



MASTERLINE®

Amenity grass seed mixtures
Wild flowers • Fertilisers



Created by nature
- perfected by DLF



2018

Masterline

- The professional choice

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DLF - SEEDS & SCIENCE

DLF SEEDS & SCIENCE DLF focuses closely on the demands of customers as well as on the market trends of clover and grass seed. Offering one of the world's largest research and breeding programmes for both turf and forage, DLF is working continually to improve the quality and reliability of all varieties.



The 1906 grass seed harvest

Danish quality seed for more than 100 years

DLF was founded in 1906 by a group of innovative seed growers. Ever since, DLF has produced grass and clover seed of the highest quality and best performance.

Research and development

DLF funds the worlds largest grass breeding programme, ensuring we are always at the very forefront of product development. This enables us to offer our customers the best and most innovative solutions in turf grass. Every 10th employee in DLF is working in research and development.

Global supplier for top events

For many years DLF has been the preferred supplier for the largest international sports events. Including the 2016 UEFA European Championship, World Cup and Olympic venues.



MASTERLINE®

CONTINUED INVESTMENT

DLF is committed to a programme of significant ongoing investment in production, processing and information technology.

- A total of 100,000 square feet purpose built warehousing for bulk storage at our Worcestershire head office with new automated machinery

ENVIRONMENTAL POLICY

Seed is one of the most environmentally friendly crops to grow with low levels of pesticide inputs to the crop.

- Seed is produced under direct control of the DLF field production staff
- Grass varieties most suitable for organic production are being identified
- Various procedures are being evaluated relating to production: drying, storage, energy use, waste disposal and packaging
- Company policy is to:
 - Reduce quantities of packaging used
 - Increase the use of recycled material
 - Increase the use of vegetable based printing inks

QUALITY

Purpose built storage and processing facilities all staffed by trained personnel. This ensures the efficient production and despatch of all products.

- Market leading cultivars from Europe's top breeders
- DLF is committed to the UK production of amenity grass seed and native wild flowers grown and processed under the strict supervision of DLF personnel
- All amenity seed lots checked on intake and tested at regular intervals during storage to ensure the highest levels of purity and germination. P&G certificates available on request

SERVICE PLEDGE

- Sound advice on the selection and management of all products
- Same day despatch for orders placed before 12 noon
- National next day carriage service (proof of delivery available on request)
- Seed packed in high quality 20kg paper coated polypropylene laminate bags to ensure they arrive in perfect condition

This pledge guarantees you high quality service and peace of mind.

GroMax

Biostimulants assist the seedlings ability to take advantage of the soils own inherent reserves of nutrient by stimulating the soils microflora, resulting in improved root growth and establishment.

GroMax is a dry formulation of natural humates and humic acids, seaweed extract, a proprietary blend of natural sugars (sucrose), vitamins (B complex & K), soluble potash and buffering agents. The product is compatible with most micronutrients, fertilisers and pesticides.

INGREDIENT SUMMARY

HUMIC ACIDS

- Rich in auxin type substances which enhance antioxidant synthesis – important in increasing plant metabolism under stress conditions
- Serve as an important high carbon food source for soil micro-organisms
- Improve the permeability of cell-wall membranes in roots, allowing more rapid absorption of essential nutrients

SEAWEED EXTRACT

- Contains high levels of cytokinins which promote cell division and lateral root growth and delay the ageing process of plant tissue
- Stimulates root growth after damage by disease or root feeding insects, or under conditions of temperature, water or salt stress

SUCROSE

- Serves as a high energy food source for plant and soil micro-organisms

B COMPLEX & K VITAMINS

- Act as important catalysts to enhance and drive plant metabolism. Vitamin B1 is widely used as a rooting aid

AMINO ACIDS

- Form the building blocks of proteins - essential for plant growth and metabolism

POTASSIUM

- Plays a vital role in disease resistance and overall hardiness of grass plants



Independent turf trials are crucial for testing that the cultivars perform well under local conditions. This ensures the best result.

Independent turf trials in Scandinavia

The turf cultivars are tested on several locations under different mowing regimes (including greens) in the harsh scandinavian climate. Trial results are freely available on www.scanturf.org

UK STRI trials

The Sports Turf Research Institute "STRI" trial new turf cultivars under Greens, Winter Sport, Lawn and Summer Sport maintenance regimes. The results are published every year in "Turfgrass Seed - The buyers guide to Quality Amenity Turfgrasses". available from your local DLF Area Manager.

Masterline - for the perfect surface

In Masterline we use the best available cultivars from our breeding programme. The cultivars are always fully tested in independent trials carried out in several countries.

Cultivars with a proven pedigree

Masterline cultivars have been tested under a wide range of climate and growth conditions in order to ensure they will perform well under the tough conditions they will be exposed to:

- Disease
- Wear
- Cold
- Salt
- Heat
- Drought

With the world's largest...

... breeding programme - we give you access to top performing cultivars from the international turfgrass lists. We have breeding stations in Denmark, Holland, France, Czech Republic, USA and New Zealand.

... Seed production - we give you the absolutely best seed lots in terms of purity and germination.



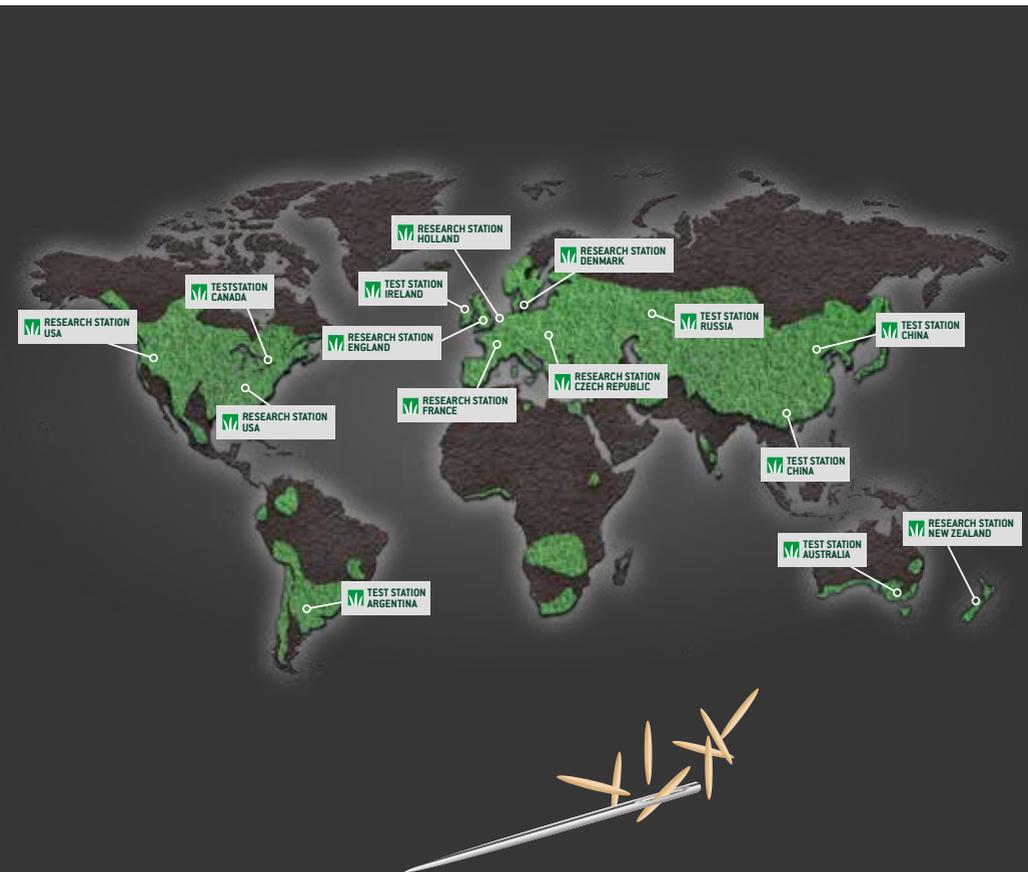
Only the very best grass seed gets into Masterline

Adapted to a changing climate

In the breeding process we expose the cultivars to as many different stressful conditions as possible. The best cultivars will be more resistant to wear, disease, cold, drought, heat and shade, will have a nice colour and low requirements for maintenance. This is our goal and to achieve this, we have a global network of strategically located breeding stations.

Top performing turf cultivars

We use the top cultivars from the international turf grass lists in our Masterline mixtures. But it is also possible to get them as single cultivars for specific purposes.





- the final result depends on seed quality

Grass seed is available at different prices and qualities. EU quality is the market's lowest legal standard. Masterline grass seed differs in three key ways:

Masterline quality grass seed All cultivars officially listed for turf



Judge for yourself. The two mixtures are sown at the same time next to each other and with the same maintenance.

Turf cultivars:

- Dense and fine leaved
- Tolerant of close mowing
- Up to 30% fewer cuts
- Adapted to local conditions

Highest purity

Example: Masterline quality



Masterline quality is far better than EU quality.

Grass seed of low quality Cultivars not listed for turf use



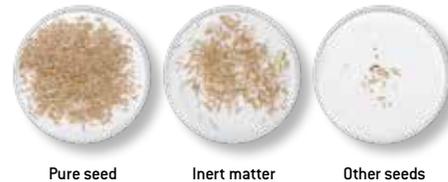
Judge for yourself. The two mixtures are sown at the same time next to each other and with the same maintenance.

Non-turf cultivars:

- Coarse and open sward
- Weeds establish easy
- High mowing frequency
- Cheap seed production (high seed yield)

Lowest market standard

Example: Red fescue seed in EU quality



Grass seed sold in the EU may contain up to 33,000 weed grass seeds per kg including annual meadow grass, and up to 15% waste.

Key characteristics of the turf grass species

The table below shows the special strengths and characteristics of each species.



THE KEY CHARACTERISTICS OF THE GRASS SPECIES

	SPEED OF ESTABLISHMENT	WEAR TOLERANCE	DENSITY	FINENESS OF LEAVES	WINTER HARDINESS	SALT TOLERANCE	DROUGHT TOLERANCE	SHADE TOLERANCE	FERTILIZER REQUIREMENT	GENERAL HEALTH
Perennial ryegrass	●●●	●●●●●	●●●	●●●	●●	●●	●●	●●●	●●●●	●●●
Turf tetraploid ryegrass (4turf)	●●●●	●●●●	●●	●●	●●●●	●●●	●●●●	●●●	●●●	●●●●●
Annual turf ryegrass	●●●●●	●●●	●●	●●	●●	●●	●●	●●●	●●●●	●●
Smooth-stalked meadow grass	●	●●●●●	●●	●●	●●●●●	●●	●●	●●	●●●	●●●
Annual meadow grass	●●●●●	●●	●●●	●●●	●	●	●	●●●	●●●●●	●
Rough-stalked meadow grass	●●●●	●●	●●●	●●	●●●	●●	●●	●●●●●	●●●	●●
Browntop bentgrass	●●●	●	●●●●	●●●	●●●	●●	●●	●●	●●●	●●
Creeping bentgrass	●●●	●●	●●●●	●●●	●●●	●●●●	●●	●●	●●●●	●●
Chewings fescue	●●	●●	●●●●	●●●●	●●●●	●●●	●●●	●●●●	●●	●●●●●
Slender creeping red fescue	●●	●●●	●●●●	●●●●	●●	●●●●	●●●●	●●●●	●●	●●●●
Strong creeping red fescue	●●	●●	●●●	●●●	●●	●●●	●●●●	●●●●	●●	●●●●
Hard fescue	●●	●	●●●	●●●	●●●	●●●	●●●●●	●●	●	●●●●
Sheeps fescue	●	●	●●●	●●●●	●●●	●●	●●●●●	●●●	●	●●●
Tall fescue	●	●●●●	●	●	●●●●	●●●●●	●●●●●	●●	●	●●●
Micro clover	●	●●●	●●●	●●●●	●●●	●●	●●●●	●●	●	●●●●

● = low ●●●●● = high



NEW 5kg Carry pack

The optimal pack size for gardens and small landscape projects

Now available on our most popular lawn seed mixes

PM51 PM52 & PM60



Created by nature – Perfected by DLF



Green economy - save £440 per hectare (ha)

Operational experience shows that an ordinary pitch with microclover only needs 2 nitrogen applications of 25 kg nitrogen (N)/ha in the beginning of the growing season.

Afterwards, the microclover is supplying the turf with the N it is fixing from the air. This saves 50 kg of N/ha - or £170/ha. Furthermore, you can save up to £270 in application costs.

