





### Seed Varieties

### **FORAGE**

RED CLOVER, WHITE CLOVER	
LUCERNE, ALSIKE CLOVER, BLACK MEDICK, BIRDSFOOT TREFOIL	
PERENNIAL RYEGRASS	
HYBRID RYEGRASS, ITALIAN RYEGRASS & WESTERWOLDICUM	14
FESTULOLIUM , MEADOW FESCUE	18
TIMOTHY, TALL FESCUE	19
DAT-GRASS, BROMUS, COCKSFOOT	20
DED EECCHE CMOOTH CTALKED MEADOW CDACC	21

### **AMENITY**

PERENNIAL RYEGRASS	24
SLENDER CREEPING RED FESCUE	27
CHEWINGS FESCUE	28
STRONG CREEPING RED FESCUE, HARD FESCUE AND SHEEP'S FESCUE	29
TALL FESCUE, CREEPING BENT	31
ROUGH-STALKED MEADOW-GRASS, BROWNTOP BENT, CREEPING BLUEGRASS, SMALL LEAVED TIMOTHY	32
CMOOTH STALKED MEADOW CDASS WHITE CLOVED	25



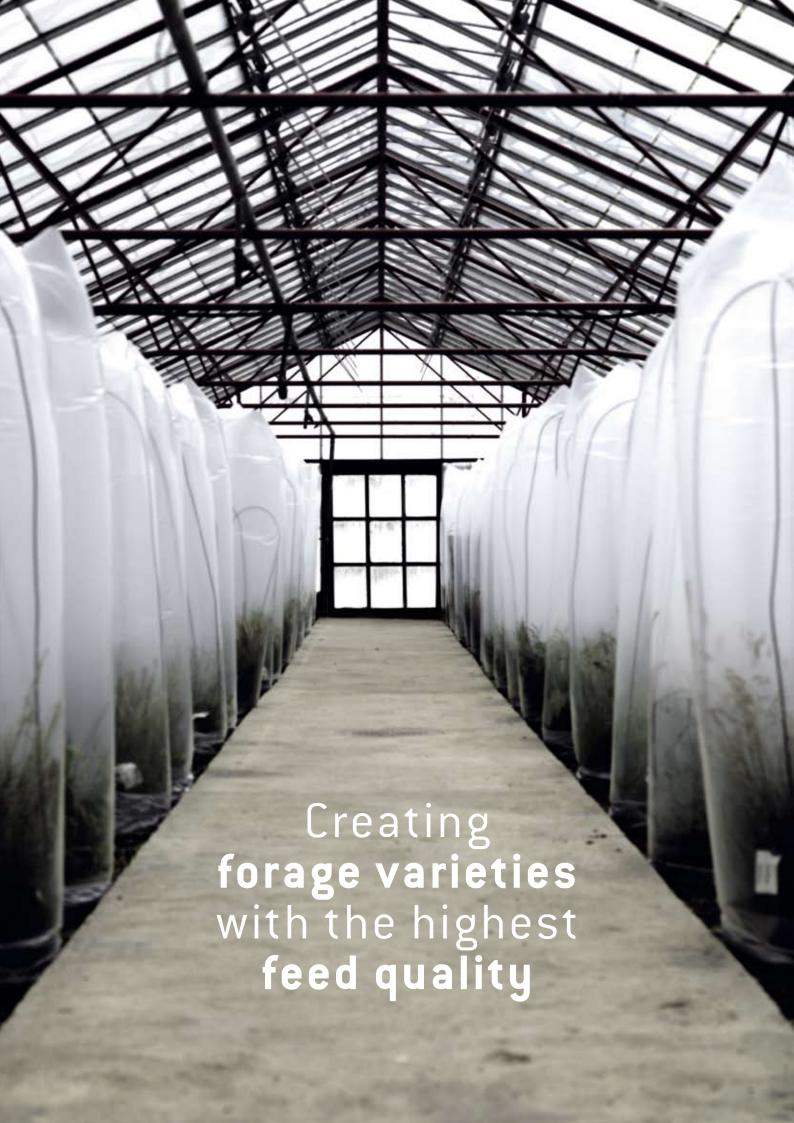


### **DLF-TRIFOLIUM SEEDS & SCIENCE**

DLF-TRIFOLIUM focuses closely on the demands of customers as well as on the market trends of clover and grass seed. Offering one of the world's largest research and breeding programmes for both turf and forage, DLF-TRIFOLIUM is working continually to improve the quality and reliability of all varieties. To meet market expectations, these varieties are tested through a worldwide trialling network for adaptation to different climatic and environmental conditions.

DLF-TRIFOLIUM is the world's largest producer and distributor of grass seed. With subsidiaries in Denmark, Sweden, Holland, Belgium, UK, United States, France, Germany, Czech Republic, Russia, China and New Zealand, an extended distributor and customer network is sufficiently able to serve the markets worldwide.





				RED (	CLOVER
	PLOIDY	LISTED/ RECOMMENDED IN	LATENESS	WINTER HARDINESS	YIELD
AMOS	Т	A,CZ,D,DK,F,S,SK,UK			
BESKYD	Т	A,CZ,I,SK			-
BIVOJ	Т	CZ	<del></del>		
DOLINA	T	BY,CDN,CZ			
FRESKO	Т	CZ	<del></del>		-
KVARTA	Т	A,CH,CZ,D,SK,UA			<del> •</del>
LONE	Т	FIN,S	<del></del>		
MARO	D	CH,D,EST	<del></del>		
PAV0	D	D			•
RAJAH	D	DK,EST,HR,LV,S,SI			•
SUEZ	D	CZ	-		
VENDELIN	D	CZ			-
VESNA	Т	A,CZ,EST,HR,LIT,RO,RU,SK		<del></del>	-

### Red clover (Trifolium pratense L.)

Red clover thrives well in a wide range of soils except very light, acidic or water-logged soil. It has a deep rooted system which makes it **drought tolerant**. Red clover is an important component of clover/grass mixtures for one or two year

conservation legs. In most countries with a **temperate climate**, red clover is widely cultivated and tolerates low temperatures during winter. The tetraploid varieties are more vigorous and leafy in growth.

