## Amenity 2018

Amenity Grass Seed, Fertiliser and Wild Flora Products





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At Germinal we are constantly investing in research and development to bring firstclass grass seed and turf care products to market. Our portfolio includes the very best landscape, sports turf and amenity grass cultivars as well as an extensive selection of UK-specific wildflower varieties. With a range of state-of-the-art phased release fertilisers to choose from, plus cutting edge advice from our qualified staff, we can help you get the very best results from your amenity space.



This year's Germinal Amenity Catalogue is bigger and better than ever before. As well as our popular range of Grade-A golf, sports and landscaping mixtures and wild flora seeds, we have also added a number of new and cutting-edge cultivars and specialist fertilisers.

Thanks to a fineness of leaf score of 8.8 for the second year running, Cabrio Ultra Fine Ryegrass is once again the number one variety on the BSPB's Series L Table 1 for perennial ryegrasses. Cabrio is recommended for use on golf tees and green aprons as well as tennis courts and cricket squares, where it is ideal for repairing baselines and wicket ends. It is exclusively available in Germinal's A5 Cricket, Tennis and Tees, A10 Golf Tees and Divot Repairs, and A28 Ultrafine Ryegolf mixtures: in all three mixtures, Cabrio creates a high density, wear tolerant sward with rapid repair capability.

#### 007 DSB - the adaptable creeping bent

007 DSB creeping bentgrass has gone from strength to strength in the last 12 months, having been used on several Ryder Cup and US Open courses, as well as for greens renovations at Wentworth.

007 DSB was developed in the US using 24 parent plants to produce a single cultivar with a wide genetic base. It is this background which enables it to deliver all the qualities of a top-rated creeping bentgrass: prostrate growth habit, high shoot density and good wear tolerance.

For 2018, 007 DSB is available alongside two of the latest UK-bred browntop bentgrasses: comprising 35% AberRegal, 35% AberRoyal and 30% 007 DSB, Forefront Greens produces a sward with enhanced disease and stress resistance and retains a superb year-round green colour. It also offers increased wear and heat tolerance, vigorous growth, and good all-round disease resistance for hard-working, modern golf greens.

#### Specialist fertilisers

As well as grass and wildflower seeds, Germinal also supplies a range of specialist fertilisers.

The new Floranid<sup>®</sup>Twin range of phased-release granular fertilisers has been specifically designed by Compo Expert for use on sports pitches, golf courses, tennis courts and all fine-turf sports facilities where a consistent and long-acting supply of nutrients is required.

Just like the previous Floranid range, Floranid Twin contains fast-acting nitrogen in ammonium and nitrate forms, as well as a phased-release element based on the advanced isobutylidene diurea (IBDU) or Isodur<sup>®</sup> molecule. The new range also contains an additional phased-release element in the form of crotonylidene urea or Crotodur. Put simply, this means that almost all the N supplied will be slowly and steadily released into a form which can be taken up by the sward for a period of around 16 weeks.

Compo Expert also manufactures a range of liquid fertilisers, with Basfoliar Turf Complete SL formulated specifically for use as a spring and summer fertiliser. Unlike less sophisticated liquid fertilisers, Basfoliar Turf Complete SL contains two forms of nitrogen for efficient utilisation. It also uses potassium in the sulphate form for low salt stress, and is fortified with magnesium for

## **Exceptional products to** improve your amenity space

#### Cabrio - the finest ryegrass bar none

#### Introduction



02

improved sward colour. A range of EDTA chelated trace elements ensure plants receive a complete supply of nutrients, while seaweed extract is used to combat abiotic stresses caused by excessive wear and unfavourable weather conditions.

#### The best products in one place

By bringing these products together in one place, Germinal's 2018 Amenity Catalogue enables green keepers, course managers and groundsmen to make the very best of their green spaces. Whether you are managing a top flight football pitch or world class golf course, or simply trying to create the best sports or amenity facilities from a limited budget, we're confident our products, together with our friendly, professional advice, can help you get the most out of your resources.

We will also be updating and improving the Germinal Amenity website in 2018. Our aim is to create a free source of sector specific information - including technical articles, advice columns, product guides and an interactive seed and fertiliser specifier tool - to enable our customers to improve their amenity space.

For more information, go to www.germinalamenity.com - the new website should be up and running in Spring 2018.

**Richard Brown** National Amenity Sales Manager, Germinal GB

Germinal is the largest privately owned seed company in the UK and the only company selling British-bred turf grasses direct to the end user.

#### Germinal technical support

Our team of dedicated technical sales representatives has vast experience of amenity grass seed and fertilisers for golf, sports and landscaping, and is committed to helping you find the correct grass seeds and fertilisers to improve your facility.

#### F.A.C.T.S.\* qualified

Having chosen the correct grass mixtures, why not let one of our qualified advisers write up a fertiliser plan to help you gain the best performance from your sward throughout the coming year?

For Technical Sales Representatives' details, please see page 68.

\* Fertiliser Advisers Certification and Training Scheme

#### Mixtures for golf

A5 Cricket, Tennis A10 Golf Tees and A28 Ultrafine Ryec A27 Golf All Fescu A29 With Ryegras A31 Supreme Tee

TEES

#### FAIRWAYS AND RC

A12 Golf Fairways A13 Golf Roughs A27 Golf All Fescu

WINTER SPORTS

A7 'Olympic Qualit

A8 Pitch Renovato

A9 General Outfie

A20 Premier Rves

A20 Creeping Pere

A20 Supreme Poa A30 Rapid Sports

A31 Supreme Tee

A999 Rescue

#### **Mixtures for** sports pitches

**Mixtures for** landscaping

A2 Quality Lawns A26 So-Green

FORMAL AREAS

A7 'Olympic Qual

#### LOW MAINTENAN

A3 Embankments A4 Low Maintena A18 Road Verge a A22 Low Mainten AberSustain

#### Wildflower mixtures

GOLF Fairway Meadow Links Habitat Woodland Edge

#### **REGIONAL ENVIR**

RE1 Traditional Ha **RE2** Lowland Mea RE3 River Flood P RE4 Lowland Lime **RE8** Coastal Recl RE10 Marginal Lar **RE11 Heath Scrub** 

#### 100% UK NATIVE WF1 Flowering M

WF3 General Purp WF10 Cornfield A

## **Grass seed mixtures**

and Tees Divot Repairs	<b>Pg</b> 07 07 08	A29 With Ryegrass Divot Mix A32 Ecological Roughs Mixture A33 Habitat Mixture	09 09 09
jolf e s Divot Mix s OUGHS and Habitat Areas e	08 09 09 09 08 08 08 08	GREENS A11 Golf Greens 007 DSB Creeping Bent ForeFront Greens AberRoyal Browntop Bent AberMajesty Browntop Bent Blend AberRegal Browntop Bent	Pg 07 11 12 12 12
y' Sports Ground r d port mnial Ryesport Supina Renovator Plus	<b>Pg</b> 19 20 22 22 22 23 23 23 23	SUMMER SPORTS A5 Cricket, Tennis and Tees A7 'Olympic Quality' Sports Ground A1 Professional Bowls A9 General Outfield RACECOURSE AND POLO GROUNDS A14 Racecourse and Polo Grounds A8 Pitch Renovator A20 Premier Ryesport A30 Rapid Sports Renovator Plus	Pg 19 19 20 Pg 20 20 22 23
ty' Sports Ground	Pg 19 27 30 Pg	HARDWEARING A9 General Outfield A19 All Purpose Landscaping A24 Wear and Tear A22 Low Maintenance	<b>Pg</b> 20 29 30 30
and Drought nce Areas nd Embankments ance	27 27 29 30 31	PROBLEM AREAS A6 Supreme Shade A15 Reclamation Landfill A16 Reclamation Country Parks A17 Legume and Clover A21 Saline Coastal & Road Verges A25 Agricultural Reinstatement	Pg 28 28 28 28 29 30
	<b>Pg</b> 17 17 17	POLLINATORS WFG18 Butterfly and Honey Bee WF17 Cultivated Annuals WF19 Pollinators' Paradise	<b>Pg</b> 41 41 41
ONMENTAL y Meadow dow ain / Water Meadow estone mation ture nd bland eadow iose Neutral Soils nnuals	Pg 36 37 37 38 38 38 39 Pg 40 40 40	GENERAL LANDSCAPING AND GOLF COURSES WFG2 Flowering Meadow WFG4 Neutral Soils WFG5 Calcareous Soils WFG6 Heavy Clay Soils WFG7 Free Draining Sandy Soils WFG8 Hedgerows & Shaded Areas WFG9 Wetland & Pond Areas WFG15 Countrylife Schools & Colleges WFG20 Eco Species Rich Lawn WFG21 Everyday Meadow	Pg 42 43 43 43 44 44 45 45

## **Fertilisers**

**GRANULAR FERTILISERS** 

#### **Fertilisers for** close mown / fine turf

Floranid Twin Eagle Master	50
G4 Spring/Summer Fine Turf	
Spring Kick	63
G6 Spring/Summer Booster Extra	63
G9 Spring/Summer Fine Turf	
Iron Booster	64
G7 Autumn/Winter Fine Turf	
Winter Defence	64
G12 Autumn/Winter Autumn Tonic	65
LIQUID FERTILISERS	Pg
Vitanica RZ	57
Chelated Iron	57
Basfoliar Turf Complete SL	57
Maritime Turf Hardener	58
Maritime + Nitrogen	58
Maritime + Iron	58
Maritime Natural	58
GL1	59
GL4	59
GL3	59
GL2	59

Pa

Kali Gazon	53
Ferro Top	54
Agrosil® LR	54
Fertilis Swing NK	56
Fertilis Speed	56
Symbio MycoForce	60

Pg

SPECIALIST FERTILISERS

### **Fertilisers for sports** stadia / outfields / fairways

i lali ways	Chelated Iron
	Basfoliar Turf Complet
	Maritime Turf Hardene
	Maritime + Nitrogen
	Maritime + Iron
	Maritime Natural
	GL1
	GL2
	GL3
	GL4
	GL5
	GRANULAR FERTILIS
	Floranid Twin Permane
	Floranid N31

GL5

LIQUID FERTILISERS

Vitanica RZ

GL4	59
GL5	59
GRANULAR FERTILISERS	Pg
Floranid Twin Permanent	49
Floranid N31	49
Floranid Twin Turf	49
Floranid Twin Club	50
NovaTec N-Max	51
NovaTec Premium	51
G1 Preseeding Quick Start	62
G2 Preseeding Quick Start Extra	62
G3 Spring/Summer Spring Kick	63
G5 Spring/Summer Booster	63
G6 Spring/Summer Booster Extra	63
G8 Autumn/Winter Winter Defence	64
G10 Spring/Summer Labour Saver	65

SL

59

⊃g	SPECIALIST FERTILISERS	Pg
57	Kali Gazon	53
57	Basatop Fair	53
57	Easygreen Mini	53
58	Ferro Top	54
58	Agrosil <sup>®</sup> LR	54
58	Fertilis Swing NK	56
58	Fertilis Speed	56
59	Symbio MycoForce	60
- 0		

**Products** 

- purity and germination

### Service

- the next working day
- hand expert advice

- Europe and the USA
- our varietal portfolio

## **Research & Development**

• We produce the major portion of our grass seed in the UK; this ensures that your purchase helps to support the UK economy

• The Grade 'A' range is the first word in quality with regards to cultivar,

• The comprehensive range offers a mixture to suit every greenkeeper, groundsman, landscape contractor or landscape architect

• Mixtures include exclusive top rated cultivars, unavailable through any other seed suppliers, many of which are UK bred for UK conditions. Look out for the 'ABER' varieties in our mixtures

• Simplify your life. Buy direct from your visiting technical sales representative, through our Lincoln office, or online at www.germinalamenity.com

Orders of stock items placed before midday will be delivered

• Talk directly to one of our technical sales representatives for first

#### **Research and Development**

 Germinal funds the amenity seed breeding programme at IBERS\*; working together we form the UK's largest grass breeding programme

 Our relationship with internationally renowned amenity grass breeders ensures exclusive access to the best cultivars from

• This commitment to breeding ensures a constant improvement in



**A5** 

Designed specifically for the professional user, Grade 'A' golf mixtures always include vigorous lots of the most highly rated cultivars available. The result is a dependable range of mixtures that consistently deliver results time and time again.

### Cricket, Tennis and Tees

50% ESCAPADE (Perennial Ryegrass) 50% CABRIO\* (Ultra Fine Perennial Ryegrass)

- Quick to establish
- Hard wearing • High density ground cover
- Superior rooting

the highest rated variety for summer sports in the 2017 BSPB list.

Sowing Rate:

**Overseeding Rate:** 20g/m² (200kgs/ha)

Cutting Height:



## Grade 'A' golf mixtures

### A10 **Golf Tees and Divot Repairs**

35% ABERCHARM (Slender Creeping Red Fescue) 25% DORIANNA (Chewings Fescue) 15% ESCAPADE (Perennial Ryegrass) 10% TETRIS (Smooth-Stalked Meadow Grass) 10% CABRIO\* (Ultra Fine Perennial Ryegrass) 2.5% ABERROYAL (Browntop Bent) 2.5% ABERREGAL (Browntop Bent)

- For rapid repair
- Wear tolerant
- Quick recovery from divot scars
- Contains Cabrio, the most fine leaved Perennial ryegrass currently available

A10 produces a high density sward with excellent binding capacity and recovery rate. This mixture also provides dark green winter colour and disease resistance. Includes

### **Sowing Rate:** 35g/m² (350kgs/ha)

**Overseeding Rate:** 20g/m² (200kgs/ha)

### **Cutting Height:**

#### Shade Option:

SUPREME Poa supina can be added at 2.5% for enhanced

#### No-Rye Option:

The perennial ryegrass can be removed from this mixture to create a fescue based

#### Fertiliser **Recommendation:**

Once established – Floranid Twin Eagle Master

### A11 Golf Greens

40% DORIANNA (Chewings Fescue)

40% MIRADOR (Slender Creeping Red Fescue)

10% ABERROYAL (Browntop Bent)

10% ABERREGAL (Browntop Bent)

- Uniform putting surface
- Dense sward
- Tolerates close mowing
- Includes UK bred grasses for UK conditions

Also available with Vesper Velvet bent grass as A11S Sustainable.

**Sowing Rate:** 35g/m² (350kgs/ha)

**Overseeding Rate:** 

**Cutting Height:** 

#### Fertiliser Recommendation:

\* The highest rated variety for summer sports in the 2018 BSPB list.

### A12 Golf Fairways

#### 30% JOANNA (Chewings Fescue)

25% CORAIL (Strong Creeping

Red Fescue) 15% CALICO

(Perennial Ryegrass)

15% ESCAPADE (Perennial Ryegrass)

10% TETRIS (Smooth-Stalked Meadow Grass)

2.5% ABERROYAL (Browntop Bent)

2.5% TYEE (Creeping Bent)

Quick establishment

- Good recovery from divots
- Low maintenance
- Clean cutting

A12 provides rapid repair of divot scarring. Once fully established, the sward will withstand drought conditions on sandy soils. ESCAPADE provides slow re-growth without compromising shoot density, to produce a low maintenance fairway.

Sowing Rate: 35g/m<sup>2</sup> (350kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** Down to 15mm

Fertiliser **Recommendation:** 

In the seedbed - Agrosil® LR Once established -NovaTec N-Max or NovaTec premium

### A13 **Golf Roughs** and Habitat Areas

62.5% CORAIL (Strong Creeping Red Fescue)

10% ABERFLEECE (Sheeps Fescue)

25% JOANNA (Chewings Fescue)

2.5% ABERROYAL (Browntop Bent)

Golf roughs add to the challenge of any course and provide an important, diverse grassland habitat for wildlife. The combination of fescues found in A13 will adapt to a variety of maintenance programmes.

Sowing Rate: 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** As desired

A27 Golf **All Fescue** 

#### 25% MELITTA (Chewings Fescue)

25% JOANNA (Chewings Fescue)

(Slender Creeping

25% MIRADOR (Slender Creeping **Red Fescue)** 

### Wear resistant

A27 is suitable for overseeding of fairways and greens where improved sward density, drought tolerance and disease resistance are required. This adaptable mixture is ideal for those courses wishing to maintain their fescue content or repair damaged areas through divoting or disease. Also available as 100% slender creeping red fescue on request.

15mm for fairways and tees

**Bentgrass Option:** Any of our bentgrasses on request

## Fertiliser

Agrosil® LR

#### Fertiliser **Recommendation:** In the seedbed -Agrosil<sup>®</sup> LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn) Kali Gazon (winter)

the mixture.

Sowing Rate:

35g/m<sup>2</sup> (350kgs/ha)

**Overseeding Rate:** 

20g/m<sup>2</sup> (200kgs/ha)

Cutting Height:

Down to 6-7mm

\* The highest rated variety for summer sports in the 2018 BSPB list.

### A29 With Ryegrass **Divot Mix**

**40% AGREEMENT** (Perennial Ryegrass) 35% CORAIL

(Creeping Red Fescue) 25% CALLIOPE

(Chewings Fescue)

#### • Quick to germinate

- Cost effective
- Multi-purpose

A29 is a multi use divot mixture ideal for repairing worn areas, divot and pitch marks on golf courses, sports grounds and general municipal areas.

Sowing Rate: 35g/m<sup>2</sup> (350kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

#### Fertiliser

**Recommendation:** In the seedbed -Agrosil® LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)



### A31 **Supreme** Tees

85% TETRIS (Smooth-Stalked Meadow Grass)

15% SUPREME (Poa supina)

#### • Unrivalled shade tolerance

- Disease resistance Uniform neat cleanness of cut
- Exceptionally hardwearing with good recovery

The perfect mixture for shaded golf tees or any extremely shaded areas on golf courses or in sports stadia. Includes SUPREME Poa supina, this mixture is extremely shade tolerant and offers exceptional wear tolerance once established. SUPREME is a new improved Poa supina with a darker colour than older varieties. Being 100% Poa species means the mixture offers above average disease resistance and an unrivalled cleanness of cut, giving a uniform hardwearing and disease free sward even in the most shady areas.

#### Sowing Rate: 10-15g/m<sup>2</sup> (100-150kg/ha)

Cutting Height: Down to 3mm

#### Fertiliser **Recommendation:**

In the seedbed -Agrosil<sup>®</sup> LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)

Sowing Rate:

### **Overseeding Rate:**

**Cutting Height:** 

Once established -According to use

A28

Ultrafine

Ryegolf

45% MIRADOR

Red Fescue)

(Slender Creeping

25% DORIANNA

25% CABRIO\*

(Ultra Fine

(Chewings Fescue)

Perennial Ryegrass)

• A versatile golf mixture

Tolerant of close mowing

score for fineness of leaf

(8.3) under close mown

conditions, 4-7mm on

courses which suffer from

whilst being very compatible

with the fescue element of

5% ABERROYAL

(Browntop Bent)

Hard wearing

Cabrio has highest

current BSPB list.