- Save water and fertiliser
- Improved colour even at the end of the season
- Wear tolerant in combination with perennial ryegrass
- Controls weeds
- Climate friendly: 100 pitches with microclover save 18 tonnes of CO₂

SAVE
18 tonnes
CO₂

Impressive results

The high wear tolerance of the microclover and the good turf quality in combination with grass are documented in impartial trials done by STRI England and BSA Germany.

You will find microclover in the following:

- Masterline PM26 EcoSward
- Masterline PM27 EcoSward Plus
- 100% micro clover (Pipolina)

Microclover trial - Samsøe Energy Academy

In co-operation with Samsøe Energy Academy we have established microclover trials at Samsøe Golf Club. The purpose was to establish which turf grass species are the best in combination with microclover. Using microclover is a sustainable solution.

• Reduced fertiliser input and CO₂ output

- The clover takes nitrogen from the air (up to 120kg N/ha/year) and makes it available to the grass

• **No watering** - the grass remains green during drought

• **No weed killer** - growth spreads evenly in between the grass plants and out competes weeds.

The project is a co-operation between:



Trials with microclover at STRI showing the nice green colour.



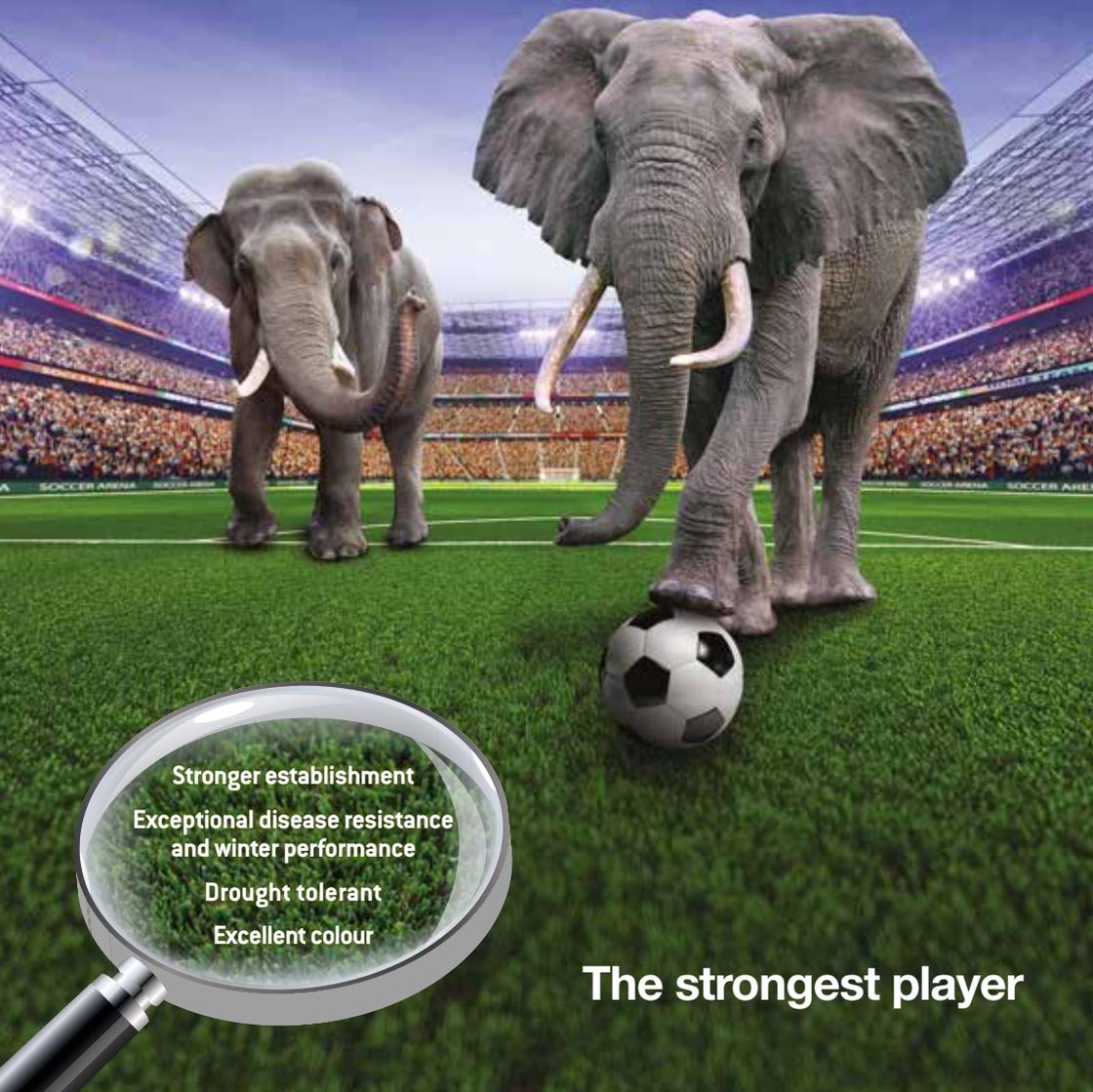
Fine leaved and dense Microclover.



Out competing weeds with no use of herbicides.

4turf™
by DLF

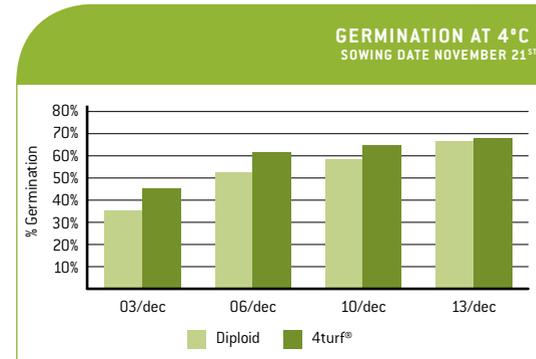
Stress resistance as standard
Turf Type Tetraploid Perennial Ryegrass



The strongest player

Stronger establishment

4turf® larger seeds contain more energy reserves for a stronger faster establishment and healthy plant development. When the weather cools down 4turf® doesn't. 4turf® continues to germinate. 4turf® tetraploid ryegrass has a better germination at 4°C compared to diploid. This is also a big advantage when overseeding.



Diploid



4turf®
by DLF



Exceptional disease resistance and winter performance

4turf® gives you healthy green ground cover under the most difficult period of the year because of the improved energy reserves and stronger root system. During autumn and winter 4Turf shows the highest resistance to disease in European trials.

Drought tolerant

4turf® needs less water during a drought. Its larger root system and natural water reserves help it stay greener for longer. 4turf® varieties are not just drought-tolerant, they also recover quicker when the rain returns. Drought trials conducted in the Loire Valley in France confirmed that 4turf® cultivars were significantly more drought-tolerant than diploids.



Excellent colour

4turf® has a deeper glossier dark green colour than traditional varieties. Its improved stress tolerance throughout the year and its increased resistance to weed invasion means that 4turf® will be greener quicker and for longer than traditional varieties of perennial ryegrass.

ProNitro®

READY TO GROW

The New Nitrogen Seed Coating for significantly stronger & faster establishment

High quality grass seed with all the nitrogen needed for fast effective establishment in a single seed coating



Environmentally friendly, labour saving and cost effective

ProNitro® focuses on improving nutrient utilisation during the early stages of plant growth. ProNitro® mixtures contain high quality seed from DLF, only cultivars with superior performance characteristics and seed lots with high vigour are selected for coating. ProNitro® contains a combination of both fast acting and slow release nitrogen encapsulated within a smooth outer coating for improved seed flow.

Benefits of ProNitro® IMPROVED SEEDING RESULTS, GUARANTEED!

Faster, more uniform establishment & Reduced costs

- Labour saving and cost effective
- Targeted nutrient application, can reduce losses to the environment by 50%
- Replaces seedbed fertiliser
- Improved stress tolerance
- Up to 34% more plants and up to 30% increase in root growth
- Increased wear tolerance
- Reduced Poa annua
- ProNitro® germinates rapidly
- Reduced weed invasion
- Strong root development
- Stronger healthier plants



As the fertiliser is coated directly onto the seeds, the germinating and developing seedling receives the full benefit of the additional nutrition, not the surrounding plants.

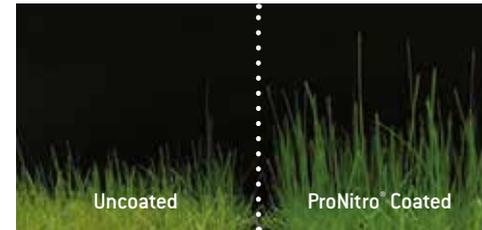
The roots and shoots grow rapidly developing strong, vigorous plants. This is particularly important when overseeding into a competitive sward.

ProNitro® coated seed germinates rapidly with strong root development



ProNitro® coated seed germinates rapidly.

ProNitro® replaces the need for traditional pre seed fertilisers and can decrease leaching by up to 50%



Regrowth over one week after cutting back to 20 mm

Unique formulation

The unique formulation of ProNitro® delivers stronger establishment with up to 34% more plants and a 30% increase in root mass, resulting in a healthier sward and less weed invasion.



Watch the full ProNitro® video online
youtu.be/pkaHxK4DeA8

Renovation trial



Available on



PM51

 NITRO GREENSCAPE

PRODUCT FORMULATION: 10% N



PM80

 NITRO RENOVATOR

PRODUCT FORMULATION: 10% N



PM5

ECONOMY GREEN

GOLF AND BOWLING GREENS

40%	WAGNER	chewings fescue
40%	ARCHIBAL	slender creeping red fescue
20%	HIGHLAND	browntop bent

Sowing rate:	35g/m ²
Overseeding:	25g/m ²
Mowing height:	down to 5mm

This traditional 80:20 mixture offers good results at a reasonable price.

GroMax treated



PM10

TRADITIONAL GREEN

GOLF AND BOWLING GREENS

40%	WAGNER	chewings fescue
40%	ARCHIBAL	slender creeping red fescue
10%	TROY	browntop bent
10%	JORVIK	browntop bent

Sowing rate:	35g/m ²
Overseeding:	25g/m ²
Mowing height:	down to 5mm

An ideal mixture for greens renovation providing rapid germination, a fine putting surface and excellent year round colour. The addition of the top rated new tenuis bentgrass Troy further improves disease resistance.

GroMax treated



PM13

FESCUE GREEN

HIGH QUALITY GREENS, TEES AND FAIRWAYS – FESCUE OVERSEEDING

10%	SISKIN	chewings fescue
20%	HUMBOLDT	chewings fescue
20%	CALLIOPE	chewings fescue
10%	BEUDIN	slender creeping red fescue
20%	CEZANNE	slender creeping red fescue
20%	ARCHIBAL	slender creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	15-25g/m ²
Mowing height:	down to 6mm

A high quality fine fescue mixture designed for the renovation of greens. The mix will establish quickly and has excellent year round colour and disease resistance. Especially useful for over sowing early and late in the season when following a sustainable golf management programme.

GroMax treated



PM15

GREEN ALLBENT

GREENS RENOVATION MIXTURE (ALL BENT)

50%	TROY	browntop bent
50%	JORVIK	browntop bent

Sowing rate:	10g/m ²
Overseeding:	5g/m ²
Mowing height:	down to 4mm

An all browntop mixture, ideal for autumn over sowing of existing greens. Top rated cultivars for greens use, this combination provides excellent year round colour and disease resistance.

GroMax treated



PM20

FINETURF

TEES, FAIRWAYS AND HIGH QUALITY FINE LAWNS (WITHOUT RYEGRASS)

30%	WAGNER	chewings fescue
20%	ARCHIBAL	slender creeping red fescue
50%	SERGEI	strong creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	15-25g/m ²
Mowing height:	down to 10mm

A mixture of only the best species ensures the production of a truly first class fine turf sward. An important pre-requisite is a clean seed bed free from coarse species so that the full benefits of the short fine varieties can be seen.

GroMax treated



PM25

GRO-SLOW

LOW MAINTENANCE/POOR SOILS/EMBANKMENTS/ GOLF ROUGH

10%	ARCHIBAL	slender creeping red fescue
45%	MAXIMA	strong creeping red fescue
30%	DUMAS 1	hard fescue
10%		crested dogstail
5%	HIGHLAND	browntop bent

Sowing rate:	25-50g/m ² 4g/m ² when sowing with wild flora
Overseeding:	15-25g/m ²
Mowing height:	20mm or twice/year to approx 100mm
Unmown height:	approx 150-200mm (excluding flower heads) depending on fertility

This is a reduced maintenance mix that is naturally low growing and attractive, using fine grasses that are very tolerant of dry, infertile conditions reducing the need for additional applications of water and fertiliser. The addition of Crested dogstail to the mix ensures a quick germination and green up of the sward.