			WILLTE CLOVED
			WHITE CLOVER
	LISTED/ RECOMMENDED IN	LEAF SIZE	TOLERANCE TO YIELD CLOSE GRAZING
ALBERTA	F,NL,RU,UK	<del></del>	<del></del>
AVOCA	IRL,UK	<b>—</b>	<b>—</b>
CHIEFTAIN	IRL,UK	<del>_</del>	<del></del>
GALWAY	UK	<b>-</b>	<del></del>
JUMB0	I .		<del></del>
KLONDIKE	A,D,DK,EST,F,RU,S	<del></del>	<del></del>
MILAGRO	F	<del></del>	<del>-</del>
MILKANOVA	A,CND,CH,D,DK,E,EST,I,N,RU,S,SI,UK	<b>—</b>	<del>-</del>
MILO	CH,CZ,F,LU,RU,UA	<del></del>	<del>-</del>
NANOUK	CZ,I,RU	<b>■</b>	<b>→</b>
PEPSI	СН	<del></del>	<b>─ ─ ─</b>
RABBANI	D		<del>-</del>
RETOR	EST,HU,L,LIT,NL,RU	<del></del>	<b>—</b>
RIESLING	CZ,D,F,NL,PL,S,UK		<del>    •   •   •   •   •   •   •   •   •  </del>
RIVENDEL	CZ,D,DK,E,EST,F,LIT,NL,RO,RU,S,SI,UA		<b>───</b>
RONNY			<b></b>

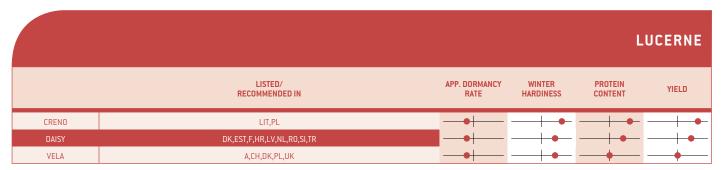
### White clover (Trifolium repens L.)

White clover thrives very well in soils with good water capacity. The yield on sandy soils is very high provided there is sufficient moisture from rainfall or irrigation. White clover is more persistent than red clover and forms many new shoots from the stolons. Winter hardiness is good. White clover in

grassland increases palatability and intake of cattle significantly. Digestibility, including flowerheads, is very high. The small leaved varieties are well suited for grazing whereas the large leaved types can be used for conservation as well.



### Forage Varieties



### Lucerne (Medicago sativa L.)

Alfalfa is grown in most temperate regions of the world. It **thrives** very well on well-drained soils with a sufficient content of lime, potash and phosphate. It has a deep tap root system and is thus able to withstand severe drought. It is a productive plant with high nutritional value. It has an early spring growth and rapid regrowth

after cutting. Alfalfa can be **conserved as hay** but it is also **possible to ensile the crop** by mixing it with grasses, alternatively by **drying it artificially and making it into pellets**. Alfalfa is divided into **dormancy rates** that refer to autumn growth after the last cut.

	ALSIKE CLOVER
	LISTED/ RECOMMENDED IN
ERMO	CZ,DK,EST,JP,PL

### Alsike clover (Trifolium hybridum L.)

Alsike has growth characteristics of both **red and white clover**. It thrives well in **acidic and water-logged soils** and is used in mixtures

with grasses suitable for these conditions. The persistence of the clover is normally 2-3 years.

	BLACK MEDICK
	LISTED/ RECOMMENDED IN
VIRGO	EU

### Black medick (Medicago lupulina L.)

Black medick is mainly used for intercropping for **green manuring**. The crop is undersown in a spring cereal and is ploughed under in the late

autumn or following spring. Black medick is used for forage as well.

	BIRDSFOOT TREFOIL
	LISTED/ RECOMMENDED IN
LOTANOVA	I,S

### Birdsfoot trefoil (Lotus Corniculatus)

Birdsfoot trefoil thrives well in drought-prone and less fertile soils due to the deeper tap roots. It produces high quality forage and

the **content from tannins** prevents bloating in grazing cattle. It is normally shorter lived than white clover.

### Forage Varieties

### PERENNIAL RYEGRASS LISTED/ RECOMMENDED IN WINTER HARDINESS **PLOIDY** LATENESS PERSISTENCE RUST RESISTANCE SPRING GROWTH **GROUND COVER** YIELD **IKAROS** D PIMPERNEL D A,BY,EST,HR,I,LU,SK,YU D 2 A,D,PL TELSTAR SHERWOOD D 3 UK 4 CALVANO 1 D NL DOMIATTI 1 D 4 NL 4 GANDALF D NL,UK D 4 LAGUNA NLORANTAS D 4 NL RESPECT D 4 CZ,D,LV,NL,PL SIBASA D 4 DK,NL ABOSAN 1 ARAKAN D 5 D BUTARA 1 D UK D 5 D,EST,IRL,NL,UK DENVER LAUREL D 5 D 5 STEFANI D,DK D,LV,PL D 6 FEEDER JALINAS D 6 NL CZ,D,NL,PL RECOLTA D 6 A,D,NL,PL,UK D 7 ASIAGO 1 NL CATALO 1 D 7 NL EIFFEL D 7 HERBIE D 7 CZ,D,DK,EST,F,PL,RU,S KABOTA D D -LASS0 D 7 DK,UK

### PERENNIAL RYEGRASS LISTED/ RECOMMENDED IN WINTER HARDINESS PLOIDY LATENESS PERSISTENCE RUST RESISTANCE SPRING GROWTH **GROUND COVER** YIELD ROMARK D NL,UK CANCAN D B,D,IRL,LU,NL,UK D PORTIA 8 IRL,NL,UK ANACONDA 1 GIANT 2 D NEPTUN D F,L,UK ROSALIN D,DK,F,LU,N,PL,UK AUBISQUE 4 A,D,EST,F,IRL,L,N,NL,PL,UK IRL,LU,UK MATHILDE 4 CZ,DK,EST,LV,LU,N,PL,RU NAPOLEON TRINTELLA 4 D,UK A,B,BY,CH,CZ,D,DK,EST,F,HR, LIT,LV,LU,PL,RO,RU,S,UK,YU 5 **EUROSTAR** D,F,L,UK 5 GARIBALDI DK,F,PL,RU IRL,UK GODALI 1 5 UK IRL,LU,UK 5 CZ KERTAK TWINS T 5 A,CH,D,L **EMINENT** 6 KENTAUR 6 CZ,D,DK,SK,F MISSOURI B,CZ,D,RU 6 MONTOVA D,UK NAVARRA D 6 A,D,DK,LV,LIT TURANDOT ARUSI CZ,D COOPER DAGONAN 1 F **EXPERT** F IRL,UK **GLENCAR**

