Extend also provides a high-yielding silage cut. It is best cut towards the end of May, 5-10 days before its heading date in early June.

#### Benefits of Top 5 Extend

- · Suitable for dairy, beef and sheep systems
- High palatability to drive dry matter intakes and animal performance
- · Outstanding seasonal grazing yield and quality
- Suitable for intensive grazing, cut-and-graze or zero grazing systems

Fig 01.

#### Top 5 Extend:

T = Tetraploid

D = Diploid

| Kg / acre | Variety      | Туре                   | Heading Date |
|-----------|--------------|------------------------|--------------|
| 2.00      | AberGain     | Perennial Ryegrass (T) | 04 June      |
| 4.00      | Gracehill    | Perennial Ryegrass (T) | 04 June      |
| 2.00      | AberChoice   | Perennial Ryegrass (D) | 11 June      |
| 3.00      | Ballyvoy     | Perennial Ryegrass (D) | 03 June      |
| 0.60      | White Clover |                        |              |
| 11.6      |              |                        |              |

Fig 02.

**Top 5 Extend:** Spread of heading dates

MAY JUNE
20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 15 16 17 18 19 20

OPTIMAL CUTTING WINDOW







Top 5 Grazing is ideally suited to rotational grazing or set stocking, but also offers opportunity for a heavy silage cut in late May or early June.

The dense leafy sward produced by Top 5 Grazing makes it the best selection for intensive animal production systems. Its yield and quality are retained in both grazing or cut-and-graze systems.

#### Benefits of Top 5 Grazing

- Suitable for dairy, beef and sheep systems
- High palatability to drive dry matter intakes and animal performance
- Supreme grazing yield and quality
- Suitable for intensive grazing or cut-and-graze
- Excellent spring and autumn growth

MAY | JUNE

Fig 03.

Top 5 Grazing:

T = Tetraploid

D = Diploid

| Kg / acre | Variety      | Туре                   | Heading Date |
|-----------|--------------|------------------------|--------------|
| 2.50      | Ballintoy    | Perennial Ryegrass (T) | 04 June      |
| 2.50      | Briant       | Perennial Ryegrass (T) | 03 June      |
| 3.00      | AberBann     | Perennial Ryegrass (D) | 10 June      |
| 3.00      | Drumbo       | Perennial Ryegrass (D) | 05 June      |
| 0.60      | White Clover |                        |              |
| 11.60     |              |                        |              |

Fig 04.

**Top 5 Grazing:** Spread of heading dates

20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 15 16 17 18 19 20

OPTIMAL CUTTING WINDOW



## Top5 Silage



Top 5 Silage is a specialist grass mixture created specifically for the production of a superior quality silage with first cut in late May.

If you are looking for a first cut in late May, Top 5 Silage is ideal, while also offering a second cut about six weeks later. A high yielding, good quality two-cut silage mixture with excellent aftermath grazing.

#### Benefits of Top 5 Silage

- Produces high-quality silage without compromising yield
- Mixture contains top PPI ryegrass varieties
- Optimum heading date range enables high-quality first cut silage late May
- · Excellent spring and autumn growth
- · Available with white clover

| Kg / acre | Variety   | Туре                   | Heading Date |
|-----------|-----------|------------------------|--------------|
| 3.00      | AberClyde | Perennial Ryegrass (T) | 25 May       |
| 2.50      | Dunluce   | Perennial Ryegrass (T) | 29 May       |
| 3.50      | AberMagic | Perennial Ryegrass (D) | 28 May       |
| 2.50      | AberWolf  | Perennial Ryegrass (D) | 30 May       |
| 11.50     |           |                        |              |

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

MAY | JUNE

Fig 05.

#### Top 5 Silage:

T = Tetraploid D = Diploid

Fig 06.

**Top 5 Silage:** Spread of heading dates

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 15

OPTIMAL CUTTING WINDOW FOR HIGH QUALITY SILAGE



All farms in derogation are required to sow a minimum of 0.6 kg uncoated clover or 1.0 kg coated clover per acre when reseeding. This mixture does not contain clover. If necessary please request clover or speak to one of our sales team for advice.

## **Sheep Mixture**



#### A specialist mixture for intensive sheep grazing systems.

Our Sheep Mixture offers grass and clover varieties specifically selected for sheep production systems. Its excellent spring and autumn growth supports grazing when feed demand is highest.

#### **Benefits of Sheep Mixture**

- · High palatability to drive intakes and animal performance
- Outstanding yield potential
- · Dense and persistent sward
- Excellent spring and autumn growth
- Includes white clover ideal for sheep grazing

#### Fig 07.

#### **Sheep Mixture:**

T = Tetraploid D = Diploid

| Kg / acre | Variety                  | Туре                   | Heading Date |
|-----------|--------------------------|------------------------|--------------|
| 2.60      | Ballintoy                | Perennial Ryegrass (T) | 04 June      |
| 2.50      | Briant                   | Perennial Ryegrass (T) | 03 June      |
| 3.00      | AberBann                 | Perennial Ryegrass (D) | 10 June      |
| 2.50      | Drumbo                   | Perennial Ryegrass (D) | 05 June      |
| 0.50      | Small Leaf White Clover  |                        |              |
| 0.50      | Medium Leaf White Clover |                        |              |
| 11.60     |                          |                        |              |

Fig 08.

**Sheep Mixture:** Spread of heading dates

MAY JUNE

1 2 **3 4 5 6 7 8 9 10** 11 12 13 14 14 15 16 17 18 19 20

OPTIMAL CUTTING WINDOW



## **Multi-Species Mixture**

# Multi-Species Mixture is a specialist mix for lower input systems where improving soil health is a priority.

Multi-Species Mixture contains high-quality grasses, legumes and herbs, providing multiple sources of protein, energy and minerals for grazing livestock. Soil health benefits from the plant species' different abilities to fix and lift nitrogen, reducing environmental impact.

#### **Benefits of Multi-Species Mixture**

- Superior sward performance through complementary plant species
- · Improved soil structure
- Increased drought tolerance
- Ideal for finishing lambs, cattle and dairy systems
- · Reduced effect of internal parasites
- High-quality feed through the summer

#### Kg / acre Variety Туре **Heading Date** 3.30 Briant Perennial Ryegrass (T) 03 June 3.30 AberBann Perennial Ryegrass (D) 10 June 0.70 Timothy Comer 1.50 White Clover Blend Legume 1.50 Red Clover Blend Legume 1.00 Tonic Plantain 0.70 Puna II Chicory 12.00

#### Fig 09.

## Multi-Species Mixture:

T = Tetraploid

D = Diploid



### **Difficult Soils**





#### Fig 10.

## Difficult Soils Mixture:

T = Tetraploid D = Diploid Difficult Soils Mixture is a specialist mix for wet, peaty or heavier soils.

The Difficult Soils Mixture is ideal for challenging conditions where outstanding ground cover and persistency are required. Timothy is a persistent and hardy grass suited to difficult soils and white clover brings the added benefit of fixing nitrogen. Both can be excluded on request.