GroMax treated



PM25R

GRO-SLOW PLUS

LOW MAINTENANCE/POOR SOILS/EMBANKMENTS

15%	DOUBLE	tetraploid perennial rye
10%	ARCHIBAL	slender creeping red fescue
40%	MAXIMA	strong creeping red fescue
20%	DUMAS 1	hard fescue
10%		crested dogstail
5%	HIGHLAND	browntop bent

Sowing rate:	25-50g/m ²
Overseeding:	15-25g/m ²
Mowing height:	20mm or twice/year to approx 100mm
Unmown height:	approx 150-200mm (excluding flower heads) depending on fertility

The addition of new Double 4Turf™ tetraploid rye grass to our standard low maintenance mixture is suitable when rapid establishment is also required. 4Turf™ has a more open habit, perfect to allow the finer grasses to establish and offers improved drought tolerance and a stronger root system.

GroMax treated



PM26

ECOSWARD

LOW MAINTENANCE LANDSCAPE MIX WITH CLOVER

25%	WAGNER	chewings fescue
20%	ARCHIBAL	slender creeping red fescue
40%	SERGEI	strong creeping red fescue
10%	EVORA	smooth stalked meadow grass
5%	PIPOLINA	microclover

Sowing rate:	25g/m ²
Overseeding:	25g/m ²
Mowing height:	13-25mm

Ecosward mixtures have been developed to reduce input costs and be kind to the environment by eliminating the need for excessive fertiliser, water and herbicide. Adding new Microclover to the mixture naturally fixes nitrogen for the grasses while significantly increasing drought tolerance and disease resistance. Produces a visually attractive, dark green turf.

GroMax treated



PM27

ECOSWARD PLUS

LOW MAINTENANCE LANDSCAPE MIX WITH CLOVER INCLUDING RYEGRASS

50% DOUBLE	tetraploid perennial rye
35% SERGEI	strong creeping red fescue
10% WAGNER	chewings fescue
5% PIPOLINA	microclover

Sowing rate: 25g/m²
Overseeding: 25g/m²
Mowing height: 13-25mm

Ecosward mixtures have been developed to reduce input costs and be kind to the environment by eliminating the need for excessive fertiliser, water and herbicide. Adding Microclover to the mixture naturally fixes nitrogen for the grasses while significantly increasing drought tolerance and disease resistance. Produces a visually attractive, dark green, hard wearing turf. Especially suitable for reinforced paving systems. High carbon capture mixture.

GroMax treated

PM28

WETLAND

DAMP AND WATERLOGGED SOILS

15% SABRENA 1	rough stalked meadow grass
10%	small leaved timothy
15% MAXIMA	strong creeping red fescue
10% ESQUIRE	perennial rye
10%	crested dogstail
40%	tall fescue

Sowing rate: 25-35g/m²
Overseeding: 25g/m²
Mowing height: as required

Capable of withstanding prolonged wet conditions on heavy or light soils. When conditions allow the mixture can also be mown down to produce an attractive sward.

GroMax treated

PM29

ALL SEASON

DROUGHT TOLERANCE

50% MASTERPIECE	tall fescue
50% DEBUSSY	tall fescue

Sowing rate: 25-35g/m²
Overseeding: 25g/m²
Mowing height: down to 10mm

The All Season mixture takes advantage of the significant advances DLF have made in the breeding of turf type tall fescues with regard to fineness of leaf and shoot density, providing an attractive, hard wearing, low maintenance alternative to ryegrass mixtures. Tall fescue has roots which will penetrate the root zone to depths of over 1m, the mix will cope with extremes of heat, drought and occasional waterlogging.

GroMax treated



PM35

UNIVERSAL

CRICKET SQUARES, TEES AND TENNIS COURTS

35% CLAUDINE	perennial rye
35% DYLAN	perennial rye
30% ARCHIBAL	slender creeping red fescue

Sowing rate: 35-50g/m²
Overseeding: 25-50g/m²
Mowing height: down to 5mm

This mixture incorporating high quality turf type perennial ryegrass cultivars gives fast establishment, strong soil binding characteristics, fine dense appearance and high close mown wear tolerance. A versatile mix suitable for any close mown situation under wear.

GroMax treated



PM36

WICKET

CRICKET WICKET, TENNIS AND TEES RENOVATION

20% CHARDIN	perennial rye
20% CLAUDINE	perennial rye
60% DYLAN	perennial rye

Sowing rate:	35-75g/m ²
Overseeding:	25-75g/m ²
Mowing height:	down to 5mm

The combination of these highly rated cultivars, now including Claudine, gives excellent performance with regard to speed of establishment, density and resistance to wear under close mown conditions.

GroMax treated



PM40

TEE AND FAIRWAY

TEES, FAIRWAYS AND CRICKET OUTFIELDS (WITHOUT RYEGRASS)

40% SERGEI	strong creeping red fescue
25% ARCHIBAL	slender creeping red fescue
30% WAGNER	chewings fescue
5% HIGHLAND	browntop bent

Sowing rate:	35-50g/m ²
Overseeding:	15-25g/m ²
Mowing height:	down to 12mm

A traditional fescue/bent fairway mixture which delivers a fine dense playing surface with improved drought tolerance and disease resistance under a sustainable management programme.

GroMax treated

PM45

TEE AND FAIRWAY PLUS

TEES, FAIRWAYS, CRICKET OUTFIELDS AND DRIVING RANGES (WITH RYEGRASS)

35% DICKENS	perennial rye
35% SERGEI	strong creeping red fescue
25% WAGNER	chewings fescue
5% HIGHLAND	browntop bent

Sowing rate:	35-50g/m ²
Overseeding:	15-25g/m ²
Mowing height:	down to 12mm

An excellent mixture for the rapid renovation of tees and fairways. The addition of Dickens perennial ryegrass, combined with fine fescue and bent grass, ensures a dense, hard wearing surface which repairs easily from divoting.

GroMax treated



PM50

QUALITY LAWN

HIGH QUALITY HARD WEARING LAWN

30% BERLIOZ	perennial rye
20% DICKENS	perennial rye
30% SERGEI	strong creeping red fescue
10% WAGNER	chewings fescue
10% ARCHIBAL	slender creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	15-25g/m ²
Mowing height:	down to 10mm

An excellent mixture, fine in appearance and hard wearing with excellent colour. The improved new cultivars ensure, a shade tolerant, low maintenance turf, with good disease resistance, keeping future maintenance costs to the minimum. A very successful mixture for both private and local authority use, on housing and industrial developments where a high quality and durable turf is called for.

GroMax treated



PM51

GREENSCAPE

HARD WEARING LAWNS (WITH RYEGRASS)

30% DOUBLE	tetraploid perennial rye
30% ESQUIRE	perennial rye
40% MAXIMA	strong creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	25-50g/m ²
Mowing height:	down to 13mm

A hard wearing mixture that will establish rapidly. Ideal for general purpose landscaping and lawns. Our unique Double 4Turf™ Tetraploid ryegrass delivers fast establishment, improved colour, increased drought tolerance and incredible disease resistance. Improved performance and reduced management costs. Contains only STRI UK listed cultivars.

GroMax treated



ProNitro[®]
coated option available

PM51

NITRO GREENSCAPE

PM52

GREENFINE

FINE LAWNS (WITHOUT RYEGRASS)

30% WAGNER	chewings fescue
70% MAXIMA	strong creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	25-50g/m ²
Mowing height:	down to 13mm

An economical, fine textured mixture, reduces maintenance, suitable for landscaping and lawns. Contains only STRI UK listed cultivars.

GroMax treated



PM60

GREENSHADE

SHADED CONDITIONS (WITHOUT RYEGRASS)

10%	SABRENA 1	rough stalked meadow grass
35%	WAGNER	chewings fescue
35%	ARCHIBAL	slender creeping red fescue
20%	SERGEI	strong creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	25-50g/m ²
Mowing height:	down to 25mm

A top quality mixture designed to produce an excellent wear tolerant turf under shaded conditions. Sabrena 1 rough stalked meadow grass germinates rapidly, providing an exceptionally fine, dense, green growth year round. To ensure successful results, do not mow too closely and feed regularly.

GroMax treated



PM65

GALLOP

RACE COURSES AND POLO GROUNDS

40%	DOUBLE	tetraploid perennial rye
20%	BERLIOZ	perennial rye
20%	CLAUDINE	perennial rye
20%	MIRACLE	smooth stalked meadow grass

Sowing rate:	35-50g/m ²
Overseeding:	25-50g/m ²
Mowing height:	75-100mm

This mixture is designed for new courses/grounds and end of season renovation. The deeper root system, improved colour and incredible disease resistance of new Double 4Turf™ tetraploid ryegrass combined with the improved wear tolerance of the diploid ryegrasses deliver a high performance turf.

GroMax treated



PM70

RECREATION

SPORTS FIELDS, TEES AND FAIRWAYS AND HARD WEARING LANDSCAPE TURF

25%	DOUBLE	tetraploid perennial rye
20%	CLAUDINE	perennial rye
25%	PLATINUM	perennial rye
30%	SERGEI	strong creeping red fescue

Sowing rate:	35-50g/m ²
Overseeding:	25-50g/m ²
Mowing height:	down to 12mm

A versatile mixture that will produce a very hard wearing sward with a high shoot density suitable for winter and summer games. The introduction of unique new Double 4Turf™ tetraploid ryegrass delivers the fastest possible establishment, especially important for the rapid renovation of worn turf, plus improved disease resistance and improved drought tolerance thanks to the deeper root system. The perfect mixture to bring your venue back to life following that summer tournament or festival.

GroMax treated



PM75

STADIA

SPORTS ARENAS AND HEAVY DUTY WEAR

20%	BERLIOZ	perennial rye
30%	CLAUDINE	perennial rye
30%	PONDEROSA	perennial rye
20%	MIRACLE	smooth stalked meadow grass

Sowing rate:	35-50g/m ²
Overseeding:	25-50g/m ²
Mowing height:	down to 25mm

The construction of a new playing surface provides an ideal opportunity to include new high performance cultivars. PM 75 has been designed to produce a sward capable of withstanding the most heavy duty wear. Top rated cultivars including Berlioz perennial ryegrass and Miracle smooth stalked meadow grass ensures a dense, attractive sward with excellent regenerative ability.

GroMax treated



PM79



PLAYING FIELD

SPORTS FIELD RENOVATION

50% DOUBLE	tetraploid perennial rye
20% PLATINUM	perennial rye
30% ESQUIRE	perennial rye

Sowing rate:	35-75g/m ²
Overseeding:	25-75g/m ²
Mowing height:	down to 25mm

The introduction of New Double 4Turf™ tetraploid ryegrass introduces the latest World Cup genetics from DLF, delivering fast establishment, improved colour, drought tolerance, nitrogen efficiency and incredible disease resistance! A good quality, economical sports field renovation mixture. Contains only STRI UK listed cultivars. Delivers great results and value.

GroMax treated



PM80



RENOVATOR

SPORTS FIELD RENOVATION

20% DOUBLE	tetraploid perennial rye
30% CLAUDINE	perennial rye
30% PONDEROSA	perennial rye
20% BERLIOZ	perennial rye

Sowing rate:	35-75g/m ²
Overseeding:	25-75g/m ²
Mowing height:	down to 25mm

An ideal mixture for the renovation of worn playing surfaces. New Double 4Turf™ tetraploid ryegrass introduces the latest World Cup genetics from DLF ensuring that PM 80 will establish rapidly with improved colour, drought tolerance, nitrogen efficiency and incredible disease resistance! The inclusion of Claudine perennial ryegrass provides excellent colour and shoot density.

An ideal mixture for the renovation of worn playing surfaces.

GroMax treated



ProNitro[®]
coated option available

PM80



NITRO RENOVATOR



PM81

PREMIER RENOVATION

SPORTS FIELD RENOVATION

10%	MONROE	perennial ryegrass
40%	COLUMBINE	perennial ryegrass
20%	CLAUDINE	perennial ryegrass
30%	BERLIOZ	perennial ryegrass

Sowing rate:	35-75g/m ²
Overseeding:	25-75g/m ²
Mowing height:	down to 25mm

PM 81 incorporating top rated Monroe & Columbine perennial ryegrass gives unrivalled sward density and wear tolerance. The mixture will establish rapidly providing excellent all year round colour. A mixture suitable for new builds and the renovation of top performance winter sports pitches.