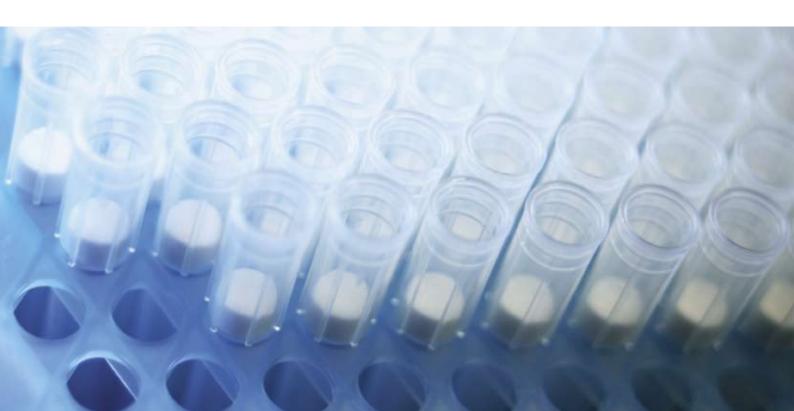


Lateness 1-9, 9 = very late

### Perennial ryegrass (Lolium perenne L.)

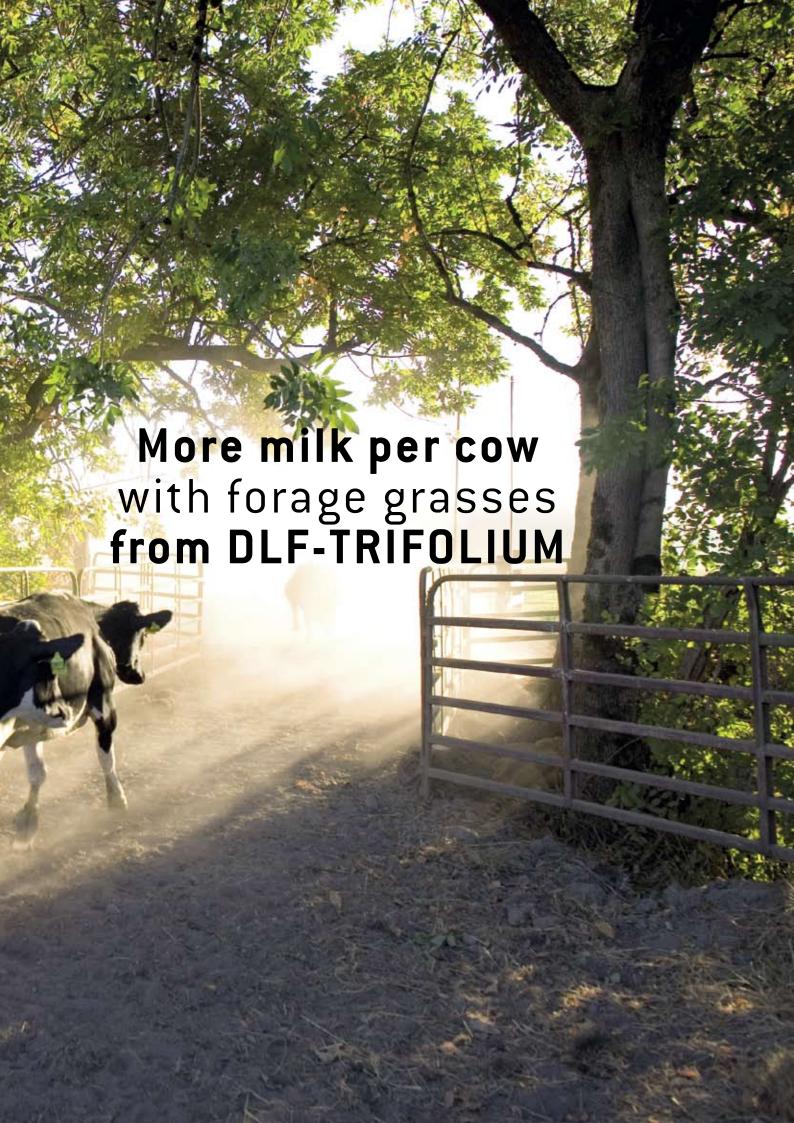
Perennial ryegrass is a **high yielding, high quality grass**. The best varieties are very persistent under a grazing management, provided they are well fertilised, well managed and the winters are not too severe. In cold areas perennial ryegrass plays an important role in short term leys with high yields and quality. Perennial ryegrass is

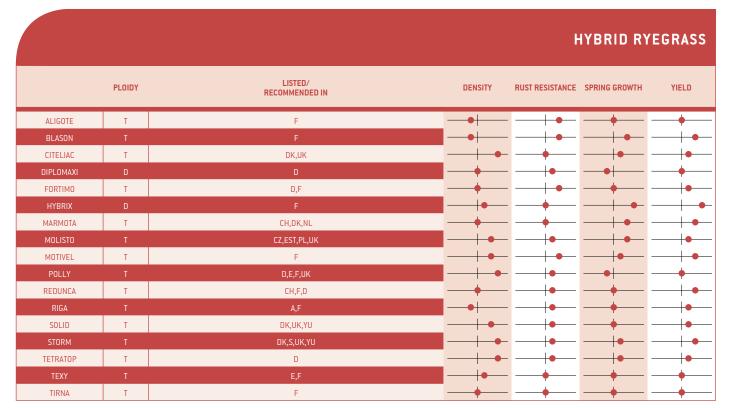
compatible in mixtures with white clover. It is suitable for cultivation in most types of soils except very wet land. Perennial ryegrass is available in early, intermediate and late heading types and in diploid and tetraploid forms.