#### **Benefits of Difficult Soils Mixture**

- · High sward density
- Good persistency
- Increased palatability to drive dry matter intakes
- Suitable for dairy, beef and sheep systems

| Kg / acre | Variety            | Туре                   | Heading Date |
|-----------|--------------------|------------------------|--------------|
| 3.50      | AberGreen          | Perennial Ryegrass (D) | 31 May       |
| 3.00      | Briant             | Perennial Ryegrass (T) | 03 June      |
| 3.50      | Drumbo             | Perennial Ryegrass (D) | 05 June      |
| 1.00      | Comer              | Timothy                |              |
| 0.60      | White Clover blend |                        |              |
| 11.60     |                    |                        |              |

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

Fig 11.

#### Difficult Soils Mixture: Spread of heading dates

MAY JUNE

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 14 15

OPTIMAL CUTTING WINDOW



Horse Mixture 11

### **Horse Mixture**



Horse Mixture is a specialist mix for pastures supporting the grazing of horses and ponies.

Horse Mixture is ideal for horses and ponies because it creates a high fibre, low protein grass sward and tolerates tight grazing.

#### **Benefits of Horse Mixture**

- Excellent yield performance for both cutting and grazing
- Produces a dense and persistent sward tolerant of tight grazing
- Minimal poaching due to the smooth-stalked meadow grass
- Available with or without mixed herbs high in trace elements

Fig 12.

Horse Mixture:

| Kg    | Туре   |
|-------|--|
| 7.00  | Perennial Ryegrass                               |
| 3.00  | Smooth Stalked Meadow Grass (Kentucky Bluegrass) |
| 1.50  | Timothy  |
| 0.50  | Mixed Herbs                                      |
| 12.00 |  |



## **Tetraploid Mixture**

The Tetraploid Mixture is a specialist mix for overseeding in intensive grazing systems.

Overseeding helps rejuvenate swards with minimal time out of production. If you are looking to overseed swards damaged by poaching, the Tetraploid Mixture is the best option for you. The heavier seeds of high-quality perennial ryegrass varieties contained within the mixture give it the ability to establish rapidly. The larger, more upright, leaves also make the swards easier to graze. The more open growth habit of these grasses, however, makes this mixture less suited to heavier soil types due to an increased risk of poaching.

#### **Benefits of Tetraploid Mixture**

- · Increased palatability driving higher intakes
- High-quality grasses giving superior animal performance
- Excellent sward utilisation
- Suited to overseeding to repair damaged swards
- Rapid establishment

| Kg    | Variety   | Туре                   | Heading Date |
|-------|-----------|------------------------|--------------|
| 4.00  | Gracehill | Perennial Ryegrass (T) | 04 June      |
| 4.00  | Ballintoy | Perennial Ryegrass (T) | 04 June      |
| 4.00  | Dunluce   | Perennial Ryegrass (T) | 29 May       |
| 12.00 |           |                        |              |



#### Tips to successfully overseed grass

- Sow at a rate of 8 kg/acre when overseeding
- Ensure good soil-to-seed contact not suitable in swards with a "butt"
- For badly poached ground a full reseed may be more cost effective
- · Ideally overseed in the spring or after cutting silage
- Watch the weather requires rain very soon after sowing, poor germination and establishment will occur if weather comes dry after sowing
- Ideally scratch the surface with tines to create soil contact for the seed and also help pull dead grasses from the sward
- Use appropriate sowing method to spread or stitch in to ensure even distribution of the seed
- Apply lime, P and K to correct deficiencies
- · Roll after sowing assuming ground conditions allow
- Ensure frequent grazing at low covers after sowing to control the old sward

Fig 13.

## Tetraploid Mixture:

T = Tetraploid

Farms in derogation are required to sow a minimum of 0.6 kg uncoated clover or 1.0 kg coated clover per acre when reseeding. This mixture does not contain clover. If necessary please request clover or speak to one of our sales team for advice.

# 3 + Cut Intensive Silage Options: Red Clover Intensive Silage

Red Clover Intensive Silage is designed specifically for highquality silage production, with the potential for increased protein content and reduced fertiliser costs.

It is ideal for increasing protein production on farm, reducing your bought-in feed requirement. Aim for a first cut between red clover's early flower bud and 50% flowering stage, with subsequent cuts at five to six weekly intervals. The sward also provides excellent aftermath grazing for finishing lambs.

#### **Benefits**

- · Improved protein content of silage
- · Reduces the need for artificial nitrogen
- Outstanding grazing yield and quality
- Suitable for aftermath grazing, but avoid overgrazing

Fig 14.

Red Clover Intensive Silage
T = Tetraploid
D = Diploid

| Kg / acre | Variety            | Туре                   | Heading Date |
|-----------|--------------------|------------------------|--------------|
| 4.00      | AberClyde          | Perennial Ryegrass (T) | 25 May       |
| 3.5       | AberWolf           | Perennial Ryegrass (D) | 30 May       |
| 4.0       | Red Clover Blend   |                        |              |
| 0.5       | White Clover Blend |                        |              |
| 12.00     |                    |                        |              |

### **Hybrid Silage**

A mix containing hybrid ryegrass to produce large quantities of high-quality silage from three or four cuts during peak grass growth.

This mix meets the needs of farmers with a high demand for silage or trying to maximise yield potential from out-farms. If you aim for three or four cuts in the pit by mid-July onwards, Hybrid Silage is the best option for you, with first cut in mid-May. Sward quality allows grazing after the final cut towards the back end of the year.

#### **Benefits**

16.00

- · Three to four high quality, high yielding silage cuts
- · Excellent spring and autumn growth, suited to an early or late grazing
- Option to include red clover for enhanced protein content

| Kg   | Variety  | Туре                | Heading Date |
|------|----------|---------------------|--------------|
| 8.00 | AberEcho | Hybrid Ryegrass (T) | 18 May       |
| 8.00 | AberEve  | Hybrid Ryegrass (T) | 22 May       |

Fig 15.

Hybrid silage

T = Tetraploid

# Germinal Horizon

Research and Innovation

# Forage innovation fit for the future

As specialists in forage, Germinal is always looking to the future. Committed to research and development, we are driving innovation in seed production. We are not just part of the supply chain, but a plant breeder with vital knowledge in seed development.

Our research and innovation team, Germinal Horizon, comprises scientists at world-leading grassland research centre, Aberystwyth University's Institute of Biological, Environmental and Rural Science (IBERS), and its own R&D farm sites. In addition to their work within Germinal Horizon, our team oversees on-farm trials to confirm new varieties work effectively in a real-life farming situation.

The focus of our breeding programme has always reflected the areas of greatest need on Irish farms. Our breeding philosophy is to deliver forages farmers can rely on for optimal performance, balancing production traits such as yield and persistency with the highest possible quality. Our grasses and clovers are precision bred to support modern production systems, maximising livestock performance and farm productivity. This guiding principle is reflected in Germinal varieties ranking highly on Recommended Lists and the Pasture Profit Index year after year.

We are also working now to enhance agricultural productivity in the face of today's climate challenges and develop products fit for the future. Significant progress has been made in reducing nitrogenous emissions through the development of our high-sugar grasses and work is underway to continue developing varieties which underpin sustainable agriculture.

Nitrogen fixation is a key driver of our forage legume programmes, offering great potential for improving nitrogen-use efficiency (NUE) and allowing extensive reductions of applied mineral nitrogen fertiliser, a major source of greenhouse gas emissions. We are breeding new types of red clover with the persistency of white clover under grazing but with protein protection in the rumen, reducing nitrogenous emissions and improving protein availability for the animal.