A28 is suitable for golf

25% BORLUNA

**Red Fescue**)

### Versatile mixture

## Tolerant of close mowing

Down to 5mm for greens,

can be added to the above

**Recommendation:** In the seedbed -

wear and tear due to intensive use where a traditional mixture will not perform. The use of CABRIO provides outstanding wear

### characteristics associated with perennial ryegrass

35g/m<sup>2</sup> (350kgs/ha)

20g/m<sup>2</sup> (200kgs/ha)

### A32 **Ecological Roughs Mixture**

60% CORAIL (Strong Creeping Red Fescue)

15% Sweet Vernal Grass

5% ABERROYAL (Browntop Bent)

15% Small Leaved Timothy

5% Crested Dogstail

A32 provides the perfect buffer between fairways and more off-line areas of play. It creates an easy to manage sward which can be maintained via infrequent cutting to create a thin. semi-rough environment that enables rapid ball retrieval and onward play. It also creates an ecologically valuable, natural grassland habitat, acting as an extension to wildlife-rich areas of thicker rough.

Additional species available on request - Tufted hairgrass, Wavy hairgrass, Quaking grass, Meadow foxtail, Golden oatgrass.

Sowing Rate: 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** As desired

### A33 Habitat Mixture

35% CORAIL (Strong Creeping Red Fescue)

30% ABERCHARM (Slender Creeping Red Fescue)

5% Red Clover

10% Sweet Vernal Grass

15% Small Leaved Timothy

5% Quaking Grass

The perfect mixture for creating enhanced habitat within semi-rough environments.

Additional species available on request - Tufted hairgrass, Wavy hairgrass, Meadow foxtail, Golden oatgrass.

Sowing Rate: 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** As desired



"Grasses are vitally important from an ecological viewpoint. They are the principal components of all grassland habitats, with different species providing unique diversity within machair to the north, and chalk downlands in the south. These habitats provide food, shelter and vantage for a range of wildlife communities and are particularly valuable for molluscs through to invertebrates, bryophytes and small mammals. Often unappreciated are the secondary benefits of grasslands, which, by their presence, provide important food resources for bats and birds."

Sophie Vukelic, Ecology and Environment Consultant at the Sports Turf Research Institute (STRI)

## Bentgrasses

Germinal has one of the most extensive bentgrass portfolios in the market. Whether you're establishing a new green or overseeding an existing one, we've got a specialist bentgrass to suit every situation.

Contact our advisers to arrange a site visit. Alternatively, request a copy of our overseeding leaflet, detailing best practice for achieving optimum results from overseeding programmes.

#### **Fertilisers for Bentgrass**

Please ask your F.A.C.T.S. qualified technical sales representative about our extensive range of mini granular and liquid feeds; they can help you find the perfect feeding regime to maximise the potential of any member of our bentgrass portfolio.

The latest 'super bent' varieties are aptly named: in all tests carried out on these new generation cultivars – from heat and cold tolerance, to disease resistance, fineness of leaf, density of growth habit and input requirement - they significantly outperform all other bentgrass varieties.

## Super Bents: 007 DSB and Forefront Greens

007 DSB is arguably the best-of-the-best: it was developed in the US using 24 parent plants to produce a single cultivar with a wide genetic base. It is this background which enables it to deliver all the qualities of a top-rated creeping bentgrass (prostrate growth habit, high shoot density and good wear tolerance) in a range of conditions - from the extreme heat of Morocco to the harsh cold of Western Siberia.

Unlike older creeping bent varieties, 007 DSB does all of this with a lower requirement for water and nutrients. This means that, for the first time, a creeping bentgrass can be successfully blended with high quality browntop bent varieties to deliver an added-benefit but low input seed mixture.

### 007 **DSB Creeping Bent**

- and cold winters
- Very good cool weather colour the winter months
- Snow Mould
- Dollar Spot resistance

007 DSB offers superior turf quality, eliminates winter stress discolouration and is highly competitive against poa annua. Highly versatile - it is suitable for use on greens, tees and fairways, as a complete reseed or for overseeding. 007 DSB has enhanced Dollar Spot resistance and offers vigorous, uniform growth.

Sowing Rate: 8 - 12g/m2 (80 to 120kgs/ha)

**Overseeding Rate:** 5 - 8g/m<sup>2</sup> (50 - 80kgs/ha)

**Cutting Height:** Down to 3mm

Widely adaptable to warm summers

• Very salt tolerant - trials show it to be more salt tolerant than Seaside II retention - no purple colour during

· High disease resistance especially against Anthracnose, Fusarium and

### **ForeFront** Greens

35% ABERREGAL (Browntop Bent)

35% ABERROYAL (Browntop Bent)

30% 007 DSB (Creeping Bent)

- · Suitable for soil or sand-based greens
- Enhanced resistance to Red Thread and Fusarium
- Superb stress resistance
- Superb year-round green colour
- Excellent shoot density and fineness of leaf

Combining two of the best British-bred browntop bents with the best creeping bent ensures ForeFront Green delivers the highest levels of disease and stress resistance. And with excellent shoot density, fineness of leaf and unrivalled winter and summer greenness, Forefront Greens is the mixture for better golf greens.

Sowing Rate:

8 - 12g/m2 (80 to 120kgs/ha)

**Overseeding Rate:** 5 - 8g/m<sup>2</sup> (50 - 80kgs/ha)

Cutting Height: Down to 3mm

## Aber bentgrasses

### **AberRoyal Browntop Bent**

- Excellent shoot density
- Very fine-leaved
- Superb year-round green colour
- Disease resistant
- Out competes Poa annua
- UK bred for UK golf greens

AberRoyal Browntop Bent is suitable for traditional UK soil and sand-based greens and was bred at our IBERS turfgrass breeding programme. Now used on a large number of UK and European courses and widely recommended by leading agronomists, AberRoyal is the greenkeepers' number one choice.

#### Sowing Rate: 8 - 12g/m<sup>2</sup> (80 - 120kgs/ha)

**Overseeding Rate:** 

5 - 8g/m<sup>2</sup> (50 - 80kgs/ha)

**Gavin Ballantyne** 

Head Greenkeeper

**Cutting Height:** Down to 3mm

### **AberMajesty Browntop Bent Blend**

**50% ABERROYAL** (Browntop Bent)

**50% ABERREGAL** (Browntop Bent)

- Combined genetic traits of two winning varieties
- UK Bred varieties for UK golf greens
- Excellent shoot density
- · Very fine leaved

A combination of proven performer AberRoyal and brand new variety AberRegal. Increased genetic diversity makes AberMajesty the perfect choice for both soil and sand-based greens anywhere in the UK.

Sowing Rate: 8 - 12g/m² (80 - 120kgs/ha)

Overseeding Rate: 5 - 8g/m<sup>2</sup> (50 - 80kgs/ha)

Cutting Height: Down to 3mm

### **AberRegal Browntop Bent**

- Excellent disease resistance particularly to fusarium
- Superb year-round green colour
- UK Bred for UK golf greens
- Excellent shoot density

The latest UK bred variety to come out of the amenity breeding programme at IBERS, AberRegal is bred from an original selection taken from southern England and exhibits exceptional disease resistance and drought tolerance.

Sowing Rate: 8 - 12g/m<sup>2</sup> (80 - 120kgs/ha)

5 - 8g/m<sup>2</sup> (50 - 80kgs/ha)

**Cutting Height:** Down to 3mm

### **Breeding to maximise Fusarium resistance**

Recent trials carried out by the STRI on behalf of Germinal suggest that over-seeding golf greens with browntop bentgrass cultivars such as AberRegal might offer improved resistance against microdochium patch disease, better known as Fusarium patch disease.

"We've used a selection of Breeding trials at the Institute of Biological, Environmental and Rural different bentgrasses in the past Sciences (IBERS) in Aberystwyth and have found AberRoyal to be suggested that AberRegal gives above the best in terms of germination average resistance to Fusarium. The reliability. Other varieties may be aim of the STRI trial was therefore cheaper, but in my mind, if we to examine the susceptibility and want top quality greens, we need resistance of eight browntop bentgrass cultivars to Fusarium under a close to use top quality cultivars." mowing regime. The trials showed that AberRegal offers above average resistance to Fusarium and can Turnhouse Golf Club, Edinburgh therefore increase the effectiveness of,

and/or reduce the requirement for a full programme of fungicide applications.

A good percentage of bentgrasses such as AberRegal will therefore provide a firebreak between areas of Poa annua, thereby preventing patches of infection from joining together.

#### Aber Bentgrasses:

- Exclusive to Germinal
- Bred at IBERS
- UK bred for UK conditions
- Maximum Fusarium resistance

FISHER











Overseeding golf greens with a high quality

bentorass can increase disease resistance.

Getting the most from overseeding with bentgrasses

Overseeding with bentgrass cultivars such as AberRoyal and AberRegal is essential to halting the spread of annual meadow grass thus improving the visual appearance and disease resistance of hardworking golf greens. With Browntop, Creeping and Velvet bentgrasses to choose from, Germinal has one of the most extensive bentgrass portfolios on the market.

To maximise the benefit that these varieties deliver, follow these simple guidelines when planning next season's overseeding regime:

#### 1. Planning

#### Set enough time aside for your overseeding work to be carried out properly and thoroughly. Realistically evaluate what you want to achieve and draw up a schedule of how to get there. Included in this schedule should be an ongoing and comprehensive appraisal of how the bentgrass performs after it has been introduced.

#### 2. Timing

Throw away the general rule of thumb for overseeding: that it is best carried out in early Autumn. Overseeding can work well whenever the soil temperature is favourable - the minimum soil temperature for bentgrass germination is 10°C with the optimum range being 16-22°C. This range of temperatures typically means that overseeding work in the UK should be carried out between April and September, although in some areas and in some years this season will be extended. Where a comprehensive and efficient irrigation system is in place, it is better to work at the upper end of the optimum soil and air temperature range as this will give better seed establishment

and early stage growth. Alternatively, seeding in advance of warm weather or moisture allows you to utilise a potentially quieter time and then wait for germination.

#### 3. Frequency

Closely allied to timing is the question of frequency. We all know that sometimes, following a renovation, the planets line up and the weather works in our favour to produce a fantastic result. With that in mind, it can be beneficial to hedge your bets and try to overseed twice or maybe three times in the season. This does not necessarily mean buying twice as much seed: for instance, if you only have the budget to overseed your greens once with pure bentgrasses at 5g/m<sup>2</sup>, you could split that seed and do two light overseedings, each at 2.5g/m<sup>2</sup>. One of these treatments could be done early in the season, from late March to early April. As long as this first treatment is followed by a spell of mild weather, the results can be very good and can restore the population of desirable grasses in a green right at the beginning of a busy playing season.

Overseeding more than once does not therefore mean you have to commit to a potentially disruptive full renovation on each occasion: as long as a good root zone is available for new seeds to be sown into, it is feasible to stitch new seed into an established green via linear grooving or even after a light barrel rolling.



#### Ensuring good seed-to-soil contact is the key to successful overseeding.

#### 4. Preparation

the grasses on your green. This completed, - or at least recognised - you are able to proceed with the preparation.

#### 5. Application: ensure good seed soil contact

There is no right or wrong way to create the correct environment for germination. Broadcasting or drop seeding into linear grooves, hollow cores or tine holes can all work, and of course there are many good seed drills available.

The most important thing is to ensure that the seed has good contact with the soil and is sown at the correct depth (not too deeply) and that it remains adequately and consistently moist.

A seed only has a small store of energy for the emerging plant to use during the germination period. The coleoptile therefore needs to be able to push through the soil surface as quickly as possible so that the first leaf can emerge and begin photosynthesising. The seedling can then start to process its own energy and will be much more able to establish itself strongly. The correct depth to sow bentgrass to is between 2-5mm deep. If overseeding takes place following surface disruption – such as hollow coring – it is essential that cores are top-dressed to within 2-5mm of the surface before either topdressing or broadcasting seed and then applying a light top dressing of between 2-5mm.

Evaluate thatch levels, irrigation coverage, wear patterns, drip lines, tree roots and every other possible biotic cause for poor performance of

#### 6. Watering

Assuming all the points above have been achieved, germination can take as little as seven days although 14-21 days is more likely. During this period irrigation is really the only controllable resource you have. Ideally the surface should be permanently damp and as soon as the surface feels dry and no material particles stick to your hand, the surface should be covered with a light sprinkling of water.

#### 7. Establishment

When seedlings start to appear and the sward is forming, applications of water should become less frequent but heavier. The sward should be allowed to dry between applications in order to prevent damping off.

With regards to first cut, it is an advantage to raise the height of cut. In an ideal world, the cut height would increase up to 6mm. However, if commitments to play mean the most you can get away with is an increase of 1mm from your current mowing height (e.g. an increase from a summer mowing height of 3.5mm up to 4.5mm) for a period of a week, this would be the next best scenario.

Most often, successful overseeding is thwarted by poor survival rates of new seedlings rather than poor germination. You can be confident that any seed lot you purchase from a reputable source will adhere to minimum germination rates. The important thing is to consider the establishing seedlings within the sward during every operation you undertake. Aggressive management of the sward should be avoided while seedlings are becoming established: sensible grooming of the sward such as brushing and light rolling - and only light aeration if required should be the only management techniques used while the root systems of the new seedlings are becoming established.

#### **Golf mixtures**

## **Golf wildflower mixtures**

We have seen an increasing demand in recent years for high quality wild flora mixtures to complement established and more contemporary golf courses. As a result, we have designed three new blends, each of which is tailored to a specific set of environmental challenges and designed to create a definitive wild flower habitat.



"Germinal's Woodland Edge mix gives us a colourful display of flowers throughout the growing season. It's so easy to manage that we're going to extend the wildflowers next year and also plant strategic areas around the course to add colour along the fairways and around the tees and greens."

Paul Walker Head Greenkeeper Wigan Golf Club

#### **Fairway Meadow**

The new Fairway Meadow mixture is suitable for a range of soil types and growing aspects, and provides a meadow habitat for 365 days a year with flowers in bloom from April to September. It contains a variety of UK native annual and perennial species. and provides an ideal food source and habitat for bees and butterflies. It is perfect for boosting diversity and colour on appropriate parts of any parkland golf course and a good way of adding interest to the course for golfers.

#### **Links Habitat**

The new Links Habitat seed mixture contains a selection of UK native perennial wild flower species which are synonymous with sandy links soils and which can increase biodiversity to provide an all year round habitat and food source for bees and butterflies.

#### Woodland Edge

The Woodland Edge Wildflowers mixture creates a year round meadow habitat with flowers providing added colour from April through until September. It contains a wide variety of UK native annual and perennial species, provides a food source and habitat for bees and butterflies and is a great way of boosting diversity and adding colour to shaded parts and marginal areas of any parkland golf course.

### Fairway Meadow

#### Mixture breakdown:

FESTUCA longifolia Hard Fescue 20% FESTUCA ovina Sheep's Fescue 20% FESTUCA RUBRA litoralis Slender Creeping Red Fescue 20% CYNOSURUS cristatus Crested Dogstail 10%

ANTHOXANTHUM odoratum Sweet Vernal 5%

PHLEUM bertolonii Small Leaved Timothy 5% AGROSTEMMA githago

Corn Cockle 4% LEUCANTHEMUM vulgare Oxeye Daisy 2%

ANTHEMIS arvensis Corn Chamomile 1.5% CENTAUREA cyanus Cornflower 1.5%

CHRYSANTHEMUM segetum Corn Marigold 1.5%

PAPAVER rhoeas Corn Poppy 1.5% RANUNCULUS acris

Meadow Buttercup 1.5% SANGUISORBA minor Salad Burnet 1.3%

CENTAUREA nigra Common Knapweed 1% MELILOTUS alba

PLANTAGO lanceolata Ribwort Plantain 1%

DIGITALIS purpurea Foxglove 0.8% PRUNELLA vulgaris Self Heal 0.4% SILENE alba White Campion 0.4% SILENE diocia Red Campion 0.4% LOTUS corniculatus Birdsfoot Trefoil 0.2%

Sowing Rate: 5q/m<sup>2</sup>

### **Links Habitat**

#### Mixture breakdown:

FESTUCA ovina Sheep's Fescue 50% FESTUCA RUBRA litoralis Slender Creeping Red Fescue 15%

RUMEX acetosa Common Sorrel 5.9% ANTHOXANTHUM odoratum

Sweet Vernal Grass 5% ARRHENATHERUM elatius

Tall Oat Grass 5% CALLUNA vulgaris Heather 5%

DIGITALIS purpurea Foxglove 5%

DESCHAMPSIA caespitosa Tufted Hair Grass 2.5%

DESCHAMPSIA flexuosa Wavy Hair Grass 2.5%

GALIUM saxatile Heath Bedstraw 2% CONOPODIUM majus

Pignut 1% SUCCISA pratensis Devilsbit Scabious 1%

POTENTILLA erecta Tormential 0.05%

PRIMULA vulgaris Primrose 0.05%

Sowing Rate: 5g/m<sup>2</sup>

### Woodland Edge

#### Mixture breakdown:

FESTUCA arundinacea Tall Fescue 25%

FESTUCA RUBRA SSP litoralis Slender Creeping Red Fescue 25% CYNOSURUS cristatus Crested Dogstail 15% FESTUCA RUBRA rubra Strong Creeping Red Fescue 10%

POA nemoralis Wood Meadow Grass 5%

MELILOTUS alba White Melilot 3% AGROSTEMMA githago

Corncockle 2.3% GEUM urbanum

Wood Avens 2% SILENE dioca

Red Campion 2% CHRYSANTHEMUM segetum Corn Marigold 1%

FILIPENDULA ulmaria Meadow Sweet 1%

GALIUM mollugo Hedge Bedstraw 1%

HYPERICUM perforatum Perforated St John's Wort 1%

IRIS pseudacorus Iris 1%

SILENE alba White Campion1% TORILLIS japonica

Hedge Parsley (Upright) 1%

ALLIARA petiolata Garlic Mustard 0.8% ALLIUM ursinum

Ransoms 0.5% HYACINTHOIDES non scripta Bluebell 0.5%

LYCHNIS flos-cuculi Ragged Robin 0.5% TEUCRIUM scorodonia

Wood Sage 0.5% DIGITALIS purpurea

Foxglove 0.4% CLEMATIS vitalba Traveller's Joy 0.3%

STACHYS officinalis Betony 0.2%

**Sowing Rate:** 5g/m<sup>2</sup>



Designed specifically for the professional user, Grade 'A' sport mixtures always include vigorous lots of the most highly rated cultivars available. The result is a dependable range of mixtures that consistently deliver results time and time again.

### **A1** Professional Bowls

40% JOANNA (Chewings Fescue) 40% DORIANNA (Chewings Fescue) 10% ABERROYAL (Browntop Bent)

**10% ABERREGAL** (Browntop Bent)

- High shoot density High resistance to red thread
- Withstands close mowing
- Very fine texture

### Sowing Rate:

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** 

Fertiliser **Recommendation:** In the seedbed – Agrosil® LR Once established – Floranid Twin Eagle Master

\* The highest rated variety for summer sports in the 2018 BSPB list.