**Hybrid ryegrass** (Lolium x boucheanum Kunth)

Hybrid ryegrass is a cross between perennial and Italian ryegrass combining yield, quality and persistence. Types range from perennial ryegrass, intermediate and Italian types. Usage has mainly been for conservation, but the new perennial types have proved to be excellent for grazing. Hybrid ryegrass has improved

**drought tolerance to Italian ryegrass**, especially the very dense hybrids. Spring growth is similar to early perennial ryegrasses whereas the heading is more like intermediate perennials. This gives a great deal of **flexibility in the spring** and high quality forage.

		ITAI	LIAN RYE	GRASS & V	VESTERWO	LDICUN
	PLOIDY	LISTED/ RECOMMENDED IN	PERSISTENCE	RUST RESISTANCE	SPRING GROWTH	YIELD
ALAMO	D	D,UK		<b>—</b>		<del></del>
CAVOUR	D	F		<del></del>	<del></del>	<del></del>
CORDELIA	D	D,F		<del></del>	<del></del>	<del>•</del>
EF 486 DASAS	D	DK,IS	-		<del></del>	<del></del>
FOX	D	F,UK		<del></del>	<del></del>	
HOWARD		UK		<b>—</b>	<del></del>	<del></del>
PODIUM	D	B,F,A		<del></del>	<del></del>	
PROSPECT	D	B,UK		<b>—</b>	<del></del>	
SIKEM	D	DK,E,KR,SK	<del></del>	<b>—</b>	<del></del>	<del></del>
ZARASTRO	D	B,D		<b>—</b>	<del></del>	
ALOUETTE	Т	F		<del></del>	<del></del>	<del></del>
ANTONIA		F,I		<del></del>	<del></del>	<del></del>
AURELIA	Т	F	<del></del>	<b>—</b>	<del></del>	
CABALLO	Т	F,A	-		<del></del>	
DANERGO	Т	A,D,DK,EST,HU,I,IS,LU,SI,UK	-	<b>—</b>	<del></del>	
DOMINO	T	F,I	<del></del>	<del></del>		<del></del>
JEANNE	T	D,F,I,PL	<del></del>		<del></del>	<del></del>
MONARQUE	Т	F	-	-		<b>—</b>
MONDORA	Т	D,EST,FIN,N		<b>—</b>	<del></del>	
MONTBLANC	Т	EST,F,NL	+	-		-



WW = westerwoldicum

### Italian ryegrass (Lolium multiflorum L.)

Italian ryegrass is **one of the fastest growing grasses** available to farmers. It establishes well and starts growing early in the following spring. It has a rapid regrowth after cutting and the **quality of the grass is very high** in respect of digestibility. It thrives on all kind of soils and is **mainly used for conservation** in short duration leys, often in mixtures with red clover. New varieties have good persistence suitable for 2-3 years use in mild climates. A lot of Italian ryegrasses are used for **intercropping**, i.e. between maize crops. Italian ryegrass exists in diploid and tetraploid forms.

Westerwoldicum is the **annual type of Italian ryegrass and the fastest growing grass**. Contrary to Italian ryegrass, it forms stems during the sowing year. Westerwoldicum is used when high production of hay or silage is required within 3-6 months after sowing. Differences between diploid and tetraploid varieties are small.







### **Festulolium**

Festulolium is a cross between festucas (meadow fescue/tall fescue) and Iolium (Italian ryegrass). This creates a combination of high quality with good winter hardiness, persistence and stress tolerance. As a result of crossing/backcrossing and selection,

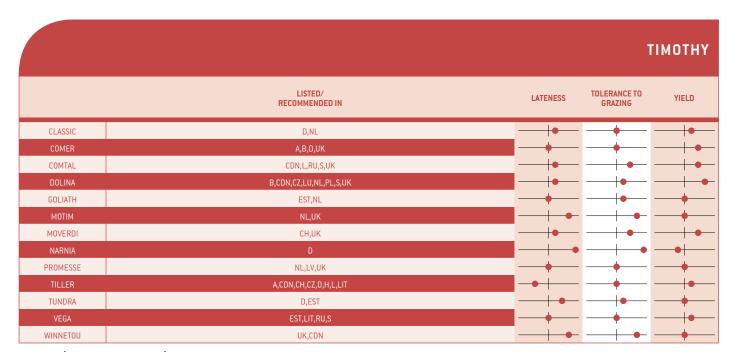
DLF-TRIFOLIUM has types similar to tall fescue, Italian ryegrass and perennial ryegrass, all with improved characteristics taken from the parent crossings. This gives an excellent opportunity to extend the growth of high quality grass in cold regions.

			MEADOW	FESCUE
	LISTED/ RECOMMENDED IN	PERSISTENCE	WINTER HARDINESS	YIELD
DARIMO	A,CZ,D,EST,L,LIT,PL,RU			
JAMAICA	CZ,F	<b></b>	<del></del>	<del></del>
KOLUMBUS	D	<del></del>		<del></del>
LAURA	A,CZ,DK,D,EST,HR,LV,PL,RO,S,SI,SK			<del></del>
NORILD	S	<b>—</b>		<del></del>
RICARDO	D		<del></del>	
SENU PAJBJERG	DK,E,EST,LIT,LV,RO,RU,SK,UA	<del></del>	<del></del>	-
STELLA	CZ,F,LU,LY,NL,PL,S			

### Meadow fescue (Festuca pratensis Huds.)

Meadow fescue is a **very persistent grass**. It does not require high temperatures for active growth and is **very winter hardy**. It appreciates a **high soil moisture content**. Meadow fescue can be

grown successfully in a wide range of soils. Meadow fescue has early spring growth with a regrowth consisting mainly of leafy shoots. It is suitable for both cutting and grazing.



### Timothy (Phleum pratense L.)

This species is normally found growing wild in fertile soils in good moist conditions. It is a persistent grass, which seldom suffers from frost damage. If moisture is available, it tolerates high summer temperatures, but is best suited for cultivation in areas with temperate climatic conditions, including low-lying wet land. Timothy

starts growing early in the spring and offers good production in the autumn. Early types are mainly for conservation with a high first cut whereas the later types have a prolonged growth over the summer and are well suited for grazing.