Similarly, more hybrid white clovers are being bred with a root system extending further below ground, as well as above, providing greater drought tolerance. There is also a need to address such increasingly frequent extremes of weather by developing new forage varieties. These developments extend our innovative clover range and reflect the growing interest from farmers in using clover within a grassland system.

Germinal's well-established breeding population provides the ideal platform to continue developing the new agronomic and environmental traits most needed by grassland farmers now and in the future.

16 Clovers

### The role of white clover

White clover offers many benefits in today's sustainable livestock farming systems. It can supply over 150 kg N/ha, nitrogen/ha reducing the requirement and cost of fertiliser applications. Its strong creeping stolons make it tolerant of grazing and enables the plant to store energy and protein over winter into spring.

To gain the most from white clover, an established sward needs a clover content of 25-30%, but it is slower to establish than grass due to its smaller seed size. To overcome this, Germinal's coated white clover establishes quicker and is more productive than uncoated seed. The coating contains phosphorus to promote root growth and rhizobium inoculants to improve nitrogen fixation. Coated white clover can be used in a full reseed or to overseed clover into an existing sward.

#### Tips to successfully overseed with white clover

- Ensure adequate soil pH and P and K indices
- Seed must make contact with the soil an old sward with a "butt" is unsuitable
- Control weeds before sowing clover it is much more costly and less effective to try to control weeds when clover is growing
- The ideal time for overseeding is following a heavy silage harvest or following tight grazing in late April or May
- Watch the weather requires rain after sowing. Poor germination and establishment will occur if weather comes dry after sowing
- Sow 3 kg/acre of coated white clover seed with one bag 0:7:30
- Clover can be broadcast or stitched into the sward
- Sow in two directions up/down and then across the field
- · Roll after sowing
- Avoid spreading N for the remainder of the year

#### Management post-sowing

- Graze frequently, at low covers (<1200 kg DM/ha) for the first few grazings to allow light to reach the base of the sward
- Subsequently, graze at 1200-1400 kg DM/ha to a residual of 4 cm
- Avoid cutting for silage as clover can then out-compete grass
- Maintain optimum pH, P and K in the soil

Derogation farms must sow a minimum 1kg coated clover/acre when reseeding or 0.6kg/acre uncoated clover. Clovers 17

## **Red clover**

Red clover is a high-quality, cost-effective source of home-grown protein, with the capacity to reduce the reliance on bought-in feed.

With a protein content of 18-20%, it is an attractive option for feeding livestock and loses less protein in the silo. 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 Aberystwyth, have overcome this problem. It lasts at least four years in a cutting sward and is significantly more tolerant of grazing. This longer productive life makes them more compatible with medium to long-term swards.

Red clover has good environmental credentials too. It fixes nitrogen at a rate of 150 kg N/ha, releasing it to other plants, reducing the need for nitrogen fertiliser.

Encouraged by results seen in trials and on farm, red clover breeding continues at Germinal Horizon Aberystwyth. Researchers are currently working on the development of new varieties with resistance to the more common disease challenges.





Organic Mixtures 19

# **Organic Mixtures**

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

Our new range of organic grass seed mixtures contains high-quality varieties featured on the Irish Grass Recommended List. They are all designed for organic systems, containing varieties with proven performance on Irish farms.

#### 1. Organic Perennial Ryegrass (100% Organic)

| Kg / acre | Variety            | Туре                   | Heading Date |
|-----------|--------------------|------------------------|--------------|
| 6.50      | Organic AberChoice | Perennial Ryegrass (D) | 11 June      |
| 6.50      | Organic AberClyde  | Perennial Ryegrass (T) | 25 May       |
| 13.00     |                    |                        |              |

#### 2. Permanent Pasture (77% Organic) \*

| Kg / acre | Variety            | Туре                   | Heading Date |
|-----------|--------------------|------------------------|--------------|
| 6.00      | Organic AberChoice | Perennial Ryegrass (D) | 11 June      |
| 4.00      | Organic AberClyde  | Perennial Ryegrass (T) | 25 May       |
| 1.00      | Comer              | Timothy                |              |
| 2.00      | White Clover Blend |                        |              |
| 13.0      |                    |                        |              |

#### 3. Red Clover Silage (74% Organic) \*

| Kg / acre | Variety            | Туре                   | Heading Date |
|-----------|--------------------|------------------------|--------------|
| 4.80      | Organic AberChoice | Perennial Ryegrass (D) | 11 June      |
| 4.80      | Organic AberClyde  | Perennial Ryegrass (T) | 25 May       |
| 3.40      | Red Clover Blend   |                        |              |
| 13.0      |                    |                        |              |

<sup>\*</sup> Organic farmers need a derogation before purchasing these mixture as they contain conventional and organic seed

#### Fig 16.

#### Organic Perennial Ryegrass:

T = Tetraploid

D = Diploid

#### Fig 17.

## Permanent Pasture:

T = Tetraploid

D = Diploid

#### Fig 18.

## Red Clover Silage:

T = Tetraploid

D = Diploid

# Reseeding

# Timing Spring reseeding

- Improving temperatures aid germination and establishment of new sward
- Opportunity to take several grazings to help tiller the new sward
- Improved soil conditions will make it easier to apply a post-emergence spray
- The sward will be well "settled" in the following spring
- · Easier to establish clover

#### **Autumn reseeding**

Autumn reseeding may suit from a feed budget perspective, but there are some risks:

- Lower soil temperature can decrease seed germination
  - aim to sow seed by early September
- Poor weather may make it more difficult to graze a new reseed or apply a herbicide for weed control
  - grazing helps tiller the grass plants and creates a dense sward

### Follow our 10-point plan when reseeding.

- Soil test. Target pH is 6.3, target P and K index is 3.
  If ploughing, wait until after ploughing to soil sample
- 2 Spray off the old sward with glyphosate
- Cultivate to ensure a fine, firm seed bed is achieved.
  Ploughing will help level any rough fields. Apply lime as per soil test results
- Select Irish Recommended List varieties suited to intended field use e.g. grazing or silage
- Sow 14 kg seed/acre in good conditions (warm with rain forecast), no deeper than 10-15 mm. Farms in derogation must include 1 kg/acre coated clover (0.6 kg/acre uncoated clover seed) in their mixtures
- 6 Roll well to ensure good soil/seed contact
- Apply N, P and K as per guidelines and soil test results
- Monitor reseed for pest attack e.g. slugs, frit fly, leatherjacket, rabbits etc. Take immediate action where necessary
- Post-emergence weed spray is essential, apply approx. 5-6 weeks after establishment, prior to first grazing. Where clover was sown, use a clover safe spray
- Graze the new reseeds, frequently and at light covers to assist in tillering and to help create a dense sward

Reseeding 21

# Reseeding advice

The method used to reseed usually makes little difference to yield in the first full year. More important is making sure whichever method you use is done properly and managed well.

#### Liming

Liming is important to help counteract any acidity resulting from the old sward decaying. Even if a field was limed within two years, applying 1-2 tonnes lime at sowing helps the new sward establish well.

#### Seedbed

Ground preparation is critical, aiming to produce a fine, firm and level seedbed – one you can ride a bike across! If direct drilling, check for rain before drilling as it's less successful in dry conditions.

#### Roll

Post-sowing rolling is essential. It helps compress the soil, keeping more moisture in the seedbed. It also helps seed-to-soil contact and the best chance of successful germination.

