DSV Product Information 2024

IT'S YOUR SOIL



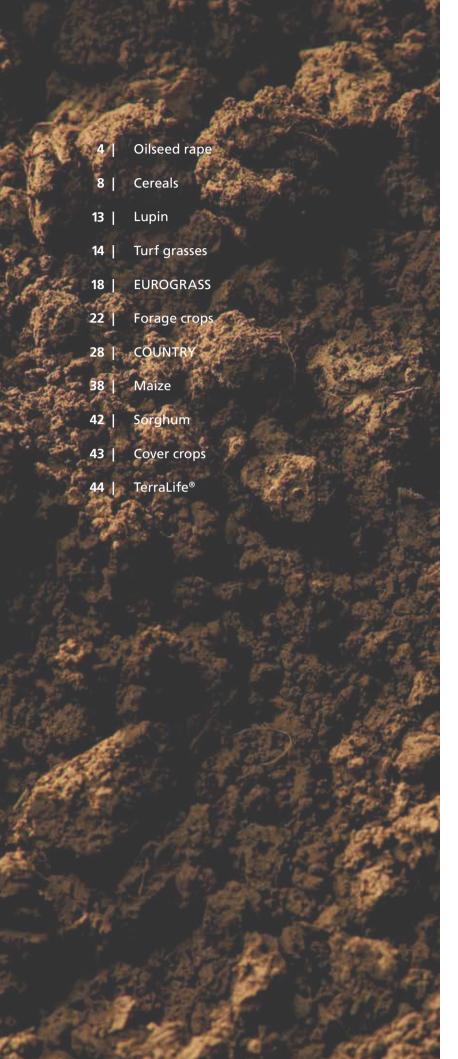
Innovation for your growth

www.dsv-seeds.com



As a breeding and seed company with 100 years of experience, we offer our customers innovative varieties and complex cultivation methods. Deutsche Saatveredelung AG (DSV) is a full-service provider for the entire agricultural crop rotation and turf grasses. We are a successful breeder of oilseed rape and cereals, as well as grasses and small-seeded forage legumes. Furthermore, we are specialists in cover crops and offer a wideranging maize portfolio as well as sorghum. We provide turf customers with several solutions, beginning with single varieties for all kind of turf use, high quality mixtures for professional or private use up to complete programmes for the do-it-yourself market. Our activities encompass not only the breeding and production of new varieties with the properties and combinations of features desired by our customers, but also expert advice, high-quality service and extensive marketing through a global distribution network. Working on the 'one-stop shop' principle, we are a full-service supplier in the seed sector.





Let's all get back to the soil

Experience from 100 years of breeding has taught us that healthy soil is the basis for sustainable growth. Without a profound understanding of the interactions and processes, resource-conserving agriculture is not possible. We breed healthy, nutrient-efficient varieties and are experts in sustainable crop rotation systems, such as undersown crops, energy crops, forage crops and cover crops. In the grass seeds sector we tap into a wealth of expert knowledge on species and varieties to provide customised solutions.

All this is based on effective quality management which we call Integrated Quality (IQ) management. This approach encompasses all divisions of the company to implement one integrated and comprehensive quality assurance system that is based on high production standards. Our sales specialists listen to our customers and provide extensive and individual advice whilst keeping in touch with the breeders. They channel customer needs so these are taken into account as new varieties and solutions are developed.

DSV seed ensures high-quality yields and safeguarding soil fertility. So that you can continue to farm economically successfully under the current challenging conditions.





Oilseed rape bred by DSV – success as a result of innovation and tradition

We have been part of the success of oilseed rape (OSR) breeding in Europe since the 1960s, expansion of the crop. While OSR breeding technology has evolved over the decades, the goal is still the same: to deliver improved varieties for our customers' success. We

Focused on hybrids

In our OSR breeding we are focusing on hybrids for more than 20 years. Apart from the resistances such as TuYV or clubroot more quickly than in the past. Thus, we are able to

International distribution

and a state of the state of the state of the state

Depending on the country, our varieties are distributed under the DSV or RAPOOL brand.