				TALL	FESCUE
	LISTED/ RECOMMENDED IN	DIGESTIBILITY	DENSITY	WINTER HARDINESS	YIELD
CARMINE	F		<del>-</del>		
EMERAUDE	F		<del></del>	•	<del></del>
EXCELLA	F	<b>—</b>	<del></del>	•	<del></del>
FUEGO	F,EST,PL	<b>—</b>		<del></del>	<del></del>
HYKOR	D	<del></del>	<del></del>		<del></del>
JORDANE	F	<b>———</b>	<del></del>	<del></del>	<del></del>
KORA	CH,CZ,D,HR,HU,PL,RO, SK,UA		<del></del>	<del></del>	
SEINE	E,EST,F	<b>—</b>		<b>—</b>	<del></del>
TUSCANY	F				

Tall fescue (Festuca arundinacea Schreb.)

Tall fescue is one of the most drought, heat and wear tolerant species. Due to its large, deep rooted system it is able to take up water, also in very dry periods. Tall Fescue tolerates high temperatures and stays green in a dry summer period maintaining

production unlike many other species that have ceased growing. **New varieties have softer leaves and improved digestibility**. Tall fescues provide **good winter growth** compared to other species in mild winters.

## OAT-GRASS LISTED/ RECOMMENDED IN MEDIAN A,CH,CZ,PL,SK

Oat-grass (Arrhenatherum elatius L.P. Beauv.)

Oat-grass is a **tall growing grass which is especially used for hay**. It thrives very well in **dry and poor soils** due to its very deep rooted system. Growth starts early in spring and heading is also early. It

can be mixed with red clover and other tall growing grasses for hay or silage production in a 2 max 3 cut management. Because of a slightly bitter taste, it is not fed fresh to stock.

		BROMUS
	ТҮРЕ	LISTED/ RECOMMENDED IN
BLIZZARD	Sitchensis	F

### **Bromus**

The use of brome grass is recommended especially on dry lands.

				cod	CKSFOOT
	LISTED/ RECOMMENDED IN	LATENESS	TOLERANCE TO GRAZING	MIXTURE ADAPTATION	YIELD
ALDEBARAN	D			<del></del>	-+-
AMBA	A,BY,CND,CH,DK,EST,HR,HU,KR,LU,RO,RU,SK	<b>→</b> +	<del></del>	$-\!$	-
AMBASSADOR	A,D,LV,PL		<del></del>	$-\!$	
ARAMIS		<b>—</b>	<del></del>	<del></del>	
ATHOS	AR,E,F,LU,UK		<del></del>	<del></del>	
CABRETT	F,LU	<b>—</b>	<del></del>	${\longrightarrow}$	
DONATA	D				<b>—</b>
KARAVANE		<del></del>	<del></del>	${\longrightarrow}$	
NIVA	CDN,CZ,LIT,LV,PL,SK	-	<b></b>		
SPARTA	ARG,EST,LIT,RU,UK	<b>—</b>	<b></b>		
POLLUX	D	-	<del></del>	<del></del>	

### Cocksfoot (Dactylis glomerata L.)

Cocksfoot is a very **persistent grass**. It grows relatively slowly in the sowing year, but in the second and subsequent years it is very vigorous. Cocksfoot starts growing early in the spring and **regrowth after cutting consists mostly of leafy palatable shoots**. Growth in

summertime is important. Cocksfoot is grown under varying climatic conditions. It is **winter hardy and drought tolerant**. Early types are mainly used for conservation. Late types are excellent for grazing.



### **Red fescue** (Festuca rubra L.)

Red fescue is found in many natural pastures in most soil types under **widely varying moisture conditions**. It normally propagates by means of creepers, giving a **good ground cover**. Red fescue is relatively slow growing in the sowing year and does not reach its full potential until the second or third year of use. It thrives under

a wide range of conditions, but **especially in dry, rather poor soil and in fields subject to heavy wear**. It has good frost and drought resistance and tolerates surface water during the winter. It is suitable for both conservation and grazing.

	SMOOT	H-STALKE	D MEADOW	/-GRASS
	LISTED/ RECOMMENDED IN	PERSISTENCE	GROUND COVER	YIELD
ADAM 1	A,D	-+-		
BALIN	A,DK,HR,I,LIT,LU,PL,SI	-+-		<del></del>
MONOPOLY	A,CH,CZ,EST,LIT,N,NL,RU			<del></del>
OXFORD	A,D,EST,LV,N,NL			
TOMMY	CH,NL			

### Smooth-stalked meadow-grass (Poa pratensis L.)

Poa pratensis is frequently found in natural grasslands, in both mineral and humus rich soils. It is **persistent with strong rhizomes and erect leafy shoots**. Growth starts early in the spring and the regrowth consists mainly of leafy material. Poa pratensis is

present in all permanent pastures used for grazing. It is common in temperate and relatively moist regions of both northern and southern hemispheres. It tolerates hard wear and because of its rhizomes, it can regenerate even if the grass sward is badly damaged.







### PERENNIAL RYEGRASS LISTED/ RECOMMENDED IN FINENESS OF LEAVES RESISTANCE TO WEAR TOLERANCE LATENESS DENSITY COLOUR ACE D,F,UK CZ,F,SK,UK ADVENT F,D, NL,UK BALLET BELLAMINI D,UK F,UK BERLIOZ 1 BOULEVARD CZ,F,NL,PL DK,F,UK CASSIOPEIA CHURCHILL UK CONRAD 1 D,NL,UK DANILO DK,D,EST,HR,HU,LIT,RO,RU,S,UK DICKENS 1 D D,NL,UK DOREMI HR,I,RU,UK **ESQUIRE** CZ,D,F,PL,RU,SK,UK GATOR DK,EST,F,HR,LIT,S,UK GREENFAIR GREENWAY D,DK,F,NL,UK JESSICA D,DK,NL,UK KEYSTONE D,UK MARGARITA D,EST,F,LIT,S,UK MELBOURNE D,NL,UK MONDIAL CZ,D,EST,H,LIT,N,PL,RU,SK,UK NERUDA 1 F,UK