## Grade 'A' sport mixtures

### **A5** Cricket, Tennis and Tees

50% ESCAPADE (Perennial Ryegrass) 50% CABRIO\* (Ultra Fine

Perennial Ryegrass)

- Quick to establish
- Hard wearing
- High density ground cover
- Superior rooting

the highest rated variety for summer sports in the 2017 BSPB list.

Sowing Rate:

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

Cutting Height:

### **A7** 'Olympic Quality' Sports Ground

35% PROMOTOR (Perennial Ryegrass)

30% CALICO (Perennial Ryegrass)

20% ABERCHARM (Slender Creeping Red Fescue)

15% TETRIS (Smooth-Stalked Meadow Grass)

- Dark green in summer and winter
- Rapid recovery from wear
- High shoot density drought tolerant sward
- Excellent Red Thread

### Sowing Rate:

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** 

Shade Option: For enhanced shade and wear tolerance, a 2.5%

#### Fertiliser **Recommendation:**

### A20 Seed & Feed The complete grow in package - turn your pitch round in ten weeks!

Our new-for-2018 sports pitch seed and fertiliser grow in package contains everything you need to create a well-established, viable and sustainable playing surface:

- 1. Germinal's A20 Premier Ryesport seed mixture
- 2. All the necessary fertiliser products to suit your soil type
- 3. F.A.C.T.S.\* approved nutrient programme

(\* Fertiliser Advisers Certification and Training Scheme)

#### A20 Premier Ryesport

The seed element of A20 Seed & Feed provides a combination of four top-performing species of perennial ryegrasses which deliver excellent fineness of leaf, a good cleanness of cut and a dense sward which is exceptionally easy to mow into stripes. The seed mixture - A20 Premier Ryesport - also offers good levels of disease resistance and fantastic post-winter recovery. The seed mixture can be customised, enabling you to create your own bespoke specification.

Time of application**	Product	Rate of application
Soil amendment prior to renovation	Agrosil (see page 54)	50 g/m²
Pre-seed fertiliser (at time of seeding)	Fertilis Swing (see page 56)	35 g/m²
Seeding	A20 Premier Ryesport (see page 22)	50 g/m <sup>2</sup>
10-12 days after seeding	Basfoliar Complete (see page 57)	60 litres/pitch
4 days later	Easygreen mini 12 (see page 53)	35 g/m²
10 days later	Basfoliar Complete (see page 57)	60 litres/pitch
4 days later	Floranid Twin Turf (see page 49)	35 g/m²
10 days later	Vitanica RZ (see page 57)	20 litres/pitch
IB: All dates are approximate and will depend on how nd based pitches		
Time of application**	Product	Rate of application
Soil amendment prior to renovation	Agrosil (see page 54)	50 g/m²
Pre-seed fertiliser (at time of seeding)	Fertilis Swing (see page 56)	35 g/m²
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4 days later	Floranid Twin Turf (see page 49)	35 g/m²
10 days later	Vitanica RZ (see page 57)	20 litres/pitch
	Easygreen mini 12 (see page 53)	35 g/m²
10 days later		
		A. A
B: All dates are approximate and will depend on how		
B: All dates are approximate and will depend on how rk and local community pitches		Rate of application
B: All dates are approximate and will depend on how rk and local community pitches Time of application**	the new seedlings develop.	Rate of application 10 bags/pitch
10 days later IB: All dates are approximate and will depend on how <b>rk and local community pitches</b> Time of application** 3rd week of April Seeding	the new seedlings develop.  Product	

#### More information

For more information about A20 Seed & Feed, or to discuss fertiliser options for your sports facility, please contact us to speak to one of our F.A.C.T.S. gualified technical sales representatives. With an extensive range of mini granular and liquid feeds, plus a wide selection of specialist soil conditioners to choose from, we can help you find the perfect feeding regime for your pitch.

### **A8** Pitch Renovator

#### 30% PROMOTOR (Perennial Ryegrass)

**30% CADIX** (Perennial Ryegrass)

20% CALICO (Perennial Ryegrass)

20% CORAIL (Strong Creeping Red Fescue)

#### For rapid repair

- Wear tolerant
- Quick recovery from wear
- Contains proven cold tolerant cultivars

A8 produces a high density sward with excellent binding capacity and recovery from wear. This mixture also provides dark green winter and summer colour with excellent resistance to Red Thread disease.

#### Sowing Rate: 35g/m<sup>2</sup> (350kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** Down to 25mm

#### Shade Option:

For enhanced shade and wear tolerance, a 2.5% content of SUPREME Poa supina can be included.

#### Fertiliser

**Recommendation:** In the seedbed – Agrosil® LR Once established -Floranid Twin Turf (spring/ summer)

Floranid Twin Club (autumn) Kali Gazon (winter)

### **A9** General

## Outfield

40% CALICO (Perennial Ryegrass) 30% CORAIL

(Strong Creeping Red Fescue) 20% PROMOTOR

(Perennial Ryegrass) 10% TETRIS (Smooth-Stalked

Meadow Grass)

 Cost effective sports field mixture

 General purpose use Rapid establishment

sports field mixture that provides quick establishment and forms a resilient surface for outfields and local authority play areas. A9 is suitable for a wide range of soil types.

Sowing Rate: 35g/m<sup>2</sup> (350kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

Cuttina Height:

#### Down to 20mm

Kali Gazon (winter)

Fertiliser **Recommendation:** In the seedbed – Basatop Fair Once established -Floranid Twin Turf (spring/ summer) Floranid Twin Club (autumn)

### A14 Racecourse

### and Polo Grounds

40% CALICO (Perennial Ryegrass) 40% PROMOTOR (Perennial Ryegrass)

20% AGREEMENT (Perennial Ryegrass)

Quick divot repair

- Extremely hard wearing
- Dark green in winter and summer

#### A14 is suitable for

racecourses, polo grounds and training areas. It creates a sward that is hardwearing and recovers quickly after events.

Sowing Rate: 35g/m² (350kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** Down to 20mm

#### Fertiliser

**Recommendation:** In the seedbed - Agrosil® LR Once established -NovaTec N-Max or NovaTec premium



An all-round general purpose

#### Fertiliser Programme

For the fertiliser component of the A20 Seed & Feed package, you are able to select either a soil or sand based programme. A third nutrient programme, for park pitches and local community pitches, is also available.

All three of these programmes use the very best phasedrelease fertilisers to ensure that every penny you put into the pitch works hard and gets the results you expect.

### A20 Premier Ryesport

**10% EUGENIUS** (Perennial Ryegrass) 45% CALICO

(Perennial Ryegrass)

20% EUROSPORT (Perennial Ryegrass)

25% EUROCORDUS (Perennial Ryegrass)

- · High shoot density
- Dark green in winter and summer
- A combination of fineness of leaf and a good cleanness of cut make a sward that is exceptionally easy to mow stripes in
- Good disease resistance
- Good post winter recovery

Sowing Rate: 35q/m<sup>2</sup> - 100q/m<sup>2</sup>

**Overseeding Rate:** 20g/m<sup>2</sup> - 40g/m<sup>2</sup>

**Cutting Height:** Down to 25mm

#### Fertiliser

**Recommendation:** In the seedbed -Agrosil<sup>®</sup> LR, Fertilis Swing NK Once established -Fertilis Speed, Floranid Twin Turf, Floranid N31 (spring/ summer) Floranid Twin Club (autumn)

Kali Gazon (winter)

## A20

### Creeping Perennial Rvesport

**10% EUGENIUS** (Perennial Ryegrass) 40% CALICO

15% EUROSPORT (Perennial Ryegrass)

(Perennial Ryegrass) 20% ZURICH

(Creeping Perennial Ryegrass)

### 35g/m<sup>2</sup> - 100g/m<sup>2</sup>

**Overseeding Rate:** 20g/m<sup>2</sup> - 40g/m<sup>2</sup>

**Cutting Height:** 

#### **Recommendation:**

In the seedbed -Once established -Fertilis Speed, Floranid Twin Turf, Floranid N31 (spring/ summer) Floranid Twin Club (autumn)

## **Perennial Ryegrass**

The all NEW Zurich Creeping Perennial Ryegrass. Excellent wear tolerance and recovery due to creeping growth habit. Fine leaved variety that exhibits high resistance to insects and nematode attack due to high endophyte levels. Further details on page 23.





F.A.C.T.S. qualified

the coming year?

All special mixtures are

surcharge and a wait of

3-4 working days should

subject to a mixture

All cultivars subject

be expected.

to availability.

(see page 02 for further details)

Having chosen A20 Premier

Ryesport, why not let one of

up a fertiliser plan to help you

our qualified advisers write

gain the best performance

from your sward throughout

## A999

### Rescue

**50% A20 PREMIER** RYESPORT

20% AGREEMENT PERENNIAL RYEGRASS

### **30% ANNUAL RYEGRASS**

- Rapid germination Germinates at lower
- temperatures
- · Aids establishment of other components
- Rapid recovery
- Includes Agreement, a proven low temperature germinating Perennial ryegrass

A999 combines the outstanding proven performance of A20, with an annual ryegrass that provides germination at lower temperatures outside the traditional growing periods. The annual ryegrass produces rapid cover to green up bare areas, for improved visual effect, as well as act as a nurse crop for the other A20 components to establish.

#### Sowing Rate:

**Overseeding Rate:** 30g/m<sup>2</sup> (300kgs/ha)

Cutting Height: Down to 35mm

#### Fertiliser Recommendation:

For winter feeding consider Floranid Twin Club, Kali Gazon and Liquid Chelated Iron

### A31 Supreme Tees

85% TETRIS (Smooth-Stalked Meadow Grass)

15% SUPREME (Poa supina)

- Unrivalled shade tolerance
- Disease resistance Uniform neat cleanness
- of cut • Exceptionally hardwearing
- with good recovery

The perfect mixture for shaded golf tees or any extremely shaded areas on golf courses or in sports stadia. Includes SUPREME Poa supina; this mixture is extremely shade tolerant and offers exceptional wear tolerance once established. SUPREME is a new improved variety Poa supina with a darker colour than older varieties. Being 100% Poa species means the mixture offers above average disease resistance and an unrivalled cleanness of cut, giving a uniform hardwearing and disease free sward even in the most shady areas.

45g/m<sup>2</sup> (450kgs/ha)

Sowing Rate: 10-15g/m<sup>2</sup> (100-150kg/ha)

Cutting Height: Down to 3mm

#### Fertiliser **Recommendation:**

In the seedbed -Agrosil<sup>®</sup> LR Once established -

Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)

FOR

A20

**SUPREME** 

Poa Supina

Don't be afraid of the dark!!!

Gain an advantage for the

shaded parts of your pitch

Poa supina is proven to

ryegrass. In the past,

varieties of Poa supinas'

than Perennial ryegrass,

have been lighter in colour

but SUPREME Poa supina

and blends in perfectly with

modern Perennial ryegrass

is much darker in colour

varieties. An inclusion of

proliferate in shaded areas

and offers a wear tolerance

greater than that of Perennial

Sowing Rate:

Down to 25mm

### Fertiliser



Agrosil<sup>®</sup> LR, Fertilis Swing NK Kali Gazon (winter)

**Zurich Creeping** 



#### 2.5% Supreme Poa supina in 'Your A20' mixture will increase the ability of your sward to recover on the shaded parts of your pitch.



### **A30 Rapid Sports Renovator Plus**

40% CALICO (Perennial Ryegrass)

40% PROMOTOR (Perennial Ryegrass)

20% ZURICH (Creeping Perennial Ryegrass)



- Hardwearing
- Cost effective
- Offering good recovery
- Includes Zurich creeping perennial ryegrass for added recovery

A30 is a perfect mixture for sports contractors looking for a high performance, hardwearing mixture suitable for winter pitches of varying standards from top division football and rugby through to municipal areas. The inclusion of Zurich ensures good recovery.

Sowing Rate: 35g/m<sup>2</sup> (350kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

Fertiliser **Recommendation:** In the seedbed -Agrosil<sup>®</sup> LR Once established -Floranid Twin Turf or Basatop Fair (spring/summer) Floranid Club (autumn) Kali Gazon (winter)

#### **Zurich Creeping Perennial Ryegrass**

Excellent wear tolerance and persistence due to creeping growth habit. A useful addition for pitches that are highly trafficked but not intensively managed such as school playing fields.





Zurich showing regenerative qualities in trials.

# What's in your bag of grass seed?

All too often we hear horror stories about landscape seeding projects which have failed to establish properly, or where the client has been left underwhelmed by a thin, patchy or unsightly sward. Luckily, the key to ensuring future projects don't fall foul of the same problem is simply a case of selecting clean, viable and high quality seed lots, sowing at the right time and in the right conditions, and providing adequate water and nutrients.

#### The fundamentals of seed quality

Irrespective of whether the landscape being seeded is a fine turf lawn, wildflower meadow, communal green area or any other newly sown habitat, the success or failure of a project will be dependent on the quality of the seed being used. Fundamentally there are three areas to focus on:

- 1. The quality of the seed variety selected
- 2. The purity of the seed lot
- 3. The viability or germination rate of the seed lot

Put simply, even a seed mixture containing the highest quality varieties will not perform if the seed itself is old and unable to germinate.

#### Seed purity and germination rates

Grass and wildflower seeds are sold by weight. As such, the cleaner the seed or the smaller the quantity of impurities such as weed seeds and stalks, the greater the purity of the contents of the bag will be.

A bag of top quality seed that meets HVS (Higher Voluntary Standard) purity will have a purity of approximately 96.5%<sup>†</sup>. At this level, a 20kg bag will only contain 19.3kg of seed, with the remaining 0.7kg made up of undesirable materials – a bit like buying a pint of watered down beer!

Germination is arguably a bigger factor. EU standards dictate that, depending on the species in question, seed must be at least 70-80% viable. At this level, only 14-16kg of seed from a 20kg bag will germinate reliably. Add 0.7kg of impurities and suddenly as little as 13.3kg, or 66.5% of the seed will stand any chance of growing.

Specifying a cheaper bag of seed is therefore a false economy as up to 33.5% of its content will not be fit for purpose.

In contrast, Germinal prides itself on selling only the best quality seed lots, with high purity scores and germination rates typically ranging from 90-95%, with the newest seed lots giving close to 98% germination. In fact, our Grade 'A' seed mixtures exceed all current industry standards, meaning more grass seed and less undesirable material. This means:

- Fewer seed drill blockages
   Improved sward uniformity
- Better germination
- Harder wearing swards
- Faster sward establishment
- Easier sward management
- d establishment Easier swal

It therefore makes sense to specify not only the most appropriate cultivars, but also to purchase from a reputable source which can guarantee the seed's viability.

#### **Quality cultivars**

As mentioned, the genetic merits of the cultivar chosen will also have a significant impact on the success or failure of a seeding project.

The British Society of Plant Breeders' (BSPB) turf grass seed booklet is the best source of information in terms of which cultivars are best suited to a specific purpose. This booklet summarises the results of extensive independent trials for a range of amenity grass seeds, from winter sports pitches and summer lawns, to intensively managed and close mown grasses, and ranks each variety according to several key traits and characteristics.

As an example, Cabrio Ultra-Fine Ryegrass is ranked at the top of the BSPB's list for perennial ryegrasses for use in lawns, landscaping, summer sports and turf trials. Like all perennial ryegrasses, Cabrio is hardwearing. However, unlike most other varieties, Cabrio gives very slow rates of regrowth. This trait makes Cabrio much easier to maintain. This is why Cabrio is included in Germinal's A22 Low Maintenance mixture – other perennial ryegrasses simply can't achieve what Cabrio does.

Unfortunately, A22 is our most plagiarised landscape mixture, and all too often we see a lesser variety of perennial ryegrass being used: these seed mixtures might be similar in terms of the species being used, but that is where the similarity ends. By using a mixture with a sub-standard variety in place of Cabrio, you will unwittingly negate the whole reason for selecting A22 in the first place, as it will not be low maintenance.

So, next time you're specifying a low maintenance landscape mixture, make sure it's Germinal A22: that way you'll know you're getting a reliable and proven seed mixture which will deliver the results expected by even the hardest to please clients.

Standard seed mixture (meets EU minimum standard)	Germinal seed mixture (meets or exceeds Higher Voluntary Standard)
Less uniform germination	Better germination and improved sward uniformity
More contaminants per bag	More viable seed per bag
Weed seeds create increased workload	Laboratory tested for germination and purity
Chaff and stalks cause seed drill block-ages	In-house cleaning removes undesirable material
70-80% seed germination	98% seed germination
70 00% seed germination	50 % Seed germination

<sup>†</sup> Assuming a 50:50% mixture of perennial ryegrass and strong creeping red fescue.





Designed specifically for the professional user, Grade 'A' landscaping mixtures always include vigorous lots of the most highly rated cultivars available. The result is a dependable range of mixtures that consistently deliver results time and time again.

### A2 Quality Lawns

25% JOANNA (Chewings Fescue) 45% CORAIL (Strong Creeping Red Fescue)

25% ABERCHARM (Slender Creeping Red Fescue)

5% ABERROYAL (Browntop Bent)

- Non ryegrass ornamental landscaping
- Attractive fine texture
- Withstands close mowing • Suits a wide range of soil types

### Sowing Rate:

**Overseeding Rate:** 

**Cutting Height:** 

#### Fertiliser Recommendation:



Zurich Creeping perennial ryegrass exhibiting pseudo stolons

## Grade 'A' landscaping mixtures

### **A3 Embankments** and Drought

30% ZURICH (Creeping Perennial Ryegrass)



(Strong Creeping Red Fescue)

10% JOANNA (Chewings Fescue)

25% MUSTANG 4 (Tall Fescue)

2.5% ABERREGAL (Browntop Bent)

2.5% ABERROYAL (Browntop Bent)

- Stabilises loose soils
- Quicker to establish than other embankment mixtures
- Can be used with reinforced matting for very steep slopes
- Drought tolerant
- Suits a range of soil types

advanced creeping type provides the mixture with the speed of establishment of overall ability to creep and stabilize banks. This

### Sowing Rate:

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting Height:** 

Fertiliser **Recommendation:** 

### **A4**

### Low Maintenance Areas

65% CORAIL (Strong Creeping Red Fescue)

15% JOANNA (Chewings Fescue)

15% ABERFLEECE (Sheeps Fescue)

5% ABERROYAL (Browntop Bent)

- Non ryegrass low maintenance landscaping
- Natural parkland appearance
- Tolerates poor soil types
- Low nutrient use

#### Sowing Rate:

35g/m<sup>2</sup> (350kgs/ha) or 5-10g/m<sup>2</sup> (50-100kg/ha when combining wild flowers)

**Overseeding Rate:** 

Cutting Height:

Fertiliser Recommendation:



Left uncut

### **A6** Supreme Shade

#### 50% CORAIL (Strong Creeping Red Fescue)

25% JOANNA (Chewings Fescue)

**15% TETRIS** (Smooth-Stalked Meadow Grass)

7.5% ABERROYAL (Browntop Bent)

2.5% SUPREME (Poa Supina)

#### Tolerates shade

#### Tolerates drought

 Maintains good ground cover

This mixture now benefits from the inclusion of the shade tolerant SUPREME Poa supina which also tolerates wear. These properties make A6 ideal for problem shade areas under trees and building surrounds. Use a pre-seed fertiliser prior to sowing to provide good nutrient levels and relieve compaction to aid establishment.