#### Pests

Pest attacks are more prevalent with an autumn reseed. The following points all help reduce the risk of an attack: killing off an old sward effectively and removing dead thrash; allowing sufficient time between spraying and cultivation; preparing a good seedbed in the best growing conditions for a new reseed; post-sowing rolling. Common pests include:

- Frit-fly: can result in patchy, poorly-established reseeds. Frit-fly larvae burrow into the base of newly-emerging grasses, cutting off the plant at the growing point. Autumn reseeds and min-till are at greatest risk.
- Leatherjacket: found in bare patches. Leatherjackets are the larvae of the crane fly (Daddy-long-legs). They cut off the plant just below the surface, destroying the seedling. Large crow populations feeding can indicate a leatherjacket problem.
- Slugs: most prevalent in wet weather or damp sections of a field, particularly in areas with high levels of surface trash or inadequate/ no rolling. Slugs are indicated by shredded leaves. Direct-drilled reseeds are at greatest risk as slits in the ground provide shelter for slugs. Use slug pellets if direct drilling or if a problem is identified. Risk is reduced by creating a fine, firm seedbed with adequate rolling.

#### **Weed control**

Post-emergence weed spray provides the best opportunity for weed control in the new sward. Weeds are easier and cheaper to control when they are seedlings and most susceptible to herbicides. Apply a spray targeting the weed types present 5-6 weeks after sowing. If clover is in the sward, take care to use a clover-safe spray at the three-leaf stage.

## **Grass quality**

The quality of grass is a valuable attribute financially. Higher digestibility grasses drive dry matter intakes optimising animal performance through increased milk production and protein concentration.

Grass quality is defined by DMD or digestibility value. According to Teagasc, each unit DMD results in an extra 0.24 kg milk/cow/day. In financial value, this represents an additional 10c/cow/day. For a 100-cow herd grazing a high digestibility grass for 300 days, this is worth €3,000 in extra milk production compared to a herd grazing conventional grass varieties.

Germinal varieties are highest across all four categories for quality and economic value in Teagasc's Pasture Profit Index delivering increased farm profitability.



# Irish Grass Recommended List 2022

#### **Intermediate Varieties**

|                |        |              | :      | Simulated G | razing (t DM | 1/ha)       | DMD     | Silage (t DM/ha)    |                     | Ground Cover |
|----------------|--------|--------------|--------|-------------|--------------|-------------|---------|---------------------|---------------------|--------------|
| Variety Name   | Ploidy | Heading Date | Spring | Summer      | Autumn       | Total Yield | g/kg DM | 1 <sup>st</sup> Cut | 2 <sup>nd</sup> Cut | (1-9)        |
| Moira          | D      | 26-May       | 1.65   | 7.08        | 2.43         | 11.17       | 826.8   | 4.89                | 4.16                | 6.1          |
| Astonconqueror | D      | 27-May       | 1.46   | 7.39        | 2.34         | 11.19       | 835.7   | 5.21                | 3.93                | 6.2          |
| AberMagic      | D      | 28-May       | 1.19   | 7.69        | 2.62         | 11.51       | 844.9   | 4.64                | 4.09                | 6.2          |
| Nifty          | D      | 28-May       | 1.23   | 7.62        | 2.43         | 11.30       | 831.2   | 4.65                | 4.14                | 6.3          |
| AberWolf       | D      | 30-May       | 1.33   | 7.45        | 2.35         | 11.12       | 840.9   | 4.85                | 4.45                | 6.7          |
| AberGreen      | D      | 31-May       | 1.23   | 7.82        | 2.55         | 11.60       | 842.2   | 4.31                | 4.13                | 6.5          |
| Gusto          | D      | 31-May       | 1.30   | 7.37        | 2.50         | 11.18       | 838.9   | 4.32                | 4.04                | 5.8          |
| Barwave        | Т      | 22-May       | 1.56   | 7.62        | 2.45         | 11.64       | 836.0   | 4.98                | 4.51                | 4.9          |
| Fintona        | Т      | 24-May       | 1.30   | 7.40        | 2.35         | 11.05       | 839.1   | 5.22                | 4.01                | 5.4          |
| AberClyde      | т      | 25-May       | 1.31   | 7.74        | 2.32         | 11.38       | 852.0   | 5.23                | 4.04                | 5.6          |
| Elysium        | Т      | 27-May       | 1.26   | 7.39        | 2.20         | 10.86       | 844.4   | 4.74                | 4.25                | 6.0          |
| Dunluce        | Т      | 29-May       | 1.14   | 7.54        | 2.38         | 11.05       | 845.6   | 4.52                | 4.62                | 5.4          |

#### **Late Varieties**

|               |        |              | :      | Simulated G | razing (t DM | /ha)        | DMD     | Silage (            | t DM/ha)            | Ground Cover |
|---------------|--------|--------------|--------|-------------|--------------|-------------|---------|---------------------|---------------------|--------------|
| Variety Name  | Ploidy | Heading Date | Spring | Summer      | Autumn       | Total Yield | g/kg DM | 1 <sup>st</sup> Cut | 2 <sup>nd</sup> Cut | (1-9)        |
| Oakpark       | D      | 02-Jun       | 1.19   | 7.40        | 2.38         | 10.98       | 833.3   | 4.33                | 4.55                | 6.5          |
| Ballyvoy      | D      | 03-Jun       | 1.39   | 7.24        | 2.34         | 10.97       | 843.1   | 4.14                | 4.32                | 6.2          |
| Callan        | D      | 03-Jun       | 1.43   | 7.08        | 2.23         | 10.74       | 830.1   | 4.55                | 3.96                | 6.2          |
| Drumbo        | D      | 05-Jun       | 1.14   | 7.19        | 2.29         | 10.62       | 842.6   | 4.19                | 4.36                | 6.2          |
| AstonKing     | D      | 05-Jun       | 1.37   | 7.34        | 2.24         | 10.95       | 828.3   | 4.36                | 4.29                | 5.8          |
| AberBann      | D      | 10-Jun       | 1.03   | 8.11        | 2.59         | 11.74       | 832.2   | 4.46                | 5.36                | 5.9          |
| AberChoice    | D      | 11-Jun       | 1.09   | 7.73        | 2.44         | 11.26       | 844.8   | 4.18                | 4.93                | 6.0          |
| Bowie         | D      | 16-Jun       | 1.11   | 7.43        | 2.40         | 10.94       | 838.7   | 3.63                | 5.22                | 6.4          |
| AberBite      | Т      | 01-Jun       | 0.99   | 7.49        | 2.39         | 10.87       | 849.5   | 4.55                | 4.62                | 5.8          |
| Astonenergy   | Т      | 01-Jun       | 1.03   | 7.27        | 2.30         | 10.60       | 854.1   | 4.33                | 3.95                | 5.5          |
| Triwarwic     | Т      | 02-Jun       | 1.12   | 7.42        | 2.18         | 10.72       | 842.5   | 4.63                | 4.39                | 5.8          |
| Nashota       | Т      | 03-Jun       | 1.32   | 7.51        | 2.26         | 11.09       | 845.7   | 4.68                | 4.54                | 6.0          |
| Glenfield     | Т      | 03-Jun       | 1.36   | 7.68        | 2.28         | 11.31       | 841.1   | 4.74                | 4.55                | 5.7          |
| Meiduno       | Т      | 03-Jun       | 1.27   | 7.50        | 2.33         | 11.10       | 848.8   | 4.41                | 4.31                | 5.2          |
| Briant        | Т      | 03-Jun       | 1.06   | 7.54        | 2.33         | 10.93       | 841.2   | 4.51                | 4.47                | 5.5          |
| Aspect        | Т      | 03-Jun       | 1.07   | 7.36        | 2.19         | 10.61       | 848.5   | 4.13                | 4.77                | 6.0          |
| AberGain      | Т      | 04-Jun       | 1.20   | 7.63        | 2.37         | 11.20       | 852.0   | 4.91                | 4.56                | 5.6          |
| Gracehill     | Т      | 04-Jun       | 1.28   | 7.60        | 2.44         | 11.31       | 840.9   | 5.35                | 4.56                | 5.6          |
| Ballintoy     | Т      | 04-Jun       | 1.22   | 7.59        | 2.30         | 11.11       | 846.6   | 4.59                | 4.44                | 5.4          |
| Xenon         | Т      | 07-Jun       | 1.08   | 7.33        | 2.23         | 10.64       | 846.1   | 3.98                | 4.77                | 6.2          |
| AberPlentiful | Т      | 08-Jun       | 1.36   | 7.67        | 2.37         | 11.40       | 842.1   | 4.27                | 4.69                | 5.5          |
| Solas         | T      | 10-Jun       | 1.06   | 7.29        | 2.41         | 10.76       | 837.8   | 4.31                | 5.07                | 5.8          |