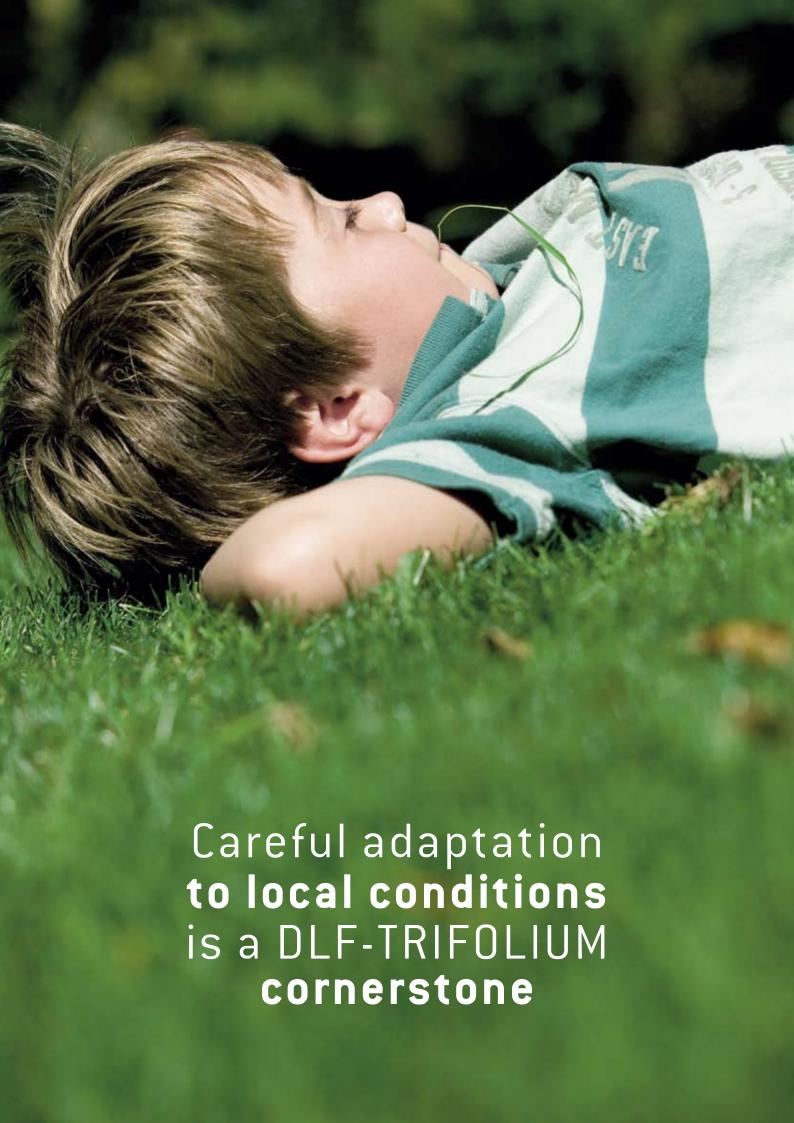


### Perennial ryegrass (Lolium perenne L.)

Perennial ryegrass is the **fastest establishing species** of all the turf grasses. It prefers milder climates, but tolerates temperatures down to minus 16-18°C without a snow cover. With a snow cover, ryegrass tolerates even lower temperatures. In temperate regions, perennial ryegrass is a true perennial with high persistence. It can be used on most soil types with the exception of very wet land. Perennial

ryegrass exists in early, intermediate and late types in respect to heading and spring growth. Perennial ryegrass has **very high wear tolerance** due to **fast regrowth of tillers and leaves**. This makes the species an essential ingredient in mixtures for sports. It demands regular fertilisation and cutting.





### **Amenity Varieties**

### There are three types of red fescue for amenity purposes:

- 1 Slender creeping red fescue type rubra trichophylla
- 2 Chewings fescue type – rubra commutata
- 3 Strong creeping red fescue type rubra rubra

### Red fescue (Festuca rubra L.)

Red fescue is found in many natural green areas on nearly all types of soils and under widely varying moisture conditions. Red fescue is relatively slow growing in the sowing year and has **very fine needle like leaves** and a **high shoot density**. It thrives under a wide range of

conditions but is notable for its **tolerance to dry, rather poor soil**. It is **very resistant to frost and drought** and it tolerates surface water during the winter to some extent. **Shade tolerance** is better than for most other species.



### Type: Rubra trichophylla

Rubra trichophylla has short rhizomes that facilitate the repair of gaps in the sward, but at a slower rate than rubra rubra. Shoot density is very high enhancing the species' ability to withstand close mowing. High salt tolerance makes trichophylla useful

in mixtures for roadsides and parks where salt is used on roads and paths during winter. The **drought and shade tolerance** of trichophylla is higher than for other red fescue types and this sub-species thrives well in a mild, coastal climate.



### **Amenity Varieties**

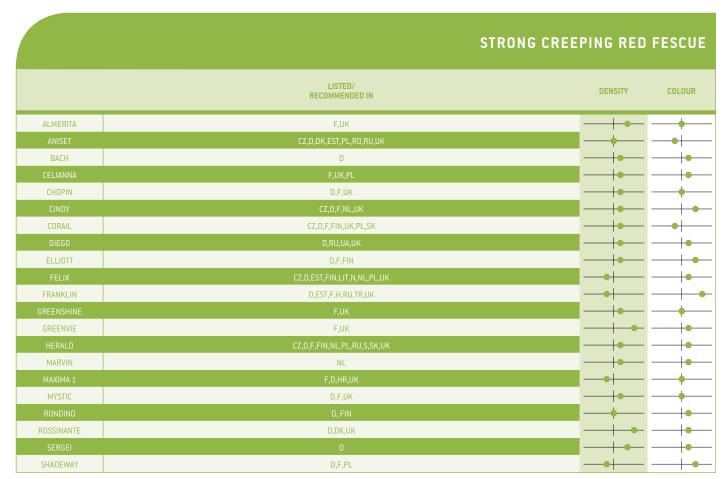
### **CHEWINGS FESCUE** LISTED/ RECOMMENDED IN TOLERANCE TO CLOSE MOWING COLOUR DENSITY CZ,D,EST,F,FIN,N,UK ALICE BLENHEIM D,F,UK DK,D,F,HR,UK CZ,D,SK CASANOVA DARWIN CZ,D,F,N,PL,RU,SK,Uk GREENSLEEVES D,F,PL,UK D MAKYTA MARITZA CZ,DK,UK RAYMOND CZ,D,FIN,LIT,PL,RU,UK WALDORF D,EST,HR,NL,S,UK

### Type: Rubra commutata

Festuca rubra commutata has no rhizomes (bunch grass) but the highest density of shoots of the three types. When using commutata in mixtures, it is often necessary to add one of the other types of fescue with rhizomes (or Poa pratensis) in order to facilitate the infill and repair of gaps in the sward. In cold areas,

commutata is an important component as it has **higher winter hardiness** than other fescues. As shoot density is very high, commutata is an integral component of mixtures that require **close mowing**, especially for **golf greens**.