Sowing Rate: 40g/m<sup>2</sup> (400kgs/ha)

**Overseeding Rate:** 25g/m<sup>2</sup> (250kgs/ha) Cutting Height:

Between 25-50mm

#### Fertiliser **Recommendation:**

In the seedbed – Agrosil® LR Once established -Floranid Twin Permanent

## A15

### Reclamation Landfill

35% CORAIL (Strong Creeping **Red Fescue**)

30% ABERNILE (Perennial Ryegrass) **15% SOUTHLANDS** 

(Crested Dogstail) 10% JOANNA

(Chewings Fescue) 5% HIGHLAND

(Browntop Bent) 2.5% ABERACE

(Miniature White Clover) 2.5% TYEE (Creeping Bent)

#### Rapid establishment

- · Performs on variable soil types
- Tolerates farm
- stock grazing
- · Limits soil erosion and contaminant leaching

A15 has a proven history of performing on a variety of reclamation schemes from colliery spoil tips to landfill sites. This mixture combines ingredients that provide rapid establishment along with tolerance to difficult growing conditions.

#### Sowing Rate:

25g/m<sup>2</sup> (250kgs/ha) **Overseeding Rate:** 

15g/m<sup>2</sup> (150kgs/ha)

Cutting Height: Between 25-75mm

#### Fertiliser **Recommendation:**

In the seedbed – Agrosil® LR Once established -NovaTec N-Max or NovaTec premium

### A16 Reclamation **Country Parks**

#### 40% CORAIL (Strong Creeping Red Fescue)

20% JOANNA (Chewings Fescue)

**15% SOUTHLANDS** (Crested Dogstail)

**15% ABERFLEECE** (Sheeps Fescue)

5% ABERROYAL

(Browntop Bent) 2.5% ABERACE (Miniature White Clover)

2.5% ABERREGAL (Browntop Bent)

- Natural grassland
- appearance • Performs on variable
- soil types Low maintenance
- Drought resistant

A16 is a low maintenance mixture for reclamation and general landscaping schemes which are based on poor soil types and where a natural appearance is sought.

#### Sowing Rate: 25g/m<sup>2</sup> (250kgs/ha)

**Overseeding Rate:** 

#### 15g/m<sup>2</sup> (150kgs/ha) Cutting Height:

Between 25-75mm

#### Fertiliser **Recommendation:** In the seedbed – Agrosil® LR Once established -NovaTec N-Max or NovaTec premium

Legume and Clover 25% COMMON VETCH (Vicia sativa)

A17

15% LUCERNE

(Medicago sativa) 15% BIRDSFOOT TREFOIL (Lotus corniculatus)

15% SAINFOIN (Onobrychis vicifolia)

15% WHITE CLOVER (Trifolium repens)

15% RED CLOVER (Trifolium pretense)

- Suitable as a green manure
- Improves soil structure and fertility
- Visually attractive
- Attracts insects and birds

A17 is a mixture designed for seeding onto poor combination with one of our nitrogen into the soil, helping also be ploughed back in to

other mixtures

**Recommendation:** In the seedbed - Basatop Fair

Once established -No Requirement



### A18 **Road Verge & Embankments**

40% CORAIL (Strong Creeping **Red Fescue**) 10% ZURICH (Creeping Perennial Ryegrass)

FOR

15% CADIX (Perennial Ryegrass) 10% JOANNA (Chewings Fescue)

12.5% EVORA (Smooth-stalked Meadow Grass) 5% ABERREGAL

(Browntop Bent) 2.5% ABERACE (Miniature White Clover) 5% ABERROYAL

(Browntop Bent)

- Rapid establishment
- · Performs on variable soil types
- Low maintenance • Suitable for all D.O.T.
- specifications Added Zurich Creeping perennial ryegrass ensure ability to regenerate from wear in unmanaged situations

A18 is a proven specification for applications such as highway verges, embankments and roundabouts. The mixture establishes quickly on a range of soil types and provides rapid ground cover to prevent gully erosion and loss of soil onto road surfaces.

#### Sowing Rate:

35g/m<sup>2</sup> (350kgs/ha) **Overseeding Rate:** 25g/m<sup>2</sup> (250kgs/ha)

Cutting Height: Between 25-50mm

#### Fertiliser

**Recommendation:** In the seedbed - Agrosil® LR Once established -No requirement



2.5g/m<sup>2</sup> (25kgs/ha)

**Cutting Height:** As required as part of

Fertiliser

### A19 **All Purpose** Landscaping

35% CORAIL (Strong Creeping Red Fescue)

**10% SAMANTA** (Slender Creeping **Red Fescue**)

25% ZURICH (Creeping Perennial Ryegrass)



25% CALICO (Perennial Ryegrass)

5% ABERROYAL (Browntop Bent)

- All purpose mixture
- Rapid establishment
- · Forms a hard wearing, dense attractive lawn
- Suits a wide range of soil types
- Added Zurich Creeping perennial ryegrass ensures ability to regenerate from wear in unmanaged situations

A19 is a universal mixture suitable for domestic lawns and commercial landscaping projects. It produces a fine even textured around cover which maintains good all year greenness

Sowing Rate: 50g/m<sup>2</sup> (500kgs/ha)

Overseeding Rate: 20g/m<sup>2</sup> (200kgs/ha)

Cutting Height: Down to 20mm

#### Fertiliser

**Recommendation:** In the seedbed – Agrosil® LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)

### A21 **Saline Coastal** & Road Verges

**40% ABERCHARM** (Slender Creeping Red Fescue)

30% CALICO (Perennial Ryegrass)

10% JOANNA (Chewings Fescue)

15% MUSTANG 4 (Tall Fescue)

5% 007 DSB (Creeping Bent)

- Suitable for salt sprayed areas
- Tolerates drought
- Stabilises sandy soils

A21 is suitable for coastal reclamation and road verges where soil salinity is greater than normal. Initial rapid establishment is provided from the perennial ryegrass content with persistency from the rest of the species, which tolerate poor fertility and drought conditions.

Sowing Rate: 40g/m<sup>2</sup> (400kgs/ha)

Overseeding Rate: 25g/m<sup>2</sup> (250kgs/ha)

Cutting Height: Between 25 - 50mm

Fertiliser **Recommendation:** In the seedbed -Agrosil® LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)

## **AberSustain**

### A22 Low Maintenance

20% CABRIO\* (Ultra Fine Perennial Ryegrass)

40% PROMOTOR (Perennial Ryegrass)

35% MIRADOR (Slender Creeping Red Fescue)

5% ABERROYAL (Browntop Bent)

- Hardwearing and low maintenance
- Unique amongst low maintenance mixtures
- Lower carbon footprint Reduce labour input
- to maintain Excellent ground cover
- Suppresses weeds

A22 is a unique perennial ryegrass-based, low maintenance mixture. CABRIO is rated highly for slow regrowth after mowing. Most traditional low maintenance mixtures are fescue based and consequently have limited wear tolerance. A22 offers the best of both worlds, a low maintenance sward that is very hardwearing.

#### Sowing Rate: 50g/m<sup>2</sup> (500kgs/ha)

**Overseeding Rate:** 20g/m<sup>2</sup> (200kgs/ha)

Cutting Height: Between 20 - 50mm

#### Fertiliser **Recommendation:**

In the seedbed -Agrosil<sup>®</sup> LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)

### A24

### Wear & Tear

35% MIRADOR (Slender Creeping **Red Fescue)** 10% JOANNA

(Chewings Fescue) 20% ZURICH

(Creeping Perennial Ryegrass) **30% ESCAPADE** 

(Perennial Ryegrass) 2.5% ABERROYAL (Browntop Bent)

2.5% ABERREGAL (Browntop Bent)

#### Very hard wearing

- Multi-specification use
- Suits a wide range of

soil types

A24 is a universal mixture where extra durability is required from lawns and commercial landscaping projects. It produces an even textured ground cover which can be mown closely if a more formal appearance is required.

#### Sowing Rate: 50g/m<sup>2</sup> (500kgs/ha)

**Overseeding Rate:** 

20g/m<sup>2</sup> (200kgs/ha) **Cutting Height:** 

#### Down to 10mm Fertiliser **Recommendation:**

In the seedbed -Agrosil<sup>®</sup> LR Once established -Floranid Twin Permanent (spring/summer) Floranid Twin Club (autumn)

### A25 **Agricultural**

## Reinstatement

20.5% ABERCHOICE (Perennial Ryegrass) 20% ABERDART

(Perennial Ryegrass)

20% ABERSTAR (Perennial Ryegrass)

20% ABERECHO (Perennial Ryegrass)

6.5% PRESTO (Timothy) 6.5% ABERACE (Miniature White Clover)

- Typical long-term grazing
- mixture Suitable for landfill
- capping · Reinstatement of farm
- land pastures Can be cut for hav

A25 is ideal for landscape contractors who are required to repair farmland damaged through pipeline projects, cabling or general vehicle access. The mixture contains up to date varieties which are compatible with modern farming. It can be grazed by all types of farm stock and can also be conserved for hay.

### Sowing Rate:

8g/m² (80kgs/ha) Cutting Height:

#### Graze or cut as required Fertiliser **Recommendation:**

In the seedbed -Basatop Fair Once established -NovaTec N-Max

## So-Green

A26

60% GALLEON (Perennial Ryegrass)

35% ABERCHARM (Slender Creeping Red Fescue)

2.5% ABERROYAL (Browntop Bent)

2.5% ABERREGAL (Browntop Bent)

- All year round dark green colour
- Contains world's only Stay-Green grass
- Excellent ground cover Outstanding visual
- appearance

A26 is the ultimate Stay-Green mixture containing Galleon perennial ryegrass which has the ability to maintain a dark green colour even during winter. This development in breeding has not been replicated by any other seed company and therefore is unique to Germinal.

Sowing Rate: 35g/m2 (350kgs/ha)

Overseeding Rate:

20g/m<sup>2</sup> (200kgs/ha)

Cutting Height: Down to 25mm

Fertiliser **Recommendation:** In the seedbed -

Agrosil<sup>®</sup> LR Once established -

Floranid Twin Permanent

#### **AberAce White Clover**

AberAce is the smallest leaved white clover<sup>†</sup> and this makes it perfect for blending into amenity swards so that the benefits of clover can be utilised without the plant dominating the grasses. AberAce has a very high stolon density, this allows it to fix on average 150 kg N/ha, eliminating the requirement for additional fertilisers in amenity areas with low to medium intensity usage. White clover root systems improve soil structure and can help to overcome problems of soil compaction.

Studies at IBERS have demonstrated improved soil structure resulting from a white clover component in the sward:

- White clover has been shown to significantly decrease the bulk density of soils and increase porosity
- General movement of nutrients was improved, making them more available to plants and subsequently improving plant health

Sowing rate: 40g/m<sup>2</sup> (400kgs/ha)

**Overseeding rate:** 20g/m<sup>2</sup> (200kgs/ha)

**Cutting height:** Down to 30mm

<sup>†</sup> NIAB Recommended Grass and Clover Lists 2012



Improved soil structure is seen in the soil core with a higher clover content.

The mixture is unique because all the varieties used are UK bred varieties from the IBERS breeding programme, UK bred for UK conditions. All varieties are chosen to complement each other perfectly and create a mixture that is environmentally and economically sustainable, perfect for the time in which we now live.

20% ABERSTAR (Perennial Ryegrass)

45% ABERFLEECE (Sheeps Fescue) 20% ABERCHARM

**10% ABERROYAL** (Browntop Bent) **5% ABERACE** (White Clover)

#### **AberStar Perennial Ryegrass**

The inclusion of AberStar agricultural perennial ryegrass makes the mixture suitable for low intensity grazing when it is used for solar park or land reclamation sites.

#### **AberFleece Sheeps Fescue**

The foundation of the mixture, AberFleece exhibits very short vegetative growth and will not typically exceed 140mm when left un-mown. A dark green colour is exhibited through the year, and coupled with inherent drought and low nutrient tolerance and fineness of leaf, gives the mixture a strong base but fine appearance.

#### AberCharm Slender Creeping Red Fescue

AberCharm produces a very dense compact sward with exceptional winter and summer greenness, which exceeded those of all other varieties in trials. Inherently fine leaved, drought tolerant and disease resistant, this stoloniferous grass supports the attributes of AberFleece and binds the mixture together.

#### **AberRoyal Browntop Bent**

AberRoyal offers exceptional shoot density to assist AberCharm to bind the sward together, a very fine leaf and exceptional winter and summer greenness further ensure the sward has a good visual appearance.

\* The highest rated variety for summer sports in the 2017 BSPB list

### AberSustain is a self sustaining mixture perfect for open parkland areas, domestic lawns, road verges and for green roofs and solar parks.

- (Slender Creeping Red Fescue)
- Fixes its own nitrogen
- UK bred cultivars for UK conditions
- Low maintenance
- Drought resistance
- · Low nutrient tolerant
- Clover flowers benefit bees and pollinators
- Binds soil
- · Suitable for green roofs

## Wild flora mixtures

Protecting our national wild flora heritage is important. The extensive range of wild flora mixtures and native grasses from Germinal features many with native UK provenance and includes selected grasses to complement UK natural habitats.

Our mixtures are created to meet customer needs for products that are appropriate to all kinds of different conditions and so, as an option, we have added two mixtures that do include non-native species. WF17 Cultivated Annuals give a stunning display of annuals throughout the summer where maximum visual impact is required, and WF19 Pollinators' Paradise which offers maximum benefit to bees and other pollinators.



All our mixtures which contain flowers have been deemed 'Perfect for Pollinators' by the Royal Horticultural Society (RHS).



## Wild flora mixtures

Germinal offers two wild flower seed ranges - Regional Environmental (RE) and General Landscaping Wild Flora (WF).

### Regional **Environmental** (RE) Mixtures

To help you select the right plants for any given project, mixtures are categorised in regional groups, using grid references based on the National Vegetation Classification Survey. This helps preserve the heritage of our UK natural grass and flora habitats and recognises specific communities. All (RE) mixtures are formulated by seed number and not by weight giving a balanced content of all species.

### **General Landscaping** Wild Flora (WF) Mixtures

The General Landscaping Wild Flora (WF) range is based on seed mixtures for different soil types, with 100% wild flower and ready-to-sow wild flower/grass blends, suitable for any areas in the UK. WF is ideal for producing attractive meadows in either urban areas or the countryside.

#### **Specific Mixtures**

A wide range of special mixtures to suit specific site needs can also be formulated - talk to our advisers for more details.

#### **Choosing the right Wild Flora Seed Mixture**

If you know the type of soil, situation and what the wild flora area will be used for, pinpoint a suitable mixture using our quick reference product selector table, which lists the full range of Germinal's Wild Flora and Grass Mixtures. For advice on the most suitable mixture for your needs or for advice about a special formulation, please talk to our advisers.



#### Wild Flora Meadow Management

Mixtures containing perennial species only.

Autumn sown (First year)	
March	Cut to 4-7cm if there is sufficient material.
Мау	Cut to 4-7cm in early May.
September	Cut to 4cm after flowering. In all cases, remove the clippings.
Maintenance thereafter:	
March/April	Cut to 4-7cm to remove excess grass.
September/October	Cut to 4cm after flowering. In all cases, remove the clippings.
Spring sown (First year)	
6 weeks after sowing	Cut to 4-7cm if there is sufficient material.
Мау	Cut to 4-7cm if sufficient material (sward at 10cm or above).
September/October	Cut to 4cm. In all cases, remove the clippings.
Maintenance thereafter:	
March/April	Cut to 4-7cm to remove excess grass.
September/October	Cut to 4cm after flowering. In all cases, remove the clippings.

#### **Mixtures including Cornfield Annuals**

(e.g. WFG2, WFG11, WFG15, WFG18)

100% Cornfield Annual mixtures such as WF10 do not require maintenance.

The following maintenance schedule is for combined Annual and Perennial mixtures.

Autumn sown	
March/April	Cut to 7cm if required no later than the end of April.
September/October	Cut to 4-7cm to prevent grasses and annuals out- competing Perennial Species.
Maintenance thereafter:	
March/April	Cut to 4-7cm to remove excess grass.
September/October	Cut to 4cm after flowering. In all cases, remove the clippings.
Spring sown	
August – October	Cut to 4-7cm after flowering. (NB: a late spring sowing will result in later flowering)
Maintenance thereafter:	
March/April	Cut to 4-7cm to remove excess grass.
September/October	Cut to 4cm after flowering. In all cases, remove the clippings.

A 100% Cornfield Annual sowing will not last for more than one year. Reseeding must be done to give an annual display. After several years of reseeding, a seed bank will have built up in the soil and simple soil disturbance in early spring will be sufficient to regenerate the flowers every year.