# Pasture Profit Index 2022

#### **Intermediate Tetraploids**

| ٧            | ariety Detail | S            |                          | PPI Sub-Indices (€/Ha/Year) |        |        |         |        |             |                                      |  |
|--------------|---------------|--------------|--------------------------|-----------------------------|--------|--------|---------|--------|-------------|--------------------------------------|--|
| Variety Name | Ploidy        | Heading Date | TOTAL PPI<br>(€/Ha/year) | Spring                      | Summer | Autumn | Quality | Silage | Persistency | Grazing Utilisation Trait (1-5 star) |  |
| AberClyde    | Т             | 25-May       | 253                      | 51                          | 66     | 46     | 44      | 46     | 0           | ****                                 |  |
| Barwave      | Т             | 22-May       | 244                      | 93                          | 61     | 59     | -20     | 50     | 0           | -                                    |  |
| Fintona      | Т             | 24-May       | 190                      | 49                          | 52     | 49     | -5      | 45     | 0           | ****                                 |  |
| Dunluce      | Т             | 29-May       | 184                      | 23                          | 58     | 52     | 24      | 34     | -6          | ***                                  |  |
| Elysium      | Т             | 27-May       | 170                      | 43                          | 52     | 32     | 12      | 32     | 0           | -                                    |  |

#### **Intermediate Diploids**

| Variety Details |        |              | PPI Sub-Indices (€/Ha/Year) |        |        |        |         |        |             |   |
|-----------------|--------|--------------|-----------------------------|--------|--------|--------|---------|--------|-------------|---|
| Variety Name    | Ploidy | Heading Date | TOTAL PPI<br>(€/Ha/year)    | Spring | Summer | Autumn | Quality | Silage | Persistency | Grazing<br>Utilisation<br>Trait<br>(1-5 star) |
| AberMagic       | D      | 28-May       | 215                         | 31     | 64     | 78     | 18      | 24     | 0           | ***   |
| Moira           | D      | 26-May       | 209                         | 108    | 39     | 57     | -32     | 36     | 0           | ***   |
| AberWolf        | D      | 30-May       | 209                         | 54     | 54     | 48     | 11      | 43     | 0           | **  |
| Astonconqueror  | D      | 27-May       | 206                         | 75     | 52     | 48     | -10     | 42     | 0           | ***   |
| AberGreen       | D      | 31-May       | 193                         | 38     | 69     | 70     | 5       | 11     | 0           | *   |
| Gusto           | D      | 31-May       | 176                         | 50     | 51     | 64     | 2       | 9      | 0           | ***   |
| Nifty           | D      | 28-May       | 145                         | 38     | 61     | 57     | -37     | 26     | 0           | **  |

Rows in yellow indicate Germinal varieties

Source: 'Grass and White Clover Recommended List varieties for Ireland 2022', Department of Agriculture, Food and the Marine

<sup>&</sup>lt;sup>1</sup>This is a provisional trait, a hyphen "-" indicates no grazing data available

Pasture Profit Index 2022

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# Pasture Profit Index 2022

### **Late Tetraploids**

| ٧             | ariety Detail | S            |                          |        |        |        | ¹Teagasc<br>Grazing |        |             |                                    |
|---------------|---------------|--------------|--------------------------|--------|--------|--------|---------------------|--------|-------------|------------------------------------|
| Variety Name  | Ploidy        | Heading Date | TOTAL PPI<br>(€/Ha/year) | Spring | Summer | Autumn | Quality             | Silage | Persistency | Utilisation<br>Trait<br>(1-5 star) |
| AberGain      | Т             | 4-Jun        | 241                      | 34     | 61     | 50     | 47                  | 49     | 0           | ***                                |
| Gracehill     | Т             | 4-Jun        | 241                      | 46     | 60     | 58     | 10                  | 67     | 0           | **                                 |
| Nashota       | Т             | 3-Jun        | 214                      | 53     | 57     | 39     | 28                  | 38     | 0           | -                                  |
| Glenfield     | Т             | 3-Jun        | 207                      | 59     | 63     | 40     | 3                   | 41     | 0           | -                                  |
| AberPlentiful | Т             | 8-Jun        | 204                      | 59     | 63     | 50     | 11                  | 26     | -6          | **                                 |
| Ballintoy     | Т             | 4-Jun        | 195                      | 36     | 60     | 43     | 23                  | 32     | 0           | ****                               |
| Meiduno       | T             | 3-Jun        | 195                      | 45     | 56     | 46     | 27                  | 21     | 0           | ****                               |
| AberBite      | Т             | 1-Jun        | 175                      | -2     | 56     | 53     | 32                  | 36     | 0           | ****                               |
| Briant        | Т             | 3-Jun        | 156                      | 10     | 58     | 46     | 13                  | 29     | 0           | ***                                |
| Solas         | T             | 10-Jun       | 153                      | 10     | 48     | 55     | 1                   | 39     | 0           | ***                                |
| AstonEnergy   | Т             | 1-Jun        | 151                      | 5      | 47     | 43     | 49                  | 6      | 0           | ****                               |
| Xenon         | Т             | 7-Jun        | 143                      | 12     | 49     | 35     | 29                  | 17     | 0           | ****                               |
| Triwarwic     | Т             | 2-Jun        | 141                      | 20     | 53     | 30     | 7                   | 32     | 0           | -                                  |
| Aspect        | Т             | 3-Jun        | 136                      | 11     | 50     | 30     | 27                  | 23     | -6          | ****                               |