### Type: Rubra rubra

**Rubra rubra** is the most robust and adaptable of the three. By forming strong rhizomes, it is able to **close gaps** in the grass sward very quickly. It **tolerates extreme summer temperatures better than other red fescues**. Rubra rubra is faster to establish

than trichophylla or commutata and can be used individually or in conjunction with the other types of fescue to ensure a good recuperation of the grass sward.

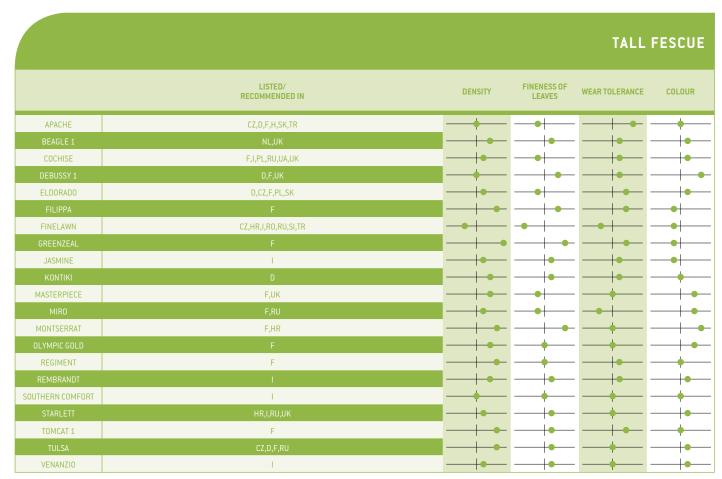
			HARD FESCUE AN	D SHEEP'S	FESCUE
	ТҮРЕ	COLOUR	LISTED/ RECOMMENDED IN	DENSITY	TOLERANCE TO CLOSE MOWING
CANTONA	Hard fescue	Green	D,F,UK	-+-	
CRYSTAL			D,EST,F,NL,RU,UK	<b></b>	
DUMAS 1	Hard fescue	Green	F	<del></del>	
				<b></b>	
MELROSE	Hard fescue	Green	D,F,NL	<del></del>	
NORDIC	Hard fescue	Green	D,F,N,NL,RU,UK	<b></b>	
RIDU	Hard fescue	Bluish	BY,CZ,DK,EST,HR,HU,LIT,PL,RO,RU,SI,SK,UA		
TRIANA	Hard fescue	Bluish	BY,DK,RU,UK		
QUATRO	Sheep's fescue	Green	CZ,D,F,NL,S,UK		

### Hard fescue and sheep's fescue

(Festuca ovina L. and Festuca ovina L var. Duriuscula)
Hard fescue is one of the grasses with the **lowest input**requirements. It thrives in all kinds of soils but is found naturally in **light dry soils** in many regions. The more original types have a bluish colour and varieties are selected for their very high adaptation to drought, heat and winter hardiness. These varieties

are excellent in mixtures for less intensive areas such as roadsides, banks, dunes, etc., but they also play an important part in domestic lawns. New improved varieties match the colour and **leaf characters of red fescues** and have a very high density. The **shade tolerance** of hard fescue is good, similar to red fescue.





### Tall fescue (Festuca arundinacea L.)

Tall fescue is one of the most **drought, heat and wear tolerant** species. Due to its large and deep root system, it is able to take up water in dry periods when other grasses have stopped their growth. This means that tall fescue stays green in dry summer periods and tolerates high temperatures. The leaf texture is rather coarse compared to other turf grasses, but new varieties have been

much improved with narrow leaves. The leaf colour is normally dark green. Winter hardiness depends on the variety as the range goes from Mediterranean types with less winter hardiness to more continental types with good winter hardiness. In general, the disease tolerance is very high. Establishment is not as quick as for perennial ryegrass and a high seeding rate is recommended.



### Creeping bent (Agrostis stolonifera L.)

The main use of creeping bent is on **golf greens**. This is due to the **very high recuperative capacity** and **shoot density** of the species, which makes it very adaptable to the **close mowing regimes** used

on these areas. Creeping bent can also be used in mixtures for very **dense lawn mixtures** due to its soft leaves and dense growth.



### Rough-stalked meadow-grass (Poa trivialis L.)

Poa trivialis is used in mixtures for **shady areas under more humid conditions**. Poa trivialis is also useful for **overseeding** warm season

grasses on golf greens where the species plays an important role.

		BROWNT	OP BENT
	LISTED/ RECOMMENDED IN	DENSITY	FINENESS OF LEAVES
ARLETTA	UK	-+-	-+-•
	D,F,PL,UK	<b>——</b>	$-\!$
JORVIK	о,ик		
LANCE	HR,UK	<b>——</b>	
MANOR	UK		
POLANA	D,SK		<del></del>
TIGER NOVA	NL,UK		<del></del>
TRACENTA	N,NL,S,TR,UK		<del></del>

**Browntop bent** (Agrostis capillaris L.-syn Agrostis tenuis Sibth.) Browntop bent is used extensively on **golf greens in mixtures with red fescue** for low input purposes. It **tolerates close mowing** 

very well. The shoot density is high and it is very adaptable to changeable growing conditions.

## CREEPING BLUEGRASS True Putt

### **Creeping bluegrass** (Poa annua forma reptans)

Poa reptans is a perennial sub-species of Poa annua with stolons. It is very aggressive and can even crowd out Poa annua. Germination is very fast and the growth is upright which leads to a "True Putt" on

golf greens. It tolerates close mowing and the tolerance to shade and wet soils is high.