GroMax treated

PM82

MICROCLOVER SPORT

SPORTS AND PLAYING FIELDS, REDUCED INPUT COSTS

30%	PLATINUM	perennial ryegrass
30%	DOUBLE	tetraploid perennial ryegrass
35%	ESQUIRE	perennial ryegrass
5%	PIPOLINA	Microclover

Sowing rate:	25-50g/m ²
Overseeding:	15-50g/m ²
Mowing height:	down to 25mm

Microclover Sport has been developed to improve turf quality and be kind to the environment through reduced herbicide, fertiliser use and lower carbon footprint. The Microclover is able to fix free nitrogen from the atmosphere. In independent trials Microclover Sport is proven to produce a sward with increased wear tolerance, disease resistance, colour and a higher visual merit, especially in drought or other high stress environments.

GroMax treated

PM85

DOT

ROAD VERGES (DOT OFFICIAL MIX)

25%	DOUBLE	tetraploid perennial ryegrass
20%	MAXIMA	strong creeping red fescue
30%	DUMAS	hard fescue
10%	EVORA	smooth stalked meadow grass
10%	HIGHLAND	browntop bent
5%	GALWAY	white clover

Sowing rate:	10-20g/m ²
Overseeding:	10g/m ²
Mowing height:	as necessary or twice/year to 75-100mm

The above mixture is ideally suited for road verges where the soil may not be of the best quality and where quick establishment, short growth, and some salt and exhaust fume tolerance are called for. Double 4Turf™ perennial ryegrass ensures fast establishment, improved drought tolerance and improved stability thanks to the deeper rooted growth habit.

GroMax treated



PM90

COASTAL

COASTAL SITES

15%	DOUBLE	tetraploid perennial rye
30%	ARCHIBAL	slender creeping red fescue
20%	MAXIMA	strong creeping red fescue
20%	DUMAS	hard fescue
10%		saltmarsh grass
2.5%	KROMI	creeping bent
2.5%	HIGHLAND	browntop bent

Sowing rate:	35g/m ²
Overseeding:	25g/m ²
Mowing height:	down to 12mm

The protection of our coastline is of paramount importance and the above mix is versatile enough to suit both flat and sloping aspects, able to produce a sward tolerant of salt laden winds. Double 4Turf TM tetraploid ryegrass is used for its rapid establishment.

GroMax treated



PM95

WITH RYE

LAND RECLAMATION INFERTILE, DROUGHT, ACID TO ALKALINE

20%	DOUBLE	tetraploid perennial rye
25%	ARCHIBAL	slender creeping red fescue
20%	DUMAS	hard fescue
20%		crested dogstail
10%	HIGHLAND	browntop bent
2.5%		small leaved white clover
2.5%		birdsfoot trefoil

Sowing rate:	10-25g/m ²
Overseeding:	10g/m ²
Mowing height:	versatile, light grazing or mow as required down to 75mm

Land reclamation mixture suitable for landfill/quarry sites and spoil heaps. The cultivars chosen represent the best that are commercially available. The perennial ryegrass will establish quickly and act as a nurse crop whilst the broad range of adaptable low maintenance species provide excellent tolerance to environmental stresses.

GroMax treated

PM105

FERTILITY

FERTILITY BUILDING PIONEER MIX

20%	alsike white clover
20%	red clover
20%	white clover
20%	yellow trefoil
20%	birdsfoot trefoil

Sowing rate: 5g/m²

PM 105 Pioneer mixture is ideally suited to land reclamation sites where short term cover is required or where fertility and soil structure needs to be improved.

GroMax treated

PM110

FLORASCAPE

LOW MAINTENANCE LANDSCAPE WITH WILD FLORA

5%	browntop bent
24%	red fescue
19%	crested dogstail
19%	chewings fescue
19%	hard fescue
9%	smooth stalked meadow grass
5%	wild flora

Sowing rate: 5-8g/m², 50-80kg/ha
Mowing height: once or twice a year to no lower than 100mm

This mix contains a wide range of wild flowers, formulated to meet a demand for creating an economical, floristically diverse sward. For full specification see Pro flora section.

PM120

SLOWGROWTH

LANDSCAPE, PARKLAND AND PLAY AREAS

60%	CLAUDINE	perennial rye
35%	ARCHIBAL	slender creeping red fescue
5%	HIGHLAND	browntop bent

Sowing rate:	35-50g/m ²
Overseeding:	25g/m ²
Mowing height:	12-50mm as necessary

The cultivar Claudine is the key to the new mixture. Claudine has an excellent rating for slow regrowth, significantly reducing mowing costs. The new mixture is ideal for use in a variety of landscape situations, including housing estates, road verges, parkland and play areas, establishing rapidly to provide a dark, dense and attractive reduced maintenance lawn.

GroMax treated

PM125

CLEARSKY

AIRPORT LANDSCAPE AND BIRD STRIKE MIX

47.5%	MASTERPIECE	tall fescue
47.5%	DEBUSSY	tall fescue
5%	AXCELLA	annual ryegrass

Sowing rate:	20g/m ²
Overseeding:	10g/m ²
Mowing height:	150mm optimum height requirement

Authorities responsible for the safety of aircraft have been concerned with the danger of damage caused by aircraft striking birds while in flight. Methods of reducing this have been sought, which has brought about the introduction of "Long Grass Management".

Tall fescue was found to be the most suitable species for a long grass policy due to its erect stiff habit of growth. It is a highly persistent, frost and drought resistant species, and when managed at an optimum mown height of 150mm, the most suited to long grass management. Turf type annual ryegrass provides the quickest germination and groundcover, and acts as nurse crop for the Tall fescue.

GroMax treated

HorseMax

Paddock



Paddock, Grazing Mix

25%	SOLOMON	intermediate perennial rye
15%	BOYNE	intermediate perennial rye
35%	GLENVEAGH	late perennial rye
15%	MAXIMA	creeping red fescue
10%	PROMESSE	timothy

10kg bag (35 – 40kg/Ha)

A good quality, hard wearing paddock mixture, that will last for many years. The inclusion of strong creeping red fescue ensures good shoot density and minimises trampling damage in wet conditions. The mix provides palatable grazing and can be cut for hay if required. Cultivars lower in water soluble carbohydrate (sugar) will help to prevent the worst effects of laminitis. A 1kg herb pack to improve animal interest and well being is also available.

GroMax treated



Pro Turf 1

👑 (WITH RYE)



HIGH QUALITY LANDSCAPE TURF

10%	CHARDIN	perennial rye
10%	CLAUDINE	perennial rye
5%	FABIAN	tetraploid perennial rye
35%	ROSSINANTE	strong creeping red fescue
10%	CEZANNE	slender creeping red fescue
10%	HUMBOLDT	chewings fescue
20%	SOMBRERO	smooth stalked meadow grass

Sowing rate: 25g/m²
Mowing height: down to 20mm
Harvest: 6-12 months

The inclusion of New Fabian 4Turf tetraploid ryegrass introduces the latest genetics from DLF, delivering fast establishment, improved colour, drought tolerance, nitrogen efficiency and incredible disease resistance!

A top class mixture providing a high quality, hard wearing turf. The inclusion of Chardin & Claudine ryegrass combines all of the benefits associated with modern turf perennials, incredible fineness of leaf, shoot density and exceptional visual merit.

Gromax coating available.

Pro Turf 2

👑 (WITH RYE)



HIGH QUALITY LANDSCAPE TURF

15%	DICKENS	perennial rye
10%	FABIAN	tetraploid perennial rye
45%	ROSSINANTE	strong creeping red fescue
20%	ARCHIBAL	slender creeping red fescue
10%	HUMBOLDT	chewings fescue

Sowing rate: 25g/m²
Mowing height: down to 20mm
Harvest: 6-12 months

The inclusion of New Fabian 4Turf tetraploid ryegrass introduces the latest genetics from DLF, delivering fast establishment, improved colour, drought tolerance, nitrogen efficiency and incredible disease resistance!

A top class mixture providing a high quality, hard wearing turf. The inclusion of Dickens combines all of the benefits associated with modern turf perennials, incredible fineness of leaf and shoot density. The high proportion of creeping red fescue provides a rhizomatous root structure increasing root strength, making the resultant turf more resistant to damage when lifting.

Gromax coating available.

Pro Turf 3

👑 (WITH RYE ECONOMY)

LANDSCAPE TURF

30%	DOUBLE	tetraploid perennial rye
45%	SERGEI	strong creeping red fescue
25%	WAGNER	chewings fescue

Sowing rate: 25g/m²
Mowing height: down to 20mm
Harvest: 6-12 months

The inclusion of New Double 4Turf tetraploid ryegrass introduces the latest genetics from DLF, delivering fast establishment, improved colour, drought tolerance, nitrogen efficiency and incredible disease resistance!

A good, general purpose turf mixture, which will establish quickly and provide a hardwearing landscape turf, which will not be too demanding with regard to maintenance. New tetraploid ryegrass provides improved colour, drought tolerance and disease resistance.

Gromax coating available.

Pro Turf 4

👑 (WITHOUT RYE)



FINE TURF

25%	CEZANNE	slender creeping red fescue
25%	BEUDIN	slender creeping red fescue
25%	MUSICA	chewings fescue
25%	SISKIN	chewings fescue

Sowing rate: 25g/m²
Mowing height: 15-25mm
Harvest: 6-12 months

A mixture of the best varieties ensures the production of a truly first class traditional lawn turf. An important pre requisite is a clean seed bed, free from coarse species, so that the full benefit of the short, fine varieties can be seen.

Gromax coating available.

Turf Quality Seed (TQS) is the purest seed on the market. This can only be achieved by a series of processes from breeding, field production, logistics and finally, delivery to the customer. Each link in the chain has to be followed carefully to ensure success.

HIGH QUALITY ENSURED THROUGH BREEDING

In the same way that only the best lots are entered into trials, only the highest quality lots are selected to go forward to produce pre basic seed. This seed is produced in small plots that are closely monitored. Harvesting and cleaning is done with small machines which can be cleaned down easily between plots.

CLEAN PRODUCTION FIELDS

TQS production begins with the cleanest basic seed and impurities are not allowed. In order to achieve high quality, seed contracts are made with the most knowledgeable and experienced growers who select seed from the cleanest fields. If this is not possible in Europe then growers will be chosen elsewhere to achieve these exacting standards.

HARVESTING AND PROCESSING

TQS fields and seed lots are specifically identified and labelled throughout the process. During harvest, combine harvesters receive extra attention for cleanliness. If there is any doubt about the quality of part of a field, this area is isolated and discarded. During the cleaning process, TQS lots undergo extra attention in the warehouse. The seed is cleaned slowly in order to get the highest possible quality.

EXTENSIVELY TESTED

TQS lots undergo thorough tests in order to check on the success of the whole process. Normal seed lots are tested at the end of the process only, whereas TQS lots are tested after cleaning, blending and packaging.

Normal seed lots are checked for purity in 2,500 seeds per lot, TQS lots are checked three times in 25,000 seeds per lot.

Normal seed lots are checked for purity by visual examination only whereas TQS lots of ryegrass and tall fescue are checked for *Lolium multiflorum* in a grow test as well.

THE RESULT IS SUPERIOR QUALITY

Only if NO other seeds are found in these examinations, will the lot be granted the S1 TQS description. If the seed lot contains NO coarse grasses, but some traces of unharmed Dicot species, it will be labelled S2 TQS. If a trace is found in a standard examination the seed will be labelled as A - TQS.

Our procedures ensure that all our products meet the required standards. TQS exceeds these standards.

SPECIALIST SPORTS TURF MIXTURE SERVICE

We are always pleased to advise upon and produce specialist mixtures for the production of high quality sports turf, including golf greens and hard wearing football and rugby pitches.