## **Regional environmental RE mixtures**



#### Traditional Hay Meadow

#### (MG5 Grassland)

#### Where to use this mixture:

- Heavy clay soils
- Road verges
- Embankments
- Quarry areas
- Lowland areas
- To encourage insects and birds

#### Mixture breakdown: ACHILLEA millefolium

ANTHOXANTHUM odoratum Sweet Vernal Grass 1% CENTAUREA nigra GALIUM verum Lady's Bedstraw 1% LEONTODON hispidus Rough Hawksbit 0.2% LEUCANTHEMUM vulgare Oxeve Daisy 0.5% PLANTAGO lanceolata Ribwort Plantain 3% AGRIMONIA eupatorium Agrimony 0.5 **PRUNELLA** vulgaris Self Heal 1% **RANUNCULUS** acris Meadow ButterCup 1.5% **RANUNCULUS** bulbosus Bulbous ButterCup 0.5% FILIPENDULA ulmaria Meadow Sweet 2.6% SANGUISORBA minor Salad Burnet 1% AGROSTIS capillaris Browntop Bent 2.5 **CYNOSURUS** Cristatus **FESTUCA** rubra litoralis Slender Creeping Red Fescue 30% TRISETUM flavescens Golden Oat Grass 5% PHLEUM bertolonii TENO 5% FESTUCA pratensis Meadow Fescue 5% FESTUCA ovina Sheeps Fescue 6.5% LOTUS corniculatus Birdsfoot Trefoil 0.5% TRIFOLIUM repens White Clover 2% TRIFOLIUM pratense Red Clover 2% **RHINANTHUS** minor Yellow Rattle 0.5% LEONTODON hispidus

Sowing Rate: 5g/m<sup>2</sup>



#### AGRIMONIA eupatorium Agrimony 1% AGROSTIS stolonifera

ALOPECURUS pratensis

**CYNOSURUS** Cristatus

Crested Dogstail 10% DESCHAMPSIA caespitosa

Tufted Hair Grass 5%

TRISETUM flavescens

**FESTUCA** rubra litoralis

Golden Oat Grass 3%

PHLEUM bertolonii

**HOLCUS** lanatus

Yorkshire Fog 6%

BRIZA media

Quaking Grass 1%

RUMEX acetosa

Dandelion 0.2%

Red Clover 1%

**FESTUCA** pratensis

Meadow Fescue 10%

Sweet Vernal Grass 19

**RANUNCULUS** repens

Creeping ButterCup 2%

Common Sorrel 1.5%

TRIFOLIUM pratense

TRIFOLIUM repens

White Clover 0.8%

Sowing Rate:

 $5g/m^2$ 

TARAXACUM officinale

ANTHOXANTHUM odoratum

TENO 5%

POA trivialis

ARRHENATHERUM elatius

Rough Stalked Meadow Grass 5%

Slender Creeping Red Fescue 25%

Creeping Bent 1%

Meadow Foxtail 3

Tall Oat-grass 5%

### Lowland Meadow (MG9 Grassland)

#### Where to use this mixture:

- Moist soils
- Open woodland
- River and lake banks
- Industrial land
- To encourage insects
- and birds

#### Mixture breakdown: ACHILLEA millefolium

CENTAUREA nigra Common Knapweed 2% FILIPENDULA ulmaria GALIUM verum Lady's Bedstraw 2% LEONTODON autumnalis Autumn Hawkbit 0.2% LEUCANTHEMUM vulgare Oxeye Daisy 0.5% PLANTAGO lanceolata Ribwort Plantain 2% LATHYRIS pratensis Meadow Vetchling 0.2% PRUNELLA vulgaris Self Heal 1% PULICARIA dysenterica mmon Fleabane 0 19 RANUNCULUS acris

RANUNCULUS acris Meadow ButterCup 2%



## RE3 River Flood Plain / Water Meadow

#### (MG8 Grassland)

#### Where to use this mixture:

- Water meadows
- River and lake banks
- Seasonally flooded
   lowlands
- To encourage insects and birds

#### Mixture breakdown:

CALTHA palustrus Marsh Marigold 0.2% CENTAUREA nigra Common Knapweed 2% FILIPENDULA ulmaria Meadow Sweet 2.5%

LEONTODON autumnalis Autumn Hawkbit 0.3% LEONTODON hispidus Rough Hawksbit 0.2%

LEUCANTHEMUM vulgare Oxeye Daisy 0.5% LYCHNIS flos cuculi

Ragged Robin 0.3% PLANTAGO lanceolata

PRUNELLA vulgaris Self Heal 1%

RANUNCULUS acris Meadow ButterCup 3% SANGUISORBA officinalis Greater Burnet 0.1%

AGROSTIS stolonifer Creeping Bent 2.5%

CYNOSURUS cristatus Crested Dogstail 20%

FESTUCA rubra litoralis Slender Creeping Red Fescue 25%

POA trivialis Rough Stalked Meadow Grass 10% PHLEUM bertolonii

TENO 5% HOLCUS lanatus Yorkshire Fog 5%

FESTUCA pratensis Meadow Fescue 10%

ANTHOXANTHUM odoratum Sweet Vernal Grass 2.5% TRIFOLIUM repens

White Clover 2% CERASTIUM fontanum Common Mouse-ear 0.1%

RUMEX acetosa Common Sorrel 1%

RANUNCULUS repens Creeping ButterCup 2% TRIFOLIUM pratense

Red Clover 1% RHINANTHUS minor Yellow Rattle 0.8%

Sowing Rate: 5g/m<sup>2</sup>

### RE4



### Lowland Limestone (CG2 Grassland)

#### Where to use this mixture:

- Free draining soils
- Limestone areas
- Earthwork areas
- Road verges
- To encourage insects and birds

#### Mixture breakdown:

ACHILLEA millefolium Yarrow 1%

ANTHYLLIS vulneraria Kidney Vetch 1% BRIZA media Quaking Grass 1%

CENTAUREA nigra Common Knapweed 2%

DAUCUS carota Wild Carrot 0.5%

GALIUM verum Lady's Bedstraw 1%

LEONTODON hispidus Rough Hawksbit 0.2%

LOTUS corniculatus Birdsfoot Trefoil 1% RHINANTHUS minor

Yellow Rattle 0.5%

ONOBRYCHIS vicifolia Sainfoin 3% PLANTAGO lanceolata Ribwort Plantain 3%

PLANTAGO media Hoary Plantain 0.5% SANGUISORBA minor Salad Burnet 3%

SCABIOSA columbaria Small Scabious 0.5%

SUCCISA pratensis Devilsbit Scabious 0.3%

LEUCANTHEMUM vulgare Oxeye Daisy 1%

AGROSTIS stolonifera Creeping Bent 2.5%

ANTHOXANTHUM odoratum Sweet Vernal Grass 1%

ARRHENATHERUM elatius Tall Oat-grass 3%

CYNOSURUS cristatus Crested Dogstail 8%

DESCHAMPSIA caespitosa Tufted Hair Grass 1%

FESTUCA ovina Sheeps Fescue 30%

FESTUCA rubra litoralis Slender Creeping Red Fescue 20%

TRISETUM flavescens Golden Oat Grass 3% FESTUCA arundinacea

Tall Fescue 10%

KOELERIA Macrantha Koeleria Macrantha (Crested Hair) 0.5%

TRIFOLIUM pratense Red Clover 1% ULEX europaeus

Sowing Rate: 5g/m<sup>2</sup>



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**RE11** 

Heath

Scrubland

(U13 Grassland)

Poor fertility soils

grassland look

Reclamation sites

with other wild flora

Mixture breakdown:

DESCHAMPSIA flexuosa

AGROSTIS capillaris

Wavy Hair Grass 7.5%

Sheeps Fescue 50%

Tufted Hair Grass 7.5

Sweet Vernal Grass 5%

Sowing Rate:

5g/m<sup>2</sup>

**FESTUCA** rubra litoralis

DESCHAMPSIA caespitosa

ANTHOXANTHUM odoratum

Slender Creeping Red Fescue 25%

Browntop Bent 5%

FESTUCA ovina

• For a natural

Where to use this mixture:

• As a combination mixture

## RE8



#### Coastal Reclamation

#### (MG12 Grassland)

#### Where to use this mixture:

- Coastal areas
- Free-draining soils
- Tidal areas

#### Salt marshes

Mixture breakdown: HYPOCHAERIS radicata Cats-Ear 0.2%

IRIS pseudacorus Yellow Flag 2.1%

LEONTODON autumnalis Autumn Hawkbit 0.2%

LOTUS corniculatus Birdsfoot Trefoil 1.5%

PLANTAGO lanceolata Ribwort Plantain 4%

PLANTAGO major Greater Plantain 1%

RANUNCULUS acris Meadow ButterCup 4%

VICIA cracca Tufted Vetch 1%

AGROSTIS stolonifera Creeping Bent 2.5%

ARRHENATHERUM elatius Tall Oat-grass 2.5%

ANTHOXANTHUM odoratum Sweet Vernal Grass 1%

**CYNOSURUS** cristatus Crested Dogstail 10%

FESTUCA arundinacea

FESTUCA rubra litoralis Slender Creeping Red Fescue 20%

**HOLCUS** lanatus Yorkshire Fog 5%

**FESTUCA** pratensis Meadow Fescue 9% TRIFOLIUM pratense

Red Clover 2% TRIFOLIUM repens

White Clover 2% TARAXACUM officinale

Dandelion 2% **Sowing Rate:** 

5g/m<sup>2</sup>



### Mixture (MG6 Grassland)

Farmland

### Where to use this mixture:

#### Moist, free-draining soils

- Landfill sites
- Farmland and
- country parks

 Informal lawns Educational sites

Mixture breakdown: ACHILLEA millefolium Yarrow 1%

CENTAUREA nigra veed 1.5% Common Knap **IRIS** pseudacorus

Yellow Flag 1% LEONTODON autumnalis Autumn Hawkbit 0.5%

MEDICAGO lupulina Black Medick 2%

PLANTAGO lanceolata Ribwort Plantain 3% PRUNELLA vulgaris

Self Heal 1% **RANUNCULUS** acris

Meadow ButterCup 2% **RHINANTHUS** minor

Yellow Rattle 1.3% AGROSTIS capillaris Browntop Bent 2.5%

ANTHOXANTHUM odoratum Sweet Vernal Grass 2%

CYNOSURUS cristatus Crested Dogstail 25%

FESTUCA rubra litoralis Slender Creeping Red Fescue 25%

POA pratensis Smooth Stalked Meadow Grass 2.5% TRISETUM flavescens

Golden Oat Grass 5.5% LATHYRIS pratensis

Meadow Vetchling 0.5% TRIFOLIUM pratense

Red Clover 2% **HOLCUS** lanatus

Yorkshire Fog 5%

POA trivialis Rough Stalked Meadow Grass 12.5% TRIFOLIUM repens

White Clover 2% CERASTIUM fontanum

Common Mouse-ear 0.2% RUMEX acetosa Common Sorrel 1% TARAXACUM officinale

Dandelion 1% Sowing Rate:

5g/m<sup>2</sup>



## Marginal

**RE10** 

### Land (U20 Grassland)

Where to use this mixture:

Various soil types

ACHILLEA millefolium

CAMPANULA rotundifolia Harebell 0.19

HYACINTHOIDES non scripta Bluebell 1%

GALIUM verum Lady's Bedstraw 3%

RANUNCULUS acris Meadow ButterCup 2%

RANUNCULUS repens Creeping ButterCup 2%

RUMEX acetosa Common Sorrel 3%

AGROSTIS capillaris Browntop Bent 5%

AGROSTIS stolonifera Creeping Bent 1%

ANTHOXANTHUM odoratum Sweet Vernal Grass 5%

**DESCHAMPSIA** flexuosa Wavv Hair Grass 2%

FESTUCA ovina Sheeps Fescue 50%

POA pratensis Smooth Stalked Meadow Grass 7%

**HOLCUS** lanatus Yorkshire Foa 10%

GALIUM mollugo Hedge Bedstraw 0.3%

POTENTILLA erecta Tormentil 0.1%

TRIFOLIUM repens White Clover 2%

VERONICA chamaedrys Speedwell 0.1%

Sowing Rate: 5g/m<sup>2</sup>

#### Landfill sites

Reclamation sites

Mixture breakdown:

Yarrow 2%

LOTUS corniculatus Birdsfoot Trefoil 1%

PLANTAGO lanceolata Ribwort Plantain 3%

PRUNELLA vulgaris Self Heal 0.4%



## 100% UK native wild flora mixtures



### **Flowering** Meadow

Where to use this mixture: This mixture will establish guickly in areas such as road verges, inner city derelict sites and wasteland areas. where an initial display of colour is required. The annual species produces a display in the first year and colour is provided by the perennial species for persistence.

#### Mixture breakdown:

SILENE alba White Campion 5%

CENTAUREA cyanus

AGROSTEMMA githago LEUCANTHEMUM vulgare

Oxeve Daisv 2.5% **DIGITALIS** purpurea

Foxglove 2% PRUNELLA vulgaris

Self Heal 69 CHRYSANTHEMUM segetum rn Marigold 8.59

CENTAUREA nigra ommon Knapwe

PLANTAGO lanceolata Ribwort Plantain 7%

PAPAVER rhoeas Corn Poppy 89

ANTHEMIS arvensis

SILENE dioica Red Campion 5% RANUNCULUS acris

Meadow ButterCup 6.5% SANGUISORBA minor

Salad Burnet 5% LOTUS corniculatus

LEO Lotus corniculatus (Birdsfoot Trefoil) 1%

FUMARIA officinalis Common Fumitory 2%

GERANIUM dissectum Cut Leaved Cranesbill 1% GERANIUM molle

ves Foot Craneshill 2%

Sowing Rate:  $1g/m^2$ 



#### **General Purpose Neutral Soils**

#### Where to use this mixture: This mixture provides a

wide range of species and suits a variety of soil types and localities. It can be incorporated into the amenity mixtures such as A4 Low Maintenance/ Conservation Areas, A18 Motorways/Road Verges and A16 Reclamation/Country Parks (combined 80% grass to 20% Wild Flora) to meet a particular amenity use.

Mixture breakdown: **RANUNCULUS** acris

Meadow ButterCup 10% SANGUISORBA minor

GALIUM verum Ladv's Bedstraw 6%

LEUCANTHEMUM vulgare Oxeye Daisy 5%

**PRUNELLA** vulgaris Self Heal 6.59

CENTAUREA nigra non Knar

PLANTAGO lanceolata Ribwort Plantain 7% LYCHNIS flos cuculi

Ragged Robin 0.5% **ONOBRYCHIS** vicifolia

SCABIOSA columbaria

Small Scabious 1.5% ACHILLEA millefolium

LINUM usitatissimum Flax 6%

MEDICAGO lupulina RHINANTHUS minor

VICIA sativa Common Vetch 1%

LOTUS corniculatus LEO Lotus corniculatus (Birdsfoot Trefoil) 2.5%

FUMARIA officinalis Common Furnitory 2%

GERANIUM dissectum Cut Leaved Cranesbill 1% GERANIUM molle

Doves Foot Cranesbill 1.5%

Sowing Rate:  $1g/m^2$ 

### Cornfield Annuals

**WF10** 

Where to use this mixture: Cornfield annuals, once a

common feature of traditional farming areas, have largely disappeared from their former habitat. This mixture can be used to recreate those areas and gives an outstanding display of colour in its first year, either sown on its own or to supplement a mixture of perennial species which are slower to establish. To produce a display of cornfield annual every year, a reseeding programme should be implemented to build up a seed bank. After several years there will be enough seed to be regenerated by soil disturbance.

#### Mixture breakdown:

AGROSTEMMA githago Corncockle 609

PAPAVER rhoeas Corn Poppy 10%

**CENTAUREA** cyanus

CHRYSANTHEMUM segetum Corn Marigold 12.5%

ANTHEMIS arvensis Corn Chamomile 7.5%

Sowing Rate: 1-2g/m<sup>2</sup>



Where to use this mixture:

FESTUCA ovina Sheeps Fescue 20% attraction and benefit to both

TARAXACUM officinale Dandelion 0.5%

> SCABIOSA columbaria Small Scabious 0.29

SILENE dioica Red Campion 1.5%

SILENE alba

PAPAVER rhoeas

Evenina Primrose 0.5%

Sowing Rate:

5g/m<sup>2</sup>



## **Butterfly and** Honey Bee

The flora in this mixture is

bees and butterflies. This is

of both perennial and annual

a visually stunning mixture

wildflowers along with the

appropriate grass species.

Mixture breakdown:

LEUCANTHEMUM vulgare

TRIFOLIUM pratense

Red Clover 1%

Oxeye Daisy 1%

CENTAUREA nigra

ALLIARA petiolata

Garlic Mustard 0.5%

Kidney Vetch 0.8%

ANTHYLLIS vulneraria

ACHILLEA millefolium

**CENTAUREA** cyanus

Cow Parslev 0.2

VICIA cracca

VICIA sativa

ANTHRISCUS sylvestris

TRISETUM flavescens

Golden Oat Grass 1%

ufted Vetch 0.3%

mmon Vetch 0.3%

**CENTAUREA** scabiosa

specially selected for its

PRIMULA veris Cowslip 0

**DIPSACUS** fullonum

KNAUTIA arvensis

Teasel 0.5% DIGITALIS purpurea

Foxglove 0.5

FESTUCA rubra litoralis Slender Creeping Red Fescue 15%

FESTUCA rubra commutata

MALVA moschata Musk Mallow 0.5%

AGROSTIS capillaris

FESTUCA longifolia Hard Fescue 2

White Campion 1.5%

Corn Poppy 1.5%

TRIFOLIUM repens White Clover

LOTUS corniculatus LEO Lotus corniculatus (Birdsfoot Trefoil) 1%

**OENOTHERA** biennis

CHRYSANTHEMUM segetum Corn Marigold 1.9%

## Mixtures for pollinators

### **WF17** Cultivated Annuals



#### Where to use this mixture:

A vibrant display of colours created from a collection of cultivated annual species. This mixture is ideal where there is no requirement for UK native species on sites where they pose no risk to colonising natural habitats. Perfect for use on urban roundabouts or on derelict brown field sites where temporary colour is required.

#### Mixture breakdown:

PHACELIA tanacetifolia Purple Tansy 15%

COREOPSIS Tickseed 59

CHRYSANTHEMUM segetum Corn Marigold 12.59

CENTAUREA cyanus Cornflower 7.5%

PAPAVER rhoeas Corn Poppy 15%

SILENE noctiflora Night Flowering Catchfly 5%

AGROSTEMMA githago Corncockle 5

COSMOS "Sensation Mix" Cosmos "Sensation Mix" 15%

CALENDUL A Art Shades Calendula Art Shades

NIGELLA Oxford Blue

Sowing Rate:  $1-2q/m^2$ 







### **Pollinators** Paradise

#### Where to use this mixture:

A mixture that is perfect for pollinators. This blend of ornamental, annual and perennial species has been specifically selected to supply pollen bearing flowers to benefit bees, butterflies and other pollinating insects for the longest period possible from spring through to early autumn. On heavy clay soils extra care should be taken to protect emerging plants from slugs.

#### Mixture breakdown:

SILENE dioica Red Campion 4.5% SILENE alba White Campion 5% **ORNAMENTAL** Geum Ornamental Geum 2% **ORNAMENTAL** Helenium Ornamental Helenium 2% **ORNAMENTAL Everlasting Pea** Ornamental Everlasting Pea **ORNAMENTAL Malvas Ornamental Malvas 29 ORNAMENTAL** Campanula Ornamental Campanula 2% **ORNAMENTAL** Verbena Ornamental Verbena LEUCANTHEMUM vulgare Oxeve Daisv 2% PAPAVER rhoeas

Corn Poppy 7.5% **HELIANTHUS** annuus

VICIA sativa SLOVENA Vetch 5% RANUNCULUS acris Meadow ButterCup 8% ACHILLEA millefolium

Yarrow 59

TRIFOLIUM repens ABERACE (Small) W Clover 5% PHACELIA tanacetifolia Purple Tansv 5%

LOTUS corniculatus LEO Lotus corniculatus (Birdsfoot Trefoil) 4%

CALENDULA Art Shades Calendula Art Shades 5 NIGELLA Oxford Blue Niaella Oxford Blue 59

FUMARIA officinalis Common Fumitory 3% CHRYSANTHEMUM segetum Corn Marigold 7% **OENOTHERA** biennis Evening Primrose 2%

CHRYSANTHEMUM segetum Corn Marigold 5%

Sowing Rate: 1-2g/m<sup>2</sup>

## The general landscaping and golf courses WFG mixtures



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#### Flowering Meadow

#### Where to use this mixture: Combines wild flora species found in WF1 with 80% ornamental grasses to produce a grassland meadow mixture, suitable for acid soil types.