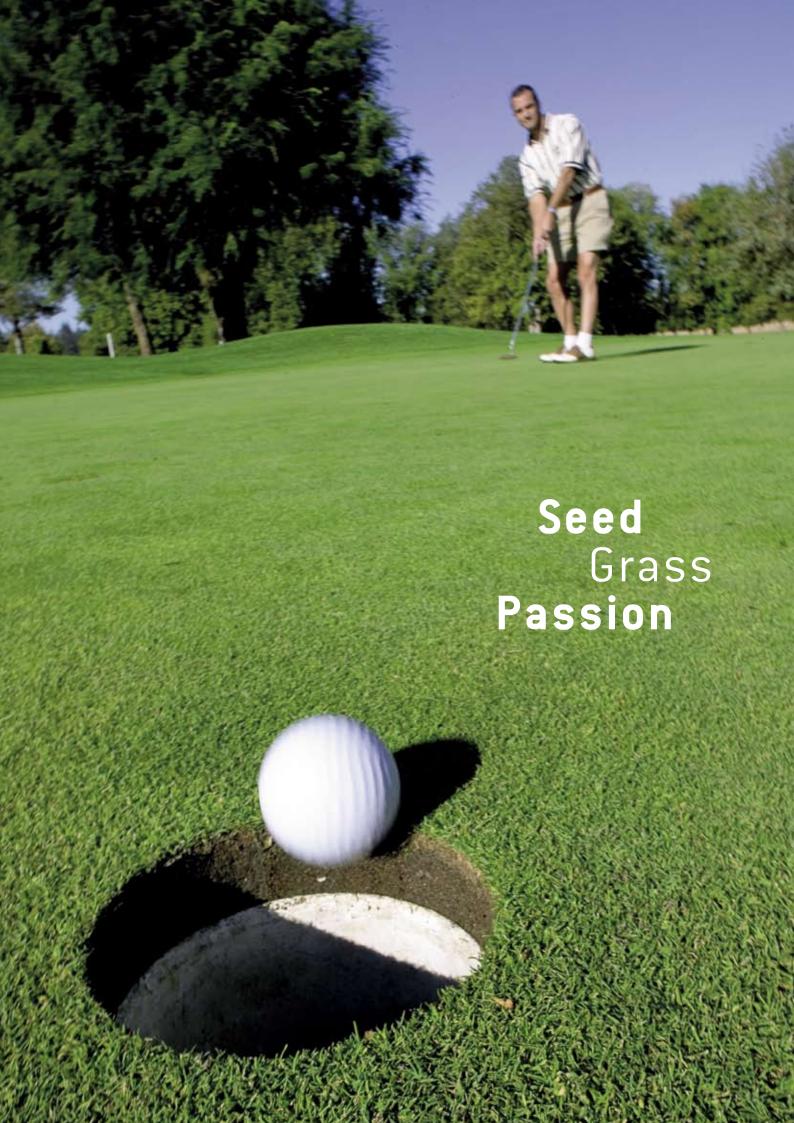
	SMALL LEAVED TIMOTHY
	LISTED/ RECOMMENDED IN
TENO	DK,RU

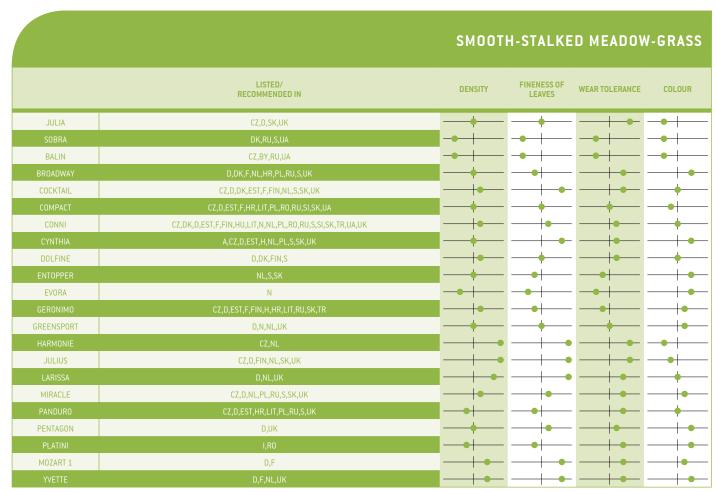
### Small leaved timothy (Phleum bertolonii DC.)

Small leaved Timothy is used in **cold, wet areas** were it tolerates extremes better than other species. This is particularly true where

plants will be subject to total submersion in winter.







### Smooth-stalked meadow-grass (Poa pratensis L.)

Poa pratensis is frequently found in the wild, in both mineral and humus rich soils in both northern and southern hemispheres. Fine-leaved varieties with excellent turf qualities have been selected. Poa pratensis is a **persistent species** with strong rhizomes and erect leafy shoots. Growth starts early in the spring and regrowth consists mainly of leafy material that can be mown very easily leaving

a clean cut. Poa pratensis **tolerates hard wear** and because of its rhizomes, it can **regenerate itself** even if the sward is badly damaged. Germination and establishment is slow. It is, however, drought tolerant and winter hardy. The heat tolerance of Poa pratensis is good which makes it a **perfect partner in mixtures with tall fescue**.

	WHITE CLOVER
	LISTED/ RECOMMENDED IN
Piccolino - Microclover	EU
Pirouette - Microclover	EU
Popolina - Microclover	EU

### White clover (Trifolium repens L.)

The breeding of white clover for turf is a speciality from DLF-TRIFOLIUM. In general, mixtures with white clover and fine grasses keep the lawn much greener and healthy without the application of nitrogen. Normal forage white clover varieties are

not suited and will not survive under regular mowing but the development of the new very small leaved varieties — **Microclover** — is a breakthrough in creating an environmentally friendly lawn, also suitable for close mowing.

# Strong performances above and below ground

It is our pleasure to present you with a portfolio of superior grass and clover varieties for both agricultural and amenity purposes, including forage, sport, lawns, parks, turf production, etc.

Varieties from DLF-TRIFOLIUM are tested on multiple sites adapted for diverse climatic and soil conditions. Test sites include Europe, USA, China, Australia and New Zealand.

The seed production is processed at modern facilities and samples are analysed at DLF-TRIFOLIUM's ISTA accredited laboratories. Quality control is carried out at every stage of production ensuring that our grass seed meets with the highest customer demands.

In this brochure, the main characteristics of each single variety are rated and therefore it is very easy to determine the best varieties for a particular use.



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