The following cultivars are available for custom turf blends. Please consult with your regional technical manager for mixture advice and availability

PERENNIAL RYEGRASS - WINTER SPORT

Improved wear tolerance, rapid recovery, strong disease resistance
Berlioz / Bizet / Claudine / Columbine / Monroe

PERENNIAL RYEGRASS - LAWN AND LANDSCAPE

Fine leaved, high shoot density, strong disease resistance
Chardin / Claudine / Clementine / Dickens / Dylan

TURF TYPE TETRAPLOID RYEGRASS **NEW**

Rapid establishment, drought tolerance, exceptional disease resistance
Double / Fabian

CHEWINGS FESCUE

High shoot density, extended visual merit, strong disease resistance
Calliope / Humboldt / Siskin / Wagner

SLENDER CREEPING RED FESCUE

High shoot density, strong soil binding characteristics
Beudin / Cezanne / Nigella

STRONG CREEPING RED FESCUE

Rapid establishment, exceptional soil binding characteristics
Rossinante / Sergei

SMOOTH STALKED MEADOW GRASS

High wear tolerance, high shoot density, strong soil binding characteristics
Miracle / Sombbrero

TALL FESCUE

Exceptional drought tolerance
Debussy / Masterpiece

BENT GRASS

High shoot density, tolerance of close mowing
Capillaris – Arrowtown / Manor

Wild Flora

WILDFLOWER MIXTURES SUITABLE FOR AMENITY LANDSCAPING AND HABITAT RECREATION

In order to meet with the increasing demand for conservation mixtures we have formulated thirteen seed mixtures, each designed to recreate a site specific habitat.



ORIGIN

The wild flowers used in the Wild Flora range are guaranteed to be UK Native Origin.

TECHNICAL SUPPORT

Our experienced team is available to provide advice on mixture selection and site management. For larger projects site visits followed by a written report are available.

CONTRACT GROWING SERVICE

DLF Seeds Limited has many years experience in the contract production of wild flower seed and plants. This is particularly relevant where extremely large quantities or unusual/rare species are required.

SPECIAL MIXTURE SERVICE

Whilst our standard mixtures will cater for most situations we are always pleased to advise upon and produce mixtures to your own specification.





Pro Flora 1

CORNFIELD ANNUALS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
40	CORN COCKLE	AGROSTEMMA GITHAGO	60-120	Purple	June - Aug
20	CORN FLOWER	CENTUREA CYANUS	30-60	Blue	June - Aug
10	CORN MARIGOLD	CHRYSANTHEMUM SEGETUM	15-45	Yellow	June - Oct
10	CORN POPPY	PAPAVER RHOEAS	30-60	Red	June - Sept
15	NIGHT FLOWERING CATCHFLY	SILENE NOCTIFLORA	60-90	White	May - Sept
5	CORN CHAMOMILE	ANTHEMIS ARVENSIS	15-50	White	June - July
80% GRASSES:					
5	BROWNTOP BENT	AGROSTIS CAPILLARIS	10-70		
25	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
20	HARD FESCUE	FESTUCA TRACHYPHYLLA	15-70		
10	SHEEPS FESCUE	FESTUCA OVINA	20-60		
30	RED FESCUE	FESTUCA RUBRA	15-90		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		



Pro Flora 2

ACID SOILS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BETONY	STACHYS OFFICIANLIS	30-80	Purple	June - Sept
1	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	June - Aug
9	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
2	COMMON CATS EAR	HYPOCHAERIS RADICATA	15-60	Yellow	June - Sept
2	COMMON STORKSBILL	ERODIUM CICUTARIUM	5-30	Pink	April - Sept
1	DEVILS BIT SCABIOUS	SUCCISA PRATENSIS	20-80	Lilac	July - Sept
2	FOXGLOVE	DIGITALIS PURPUREA	50-150	Purple	June - Sept
9	FRAGRANT AGRIMONY	AGRIMONIA PROCERA	40-150	Yellow	June - Aug
5	GREATER BIRDSFOOT TREFOIL	LOTUS ULIGINOSUS	50-60	Yellow	June - Aug
2	HEATH BEDSTRAW	GALIUM SAXATILE	5-30	White	June - Sept
11	LADY'S BEDSTRAW	GALIUM VERUM	50-80	Yellow	June - Sept
11	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
6	OXEYE DAISY	LEUCANTHERMUM VULGARE	20-100	White	May - Oct
6	RAGGED ROBIN	LYCHNIS FLOS-CUCULI	30-80	Red	May - June
2	SHEEPS SORREL	RUMEX ACETOSELLA	30-100	Pink	May - June
4	SNEEZEWORD	ACHILLEA PTARMICA	20-150	White	July - Sept
6	SORREL	RUMEX ACETOSA	30-100	Pink	May - July
7	TUFTED VETCH	VICIA CRACCA	100-200	Purple	June - Aug
6	YARROW	ACHILLEA MILLEFOLIUM	20-45	White	June - Oct
7	YELLOW RATTLE	RHIANTHUS MINOR	15-40	Yellow	May - Aug
80% GRASSES:					
5	BROWNTOP BENT	AGROSTIS CAPILLARIS	10-70		
3	SWEET VERNAL GRASS	ANTHOXANTHUM ODORATUM	10-100		
38	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
4	WAVY HAIRGRASS GRASS	DESCHAMPSIA FLEXUOSA	20-100		
10	SHEEPS FESCUE	FESTUCA OVINA	20-60		
40	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-100		



Pro Flora 3

DAMP LOAMY SOILS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
2	AUTUMN HAWKBIT	LEONTODON AUTUMNALIS	30-50	Yellow	Aug - Oct
1	BETONY	STACHYS OFFICIANLIS	30-80	Purple	June - Sept
2	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	June - Aug
12	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
2	GOATSBEARD	TRAGAPOGON PRATENSIS	30-60	Yellow	June - Sept
2	GREAT BURNET	SANGUISORBA OFFICINALIS	40-90	Red	June - Sept
13	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
1	MEADOW CRANESBILL	GERANIUM PRATENSE	30-60	Blue	June - Sept
4	MEADOW VETCHLING	LATHYRUS PRATENSIS	80-100	Yellow	May - Aug
8	OX-EYE DAISY	LEUCANTHERMUM VULGARE	20-100	White	May - Oct
1	PEPPER SAXIFRAGE	SILAUM SILUS	50-75	White	June - Aug
2	ROUGH HAWKBIT	LEONTODON HISPIDUS	20-40	Yellow	June - Sept
14	SELFHEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
6	SORREL	RUMUX ACETOSA	30-100	Pink	May - July
12	TUFTED VETCH	VICIA CRACCA	100-200	Purple	June - Aug
8	YARROW	ACHILLEA MILLEFOLIUM	20-45	White	June - Oct
10	YELLOW RATTLE	RHIANTHUS MINOR	15-40	Yellow	May - Aug
80% GRASSES:					
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
15	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-90		
16	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
11	GOLDEN OATGRASS	TRisetum FLAVESCENS	20-80		
7	MEADOW FOXTAIL	ALOPECURUS PRATENSIS	30-120		
16	SHEEPS FESCUE	FESTUCA OVINA	5-60		
20	SLENDER CREEPING RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		



Pro Flora 4

CALCAREOUS SOILS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BETONY	STACHYS OFFICIANLIS	30-80	Purple	June - Sept
1	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	June - Aug
3	BLADDER CAMPION	SILENE VULGARIS	20-60	White	May - Sept
9	BULBOUS BUTTERCUP	RANUNCULUS BULBOSUS	15-35	Yellow	May - Aug
1	CLUSTER BELLFLOWER	CAMPANULA GLOMERATA	15-50	Blue	June - Oct
1	COMMON ST JOHNS WORT	HYPERICUM PERFORATUM	30-100	Yellow	June - Sept
2	COMMON TOADFLAX	LINARIA VULGARIS	50-90	Yellow	June - Oct
1	COWSLIP	PRIMULA VERIS	10-30	Yellow	April - June
2	DARK MULLEIN	VERBASCUM NIGRUM	110-130	Yellow	June - Oct
4	DROPWORT	FILIPENDULA VULGARIS	60-80	White	June - Aug
7	GREATER KNAPWEED	CENTAUREA SCABIOSA	50-90	Purple	July - Aug
1	HAIRY ST JOHNS WORT	HYPERICUM HIRSUTUM	30-100	Yellow	July - Aug
5	HOARY PLANTAIN	PLANTAGO MEDIA	10-40	Lilac	May - Aug
6	KIDNEY VETCH	ANTHYLLIS VULNEARIA	15-30	Yellow	May - Aug
12	LADY'S BEDSTRAW	GALIUM VERUM	50-80	Yellow	June - Sept
11	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
8	OX-EYE DAISY	LEUCANTHERMUM VULGARE	20-100	White	May - Oct
2	SMALL SCABIOUS	SCABIOSA COLUMBARIA	20-45	Lilac	June - Aug
11	TUFTED VETCH	VICIA CRACCA	100-200	Purple	June - Aug
4	VIPERS GLOSS	ECHIUUM VULGARE	30-100	Blue	June - Aug
1	WELD	RESEDA LUTEOLA	30-100	Yellow	June - Sept
1	WILD BASIL	CLINOPODIUM VULGARE	30-60	Pink	July - Sept
5	WILD CARROT	DAUCUS CAROTA	30-100	White	June - Sept
1	WILD MARJORAM	ORIGANUM VULGARE	20-80	Pink	June - Sept
80% GRASSES:					
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		
22	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
4	GOLDEN OATGRASS	TRisetum FLAVESCENS	20-80		
1	QUAKING GRASS	BRIZA MEDIA	15-75		
21	HARD FESCUE	FESTUCA TRACHYPHYLLA	15-70		
12	SHEEPS FESCUE	FESTUCA OVINA	5-60		
20	SLENDER CREEPING RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
5	SMALLER CATSTAIL	PHLEUM BERTOLONII	10-50		



Pro Flora 5

WET LOAMY SOILS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BETONY	STACHYS OFFICINALIS	30-80	Purple	June - Sept
11	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
1	DEVILS BIT SCABIOUS	SUCCISA PRATENSIS	20-80	Lilac	July - Sept
3	GIPSYWORT	LYCOPUS EUROPAEUS	30-100	White	July - Sept
5	GREATER BIRDSFOOT TREFOIL	LOTUS ULIGINOSUS	5-40	Yellow	June - Oct
3	GREAT BURNET	SANGUISORBA OFFICINALIS	40-90	Red	June - Sept
2	HEMP AGRIMONY	ERIGERON ACER	30-180	White	July - Sept
1	MARSH MALLOW	ALTHAEA OFFICINALIS	90-120	Pink	Aug - Sept
1	MARSH WOUNDWORT	STACHYS PALUSTRIS	20-100	Pink	July - Sept
11	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
6	MEADOWSWEET	FILIPENDULA ULMARIA	50-150	White	June - Aug
9	OX-EYE DAISY	LEUCANTHERMUM VULGARE	20-100	White	May - Oct
1	PEPPER SAXIFRAGE	SILAUM SILUS	50-75	White	June - Aug
4	PURPLE LOOSESTRIFE	LYTHRUM SALICARIA	5-100	Purple	July - Sept
3	RAGGED ROBIN	LYCHNIS FLOS-CUCULI	30-80	Red	May - June
8	SELFHEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
2	SNEEZEWORT	ACHILLEA PTARMICA	20-150	White	July - Sept
1	SQ. STEM ST. JOHNS WORT	HYPERICUM TETRAPTERUM	30-60	Yellow	July - Sept
5	TUFTED VETCH	VICIA CRACCA	100-200	Purple	June - Aug
9	YELLOW FLAG IRIS	IRIS PSUDACORUS	60-120	Yellow	May - July
13	YELLOW RATTLE	RHINANTHUS MINOR	15-40	Yellow	May - Aug
80% GRASSES:					
4	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
20	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-90		
19	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
6	MEADOW FOXTAIL	ALOPECURUS PRATENSIS	30-120		
2	PENDULAS SEDGE	CAREX PENDULA	80-150		
5	SHEEPS FESCUE	FESTUCA OVINA	5-60		
25	SLENDER CREEPING RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		
1	SOFT RUSH	JUNCUS EFFUSUS	20-70		
4	SWEET VERNAL GRASS	ANTHOXANTHUM ODORATUM	10-100		
4	TUFTED HAIRGRASS	DESCHAMPSIA CAESPITOSA	20-200		