Mixture breakdown:

SILENE alba White Campion 1% CENTAUREA cyanus

AGROSTEMMA githago ockle 4 21

LEUCANTHEMUM vulgare Oxeye Daisy 0.5% DIGITALIS purpurea

Foxalove 0.4 **PRUNELLA** vulgaris Self Heal 1 2%

CHRYSANTHEMUM segetum Corn Marigold 1.7%

CENTAUREA nigra PLANTAGO lanceolata

Ribwort Plantain 1.4% PAPAVER rhoeas Corn Poppy 1.6%

FESTUCA longifolia Hard Fescue 20%

FESTUCA ovina Sheeps Fescue 15% ANTHOXANTHUM odoratum

ANTHEMIS arvensis Corn Chamomile 0.9% FESTUCA rubra litoralis Slender Creeping Red Fescue 24%

PHLEUM bertolonii TENO 5%

CYNOSURUS cristatus Crested Dogstail 7.5% ARRHENATHERUM elatius Tall Oat-grass 5%

DESCHAMPSIA caespitosa Tufted Hair Grass 2.5% SILENE dioica

Red Campion 1% RANUNCULUS acris Meadow ButterCup 1.3%

SANGUISORBA minor Salad Burnet 1% I OTUS corniculatus

LEO Lotus corniculatus (Birdsfoot Trefoil) 0.2%

FUMARIA officinalis nmon Fumitory 0.4% GERANIUM dissectum Cut Leaved Cranesbill 0.2% GERANIUM molle

Doves Foot Cranesbill 0.4% Sowing Rate: 5g/m<sup>2</sup>



### Where to use this mixture:

WFG4

Neutral

Soils

Combines all wild flora species found in WF3 with 80% ornamental grasses. This mixture is suitable for creating a grassland mixture on a wide range of soil types.

#### Mixture breakdown:

**RANUNCULUS** acris Meadow ButterCup 2% SANGUISORBA minor

Salad Burnet 1.2% GALIUM verum Lady's Bedstraw 1.2% LEUCANTHEMUM vulgare Oxeye Daisy 19

LINUM usitatissimum Flax 1 2%

PRUNELLA vulgaris Self Heal 1.39 CENTAUREA nigra **.** 900 he

Common Knapv PLANTAGO lanceolata Ribwort Plantain 1.49

LYCHNIS flos cuculi Radged Robin 0.1% ONOBRYCHIS vicifolia

Sainfoin 5% SCABIOSA columbaria Small Scabious 0.3%

**FESTUCA** arundinacea Tall Fescue 10%

**CYNOSURUS** cristatus Crested Dogstail 20% FESTUCA rubra litoralis

Slender Creeping Red Fescue 25% PHLEUM bertolonii

TENO 5% FESTUCA rubra rubra Strong Creeping Red Fescue 20%

ACHILLEA millefolium

MEDICAGO lupulina Black Medick 1% **RHINANTHUS** minor

VICIA sativa

Common Vetch 0.2% FUMARIA officinalis

Common Fumitory 0.4% LOTUS corniculatus

LEO Lotus corniculatus (Birdsfoot Trefoil) 0.5%

GERANIUM dissectum Cut Leaved Cranesbill 0.2% GERANIUM molle

Doves Foot Cranesbill 0.3%

Sowing Rate: 5g/m<sup>2</sup>

WFG5

#### Calcareous Soils



WFG6

### **Heavy Clay** Soils

Where to use this mixture: Calcareous soils are free draining and prone to drought conditions. For this reason, avoid sowing in drv weather. Lime rich soils support a relatively slow growing vegetation, making

WFG5 easy to maintain once established.

Mixture breakdown: CLINOPODIUM vulgare Wild Basil 0.2%

GALIUM verum Lady's Bedstraw 1.5% DAUCUS carota **PRUNELLA** vulgaris

Self Heal 0.5% CENTAUREA nigra Common Knapw CENTAUREA scabiosa

Greater Knanweed 0.5% MEDICAGO lupulina Black Medick 2% PLANTAGO media

Hoary Plantain 19 **ONOBRYCHIS** vicifolia Sainfoin 6%

SCABIOSA columbaria Small Scabious 0.1% ANTHYLLIS vulneraria

ACHILLEA millefolium Yarrow 0.5% STACHYS officinalis

Betony 0.2% FESTUCA arundinacea all Fescue 20%

**FESTUCA** rubra litoralis Slender Creeping Red Fescue 25% PHLEUM bertolonii

TENO 5% FESTUCA rubra rubra Strong Creeping Red Fescue 22.5%

POA pratensis Smooth Stalked Meadow Grass 5% AGROSTIS stolonifera

reeping Bent 2.5% ULEX europaeus Gorse 1.5%

**PASTINCACA** sativa Wild Parsnip 1.29 **RESEDA** luteola

Weld 1% SILENE dioica Red Campion 1%

GALIUM mollugo

Sowing Rate:



#### Mixture breakdown:

RANUNCULUS acris Meadow ButterCup 2%

SILENE alba White Campion 2%

Common Knapweed 2.5% MEDICAGO lupulina

Black Medick FILIPENDULA ulmaria

Meadow Sweet 2 5% PLANTAGO lanceolata

Ribwort Plantain 2.5% LYCHNIS flos cuculi

Ragged Robin 0.4% RUMEX acetosa Common Sorrel 2%

ACHILLEA millefolium

Yarrow 0 59

ANTHYLLIS vulneraria Kidney Vetch 0.3%

**FESTUCA** arundinacea Fall Fescue 25%

CYNOSURUS cristatus Crested Dogstail 25% PHLEUM bertolonii TENO 59

**FESTUCA** ovina Sheeps Fescue 25%

RANUNCULUS repens Creeping ButterCup 1.5% STACHYS officinalis

Betony 0.2% ACHILLEA ptarmica

Sowing Rate: 5q/m<sup>2</sup>

5g/m<sup>2</sup>



Oxeve Daisy 0.5% **PRUNELLA** vulgaris Self Heal 1.59

**CENTAUREA** nigra

### WFG7



### **Free Draining Sandy Soils**

#### Where to use this mixture:

Sand based soils often create unsuitable or dry site conditions. For this reason arasses contained in this mixture are both drought resistant and provide stabilising ground cover. Suitable for use in road construction, sand pits and on free draining sites.

#### Mixture breakdown:

GALIUM verum Lady's Bedstraw 3%

SILENE alba White Campion 2%

DAUCUS carota

LEUCANTHEMUM vulgare Oxeve Daisy 2.19

CAMPANULA rotundifolia Harebell 0.1%

LEONTODON hispidus

MEDICAGO lupulina Black Medick

**RESEDA** lutea Wild Mignonette 0.4%

**RHINANTHUS** minor Yellow Rattle 1%

**RESEDA** luteola

LOTUS corniculatus

ANTHYLLIS vulneraria Kidney Vetch 0.4%

ECHIUM vulgare Vipers Bugloss 0.4%

ACHILLEA millefolium

FESTUCA arundinacea

**CYNOSURUS** cristatus sted Dogstail 25

FESTUCA rubra litoralis Slender Creeping Red Fescue 25%

VERBASCUM nigrum Dark Mullein

PHLEUM bertolonii TENO 5%

ULEX europaeus Gorse 0.7%

Sowing Rate: 5g/m<sup>2</sup>





### **Hedgerows &** Shaded Areas

#### Where to use this mixture:

Suitable for sowing within hedgerows and semi-shaded woodlands. Due to light levels being lower than in the open field sites, growth of companion grasses will be slow, making this mixture low in maintenance. Brambles may require control from time to time.

#### Mixture breakdown:

SILENE alba White Campion 1% SILENE dioica Red Campion 2% **DIGITALIS** purpurea Foxglove 0.2

FILIPENDULA ulmaria LYCHNIS flos cuculi Ragged Robin 0.1% MYRRHIS odorata Sweet Cicely 2% GALIUM mollugo

ALLIUM ursinum

Ransoms 0.5% **TEUCRIUM** scorodonia Wood Sage 0.5% FESTUCA arundinacea

Tall Fescue 25% HYACINTHOIDES non scripta

Bluebell 29 CLEMATIS vitalba Traveller's Joy 0.3% CYNOSURUS cristatus Crested Dogstail 15%

**FESTUCA** rubra litoralis Slender Creeping Red Fescue 25% GEUM urbanum

Wood Avens 1%

TORILLIS japonica Hedge Parsley (Upright) 1% POA nemoralis

Wood Meadow Grass 5%

FESTUCA rubra rubra Strong Creeping Red Fescue 10% IRIS pseudacorus Yellow Flag 2%

ALLIARA petiolata Garlic Mustard 0.8%

STACHYS officinalis Betony 0.29

AGROSTEMMA githago Corncockle 1.8 CHRYSANTHEMUM segetum Corn Marigold 1%

AJUGA reptans Buale 0.2%

STELLARIA holostea Greater Stitchwort 0.1%

Sowing Rate: 5g/m<sup>2</sup>

RUMEX acetosa

Dandelion 0.45

Black Medick 1% LINUM usitatissimum

PRIMULA veris

Cats-ear 0.2%

Cowslip 0.1%

Common Sorrel 0.5%

Small Scabious 0.2% TARAXACUM officinale

MEDICAGO lupulina

CERASTIUM fontanum

HYPOCHAERIS radicata

LEONTODON hispidus

Autumn Hawkbit 0.5%

**RHINANTHUS** minor

**TEUCRIUM** scordonia

ACHILLEA Millefolium

ellow Rattle 0.2%

Wood Sage 0.5%

DAUCUS carota

Sowing Rate:

Wild Carrot 0.25

Yarrow 0.5%

10g/m<sup>2</sup>

LEONTODON autumnalis

Common Mouse-ear 0.2%

SCABIOSA columbaria

#### NEW FOR 2018

Where to use this mixture: The Species Rich Lawn Mixture is a specific mix for Eco Lawns. The high number of species included lends the mixture to gaining BREEAM credits when a perennial eco lawn type mixture is required. The mixture suits a range of soil types and mowing regimes, it can be kept neat at approx 50mm -75mm with mowing generally required once every fortnight during the growing season or it can be left to grow long and strimmed just once or twice in a season in May and late August.

FESTUC rubra litoralis Slender Creeping Red Fescue 12.5% FESTUCA longifolia Hard Fescue 10%

Sheeps Fescue 10% PHELEUM bertolonii

PLANTAGO lanceolatat

PRUNELLA vulgaris Self Heal 1%

Meadow Buttercup 2% LOTUS corniculatus

FESTUCA rubra rubra Strong Creeping Red Fescue 15%

Chewings Fescue 10%

POA trivialis

TRIFOLIUM repens White Clover 2%

Hoary Plantain 0.1%

### **WFG20 Eco Species Rich** Lawn

#### Mixture breakdown:

FESTUCA ovina Small Leaved Timothy 2.5%

CENTAUREA nigra Common Knapweed 2%

Ribwort Plantain

**RANUNCULUS** acris

Birdsfoot Trefoil 0.5%

FESTUCA rubra communtata

POA pratensis Smooth Stalked Meadow Grass 5%

Rough Stalked Meadow Grass 5% AGROSTIS capillaris Browntop Bent 5%

AGROSTIS stolonifera Creeping Bent 2.5% LOLIUM perenne

RANUNCULUS repens Creeping Buttercup 2.3%

GALIUM verum Lady's Bedstraw 1% TRIFOLIUM pratense Red Clover 29

PLANTAGO media









## Pond Areas

Suitable for aquatic habitats and damp low lying sites, edge of ponds, rivers and ditches. Take care to establish in times when there is least risk of flooding.

Mixture breakdown:

lad Burnet 2.8% RANUNCULUS acris

PULICARIA dysenterica

CALTHA palustrus Marsh Marigold 0.1%

Meadow Sweet 3%

Loosetrife 1.2%

Ragged Robin 0.1%

FESTUCA arundinacea

CYNOSURUS cristatus

**FESTUCA** rubra litoralis

RHINANTHUS minor

TENO 5%

POA trivialis Rough Stalked Meadow Grass 15% DESCHAMPSIA caespitosa

**LEONTODON** autumnalis Autumn Hawkhit 0.2%

LOTUS uliginosus Greater Birdsfoot 0.5%

Greater Burnet 0.5%

Oxeye Daisy 1%

Creeping ButterCup 2%

Hard Rush 1 5%

EUPATORIUM cannabinum Hemp Agrimony 0.2%

Sowing Rate: 5g/m<sup>2</sup>

Where to use this mixture:

SANGUISORBA minor

leadow ButterCup 3%

Common Fleabane 0.1%

FILIPENDULA ulmaria

LYTHRUM salicaria

LYCHNIS flos cuculi

SUCCISA pratensis Devilsbit Scabious 0.1%

Crested Dogstail 20%

Slender Creeping Red Fescue 25%

Yellow Rattle 0.59 PHLEUM bertolonii

Tufted Hair Grass 5%

**IRIS** pseudacorus Yellow Flag 3%

SANGUISORBA officinalis

LYCOPSUS europaeus Gypsy Wort 0.2%

LEUCANTHEMUM vulgare

**RANUNCULUS** repens

JUNCUS inflexus

Where to use this mixture: This mixture provides a wide selection of species designed for educational use, on a selection of soil types and sites. The mixture can be studied for identification purposes, progression and balance of species through time.

**WFG15** 

Countrylife Schools &

Colleges

#### Mixture breakdown: RANUNCULUS acris

#### Meadow ButterCup 2% SILENE dioica Red Campion 2.5% SILENE alba White Campion 1% **CENTAUREA** cyanus

Cornflower 0.2

Cats-Ear 0.1%

Oxeye Daisy 0.5%

**BELLIS** perennis

Self Heal 1.5%

PAPAVER rhoeas

Corn Poppy 2%

Corn Marigold 2%

Yellow Rattle 1.5%

**RHINANTHUS** minor

Shepherds Purse 0.5%

SCABIOSA columbaria

ONOBRYCHIS vicifolia

Small Scabious 0.2%

LOTUS corniculatus

Birdsfoot Trefoil 1 7% VICIA sativa

Common Vetch 0.2%

FESTUCA rubra rubra

ALOPECURUS pratensis

ARRHENATHERUM elatius

FESTUCA longifolia

Hard Fescue 20%

Meadow Foxtail 5%

Tall Oat-grass 5%

**FESTUCA** ovina

TENO 5%

5g/m<sup>2</sup>

PHLEUM bertolonii

Sheeps Fescue 20%

Crested Doastail 59

Sowing Rate:

CYNOSURUS cristatus

Strong Creeping Red Fescue 20%

Sainfoin 4%

Daisy (Lawn) 0.05%

PRUNELLa vulgaris

HYPOCHAERIS radicata

LEUCANTHEMUM vulgare

CHRYSANTHEMUM segetum

CAPSELLA bursa-pastoris

#### NEW FOR 2018

### **WFG21 Everyday** Meadow

Everyday Meadow is specifically designed to produce a fast-establishing sward of UK-native wildflowers and meadow grasses. With 90% grasses and 10% wildflowers and a sowing rate of  $15 \text{ g/m}^2$ Everyday Meadow rapidly creates a thick, attractive canopy.

#### Where to use this mixture:

- Urban, semi-urban and business park environments
- Commercial landscaping projects
- To create a fastestablishing sward
- Where UK native wildflowers are needed

#### Mixture breakdown:

FESTUCA rubra rubra Strong Creeping Red Fescue 30% FESTUCA rubra commutata Chewings Fescue 25%

FESTUCA rubra litoralis Slender Creeping Red Fescue 20%

POA pratensis Smooth Stalked Meadow Grass 10%

AGROSTIS capillaris Browntop Bent 5%

TRIFOLIUM repens White Clover 5

#### AGROSTEMMA githago Corncockle 0.5%

PAPAVER rhoeas Corn Poppy 0.5% SILENE alba White Campion 0.25%

SILENE dioica Red Campion 0.25%

CENTAUREA cyanus Cornflower 0.25

LEUCANTHEMUM vulgare Oxeye Daisy 0.25%

**DIGITALIS** purpurea Foxglove 0.25

PRUNELLA vulgaris Self Heal 0.2

CHRYSANTHEMUM segetum Corn Marigold 0.25%

CENTAUREA nigra Common Knapweed 0.25% PLANTAGO lanceolata

Ribwort Plantain 0.25% RANUNCULUS acris

Meadow Buttercup 0.25% SANGUISORBA minor

Salad Burnet 0.25% LOTUS corniculatus

Birdsfoot Trefoil 0.25% **RHIANTHUS** minor Yellow Rattle 0.25

GALIUM verum Lady's Bedstraw 0.25%

ACHILLEA millefolium Yarrow 0.25% VICIA sativa Common Vetch 0.25%

Sowing Rate: 15g/m<sup>2</sup>







## **Floranid®**<sup>™in</sup> fertilisers Phased release fertilisers



The all-new Floranid<sup>®</sup> Twin fertiliser range represents a further enhancement to the already well-proven, advanced range of Floranid<sup>®</sup> fine-turf fertilisers used by top sports clubs around the world.

Just like the previous Floranid range, Floranid Twin products have a proportion of fast-acting nitrogen in ammonium and nitrate forms, as well as a slow release element based on the advanced molecule Isodur. So what makes 'Twin' different? The clue is in the name - Floranid Twin was developed to benefit from the synergy effect of using not one, but two complementary forms of slow release nitrogen, and the new products now also contain the molecule crotonylidene urea or Crotodur.

release Crotodur N.

The 'Activity Index' (AI) is often used to assess the relative value and performance of slow release fertilisers and Floranid Twin range even increases the AI from around 95% to over 98%. This is because Crotodur is almost 100% hot water soluble (fraction 2) which is the most valuable fraction of a slow release N source. Many methylene urea products have an Activity Index of around 40-60% and this should be considered when selecting a slow release fertiliser for professional use.

### Phased release fertiliser - Initial release of ammonia followed by a second release of slow release IBDU N, and final overlapping release of slow

### How does Floranid <sup>Twin</sup> work?

Isodur has the unique benefit of releasing N when subject to temperatures above 4°C and water alone (no biological breakdown is necessary), hence it is the perfect N source for sandy rootzones or in the cool temperatures of autumn or spring when biological activity is markedly reduced. Crotodur, however, is quite stable and relies on some biological activity to release and mineralise the N. In this way the Floranid Twin range provides early stage immediate N, medium term slow release N early in the season or when little biological activity is present, and finally the release of Crotodur when soils and soil life begin to really warm up. In this way, not only is the release profile extended from 3 to 4 months, but by relying on 2 different mineralisation methods, the result is a smoother, more programmed type of release which is in perfect sync with turf demand.