### **Late Diploids**

| V            | ariety Details | 5            |                          | PPI Sub-Indices (€/Ha/Year) |        |        |         |        |             |   |  |
|--------------|----------------|--------------|--------------------------|-----------------------------|--------|--------|---------|--------|-------------|---|--|
| Variety Name | Ploidy         | Heading Date | TOTAL PPI<br>(€/Ha/year) | Spring                      | Summer | Autumn | Quality | Silage | Persistency | Grazing<br>Utilisation<br>Trait<br>(1-5 star) |  |
| AberChoice   | D              | 11-Jun       | 190                      | 15                          | 65     | 58     | 22      | 30     | 0           | ***   |  |
| AberBann     | D              | 10-Jun       | 190                      | 5                           | 81     | 75     | -25     | 54     | 0           | ***   |  |
| Ballyvoy     | D              | 3-Jun        | 186                      | 65                          | 46     | 47     | 19      | 10     | 0           | *   |  |
| Bowie        | D              | 16-Jun       | 170                      | 19                          | 53     | 54     | 28      | 16     | 0           | -   |  |
| Oakpark      | D              | 2-Jun        | 149                      | 32                          | 52     | 52     | -12     | 25     | 0           | *   |  |
| Drumbo       | D              | 5-Jun        | 146                      | 23                          | 44     | 42     | 24      | 13     | 0           | *   |  |
| AstonKing    | D              | 5-Jun        | 141                      | 61                          | 50     | 36     | -25     | 18     | 0           | ***   |  |
| Callan       | D              | 3-Jun        | 126                      | 71                          | 39     | 35     | -35     | 16     | 0           | ***   |  |

# Forage crop selection

Alternative forage crops play a valuable complementary role in grassland-based farming systems. They provide a cost-effective homegrown option for outwintering livestock and overcoming grass shortfalls during the summer.

There are three fundamental questions to ask when selecting forage crops:

- 1. When do you want to use the crop?
- 2. When will the land become available to grow the crop?
- 3. How many animals does the crop need to feed?

Use the table below to select the best crops to fit your requirements.

Fig 19.

Forage crop selection and production guide:

| Crop            | Variety       | Sowing Time       | Seeding rate<br>(per acre) | Time of Utilisation | Expected DM Yield<br>(t DM/ha) | DM%     | CP%     | Metabolisable<br>Energy (MJ/kg DM) |
|-----------------|---------------|-------------------|----------------------------|---------------------|--------------------------------|---------|---------|------------------------------------|
| Kale            | Maris Kestrel | May - June        | 2.5 - 3.0 kg*              | November - February | 10 - 12                        | 14 - 16 | 16 - 18 | 12.5 - 13.5                        |
| Hybrid Brassica | Redstart      | May - August      | 3.5 - 4.0 kg               | June - February     | 6-8                            | 12 - 14 | 18 - 20 | 10 - 11                            |
| Forage Rape     | Stego         | July - August     | 3.5 - 4.0 kg               | October - February  | 4-6                            | 12 - 14 | 18 - 20 | 10 - 11                            |
| Swede           | Triumph       | May - June        | 400 g                      | November - February | 10 - 12                        | 10 - 12 | 10 - 12 | 12.5 - 13.5                        |
| Leafy Turnip    | Appin         | April - September | 2.0 - 3.0 kg               | June - February     | 3-5                            | 8 - 10  | 18 - 20 | 10 - 11                            |

\*If broadcasting seed increase to 4.0 kg/ acre seeding rate.



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# **Kale**Maris Kestrel

### **Maris Kestrel**

Maris Kestrel is a high-quality, cost-effective kale variety for all classes of stock.

It provides a good late summer/early autumn feed for cattle or sheep and a useful solution for late season grazing deficits. It is also ideal for out-wintering stock. The leading kale variety in Ireland, its success lies in livestock being able to utilise the whole plant.

#### **Benefits of Maris Kestrel**

- · High digestibility driving intakes
- Outstanding leaf-to-stem ratio and whole plant D-value
- · Vigorous early growth
- · Resistance to lodging
- · Good winter hardiness
- Long utilisation period
- Suitable for all classes of stock

Fig 20.

#### Maris Kestrel:

| Maris Kestrel      |   |
|--------------------|---|
| Sowing time        | May to June   |
| Seed rate:         | 2.5 - 3.0 kg/acre (increase to 4.0 kg/acre if broadcasting) |
| Yield              | 10 - 12 t DM/ha   |
| Utilisation period | November to February  |



# **Hybrid brassicas**Redstart (Rape x Kale)



# Redstart offers a unique utility crop combining rapid growth with good performance all year.

If you're looking for a high energy, versatile grazing crop, Redstart is ideal. Its hybrid qualities give it the ability to grow fast like a typical forage rape while remaining tolerant of cold, frosty conditions like kale. Redstart offers a variety of grazing options through summer, autumn and winter, and is an ideal catch crop for countering late season grazing shortages.

#### Benefits of hybrid brassicas

- High energy and protein
- · Rapid and vigorous growth
- · Good winter hardiness
- Regrowth and late season yield potential
- Suitable for cattle and sheep
- · Good for outwintering

| Redstart           |   |
|--------------------|---|
| Sowing time        | May to August   |
| Seed rate:         | 3.5 - 4.0 kg/acre   |
| Yield              | 6 - 8 t DM/ha   |
| Utilisation period | Earlier sowings have the potential for multiple grazings.<br>Later sowings can be utilised until February |



Redstart:



Forage crops 29

# Forage rape Stego

## Stego

# Stego is a fast-growing, high-yielding forage rape suitable for cattle and sheep.

This rape variety offers high energy grazing through the autumn and winter and is ideal for out-wintering.

#### Benefits of forage rape

- High energy and protein
- Fast, vigorous growth
- High leaf-to-stem ratio
- Outstanding whole plant D-value with minimal residual matter
- Excellent disease resistance, including mildew
- Regrowth potential

#### Fig 22.

#### Stego:

| Stego              |                     |
|--------------------|---------------------|
| Sowing time        | July to August      |
| Seed rate:         | 3.5 - 4.0 kg/acre   |
| Yield              | 4 - 6 t DM/ha       |
| Utilisation period | October to February |
|                    | ·                   |



# **Swede** Triumph



# Triumph is a high-yielding winter-hardy feed for cattle and sheep.

This well-shaped swede is an excellent autumn and winter feed and ideal for out-wintering. A hectare of Triumph swedes provides the equivalent yield and energy to 7-10 tonnes barley.

#### **Benefits of Triumph**

- · High energy winter grazing
- · Outstanding winter hardiness
- Excellent D-value
- Strong clubroot and mildew resistance

# **Leafy turnip**Appin



# Appin is a high-yielding leafy turnip offering cost-effective and flexible feeding options for cattle and sheep.

If you're looking for a versatile feed able to provide a catch crop to overcome summer shortfalls as well as autumn and winter grazing, Appin is the right choice. It can also be used as a source of fresh and worm-free grazing for lambs.

#### **Benefits of Appin**

- Easily established by undersowing or scratching into stubbles
- Wide sowing window
- · Fast growing with excellent regrowth potential

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# Growing a successful brassica crop

Brassicas are popular crops for out-wintering but can also be ensiled and zero-grazed successfully. Selecting the best site for growing them is vital to their success.