Pro Flora 6

DRY LOAMY SOILS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
3	AUTUMN HAWKBIT	LEONTODON AUTUMNALIS	10-60	Yellow	Aug - Oct
2	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	June - Aug
9	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
2	BLACK MEDICK	MEDICAGO LUPILINA	15-50	Yellow	May - Sept
3	BLADDER CAMPION	SILENE VULGARIS	20-60	White	May - Sept
2	BULBOUS BUTTERCUP	RANUNCULUS BULBOSUS	15-35	Yellow	May - Sept
1	CLUSTERED BELLFLOWER	CAMPANULA GLOMERATA	15-50	Blue	June - Oct
3	COMMON ST JOHNS WORT	HYPERICUM PERFORATUM	30-100	Yellow	June - Sept
9	COMMON AGRIMONY	AGRIMONY EUPATORIA	30-60	Yellow	July - Sept
2	COMMON TOADFLAX	LINARIA VULGARIS	50-90	Yellow	June - Oct
1	COWSLIP	PRIMULA VERIS	5-10	Yellow	April - June
1	DOVES FOOT CRANESBIL	GERANIUM MOLLE	5-10	Pink	May - Aug
5	FIELD SCABIOUS	KNAUTIA ARVENSIS	30-90	Lilac	July - Sept
5	HOARY PLANTAIN	PLANTAGO MEDIA	10-40	Lilac	May - Aug
2	GREAT MULLEIN	VERBASCUM THAPSUS	40-200	Yellow	July - Sept
8	LADY'S BEDSTRAW	GALIUM VERUM	50-80	Yellow	June - Sept
1	MUSK MALLOW	MALVA MOSCHATA	20-80	Pink	July - Oct
6	OX-EYE DAISY	LEUCANTHERMUM VULGARE	20-100	White	May - Oct
9	SALAD BURNET	SANGUISORBA MINOR	30-90	Yellow	May - Aug
5	VIPERS BUGLOSS	ECHIUUM VULGARE	30-100	Blue	June - Aug
1	WELD	RESEDA LUTEOLA	30-100	Yellow	June - Sept
2	WILD CARROT	DAUCUS CAROTA	30-100	White	June - Sept
7	YARROW	ACHILLEA MILLEFOLIUM	20-45	White	June - Oct
11	YELLOW RATTLE	RHIANTHUS MINOR	15-40	Yellow	May - Aug
80% GRASSES:					
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
25	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-90		
21	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
4	GOLDEN OATGRASS	TRisetum FLAVESCENS	20-80		
5	SHEEPS FESCUE	FESTUCA OVINA	5-60		
25	SLENDER CREEPING RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
5	SMALLER CATSTAIL	PHLEUM BERTOLONII	10-50		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		



Pro Flora 7

HEDGEROW AND LIGHT SHADE

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BETONY	STACHYS OFFICIANLIS	30-80	Purple	June - Sept
3	COLUMBINE	AQUILEGIA VULGARIS	30-100	Purple	May - June
10	COMMON AGRIMONY	AGRIMONY EUPATORIA	30-60	Yellow	July - Sept
2	COMMON ST JOHNS WORT	HYPERICUM PERFORATUM	30-120	Yellow	June - Sept
5	FIELD SCABIOUS	KNAUTIA ARVENSIS	30-90	Lilac	July - Sept
2	FOXGLOVE	DIGITALIS PURPUREA	50-150	Purple	June - Sept
2	GREATER MULLEIN	VERBASCUM THAPSUS	40-200	Yellow	July - Sept
1	HAIRY ST JOHNS WORT	HYPERICUM HIRSUTUM	30-100	Yellow	July - Aug
10	HEDGE BEDSTRAW	GALIUM MOLLUGO	30-160	White	June - Sept
1	HEDGE CRANESBILL	GERANIUM PYRENAICUM	20-40	Pink	June - Aug
4	HEDGE GARLIC	ALLIARIA PETIOLATA	90-125	White	May - Aug
1	HEDGE WOUNDWORT	STACHYS SYLVATICA	30-100	Red	July - Aug
1	LESSER STITCHWORT	STELLARIA GRAMINEA	5-40	White	May - July
1	MUSK MALLOW	MALVA MOSCATA	30-80	Pink	May - Aug
1	NETTLE LEAVED BELLFLOWER	CAMPANULA TRACHELIUM	40-80	Blue	July - Sept
6	OX-EYE DAISY	LEUCANTHEMUM VULGARE	20-100	White	May - Oct
12	RED CAMPION	SILENE DIOICA	50-80	Red	May - Nov
14	SELFHEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
8	TUFTED VETCH	VICIA CRACCA	100-200	Purple	June - Aug
1	UPRIGHT HEDGE PARSLEY	TORILIS JAPONICA	80-100	White	July - Aug
1	WILD BASIL	CLINOPODIUM VULGARE	30-60	Pink	July - Sept
3	WILD GARLIC	ALLIUM URSINUM	15-50	White	April - June
5	WOOD AVENS	GEUM URBANUM	40-60	Yellow	May - June
2	WOOD SAGE	TEUCRIUM SCORODONIA	20-30	Yellow	July - Sept
3	YARROW	ACHILLEA MILLEFOLIUM	20-45	White	June - Oct
80% GRASSES:					
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
25	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-90		
20	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
20	SHEEPS FESCUE	FESTUCA OVINA	5-60		
15	SLENDER RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
5	TUFTED HAIRGRASS	DESCHAMPSIA CAESPITOSA	20-200		
10	ROUGH STALKED MEADOWGRASS	POA TRIVIALIS	15-90		



Pro Flora 8

LEGACY COUNTRY MEADOW (GENERAL PURPOSE)

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	Aug - Oct
11	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
6	BLACK MEDICK	MEDICAGO LUPILINA	15-50	Yellow	May - Sept
1	COMMON VETCH	VICIA SATIVA	20-100	Pink	May - Aug
12	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
1	MUSK MALLOW	MALVA MOSCHATA	30-80	Pink	May - Aug
12	OX-EYE DAISY	LEUCANTHEMUM VULGARE	20-100	White	May - Oct
5	RIBWORT PLANTAIN	PLANTAGO LANCEOLATA	5-50	Brown	May - Sept
11	RED CAMPION	SILENE DIOICA	50-80	Red	May - Sept
5	SALAD BURNET	SANGUISORBA MINOR	30-90	Yellow	May - Aug
15	SELF HEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
12	WHITE CAMPION	SILENE ALBA	30-100	White	May - Sept
8	YARROW	ACHILLEA MILLIFOLIUM	20-45	White	June - Oct
80% GRASSES:					
5	BROWNTOP BENT	AGROSTIS CAPILLARIS	10-70		
25	RED FESCUE	FESTUCA RUBRA	15-90		
20	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
20	CHEWINGS FESCUE	FESTUCA COMMUTATA	20-90		
20	HARD FESCUE	FESTUCA TRACHYPHYLLA	15-70		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		



Pro Flora 9

HERITAGE GENERAL PURPOSE

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
4	AGRIMONY	AGRIMONIA EUPATORIA	50-80	Yellow	June - Aug
1	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	June - Aug
7	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
2	COMMON EVENING PRIMROSE	OENOTHERA BIENNIS	80-150	Yellow	June - Sept
1	COMMON STORKSBILL	ERODIUM CICUTANIMUM	5-30	Pink	April - Sept
1	COMMON VETCH	VICIA SATIVA	20-100	Pink	May - Aug
12	CORNCOCKLE	AGROSTEMMA GITHAGO	60-120	Purple	June - Aug
5	CORN FEVERFEW	MATRICARIA PERFORATA	10-80	White	April - Nov
1	COWSLIP	PRIMULA VERIS	10-30	Yellow	April - June
2	DOVESFOOT CRANESBILL	GERANIUM MOLLE	5-10	Pink	May - Aug
2	FIELD POPPY	PAPAVER RHOEAS	30-60	Red	June - Sept
1	FOXGLOVE	DIGITALIS PURPUREA	50-150	Purple	June - Sept
2	HEDGE BEDSTRAW	GALIUM MOLLUGO	30-160	White	June - Sept
2	HOARY PLANTAIN	PLANTAGO MEDIA	10-40	Lilac	May - Aug
3	LADY'S BEDSTRAW	GALIUM VERUM	50-80	Yellow	June - Sept
5	SALAD BURNET	SANGUISORBA MINOR	20-90	Yellow	May - Sept
4	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
1	MUSK MALLOW	MALVA MOSCHATA	20-80	Pink	July - Oct
5	OXEYE DAISY	LEUCANTHEMUM VULGARE	20-100	White	May - Oct
1	RAGGED ROBIN	LYCHNIS FLOS-CUCULI	30-80	Red	May - June
3	ST JOHNS WORT	HYPERICUM PERFORATUM	30-100	Yellow	June - Sept
8	RED CAMPION	SILENE DIOICA	60-80	Red	May - Nov
5	RIBWORT PLANTAIN	PLANTAGO LANCEOLATA	5-50	Brown	May - Sept
5	SELFHEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
1	SUCKLING CLOVER	TRIFOLIUM DUBIUM	15-50	Yellow	May - Sept
1	WILD CARROT	DAUCUS CAROTA	30-100	White	June - Sept
2	WILD CLARY	SALVIA VERBANACA	40-80	Blue	May - Sept
6	WILD PARSNIP	PASTINACA SATIVA	30-150	Yellow	May - Sept
4	WHITE CAMPION	SILENE ALBA	30-100	White	May - Sept
2	WOOD AVENS	GEUM URBANUM	40-60	Yellow	May - June
1	YARROW	ACHILLEA MILLEFOLIUM	20-45	White	June - Oct

80% GRASSES:

1	SWEET VERNAL GRASS	ANTHOXANTHUM ODERATUM	10-100
2	MEADOW FOXTAIL	ALOPERCURUS PRATENSE	30-120
10	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75
8	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90
15	SLENDER RED FESCUE	FESTUCA RUBRA LITORALIS	20-100
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70
10	SHEEPS FESCUE	FESTUCA OVINA	5-60
35	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-90
4	SALT MARSH GRASS	PUCINELLA DISTANS	10-60
2	YELLOW OATGRASS	TRisetum FLAVESCENS	20-80
8	ROUGH STALKED MEADOW GRASS	POA TRIVIALIS	20-100



Pro Flora 10

GENERAL PURPOSE PLUS ANNUALS

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	Aug - Oct
6	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
2	BLACK MEDICK	MEDICAGO LUPILINA	15-50	Yellow	May - Sept
1	COMMON VETCH	VICIA SATIVA	20-100	Pink	May - Aug
7	CORN COCKLE	AGROSTEMMA GITHAGO	60-120	Purple	June - Aug
5	CORN FLOWER	CENTAUREA CYANUS	30-60	Blue	June - Aug
5	CORN MARIGOLD	CHRYSANTHEMUM SEGETUM	15-45	Yellow	June - Oct
4	CORN POPPY	PAPAVER RHOEAS	30-60	Red	June - Sept
10	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
1	MUSK MALLOW	MALVA MOSCHATA	20-80	Pink	May - Aug
10	OX-EYE DAISY	LEUCANTHEMUM VULGARE	20-100	White	May - Oct
10	RIBWORT PLANTAIN	PLANTAGO LANCEOLATA	5-50	Brown	May - Sept
5	RED CAMPION	SILENE DIOICA	30-100	Red	May - Sept
13	SELF HEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
10	SUCKLING CLOVER	TRIFOLIUM DUBIUM	15-50	Yellow	May - Sept
5	WHITE CAMPION	SILENE ALBA	30-100	White	May - Sept
5	YARROW	ACHILLEA MILLEFOLIUM	20-45	White	June - Oct
80% GRASSES:					
5	BROWNTOP BENT	AGROSTIS CAPILLARIS	10-70		
25	RED FESCUE	FESTUCA RUBRA	15-90		
20	CRESTED DOGS TAIL	CYNOSURUS CRISTATUS	5-75		
20	CHEWINGS FESCUE	FESTUCA COMMUTATA	30-120		
20	HARD FESCUE	FESTUCA TRACHYPHYLLA	15-70		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		