Dry matter production (total g/plot Apr – Sept) Landlab 2015 Italy



Twin-speed release of N from Isodur® and Crotodur®

Floranid can be applied less frequently saving vital man hours and other associated costs. Zero leaching of nitrogen also make Floranid products the environmentally responsible choice of granular fertilisation.

- Homogenous granules
- Won't scorch
- Environmentally safe
- · Unique slow release in symbiosis with moisture and temperature
- Zero leaching of IBDU N

#### Bag Size: 25kg

Spreading rate: 35g/m<sup>2</sup>



Floranid <sup>Twin</sup> Permanent 16-7-15 (+2% MgO + 0.5% Fe + TE)

Floranid N31 31-0-0





#### **Trace elements:**

Boron, copper, iron, manganese, zinc

Granule size: 0.7-2.8mm **IBDU N:** 23%

**CROTODUR N:** 15% Spreading rate:

35g/m<sup>2</sup>

Period of usage: March - October

A complete slow release fertiliser with a broad field of use in turf, landscaping and horticulture. With zero risk of scorching at recommended rates, application is possible throughout the whole growing season. Watering in is not obligatory, nevertheless it promotes the immediate effect. Granules enter well into the sward and breakdown with moisture or irrigation after a short period.

- Good starter effect through readily available nitrogen components
- Long term effect through unique slow release of IBDU and Crotodur Nitrogen over a period of 16 weeks
- · No risk of scorching when applied at recommended rates
- Potassium and magnesium content promotes healthy growth, strong cellular structure and resistance to both wear and disease
- Full set of trace elements, especially important for sand based sports constructions

#### Granule size: 0.7-2.8mm

**IBDU N:** 23% **Spreading rate:** 35g/m<sup>2</sup>

Period of usage: March - September

this an ideal high nitrogen feed at struggle to retain nitrogen.

- recommended rates
- ensure even release
- after application

### Floranid <sup>Twin</sup> Turf 20-5-8 (+2% MqO + TE)



Trace elements: Boron, copper, iron, manganese, zinc Granule size: 0.7-2.8mm **IBDU N:** 19% **CROTODUR N:** 29% Spreading rate: 35g/m<sup>2</sup>

Period of usage: March – September

Designed for turf of medium to high intensity use such as professional sports pitches. With zero risk of scorching at recommended rates, application is possible throughout the whole growing season.

- Long term effect through unique slow release of IBDU and Crotodur Nitrogen over a period of 16 weeks
- · No risk of scorching when applied at recommended rates
- High content of IBDU Nitrogen makes this ideal for use on sand base constructions
- · Spring and summer use
- Fine granule size 0.7 2.8mm
- · Granules quick to breakdown and disperse into sward

A high quality nitrogen only fertiliser with Isodur slow release nitrogen for use on sports pitches, fairways, tees, and lawns. Ideal for use on sports pitches in early spring to gain maximum recovery from wear. Spreading at the recommended rates holds no risk of scorching, making anytime throughout the growing season. Particularly useful for very free draining soils or sand based constructions that

- · No risk of scorching when applied at
- · High Isodur slow release content to
- Quick breakdown of the granules

 Long term effect through unique slow release of IBDU and Crotodur Nitrogen over a period of 20 weeks

## **NovaTec**

### NovaTec premium 15-3-20 (+2% MqO + TE)



**Trace elements:** Boron, iron, zinc Granule size: 2.0-4.0mm

Spreading rate: 20-35g/m<sup>2</sup>

Period of usage: February - November

especially useful as an autumn/winter or earlier spring starter.

- 12 16 week release period
- A high potassium content stiffens against disease
- protected in cooler temperatures Rapid dispersal into sward

	ATS
Resistant to leaching	1
No residues in plants	X
100% plant-safe	1
Highly potent (only trace quantities reqd)	X
Powerful enough to use alone	×
Registered for EC Fertilisers regs.?	×
Acts immediately	1
Stable for use on granular fertilisers	1
Can be used on non-urea fertilisers	1
Works in all conditions	1

"We started using the Floranid range of phased-release fertilisers to create a more consistent and predictable rate of growth and to prevent nutrient losses via leaching.

Each application gives consistent growth for 10-12 weeks, helping our busy pitches to recover rapidly during a packed list of football and rugby fixtures.

Using phased-release fertilisers has not only eliminated the intense bursts of grass growth typically associated with conventional, rapid release fertilisers, but has also eased workloads by reducing the number of individual applications required."

**Dan Sparks** Head Groundsman **Bristol City FC** 



Floranid <sup>Twin</sup> Club 10-5-20 (+4% MqO + TE)



Trace elements:

Boron, copper, iron, manganese, zinc

Granule size: 0.7-2.8mm

**IBDU N:** 36% **CROTODUR N:** 

24%

Spreading rate: 35g/m<sup>2</sup>

Period of usage: March - November

A mid to late season fertiliser designed for sports turf requiring a lower nitrogen level. High potassium and magnesium fertiliser to promote healthy root growth and disease resistance heading into the winter months.

- Autumn use
- · More resilient turf heading into winter
- Improves disease resistance • Fine granule size 0.7 - 2.8mm
- Granules quick to breakdown and disperse into sward
- Long term effect through unique slow release of IBDU and Crotodur Nitrogen over a period of 16 weeks

### Floranid Twin Eagle Master 19-5-10

(+2% MqO + TE)



**Trace elements:** 

Granule size: 0.5-1.8mm

**IBDU N:** 45%

35g/m<sup>2</sup>

March – September

A complete slow release fertiliser for close mown high value sports turf such as golf and bowling greens and tees. A full set of trace elements ensure optimal growth and green colour under close mown conditions. Perfect as a base feed for tees and greens as part of a liquid or foliar feed programme. Micro granules ensure the product rapidly breaks down and disperses into the rootzone.

- Very fine uniform granules 0.5 1.8mm
- Ideal as a base feed as part of a programme of liquid feeding
- High content of Unique IBDU Nitrogen ensures a uniform controlled release
- Long term effect through unique slow release of IBDU and Crotodur Nitrogen over a period of 16 weeks

## Ammonia (NH4+) containing fertilisers

An effective slow release

with ammonium stabiliser

(DMPP). DMPP delays the

(NH4+) means it sticks to

Dimethylpyrazolephosphate

degradation of ammonium (NH4+) into nitrate (NH3-). Retaining the

nitrogen in the ammonium form

negatively charged soil particles

NovaTec products are highly soluble

due to the phosphorus content being

derived from phosphoric acid which

makes for the quickest availability to

have a very uniform granule size with

to a lower dust content and coupled

pleasant to work with and disperses

the grass plant. NovaTec products

a high crushing strength, this leads

with the high solubility delivers

rapidly into the sward.

a product that is easy to spread,

and stays in the soil, whereas negatively charged nitrate (NH3-) leaches out of the soil and can't be utilised by the grass plant.



# With inhibitor





Boron, copper, iron

Spreading rate:

Period of usage:

### NovaTec N-Max 24-5-5 (+2% MqO + TE)



**Trace elements:** Boron, iron, zinc

Granule size: 2.0-4.0mm

Spreading rate: 20-35g/m<sup>2</sup>

Period of usage: February - November

A cost effective slow release fertiliser,

the leaf blade to protect growth from cold weather and sustain the plant

• Hardened growth keeps plants

A high nitrogen slow release fertiliser for spring/summer use, with the emphasis on nitrogen for when growth promotion is key. High nitrogen levels mean an application rate of as low as 20g/m<sup>2</sup> can be used and give an equal effect to using a traditional 9-7-7 fertiliser at 50g/m<sup>2</sup>. A perfect fertiliser for fairways.

- 12 16 week release period
- High N analysis allows low application rates and delivers economies of scale
- Perfect cost effective option for fertilising golf fairways, outfields, sportsfields
- Rapid dispersal into sward



Comparison between DMPP and other ammonium stabilisers

## **Specialist fertilisers**

All Germinal specialist fertilisers are similar in that they provide solutions for the professional turf manager.

These products make your life easier by way of offering efficiency savings and disease prevention at crucial times such as seedling establishment or strengthening the grass plant in readiness for periods of particular stress when they are more disease prone.

Bag Size: 25kg

#### **NEW FOR 2018**

**Easygreen Mini** 12-12-17 (+3MqO)

**Basatop Fair** 23-6-10 (+2% MgO + TE)



Basatop



**Trace elements:** Boron, iron, zinc

Granule size: 1.0-2.5mm

Spreading rate: † 35g/m<sup>2</sup>

Period of usage: February - October

#### Quick solubility for quick response

The Easygreen mini range includes NPK complex fertilizers with potassium sulphate (SOP), magnesium and micronutients. Due to its fine granulation (1.0 - 2.5 mm) nutrients are rapidly available to encourage plant growth. Phosphorous, important for seedling development and rapid growth, encourages root growth and plant tillering, essential at seedling establishment stage. Potassium is essential in the growth and development stage, helping with cell wall thickness and encouraging rooting.

- Rapid sward penetration
- · Quick uptake by plant
- · Great analysis for all round plant growth

**Trace elements:** Boron, zinc Granule size:

0.7-2.8mm Spreading rate: †

20-40g/m<sup>2</sup> Period of usage: March - September

Basatop Fair is a partly coated slow release fertiliser that makes use of two modes of release. As a consequence, Basatop Fair has a good cost - benefit ratio and is universally applicable for landscaping and turf.

- Universal application, intense sports
- 16 20 week longevity
- Release mechanisms link to plants needs to provide uniform feeding without flushes of growth
- at recommended rates

† For spreading settings please refer to page 66

### Kali Gazon 0-0-27 (+11% MgO)



**Turf hardener:** The anti stress fertiliser Granule size: 0.5-2.0mm

Spreading rate: \* 35g/m<sup>2</sup>

Period of usage: All year

A micro granulated potash and magnesium fertiliser for use on amenity turf. Containing 27% potash and 11% magnesium it can be used throughout the year, during the autumn and winter to harden turf and prevent disease attack, and heighten colour. Used in this way Kali Gazon ensures superior wear qualities of any sward and enables quicker recovery in the subsequent spring.

During the spring/summer the high potassium content supports transpiration control in dry periods and fortifies the grass plant with greater drought resistance. Contains very high levels of magnesium, a vital component of chlorophyll. The subsequent increase in chlorophyll ensures good metabolism of energy for healthy plant growth.

- Hardens turf and protects from disease
- · Improves stress tolerance against drought disease and cold temperatures
- Fantastic source of potassium and magnesium on sandy soils where a low cation exchange can interfere with the availability of these vital macro elements
- Heightens sward colour and appearance
- All year round use

stadia, fairways, public open spaces

• Exceptional cost to effect ratio

No risk of scorching when applied

### **Agrosil® LR** 0 - 20 - 0(+20% Silicate)



#### Granule size: 1.0-2.0mm

#### Spreading rate: †

Top dressing turf 50g/m2, top dressing turf and brushing with aeration/core holes 80g/m<sup>2</sup>, applying under turf 100-120g/m<sup>2</sup>, applying at time of seeding 35-50g/m<sup>2</sup>

#### Period of usage:

All year

#### The essential fertiliser for sand based pitch constructions

Agrosil<sup>®</sup> LR is an electrolyte system consisting of partially dehydrated sodium silicate and phosphate. Phosphate has a strong stimulating effect on the root. It is, however, quickly fixed in the soil and unavailable to plants. Phosphate fertiliser typically only penetrates the soil to a depth of 5cm but roots benefit from a sufficient amount of phosphate at a deeper level.

Agrosil<sup>®</sup> LR keeps phosphate completely available and carries it down to a depth of 30cm. The mobile silicate particles congregate in the soil to form large molecules, silicate gels. These molecules are full of pores which improve soil structure and promote greater drainage,



gas exchange and good health in even the poorest of soils, sandy rootzones, alluvil sand, compost and manufactured soils.

The silicate gels of Agrosil<sup>®</sup> LR lock up heavy metals such as lead or cadmium so tightly that they can no longer be taken up by the plant; this allows growth to be possible again on contaminated sites. Grass plants take up silicate and store it in the cell walls which protect them against infection from fungal pathogens, such as fusarium and leaf spot.

- Increases Cation Exchange Capacity C.E.C of soil
- Improves root mass
- Improves soil structure
- Promotes deep rooting
- Creates water and air storage cells
- Protects against fungal infections
- Increases nutrient uptake
- Keeps phosphate available and beneficial to plants
- · Enables growth in contaminated soils
- Improved growth on road verges where pollutants and high salt levels are a problem

Ferro Top 6-0-12 (+6% MqO + 8%Fe)



**Trace elements:** Manganese

Granule size: 0.5-2.0mm

Spreading rate: † 35g/m<sup>2</sup>

Period of usage: All year

The perfect high iron fertiliser for protecting high value turf areas throughout the growing season, but especially through the autumn and winter. Designed for medium and high value sports turf such as sports fields, greens, tees and bowling greens. Contains magnesium, a vital component of chlorophyll. The subsequent increase in chlorophyll ensures good metabolism of energy for healthy plant growth.

- High iron and magnesium content ensure quick greening without flushes of growth
- Improves greenness and resistance against disease
- Micro granules for easy application and rapid sward penetration
- Controls and inhibits moss
- All year round use



Southampton FC - 1 week post sowing Photo taken 11th June 2010. Fertilis Swing used as pre-seed fertiliser. The pitch was koro'd off, power harrowed and levelled before seed and Fertilis Swing (12 bags) were applied at the same time.



Southampton FC - 2 weeks post sowing 18th June 2010 - 1st cut!

Bacillus subtilis, selection E4-CDX(R) is a unique and effective strain of rhizosphere bacterium. Bacillus subtilis competes with harmful pathogens for space around the roots of the grass plant. Once established, it physically protects the roots and inhibits the advance of soil borne fungi such as fusarium.

Once watered in, Bacillus subtilis, selection E4-CDX(R) operates in the rhizosphere. Symbiosis with fine root hairs results in coverage of the entire root. This creates a live barrier protecting the whole root that disease can't penetrate. Therefore disease has no opportunities to set infection. Other strains of Bacillus subtilis stay at the surface leaving fresh root growth vulnerable to disease. Bacillus subtilis, selection E4-CDX(R) is unique as it is the only strain that moves with the developing root, maintaining a barrier against disease. For maximum effect Bacillus subtilis requires water, oxygen and a minimum soil temperature of 10 degrees plus, Bacillus subtilis, selection E4-CDX(R) remains effective in the soil for approx 42 days (6 weeks). Tests show that Bacillus subtilis gives off a chemical that disorientates nematodes, so they can no longer find the root.

• Fertilis Swing NK - page 56

- Fertilis Speed page 56

#### Bacillus subtilis, selection E4-CDX(R) 'rod' bacterium showing resistance to common diseases



Anthracnose



† For spreading settings please refer to page 66

#### Why Bacillus subtilis, selection E4-CDX(R) stands out from all other strains of Bacillus subtilis

Products in this catalogue that include Bacillus subtilis:

• Vitanica RZ (liquid) - page 57



Seedling Blight



Brown Patch



Fusarium



Dollar Spot

## **Liquid fertilisers**

### Fertilis Swing NK 14-0-19 (+2% MgO + TE)



#### **Trace elements:** 0.02% boron, 6% iron

**Bag size:** 25Kg

Granule size: 0.5-1.5mm

Spreading rate: 30g/m<sup>2</sup>

Period of usage: February - September **Fertilis Speed** 18-5-10 (+2.5% MgO + TE)



**Trace elements:** 0.02% boron, 0.3% iron, 0.02% zinc

Bag size: 25Kg

Granule size: 0.5-1.5mm

Spreading rate: 30g/m<sup>2</sup>

Period of usage: February - September

Homogenous NPK Compound Fertilisers combined with Bacillus subtilis, selection E4-CDX(R). Fertilis products can be used at any time through the growing season but are especially useful when applied at the time of seeding to protect young plants from soil borne seedling diseases.

- · Improved plant fitness and vitality
- Higher stress tolerance
- Promotion of root development
- · All nutrients are fully plant available
- · Inclusion of Bacillus subtilis, selection E4-CDX(R) for healthier and more disease resistant turf
- · Perfect for use at time of seeding as a preventative against soil borne seedling diseases
- Micro Granular for rapid prill dispersal and quicker nutrient availability. Important because until nutrients aren't plant available until they are in solution in the rootzone
- · Increased microbial activity in the rootzone, particularly important in more inert sand based soils
- Helps protect against plant parasitic Nematodes
- Promotion of root development

Vitanica RZ 5.0.5 Bacillus amyloliquefaciens, (R) (Selection R6-CDX)

Liquid **Chelated Iron** (8% Fe)



Vitanica RZ is a liquid organic mineral NK- fertiliser for foliar application in high quality turfgrass. Bacillus amyloliquefaciens, (R) selection R6-CDX protects plants by out competing harmful pathogens for space around the roots and giving off an antibiotic effect. This leads to an increased vitality of the plant and a reduced susceptibility to disease and abiotic stress. This unique product is perfect for application at any time of vear, but especially as a disease preventative prior to times of known disease pressure.



Iron is an essential component of the chlorophyll molecule and applications of iron will stimulate chlorophyll production and thus produces a very good colour response without any significant growth. Other effects include improved turf hardening during the autumn/winter months and control of moss.

**Application rate:** 

10 - 30L/per hectare in 400-600 litres of water

Pack size: 10L

- Liquid organic Mineral NK fertiliser
- Seaweed extract
- Chelated trace element package
- Perfect as a preventative against soil borne pathogens
- Deters plant parastic nematodes
- Encourages root development
- · Enhance the resistance of turfgrass against disease and stress

Application rate: 10-30L/per hectare

Maximum concentration 10%

Pack size: 10L



Situation	Applications	Timing	Rate (l/ha)	Frequency
Golf greens / tees and bowling greens	Active growth	Spring	80-100	1-2 times
	Regeneration	Spring – Autumn	80-100	1-2 times
	'Spoon-Feeding'	Summer	40-60	2 weekly intervals
Sports stadia	Active growth	Spring	100	1-2 times
cricket, football,	Regeneration / post match	Spring – Autumn	60	As required
rugby and hockey	Re-seeding / establishment	Spring + Autumn 1-2 weeks post germination	60	1-2 at 2 week intervals



### **Basfoliar Turf Complete SL**

9-4-6

(+2% MgO +TE plus 5% Seaweed extract)



Basfoliar Turf Complete SL is the latest sports turf fertiliser from nutrition specialists, Compo Expert, and has been formulated in response to the current trend of spoonfeeding fine turf with a full complement of essential nutrients on a little and often basis. The liquid fertiliser has a 9-4-6 NPK content, is fortified with magnesium for improved sward colour and also contains a range of EDTA chelated trace elements (copper, iron, manganese, molvbdenum and zinc), thereby ensuring that plants receive a full and complete nutrient supply.

Designed specifically for convenient use as a spring and summer fertiliser, Basfoliar Turf Complete SL contains two forms of nitrogen for efficient utilisation whilst using

" At 60Ltrs Basfoliar Turf Complete gives me a visual effect within 24hrs. plant recovery has been unreal as I use it for post-match recovery. It's a complete package so I don't need to tank mix either, which is great."