#### Factors to consider when choosing a site for growing brassicas:

- · Fields where grass production is falling
- Free-draining soil that dries out quickly
- Flat or gently sloping sites avoid steep slopes
- Avoid sites close to watercourses or water supplies
   (N.B. cross-compliance is important if outwintering stock)
- Duration since last growing a brassica crop a minimum of four years to reduce risk of clubroot

#### Sowing advice

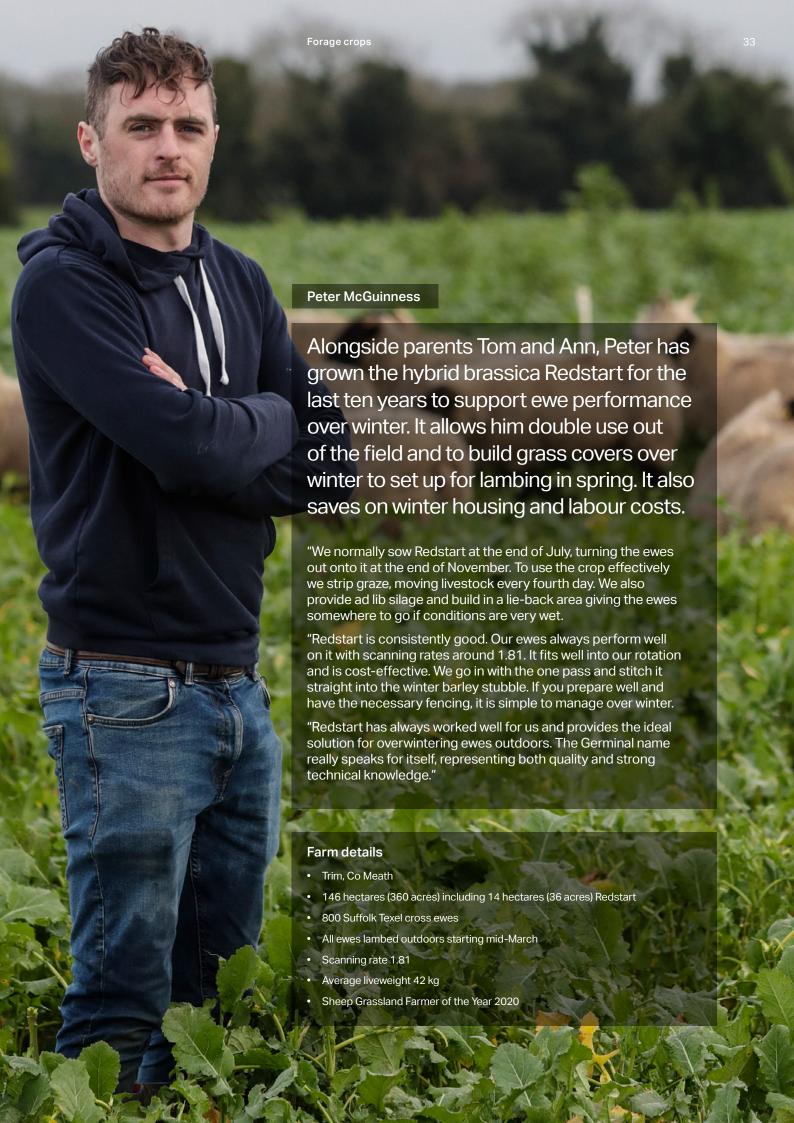
- Soil test approximately eight weeks before sowing to check soil fertility. Aim for a soil pH 6.0-6.7 and index 3 for P and K
- Spray off old sward with glyphosate. Graze hard or cut 7-10 days later to remove surface trash
- Sow seeds into a fine, firm seedbed at a maximum depth of 10 mm.
   Can also be direct drilled or broadcast, but increase seed rate if broadcasting
- Spread two bags of granulated lime if broadcasting or direct drilling to counteract acidity of dying trash
- · Roll well after sowing
- · Apply lime, N, P and K as per soil test and crop recommendations
- Monitor crop closely for pests, diseases and weed ingress, particularly during establishment

# Grazing management of brassicas

Introducing livestock to brassicas from grass needs to be done gradually. Sudden unrestricted access can cause rumen upsets due to the significant change in diet.

#### Successful grazing management:

- Introduce stock to brassicas for 1-2 hours/day, building up to full access over 7-10 days
- Brassicas are highly digestible and low in fibre so livestock grazing brassicas must have access to silage, hay or straw. Aim for 70% brassicas: 30% fibre
- Place bales in the field during summer to minimise machinery travelling when ground conditions are poor
- Provide unrestricted access to water
- Strip graze in long, narrow strips to maximise crop utilisation, ensure all animals have equal access and minimise trampling. Move the strip fence daily
- On sloping land, graze from top to bottom to reduce run-off
- Give bolus minerals to supplement the low selenium, copper, iodine and cobalt content of brassicas
- Monitor crop utilisation. Livestock should be content and the crop well utilised
- Avoid grazing brassicas after they've started flowering, around late February. At this time, the glucosinolate concentrate increases, presenting a risk to animal health



## **Environmental schemes**

At Germinal, we produce a range of mixtures which comply with environmental schemes, such as GLAS and Greening.

We have outlined our most common mixtures but if you require a different formulation, please do not hesitate to contact us.

- 1. Catch Crops
- 2. Wild Bird Cover
- 3. Arable Grass Margins
- 4. Environmental Management of Fallow Land

The information given on these four mixtures is a guide only. We recommend you check the latest guidelines by contacting the Department of Agriculture, Food and the Marine to ensure compliance.



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#### **Catch Crops**

Also known as cover crops or green manure, catch crops play a role in the regulatory requirements for green cover under the GLAS scheme. The following specifications are relevant to farmers sowing these crops within GLAS.

- Catch crops must be sown annually by 15<sup>th</sup> September
- Use light cultivation techniques ploughing is not permitted
- Use a mixture of at least two crops from the list of prescribed crops. The minimum seed rates of at least two of the species below must be sown annually
- Crops must remain in place until 1st December
- Grazing of catch crops is permitted after 1st December

# Catch Crop Mixture Options

#### Soil Booster Pro

A quick-establishing catch crop mixture which supresses weeds, improves soil structure and reduces nitrogen losses. It can be sown where oilseed rape is in the rotation as it does not contain radish or brassica.

#### Soil Booster Max

This mixture provides rapidly growing green cover to help condition the soil and reduce erosion. A good root structure increases air movement in the soil and improves drainage while scavenging nutrients from lower in the soil.

#### Soil Booster Plus

Offering the same benefits as Soil Booster Max, the nutrient-scavenging abilities of Soil Booster Plus makes nutrients available for the next cash crop.

#### Soil Booster Graze

Soil Booster Graze can be used for grazing animals after 1<sup>st</sup> December. It provides a valuable high energy feed for winter grazing of cattle and sheep. Always have fresh water and a fibre source, e.g. silage, available when grazing this mixture.

Fig 23.
List of prescribed catch crops in GLAS and sowing rate (kg/ha):

| Crop                          | Sowing Rate (kg/ha) |
|-------------------------------|---------------------|
| Oats (& black oats)           | 75 - 100            |
| Rye                           | 65 - 80             |
| Vetch                         | 12                  |
| Crimson clover/Berseem clover | 10 - 15             |
| Peas                          | 30                  |
| Beans                         | 90 - 100            |
| Forage/Fodder rape            | 3 - 5               |
| Leafy turnip                  | 5                   |
| Tillage radish                | 5                   |
| Mustard                       | 6 - 10              |
| Buckwheat                     | 30 - 40             |
| Phacelia                      | 2 - 5               |

#### **Wild Bird Cover**

Wild Bird Cover is a spring-sown crop left unharvested over winter to provide food for farmland birds.