Pro Flora 11

WOODLAND AND HEAVY SHADE

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
15	BLUE BELL	HYACINTHOIDES NON-SCRIPTA	10-40	Blue	April - June
4	COLUMBINE	AQUILEGIA VULGARIS	30-100	Purple	May - June
4	FOXGLOVE	DIGITALIS PURPUREA	50-150	Purple	June - Sept
1	GREATER STITCHWORT	STELLARIA HOLOSTEA	20-60	White	March - July
1	HAIRY ST JOHNS WORT	HYPERICUM HIRSUTUM	30-100	Yellow	July - Aug
8	HEDGE BEDSTRAW	GALIUM MOLLUGO	30-160	White	June - Sept
8	HEDGE GARLIC	ALLIARIA PETIOLATA	90-125	White	May - Aug
1	HEDGE WOUNDWORT	STACHYS SYLVATICA	30-100	Red	July - Aug
1	HEMP AGRIMONY	ERIGERON ACER	30-180	White	July - Sept
8	MEADOWSWEET	FILIPENDULA ULMARIA	50-150	White	June - Aug
1	NETTLE-LEAVED BELLFLOWER	CAMPANULA TRACHELIUM	40-80	Blue	July - Sept
4	RAGGED ROBIN	LYCHNIS FLOS-CUCULI	30-80	Red	May - June
14	RED CAMPION	SILENE DIOICA	50-80	Red	May - Nov
13	SELFHEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
3	UPRIGHT HEDGE PARSLEY	TORILIS JAPONICA	80-100	White	July - Aug
6	WOOD AVENS	GEUM URBANUM	50-70	Yellow	June - Aug
1	WILD ANGELICA	ANGELICA SYLVESTRIS	50-200	White	July - Sept
1	WILD BASIL	CLINOPODIUM VULGARE	30-60	Pink	July - Sept
3	WILD GARLIC	ALLIUM URSINUM	15-50	White	April - June
3	WOOD SAGE	TEUCRIUM SCORODONIA	20-30	Yellow	July - Sept
80% GRASSES:					
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
25	CHEWINGS FESCUE	FESTUCA RUBRA COMMUTATA	20-90		
20	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
10	SHEEPS FESCUE	FESTUCA OVINA	5-60		
15	SLENDER CREEPING RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
5	TUFTED HAIRGRASS	DESCHAMPSIA CAESPITOSA	20-200		
20	WOOD MEADOWGRASS	POA NEMORALIS	15-90		



Pro Flora 12

WATER MARGIN AND POND EDGES

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
2	COMMON FLEABANE	PULICARIA DYSENTERICA	30-80	Yellow	July - Sept
5	GIPSY WORT	LYCOPUS EUROPAEUS	30-100	White	June - Sept
3	GREAT BURNET	SANGUISORBA OFFICINALIS	40-90	Red	June - Sept
8	GREATER BIRDSFOOT TREFOIL	LOTUS ULIGINOSUS	5-40	Yellow	Aug - Sept
2	HEMP AGRIMONY	ERIGERON ACER	30-180	White	July - Sept
1	MARSH MALLOW	ALTHAEA OFFICINALIS	90-120	Pink/White	Aug - Sept
12	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
10	MEADOWSWEET	FILIPENDULA ULMARIA	50-150	White	June - Aug
2	PEPPER SAXIFRAGE	SILAUM SILUS	50-75	White	June - Aug
6	PURPLE LOOSESTRIFE	LYTHRUM SALICARIA	50-100	Purple	July - Sept
3	RAGGED ROBIN	LYCHNIS FLOS-CUCULI	30-80	Red	May - June
9	SALAD BURNET	SANGUISORBA MINOR	20-90	Yellow	May - Sept
12	SELF HEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
2	SNEEZEWORT	ACHILLEA PTARMICA	20-150	White	July - Sept
1	SQUARE STEMMED ST J. WORT	HYPERICUM TETRAPTERUM	30-60	Yellow	July - Sept
6	TUFTED VETCH	VICIA CRACCA	100-200	Purple	June - Aug
2	WATER AVENS	GEUM RIVALE	60-80	Pink	April - July
14	YELLOW FLAG IRIS	IRIS PSUDACORUS	60-120	Yellow	May - July
80% GRASSES:					
5	BROWNTOP BENTGRASS	AGROSTIS CAPILLARIS	10-70		
1	SOFT RUSH	JUNCUS EFFUSUS	20-70		
32	CRESTED DOGSTAIL	CYNOSURUS CRISTATUS	5-75		
10	MEADOW FOXTAIL	ALOPECURUS PRATENSIS	30-120		
1	PENDULAS SEDGE	CAREX PENDULA	60-180		
7	ROUGH STALKED MEADOW GRASS	POA TRIVIALIS	20-100		
10	SHEEPS FESCUE	FESTUCA OVINA	5-60		
25	SLENDER CREEPING RED FESCUE	FESTUCA RUBRA LITORALIS	20-100		
4	SWEET VERNAL	ANTHOXANTHUM ODORATUM	10-100		
5	TUFTED HAIRGRASS	DESCHAMPSIA CAESPITOSA	20-200		



Pro Flora 110

GENERAL PURPOSE (ECONOMY PLUS ANNUALS)

%	COMMON NAME	SPECIES	HEIGHT CM	COLOUR	PERIOD
20% WILD FLOWERS:					
1	BIRDSFOOT TREFOIL	LOTUS CORNICULATUS	5-40	Yellow	Aug - Oct
6	BLACK KNAPWEED	CENTAUREA NIGRA	30-80	Purple	June - Sept
2	BLACK MEDICK	MEDICAGO LUPILINA	15-50	Yellow	May - Sept
1	COMMON VETCH	VICIA SATIVA	20-100	Pink	May - Aug
7	CORN COCKLE	AGROSTEMMA GITHAGO	60-120	Purple	June - Aug
5	CORN FLOWER	CENTAUREA CYANUS	30-60	Blue	June - Aug
5	CORN MARIGOLD	CHRYSANTHEMUM SEGETUM	15-45	Yellow	June - Oct
4	CORN POPPY	PAPAVER RHOEAS	30-60	Red	June - Sept
10	MEADOW BUTTERCUP	RANUNCULUS ACRIS	30-100	Yellow	May - Sept
1	MUSK MALLOW	MALVA MOSCHATA	20-80	Pink	May - Aug
10	OX-EYE DAISY	LEUCANTHEMUM VULGARE	20-100	White	May - Oct
10	RIBWORT PLANTAIN	PLANTAGO LANCEOLATA	5-50	Brown	May - Sept
5	RED CAMPION	SILENE DIOICA	30-100	Red	May - Sept
13	SELF HEAL	PRUNELLA VULGARIS	5-20	Purple	June - Sept
10	SUCKLING CLOVER	TRIFOLIUM DUBIUM	15-50	Yellow	May - Sept
5	WHITE CAMPION	SILENE ALBA	30-100	White	May - Sept
5	YARROW	ACHILLEA MILLIFOLIUM	20-45	White	June - Oct
80% GRASSES:					
5	BROWNTOP BENT	AGROSTIS CAPILLARIS	10-70		
25	RED FESCUE	FESTUCA RUBRA	15-90		
20	CRESTED DOGS TAIL	CYNOSURUS CRISTATUS	5-75		
20	CHEWINGS FESCUE	FESTUCA COMMUTATA	30-120		
20	HARD FESCUE	FESTUCA TRACHYPHYLLA	15-70		
10	SMOOTH STALKED MEADOW GRASS	POA PRATENSIS	10-90		

SITE PREPARATION

The aim is to produce a firm weed-free tilth. Subsoils often provide a weed-free, low nutrient status seed bed, and are therefore suitable for wild flora. It is occasionally necessary to remove the topsoil in areas of high fertility, as these soils tend to promote the growth of more vigorous grasses and pernicious weeds. Treat existing vegetation with a systemic herbicide prior to seed bed cultivation, taking note of any site constraints and manufacturer's instructions first.

SUMMARY

- Treat with herbicide, cultivate the site and allow to remain fallow if practical. A repeat herbicide application may be necessary
- Remove topsoil if applicable
- Cultivate to 10cm
- Create a surface tilth

SOWING

Sowing can take place throughout most of the year, providing a good tilth can be prepared, however the months of March/April and August/September are generally the most suitable.

- Regularly mix seed to ensure even species distribution, drill or broadcast
- Sow at 5g/m² for mixtures with grass or 0.5-1.0g/m² for pure wild flower mixtures
- Bulk up small seeding rates with 4 parts silica sand to one part seed by weight
- Rake or harrow - mix seed into soil (depth approx 0.5cm) Cambridge roll to firm seed bed

WILD FLOWER MAINTENANCE

FIRST YEAR

In the first year control the weeds and reduce competition from grasses. Cut the sward to a height of 5-7cm every two months or when the sward reaches 15cm. Remove all the cuttings. Dig out or spot treat any perennial weeds.

FUTURE MAINTENANCE

Cut to 7.5cm during March/April and remove cuttings.

A second cut should take place at the end of the flowering season during August/October. Remove all cuttings.

Further cuts in the autumn period to remove untidy growth may be required.

MAINTENANCE SUMMARY

FIRST YEAR

First cut 5cm March/April
(Spring Seeding 1st cut in May)

Cut every 2 months or when sward reaches 15cm
Final cut September/October. Remove all cuttings

FUTURE YEARS

First cut 7.5cm March/April
Second cut 7.5cm August/October

Remove all cuttings

CORNFIELD ANNUALS

Cut once the flowering period is over - September/October.

Harrow autumn or spring and overseed to regenerate annuals.

Colour Boost

INTENSE COLOURFUL FLOWER EXPERIENCES ARE THE IDEA BEHIND OUR COLOUR BOOST RANGE.

The exciting new range of mixtures have been designed to create enhanced, attractive amenity spaces. Also providing an essential food source and habitat for many species of animals and invertebrates, especially pollenating insects.

The Colour Boost range of mixtures all have a specific use depending on site and required longevity of the sowing.

With increasing pressure on local authority and golf course budgets, coupled with demands to reduce emissions generated by repeated maintenance operations and the desire to improve and create habitats, sowing a Colour Boost mixture is the natural choice.

Sowing a Colour Boost mixture brings many cost savings for the commercial user compared to more traditional bedding schemes. The mixtures are sown directly onto the final recipient site, requiring little irrigation, fertiliser/chemical

application or maintenance throughout the season. This provides a substantial saving over the production, installation and maintenance costs of a traditional bedding scheme.

100% Flower seed mixtures are notoriously difficult to sow when applying at just a few grams per m². To ensure even sowing and correct application rates we suggest using our Rehofix MK1500 corn skin granule as a carrier – natural, biodegradable, easier, and a lot cheaper than running out of an expensive seed mix half way through the project. There is no set application rate for this, as every end users machine and expertise is different, but we would suggest a ratio of 1 part seed 5 parts Rehofix .

Colour Boost 1

HIGH IMPACT ANNUALS

Designed to create a robust and attractive display in any park, public open space or golf course. This 100% flower mixture will provide a dazzling annual display. Quick to establish with a long flowering period from 8 weeks after sowing up until the first frosts.

COMMON NAME	SPECIES	COLOUR
PAPER DAISY	ACROCLINIUM ROSEUM	White/Pink/Purple
PHEASANTS EYE	ADONIS AESTIVALIS	Red/Orange
POT MARIGOLD	CALENDULA OFFICINALIS PACIFIC BEAUTY	Red/Orange/Yellow
POT MARIGOLD	CALENDULA OFFICINALIS FIESTA GITANA	Orange/Yellow
CORNFLOWER	CENTAUREA CYANUS DOUBLE	Blue/Pink/White
PAINTED DAISY	CHRYSANTHEMUM CARINATUM	Red/Orange/Pink/Yellow
ELEGANT CLARKIA	CLARKIA ELEGANS	Pink/Red/White
DWARF MORNING GLORY	CONVOLVULUS TRICOLOR	Blue/Purple/Pink/White
CHINESE FORGET-ME-NOT	CYNOGLOSSUM AMABILE	Blue
CALIFORNIA POPPY	ESCHSCHOLZIA CALIFORNICA	Multi Colour Mix
FINEFLOWER	GILIA LEPTANTHA	Blue/Pink
FAREWELL TO SPRING	GODETIA GRANDILFORA	Pink/Red/White
BABY'S BREATH	GYPSOPHILA ELEGANS	Red/White
CANDYTUFT	IBERIS AMARA CORONARIA	White
CANDYTUFT	IBERIS UMBELLATA	Blue/Pink/Purple
LOVE-IN-A-MIST	NIGELLA DAMASCENA	Blue/Pink/Purple/White
CORN POPPY	PAPAVER RHOEAS	Multi-Colour Mix

Sowing rate: 3-5g/m².

Colour Boost 2

HIGH IMPACT LOW-GROW ANNUALS

Low-Growing seasonal annuals mixture, designed to create a robust and attractive display in areas where final growing height is of paramount importance. This is particularly relevant when sowing near visibility splays and sight lines on road junctions. This 100% dwarf flower mixture will provide rich blooms throughout the season, perfect for enhancing any street scene. Quick to establish with a long flowering period from 8 weeks after sowing up until the first frosts.