#### Marcus Cassidy Head Groundsman Swindon Town Football Club

potassium in the sulphate form for low salt stress.

Basfoliar Turf Complete SL also contains 5% Ascophyllum nodosum (seaweed) extract which adds a huge range of beneficial bioactive substances (oligosaccharides, plant hormones and trace elements) which help to combat abiotic stresses caused by excessive wear and unfavourable weather conditions.

- Three products in one Seaweed Extract, Surfactant and NPK analysis
- · Fully chelated for rapid uptake
- Fully chelated trace elements
- True foliar feed
- · Low salt stress for young seedlings
- Perfect for post match recovery

#### Trace elements:

0.005% Cu\*, 0.05% Fe\*, 0.01% Mn\*, 0.008% Mo, 0.005% Zn\* \* as chelate from EDTA

#### **Application rate:**

40-100l/Hectare in 600-800 litres of water

Pack size: 20L

### Seaweed based feeds

All products in this range are derived from organic crushed seaweed and offer all the natural benefits of cytokinins and auxins found in seaweed. All nitrogen is from an organic source. All analyses are available in 10L.

#### Maritime Turf Hardener 2.4.4 + 4fe

Natural seaweed and fertiliser with iron. Turf Hardener is a very popular winter tonic for fine turf to help reduce plant stress, green-up the plant and harden turf off for the winter.

#### App rate:

20-40 litres per ha in 600-1000 litres of water

Frequency: Every 4-6 weeks

#### Maritime + Nitrogen 15.0.0

Natural seaweed with nitrogen. This product is a great spring and summer boost for your turf with seaweed extract to help root development and improve shoot density with 15% Nitrogen added to give a quick turf boost.

#### App rate:

40 litres per ha in 600-1000 litres of water

#### Frequency:

Every 4-6 weeks

#### Maritime + Iron 4fe

Natural seaweed with added iron. This is a popular choice for greenkeepers and turf growers who want cosmetic enhancement with the added benefit of improved rooting and tile ring provided by the seaweed extract.

#### App rate:

40 litres per ha in 600-1000 litres of water

#### Frequency:

Every 4-6 weeks

#### **Maritime Natural 30**

This high concentrated seaweed extract contains an abundance of essential plant hormones, betaines and trace elements. It can be tank mixed with most NPK fertilisers and can be used all year round.

#### App rate:

40 litres per ha in 600-1000 litres of water

Frequency: Every 4-6 weeks



#### GL2: 3.6.6 + 1Fe

Urea Nitrogen for slower uptake. Potassium to aid leaf strength. Humic increases the availability of nutrients. Seaweed for natural colour and seasonal stress. Humic acids are important chelators, combining minerals into organic compounds that are more available to plants. They also tie up toxins, making them less available to plants. Suitable March-October (fine turf), all year round for sports. App rate: 30 litres per Ha

### GL4: 16.3.10

Mainly consists of Urea Nitrogen. N also available as Nitrates for rapid, direct to leaf uptake and Ammonia for more efficient uptake. High rate of potassium for leaf strength. Suitable March-October (fine turf), all year round for sports. App rate: 30 litres per Ha

#### GL5: 12.0.6 + 1Fe

App rate: 30 litres per Ha

### Liquid fertilisers

All products are fully tank mixable and are available in 20L.

### Ammonia/Urea based

#### GL1: 15.3.3 + te (Iron, Manganese)

Urea Nitrogen for slower uptake. Urea is naturally converted to N which avoids excessive growth flushes. Phosphorus to aid root health and virility, and Potassium for leaf strength and disease. Suitable March-October (fine turf), all year round for sports.

App rate: 30 litres per Ha

Lower volume of Urea N to avoid growth flush. Higher volume of P and K for strength and recovery. Iron for colour. Perfect for use before/after any maintenance work. More suited to fine turf or winter applications in sports. App rate: 30 litres per Ha

#### GL3: 20.0.10 + Seaweed + Humic

A combination of Ammonia, Nitrate and Urea Nitrogen for phased supply of N. Perfect for an initial boost and direct to leaf uptake. Urea form provides longer supply of N. Potassium for leaf strength plus Iron for colour. Excellent early season kick. Suitable March-October (fine turf), all year round for sports.



## Symbio MycoForce **Mycorrhizal Inoculant**

Pack size: 1.5Kg

**Overseeding:** 1.5kg/5000m<sup>2</sup>

Seeding: 3.0kg/5000m<sup>2</sup>

Period of usage: March - September

Most grass species in their undisturbed natural environments form beneficial associations with mycorrhizal fungi. Mycorrhizal fungi once established on the turf root system radiate out from the roots to form a dense network of filaments. This network obtains major macro and micro nutrients and water and transport these back to the turf root. Mycorrhizae are especially important for uptake of nutrients that do not readily move through the soil, such as phosphorus and many micro nutrients. This action of capturing and incorporating fertility and water directly into the turfgrass benefits establishment and long term health of any grass sward, from sports pitches to golf greens.

- · Aids efficient uptake of nutrients and water
- · Helps capture nutrients such as phosphorus that are often not readily plant available
- Promotes root growth
- Promotes greater stress tolerance especially drought stress
- · Accelerates uniform establishment

Also available as a seed dressing - please ask your technical sales representative

## **Compound granular fertilisers**

- Longevity 4 6 weeks

Bag Size: 25kg

Spreading rate: 70g/m<sup>2</sup>

All Germinal standard fertilisers are compound granular formulations and are specifically designed for amenity areas.

All our compound granular fertilisers are made up of (homogeneous) prills, each of which contain the exact matching analysis of vital components nitrogen (N), phosphate (P) and potassium (K). This ensures an even supply of nutrients to create uniform strong growth of turf type grasses.

• Quick release effect for immediate plant availability

- Homogeneous compound granules



### Pre-seeding G1 Quick Start 6-9-6

Granule size: 2.0-4.0mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

The standard analysis for use as a pre-seed dressing for the establishment of seed on both outfield and fine turf areas.

- The industry standard pre-seeding fertiliser
- High phosphate levels to instantly aid root growth and accelerate seedling establishment
- Levels of potassium help strengthen the leaf blade of new seedlings and help new seedlings fight foliar disease such as pythium diseases

G2 Quick Start Extra 10-15-10

**Pre-seeding** 

Granule size: 2.0-4.0mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

Higher nutrient content, recommended for impoverished soil.

- High phosphate levels to instantly aid root growth and accelerate seedling establishment
- High levels of potassium help strengthen the leaf blade of new seedlings and help new seedlings fight foliar disease such as pythium diseases

Spring / Summer G3 Spring kick 12-6-6 Spring / Summer G4 Fine Turf Spring Kick 11-5-5

Granule size: 2.0-4.0mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

A high nitrogen feed to stimulate strong vigorous growth throughout the spring and summer.

- Instantly available nitrogen
   for rapid growth effect
- Perfect for kick starting amenity areas in the spring

Also available as an organic fertiliser.

70g/m<sup>2</sup> Spreading settings: Please refer to page 66

Granule size:

Spreading rate:

0.5-1.5mm

A well balanced fertiliser which will stimulate root development on lawns, golf and bowling greens in the spring.

- Mini granular formulation for easy application and speedy dispersal into sward
- Speedy dispersal into soil helps avoid damage to expensive mowing machinery



#### Spring / Summer G5 Booster 9-7-7

### Spring / Summer G6 Booster Extra 20-10-10

### Granule size: 2.0-4.0mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

A balanced fertiliser to benefit and promote immediate healthy growth of all sports field and amenity grassed areas.

- Balance of supply of all three major nutrients
- Quick greening effect
- Promotes strong vigorous growth

### Granule size: 2.0-4.0mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

Recommended for reclamation areas and fine sandy soils or rootzones where application of fertilisers will maintain healthy grass coverage, which would otherwise be lost through lack of nutrient.

- Higher nutrient content for impoverished soils, particularly nitrogen which is necessary at all points in the growing process
- Quick greening effect
- Promotes strong vigorous growth



#### Spring / Summer G9 Fine Turf Iron Booster 12-3-9 +2 Fe + 0.5Mg

#### Granule size: 0.5-1.5mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

A pre-season fertiliser with high Nitrogen and iron to provide steady growth with good colour and strength.

- High ratio of potassium to promote good root growth
- Iron and magnesium to ensure a healthy spring 'green up' and aid resistance to foliar diseases
- Mini granular formulation for easy application and speedy dispersal into sward
- Speedy dispersal into soil helps avoid damage to expensive mowing machinery

Autumn / Winter G7 Fine Turf Winter Defence 3-10-5

#### Granule size: 0.5-1.5mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

The ideal fertiliser for applying to fine turf areas which have received intensive use during the summer months.

- High ratio of phosphate helps aid respiration and promotes root growth
- Mini granular formulation for easy application and speedy dispersal into sward
- Speedy dispersal into soil helps avoid damage to expensive mowing machinery

Granule size:

3-12-12

2.0-4.0mm **Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

Autumn / Winter

**G8** Winter Defence

A low nitrogen analysis with high phosphate and potassium to reinvigorate turf summer sports outfields after an intensive playing season or strengthen winter sports pitches for the season to come.

- Stiffens the leaf blade and encourages root growth throughout the winter
- High levels of potassium help protect plants from foliar diseases
- For use on all types of outfields, sports pitches and amenity grassed areas

Also available as an organic fertiliser.

#### Spring / Summer G10 Labour Saver Weed feed & moss killer 10-4-4 + 8 Fe

### Granule size: 2.0-4.0mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

An efficient way to manage all amenity turf areas, except very close mown turf. Feeds turf and provides effective control of broad leaf weeds and moss.

- Labour saving
- Economical
- Easy to apply
  - Environmentally sound, eliminates spray drift thus avoiding contamination of water courses





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#### Autumn / Winter G12 Fine Turf Autumn Tonic 3-6-8 +4 Fe

#### Granule size: 0.5-1.5mm

**Spreading rate:** 70g/m<sup>2</sup>

**Spreading settings:** Please refer to page 66

The perfect analysis for applying to fine turf areas that have been heavily used during the summer months but need to continue performing throughout the autumn and winter. The high percentage of Iron gives a quick greening effect and strengthens the sward against disease.

- Quick greening effect
- Mini granular formulation for easy application and speedy dispersal into sward
- High iron content strengthens the sward against disease attack

## Spreader table for Scotts Rotary Spreader: ACCUPRO 2000/SR2000

	ACCUPRO 2000 Bout width 2.5m		SR 2000 Bout width 3m	
Floranid Product	35g/m²	17.5g/m²	35g/m²	17.5g/m²
Floranid Twin Permanent	O/P	L	Q	М
Floranid Twin Club	O/P	L	Q	М
Fertilis Speed	Ν	J/K	0	K
Fertilis Swing NK	М	J/K	Ν	K
Ferro Top	0	K	Р	L
NovaTec	0	L/M	Р	М
G1, 2, 3, 5, 6, 8, 10	0	L/M	Р	М
Floranid Twin Turf	0	L	L	I
Floranid N31	0	L	L	I
Floranid Twin Eagle Master	М	I/J	Ν	J
G4, 7, 9, 12	М	I/J	Ν	J
Agrosil 50g/m <sup>2</sup>		R	Т	-
Agrosil 80g/m²		Z	N/	D
Basatop Fair	0	L	Р	М

The spreader settings are guidelines only. The spreader should be calibrated prior to application to ensure accuracy. The spreader settings are based on a walking speed of 5 km/hour. Walking faster or slower than 5 km/hour will alter the spread width and application rate. Exact rates are dependent upon the spreader itself and the accuracy of the person operating it.

# Nutrient input chart for granular fertilisers

The following chart shows the product analysis.

#### Granular Fertiliser (Kg/ha) – Nutrient input information application rate g/m<sup>2</sup>

Product Analysis %	10	15
1	1	1.5
2	2	3
3	3	4.5
4	4	6
5	5	7.5
6	6	9
7	7	10.5
8	8	12
9	9	13.5
10	10	15
11	11	16.5
12	12	18
13	13	19.5
14	14	21
15	15	22.5
16	16	24
17	17	25.5
18	18	27
19	19	28.5
20	20	30
21	21	31.5
22	22	33
23	23	34.5
24	24	36
25	25	37.5
26	26	39
27	27	40.5
28	28	42
29	29	43.5
30	30	45

The following chart shows the recommended amount of nutrient to be applied based on

20	25	30	35	40	45	50
2	2.5	3	3.5	4	4.5	5
4	5	6	7	8	9	10
6	7.5	9	10.5	12	13.5	15
8	10	12	14	16	18	20
10	12.5	15	17.5	20	22.5	25
12	15	18	21	24	27	30
14	17.5	21	24.5	28	31.5	35
16	20	24	28	32	36	40
18	22.5	27	31.5	36	40.5	45
20	25	30	35	40	45	50
22	27.5	33	38.5	44	49.5	55
24	30	36	42	48	54	60
26	32.5	39	45.5	52	58.5	65
28	35	42	49	56	63	70
30	37.5	45	52.5	60	67.5	75
32	40	48	56	64	72	80
34	42.5	51	59.5	68	76.5	85
36	45	54	63	72	81	90
38	47.5	57	66.5	76	85.5	95
40	50	60	70	80	90	100
42	52.5	63	73.5	84	94.5	105
44	55	66	77	88	99	110
46	57.5	69	80.5	92	103.5	115
48	60	72	84	96	108	120
50	62.5	75	87.5	100	112.5	125
52	65	78	91	104	117	130
54	67.5	81	94.5	108	121.5	135
56	70	84	98	112	126	140
58	72.5	87	101.5	116	130.5	145
60	75	90	105	120	135	150

## **Territory map**

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## Quick reference guide

#### **Mixtures for golf**

#### TEES

TLLS
A5 Cricket, Tennis and Tees
A10 Golf Tees and Divot Repairs
A28 Ultrafine Ryegolf
A27 Golf All Fescue
A29 With Ryegrass Divot Mix
A31 Supreme Tees
FAIRWAYS AND ROUGHS
A12 Golf Fairways
A13 Golf Roughs and Habitat Areas
A27 Golf All Fescue
A29 With Ryegrass Divot Mix
A32 Ecological Roughs Mixture
A33 Habitat Mixture
GREENS
A11 Golf Greens

007 DSB Creeping Bent
ForeFront Greens
AberRoyal Browntop Bent
AberMajesty Browntop Bent Blend
AberRegal Browntop Bent

#### **Mixtures for sports pitches**

#### WINTER SPORTS

A7 'Olympic Quality' Sports Ground
A8 Pitch Renovator
A9 General Outfield
A20 Premier Ryesport
A20 Creeping Perennial Ryesport
A20 Supreme Poa Supina
A30 Rapid Sports Renovator Plus
A31 Supreme Tees
A999 Rescue

#### SUMMER SPORTS

A5 Cricket, Tennis and Tees

A7 'Olympic Quality' Sports Ground

A1 Professional Bowls

A9 General Outfield

#### RACECOURSE AND POLO GROUNDS

A14 Racecourse and Polo Grounds

A8 Pitch Renovator

A20 Premier Ryesport

A30 Rapid Sports Renovator Plus

#### **Mixtures for landscaping**

#### FORMAL AREAS

A7 'Olympic Quality' Sports Ground

A2 Quality Lawns

A26 So-Green

#### LOW MAINTENANCE

A3 Embankments and Drought

A4 Low Maintenance Areas

A18 Road Verge and Embankments

A22 Low Maintenance

AberSustain

#### HARDWEARING

A9 General Outfield

A19 All Purpose Landscaping

A24 Wear and Tear

A22 Low Maintenance

#### PROBLEM AREAS

A6 Supreme Shade

A15 Reclamation Landfill

A16 Reclamation Country Parks

A17 Legume and Clover

A21 Saline Coastal & Road Verges

A25 Agricultural Reinstatement

## Quick reference guide

#### Wildflower mixtures

WFG21 Everyday Meadow

GOLF	
Fairway Meadow	
Links Habitat	
Woodland Edge	
REGIONAL ENVIRONMENTAL	
RE1 Traditional Hay Meadow	
RE2 Lowland Meadow	
RE3 River Flood Plain / Water Meadow	
RE4 Lowland Limestone	
RE8 Coastal Reclamation	
RE9 Farmland Mixture	
RE10 Marginal Land	
RE11 Heath Scrubland	
100% UK NATIVE WF1 Flowering Meadow	
WF3 General Purpose Neutral Soils	
WF10 Cornfield Annuals	
POLLINATORS	
WFG18 Butterfly and Honey Bee	
WF17 Cultivated Annuals	
WF19 Pollinators' Paradise	
GENERAL LANDSCAPING AND GOLF COURSES	
WFG2 Flowering Meadow	
WFG4 Neutral Soils	
WFG5 Calcareous Soils	
WFG6 Heavy Clay Soils	
WFG7 Free Draining Sandy Soils	
WFG8 Hedgerows & Shaded Areas	
WFG9 Wetland & Pond Areas	
WFG15 Countrylife Schools & Colleges	
WFG20 Eco Species Rich Lawn	

#### Fertilisers for close mown / fine turf

### **GRANULAR FERTILISERS** Floranid Twin Eagle Master G4 Spring/Summer Fine Turf Spring Kick G6 Spring/Summer Booster Extra G9 Spring/Summer Fine Turf Iron Booster G7 Autumn/Winter Fine Turf Winter Defence G12 Autumn/Winter Autumn Tonic LIQUID FERTILISERS Vitanica RZ Chelated Iron Basfoliar Turf Complete SL Maritime Turf Hardener Maritime + Nitrogen Maritime + Iron Maritime Natural GL1 GL4 GL3 GL2 GL5 SPECIALIST FERTILISERS

Kali Gazon			
Ferro Top			
Agrosil® LR			
Fertilis Swing NK			
Fertilis Speed			
Symbio MycoFord	e		

## Quick reference guide

#### **Fertilisers for sports** stadia / outfields / fairways

LIQUID FERTILISERS	
Vitanica RZ	
Chelated Iron	
Basfoliar Turf Complete SL	
Maritime Turf Hardener	
Maritime + Nitrogen	
Maritime + Iron	
Maritime Natural	
GL1	
GL2	
GL3	
GL4	
GL5	

#### **GRANULAR FERTILISERS**

Floranid Twin Permanent

Floranid N31

Floranid Twin Turf

Floranid Twin Club

NovaTec N-Max

NovaTec Premium

G1 Preseeding Quick Start

G2 Preseeding Quick Start Extra

G3 Spring/Summer Spring Kick

G5 Spring/Summer Booster

G6 Spring/Summer Booster Extra

G8 Autumn/Winter Winter Defence

G10 Spring/Summer Labour Saver

#### SPECIALIST FERTILISERS

Kali Gazon

Basatop Fair

Easygreen Mini

Ferro Top

Agrosil® LR

Fertilis Swing NK

Fertilis Speed

Symbio MycoForce



## Find out more

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

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