- Maximum area for payment is three hectares
- Establish Wild Bird Cover by 31<sup>st</sup> May
- Crop must remain in situ until 15th March the following year
- Livestock may enter the parcel from 15<sup>th</sup> March in the year of replanting
- Fertiliser can be applied at a maximum of half rate for a cereal crop
- Increase seeding rate by one-third if broadcasting and roll immediately after sowing
- One and two-year options available

#### **One-Year option**

- · Must use a cereal e.g. oats, triticale, wheat or barley
- · Must be re-sown each year while in the scheme

Seed options

Seed rate where drilled\*

Cereal and Linseed (Cereal can be oats, wheat, barley or triticale)

Cereal and Mustard (Cereal can be oats, wheat, barley or triticale)

75 kg/ha cereal and 15 kg/ha of linseed
75 kg/ha cereal and 10 kg/ha of mustard

#### **Two-Year option**

- Must contain kale and a cereal (wheat/barley/oats/triticale)
- · Seed cannot be mixed
- · Half plot to be sown with kale, other half with cereal

Fig 25.
Wild Bird Cover
Two-year option:

Fig 24.

Wild Bird Cover

One-year option:

| Year | Sowing guidelines   | Seed rate where drilled*                         |
|------|---|--|
| 1    | Establish half the plot with cereal and half with kale    | 75 kg/ 0.5 ha cereal<br>and 3 kg/ 0.5ha of kale  |
| 2    | Kale remains in situ, re-establish cereal in half of plot | 75 kg/ 0.5 ha of cereal                          |
| 3    | Re-establish half of plot as kale and half as cereal      | 75 kg/ 0.5 ha cereal<br>and 3 kg/ 0.5 ha of kale |
| 4    | Kale remains in situ, re-establish cereal in half of plot | 75 kg/ 0.5 ha of cereal                          |
| 5    | Re-establish half of plot as kale and half as cereal      | 75 kg/ 0.5 ha cereal<br>and 3 kg/ 0.5 ha of kale |

<sup>\*</sup> Increase seeding rate by one-third if broadcasting

<sup>\*</sup> Increase seeding rate by one-third if broadcasting

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#### **Arable Grass Margin**

Arable grass margins provide a habitat for flora and fauna, increase biodiversity and protect water quality.

- Establish margins of 3, 4 or 6 m along the full length of LPIS parcel or field boundary
- Margins must remain in the same location for the duration of a contract
- Sow a grass mix containing a minimum of 60% Cocksfoot, Timothy or a combination of both at a seed rate of 25-30 kg/ha
- Soil cultivation must not be carried out within the margin once it's established
- Mulch, mow or graze the margin once a year, but not between 1<sup>st</sup> March and 15<sup>th</sup> August
- Do not apply fertiliser or lime to the margin
- Pesticides may only be applied to the margin for the spot treatment of noxious or invasive weeds
- · Retain all seed labels and receipts for the duration of a contract

Fig 26.

Arable
Grass Margin
GLAS Grass Mix:

| Туре               | Mix % |
|--------------------|-------|
| Timothy            | 60%   |
| Perennial ryegrass | 40%   |

### **Environmental Management of Fallow Land**

The environmental management of fallow land provides food and habitat for ground nesting birds, other fauna and insects through the nesting season.

- Permitted area: 0.25-3 hectares
- Establish fallow area by sowing before 31st May
- Sow a grass mix containing a minimum of 60% Cocksfoot, Timothy or a combination of both at a seed rate of 25-30 kg/ha
- · Do not apply fertiliser
- Mulch or mow the area once a year, but not between 1<sup>st</sup> March and 1<sup>st</sup> September
- Retain all seed labels and receipts for the duration of a contract
- Do not graze. Area must be fenced and stock proof

| Fig 27.        |  |  |
|----------------|--|--|
| Environmental  |  |  |
| Management     |  |  |
| of Fallow Land |  |  |

**GLAS Grass Mix:** 

| Туре               | Mix % |
|--------------------|-------|
| Timothy            | 60%   |
| Perennial ryegrass | 40%   |

## Wildflower mixtures



# **WF1** Flowering Meadow

WF1 Flowering Meadow mix produces an abundance of flowers ideal for road verges, gardens or any area requiring low maintenance. The flowering species' outstanding colour provides a rich food source to encourage pollinators such as butterflies and bees.

A blend of annual and perennial species selected to produce an initial display of colour in the first year with the perennial species persisting in the following years.

#### Benefits of WF1 Flowering Meadow

- Low maintenance
- Abundant and colourful display of flowers
- Supports pollinators
- Increased biodiversity



# **WFG2** Flowering Meadow

WFG2 Flowering Meadow mix is an all-round mixture suitable for a range of sites and soils to produce a grassland meadow. The flowering species attract and benefit pollinators such as bees and butterflies, from April to September with the main flowering period between May and July. A blend of annual and perennial wildflowers with appropriate grass species.

#### Benefits of WFG2 Flowering Meadow

- Suited to a range of sites and soils
- Abundant and colourful display of flowers
- Supports pollinators
- Increased biodiversity
- Colourful and distinct landscape

Wildflower mixtures 39



#### **Farm Pollinator Mix**

The Farm Pollinator Mix supplies flowering species from spring to early autumn ideal for non-farmed spaces such as laneways and roadside verges, field, arable and watercourse margins and unused areas around farmyards. It increases the biodiversity value of your farm without loss to production and contains a blend of annual and perennial species highlighted by the All-Ireland Pollinator Plan as suitable for pollinators.

#### Benefits of Farm Pollinator Mix

- Increased biodiversity
- Colourful and distinct landscape
- · Visual sign of Irish agriculture's sustainability
- Contains All-Ireland Pollinator Plan species
- Supports pollinators through the entire lifecycle



# **WF10**Cornfield Annuals

WF10 Cornfield Annuals mix is ideal for recreating a once common feature of farming areas, giving an outstanding display of colour in its first year. In subsequent years, an annual reseeding programme builds up a strong enough seed bank to maintain a colourful display from seed being regenerated through soil disturbance. This blend of annual species can be sown on its own or to supplement a mixture of perennial species slower to establish.

#### Benefits of WF10 Cornfield Annuals

- Abundant and colourful display of flowers
- Supplements existing perennial species
- · Increased biodiversity
- Supports pollinators

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# Leisure<sup>®</sup>Lawn



Fig 28.

Leisure® Lawn:

# Leisure Lawn is a quick-establishing lawn seed for landscaping and domestic lawns

Leisure Lawn forms a hardwearing lawn which maintains a healthy green colour all year. Suitable for sowing from scratch or lawn restoration after winter.

| Species                                | Mix % |
|--|-------|
| Dwarf Perennial Ryegrass (2 varieties) | 60%   |
| Strong Creeping Red Fescue             | 35%   |
| Chewings Fescue                        | 5%    |

Pack Size: 1, 2, 5, 10 or 20 kg
Sow: April to late August

**Sowing rate:** 25-30 g/m² (100-120 kg/acre)



## Find out more

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

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Leisure® 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 available variety on the DAFM Recommended List.

In the eventuality of coated clover seed being unavailable, we will replace it a similar quantity of uncoated seed to maintain an equal proportion of clover in the mixture. From 1st January 2020, farms in derogation are required to sow 0.6 kg uncoated or 1.0 kg coated clover when reseeding. To ensure you are compliant speak to one of our sales reps.

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