COMMON NAME	SPECIES	COLOUR
SWEET ALYSSUM	LOBULARIA MARITIMA	Lilac/White
DWARF MORNING GLORY	CONVOLVULUS TRICOLOR	Blue/Purple/Pink/White
CORNFLOWER	CENTAUREA CYANUS	Blue/Pink/White
CALIFORNIA POPPY	ESCHSCHOLZIA CALIFORNICA	Orange/Yellow
FAREWELL TO SPRING	GODETIA GRANDIFLORA	Pink/Red/White
VIRGINIA STOCKS	MALCOMIA MARITIME	Lilac/Pink/White
FLAX	LINUM ANNUM	Blue/Red
LOVE-IN-A-MIST	NIGELLA DAMASCENA	Blue/Pink/Purple/White
MEXICAN MARIGOLD	TAGETES PATULA	Orange/Red
CHINA ASTER	CALLISTEPHUS SINENSIS	Multi-Colour Mix
POT MARIGOLD	CALENDULA OFFICINALIS	Orange/Yellow
CANDYTUFT	IBERIS UMBELLATA	Blue/Pink/Purple/White

Sowing rate: 3-5g/m².

Colour Boost 3

HIGH IMPACT PERENNIALS

Seasonal Perennials mixture containing 100% Flowers, the mixture consists of 90% perennial flower species, and 10% annual species that give colour the first year. The composition of species is wide and ensures a good adaptability to different growing conditions. The colour scheme of the mix changes during the season according to which species are in bloom at the time.

COMMON NAME	SPECIES	COLOUR
BASKET OF GOLD	ALYSSUM SAXATILE	Yellow
ALPINE ROCK CRESS	ARABIS ALPINE	White
OXEYE DAISY	CHRYSANTHEMUM LEUCANTHEMUM	White/Yellow
TICKSEED	COREOPSIS GRANDIFLORA	Yellow
CALIFORNIA POPPY	ESCHSCHOLZIA CALIFORNICA	Orange/Yellow
BLANKET FLOWER	GAILLARDIA GRANDIFLORA	Red/Yellow
PERENNIAL FLAX	LINUM PERENNE	Blue/White
ALPINE FORGET-ME-NOT	MYOSOTIS ALPESTRIS	Blue
WILD PINK	DIANTHUS PLUMARIUS	Pink/White
COMMON DAISY	BELLIS PERENNIS	Multi-Colour Mix
SELFHEAL	PRUNELLA GRANDIFLORA	Blue
SOAPWORT	SAPONARIA OFFICINALIS	Pink/White
POT MARIGOLD	CALENDULA OFFICINALIS	Orange/Yellow
CANDYTUFT	IBERIS AMARA CORONARIA	White
CANDYTUFT	IBERIS UMBELLATA	Blue/Pink/White

Sowing rate: 3-5g/m².

The Pro Fert range of fertilisers has been specially formulated with the Landscaper and Turf Manager in mind. All products are supplied in easy to handle 20kg bags and are all available for next day delivery.

Pro Fert 1

PRE-SEED FERTILISER

ANALYSIS:

6: 9: 6

COMPOUND BLEND

Application Rates: 35-70g/m²

USE: Mainly in pre-seed situations (spring and autumn) to promote a healthy and vigorous root system. Can also be used as an economical feed for existing turf.

Pro Fert 2

PRE-SEED FERTILISER

ANALYSIS:

10: 15: 10

COMPOUND BLEND

Application Rates: 35-50g/m²

USE: Mainly pre-seed situations (spring and autumn), or as a spring dressing on outfield sports turf. The plant nutrient ratio of 1: 1.5: 1 is well recognised.

Pro Fert 3

SPRING/SUMMER FERTILISER

ANALYSIS:

12: 6: 6

COMPOUND BLEND

Application Rates: 50g/m²

USE: An ideal pre-seed fertiliser or as a spring/summer feed to bring on established turf following the winter.

APPLY: between March and September.

Pro Fert 4

SPRING/SUMMER FERTILISER

ANALYSIS:

14: 0: 7+3MGO + 2FE

1-2MM MINI COMPOUND GRANULE

Application Rates: 50g/m²

A high nitrogen low phosphate fertiliser ideal for all amenity turf situations, this mini compound granule promotes a strong, dense and healthy turf with excellent colour.

USE: An ideal pre-seed fertiliser or as a spring/summer feed to bring on established turf following the winter.

APPLY: between March and September.

Pro Fert 6

AUTUMN/WINTER FERTILISER

ANALYSIS:

3: 12: 12

2-4MM COMPOUND GRANULE

Application Rates: 50g/m²

A low nitrogen fertiliser with high phosphate and potassium levels enhances root development (where levels are low). Maintains turf colour and improves disease resistance.

USE: An ideal autumn/winter fertiliser for established turf.

APPLY: September onwards until the end of the growing season.

Terra FSP

HYDROSEEDING MULCH

Terra FSP is a high performance GREEN mulch for hydroseeding applications. It promotes accelerated growth through a combination of seed protection and improved hydration for nourishment. Manufactured from recycled wood fibre and straw, Terra FSP is safe to handle, environmentally sound with an unlimited shelf life.

Application Rates: 100-180g/m²

RAPID GROWTH

Terra FSP holds 1200% its own weight in water. Its water retention capability ensures newly sprayed seed is provided with vital nourishment necessary for successful germination and establishment.

SUPERIOR QUALITIES

Uniform grass cover is more achievable due to an even application of slurry containing the Terra FSP.

ENVIRONMENT

Terra FSP is non-toxic and non-irritant. 100% biodegradable it decomposes to return precious nutrients to the soil.

GroWeb

HYDROSEEDING MULCH

GroWeb Mulch is a blend of natural fibres. The purpose of mulch is to protect and nurture the seed. The fibres knit together when mixed with water, tackifier and fertiliser. Once sprayed onto the surface of the site they provide a protective and moisture retentive cover thus aiding the germination of the seed.

Application Rates: 100-180g/m²

RAPID GROWTH

GroWeb's mix of fibre provides excellent water absorption - up to 400% its own weight. Its strong mat holds moisture and promotes rapid seed growth for quick, quality results.

SUPERIOR QUALITIES

GroWeb has a virtually neutral pH - ideal for establishing vegetation.

ENVIRONMENT

GroWeb is 100% recycled cotton fibre. It is biodegradable and absolutely non-toxic.

GroWeb

TACKIFIER

GroWeb Tackifier is a natural non-toxic powder made up of 99% natural colloids and 1% inhibitor. The purpose of GroWeb Tackifier is a gelling agent that when mixed with water, swells becoming highly viscous, binding the seed, fertiliser and mulch to the soil surface. GroWeb Tackifier helps protect the seed from wind erosion, water erosion and drought.

Application Rates: 2-4g/m²

ADVANTAGES OF USING GROWEB TACKIFIER

- GroWeb Tackifier is a harmless powder which is easy to handle
- GroWeb Tackifier is highly viscose and will assist erosion control by stabilising the soil and holding the other materials in place
- GroWeb Tackifier is highly water absorbent and will retain water and re-wet
- GroWeb Tackifier lubricates both the mulch and the moving parts of the hydraseeding machine
- GroWeb Tackifier helps protect the seed from wind erosion, water erosion and drought

GroWeb

SOIL & PLANT FERTILISER

Organic slow release fertiliser 8:7:7 and minerals, trace elements and natural growth stimulants. GroWeb Soil and Plant Conditioner is a concentrated liquid fertiliser. It is designed as a total replacement, one stop fertiliser.

Application Rates: 30-40L per/ha

ADVANTAGES OF USING GROWEB FERTILISER

- A predictable and safe fertiliser
- Naturally occurring growth stimulants aid rapid germination
- Good micro-organism activity encourages development of healthy sward
- Steady Nitrogen release
- Increased root depth means greater drought resistance
- Organic activity releases locked up nutrients
- Both naturally occurring growth stimulants are proven to contribute to recovery from shock as in adverse climatic conditions



Weight

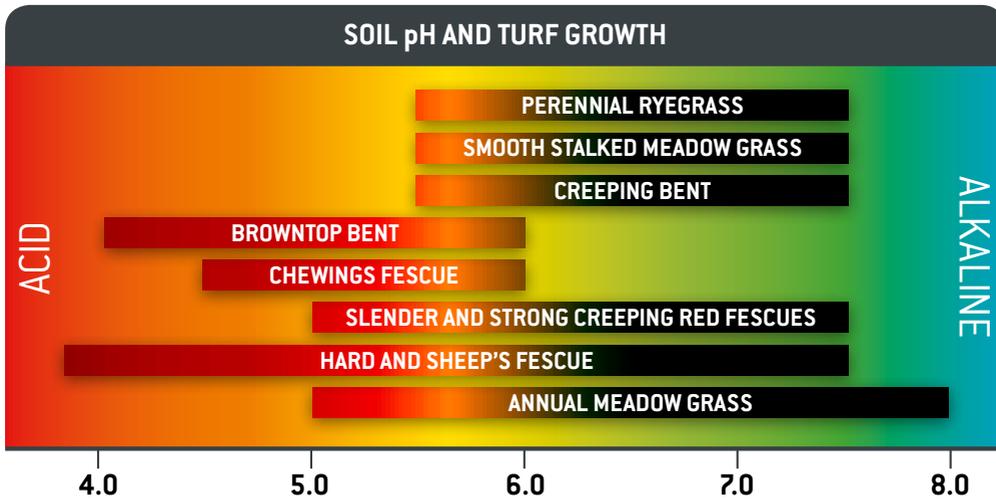
lbs	to kilograms	divide by	2.205
kilograms	to lbs	multiply by	2.205
tons	to tonnes	multiply by	1.016
tonnes	to tons	divide by	1.016
cwts	to kilograms	multiply by	50.794
kilograms	to cwts	divide by	50.794

Area

acres	to hectares	divide by	2.471
hectares	to acres	multiply by	2.471
square yards	to square metres	multiply by	0.8361
square metres	to square yards	divide by	0.8361

Pitch Dimensions

	Metres (l x w)	Area
Soccer	100 x 64	6400m ²
Rugby	100 x 69	6900m ²
Hockey	91.4 x 55	5027m ²
Cricket Square	30 x 23	690m ²
Lawn Tennis	23.8 x 11	262m ²
Bowls	40 x 40	1600m ²
Croquet	32 x 25.5	816m ²
Golf Green		500m ² /600m ²
Golf Tee		250m ² /500m ²



Soil pH. Table shows most suitable pH for grass species

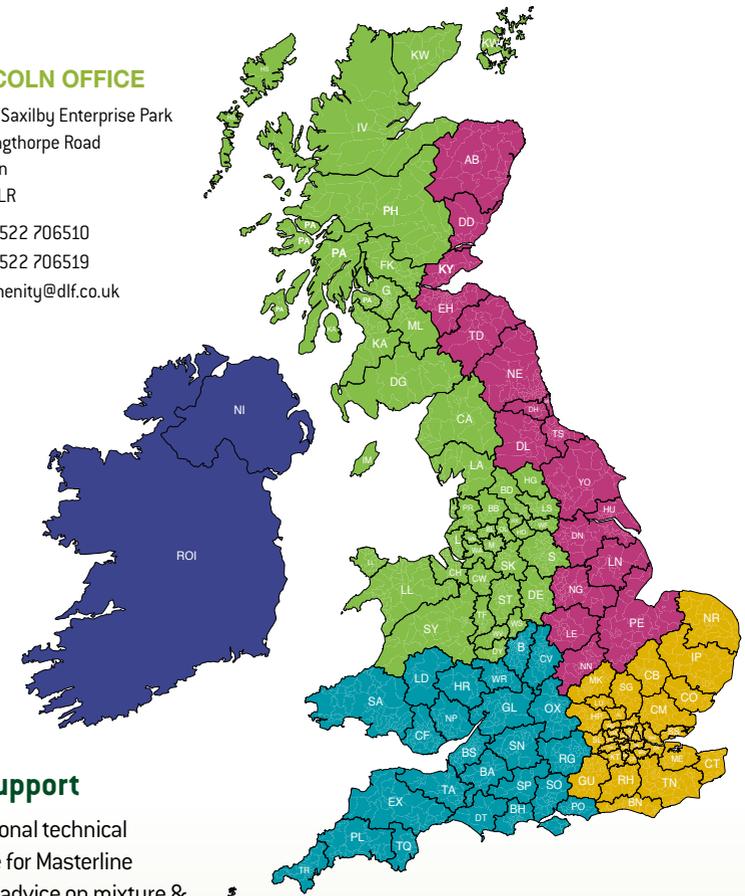
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The **professional** choice

It is our pleasure to present the unique Masterline brand with superior grass varieties. Our focus is on fine-leaved, dense varieties with outstanding disease resistance, wear and drought tolerance.

All Masterline mixtures are based on the large portfolio from the DLF Group and only the very best varieties are selected for our mixtures.

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