Breeding milestones

Winter oilseed rape hybrids

BATIS

The new star for early maturity

- Good development before winter and strong regrowth after winter
- Early flowering and medium maturity
- Very even maturity of pods and straw
- Distribution in: CZ, LT, PL, RO, SK

CROISSANT

Advanced Clubroot genetics with strong disease package

- New CR genetic with TuYV resistance and RLM7 Phoma resistance
- Excellent yields and high oil content
- Good stem health
- Distribution in: CZ, DK, EE, LT, LV, PL, SE

DESPERADO

DOMINATOR

Optimal yield protection

• Excellent winter hardiness

• Outstanding stem health due to APR37

Distribution in: CL. CZ. EE. LT. LV. PL. UA

• TuYV resistance and Verticillium tolerance

Early maturity with broad harvest flexibility

- Full trait package with RLM7, pod-shatter and TuYV resistance
- Very good lodging resistance and harvestability
- Good autumn development and late sowing potential Distribution in: CZ, EE, LT, LV, PL, SK

TEMPTATION High performance TuYV resistant variety

and stable vields

DRIFTER First Phoma Blocker variety

- Best Phoma resistance on the market with LepR1 and RLM7
- Very good lodging resistance
- Early maturity, good winterhardiness
- Distribution in: DK, EE, FR, LT, LV, PL, SE

DUKE

- Stronger vigour for difficult conditions
- Very strong early vigour and good adaptation to late sowing date
- TuYV resistance combined with very strong resistance to phoma
- Very good pod shatter resistance
- Distribution in: AR, CZ, EE, ES, HU, LT, LV, PL, UA, UK







Phoma Blocker



DUPLO Outstanding vigour in autumn and spring

• Fast regrowth in spring and medium flowering date • TuYV resistance in combination with outstanding phoma and pod shatter resistance

• Very stable and high grain yield

Distribution in: BG, CZ, EE, LT, LV, RO, SE, SK, UA, UK, HU

DYNAMIC Excellent stress tolerance and widely adapted

• Broad adaption and excellent yield stability • Very good resistance to stem canker based on RIm7 resistance gene

• Resistance to TuYV

Distribution in: BG, BY, EE, HU, LT, LV, PL, RO, RU

MANHATTAN

Balanced vigour in autumn to ensure the winter hardiness

• Full trait package with RLM7, pod-shatter and TuYV resistance Robust plant type Good Verticillium tolerance

Distribution in: CZ, DK, HU, LT, PL, SK

• Strong early vigour and good adaptation to late sowing Good winter hardiness • Good lodging resistance Distribution in: BY, CZ, EE, HU, LT, LV, PL, RU, RS, SK, UA, UK

RAP20270W11 (TEXAS) NEW Outstanding healthiness for high

• Very good stem health Robust variety with good yield stability • TuYV+RLM7 resistance

Distribution in: CZ, EE, LT, LV, PL



| 5

Winter oilseed rape hybrids



BEATRIX CL

The new generation of Clearfield WOSR

- Strong package of disease resistances (RIm7 + TuYV)
- Pod shatter Resistance
- Very strong early vigour
- Distribution in: AUS, BG, EE, LT, LV, PL, RO, SK, UA, UK

MATRIX CL First Quad Layered PNN Variety from DSV

- Very high grain yield potential
- Very good disease ratings and TuYV resistance
- Excellent pod shatter resistance

Distribution in: BG, HU, RO, UA, UK



PHOENIX CL

- Fits to all types of soils and tillage systems
- Develops very vigorous in autumn and is adapted to mid-early to late sowing dates
- Very good winter hardiness and drought stress tolerance
- Distribution in: AU, AR, BG, BLT, CL, LT, RO, UA, UK, US

SIMPLEX CL

Excellent plant health combined with strong early vigour

- Very good winter hardiness
- Excellent disease and pod shatter resistance
- Excellent resistance to biotic and abiotic stress factors

Distribution in: BG, CL, EE, LT, LU, LV, RO, UA

HOLL refers to a range of winter oilseed rape varieties with a High Oleic and Low Linolenic (HOLL) fatty acid oil profile. It was achieved by conventional breeding methods to provide an oilseed rape oil with a specific fatty acid profile benefiting food processors, foodservice operators and consumers.

Newcomer with strong quality

- Excellent oil Quality (oleic acid ~80 %, linolenic acid <3 %)
 Good yield level
- Registered in: common EU catalogue, Switzerland, UA

V350OL Early maturing HOLL

- High grain yield potential and high oil content
- Excellent oil quality (linolenic acid <3 %)
- Registered in: common EU catalogue, US



Spring oilseed rape hybrids

LAKRITZ

- Excellent stress tolerance and vigour
- Medium-late flowering and maturity
- Very high oil content

LUMEN

- Compact plant type with excellent lodging resistance
- Very vigorous juvenile development
- Excellent yield stability over all regions

- Very high grain and oil yield
- Excellent lodging resistance
- Medium flowering begin and medium to late harvest date



CEBRA CL

- Mid-early maturity
- Very good lodging resistance
 Very good grain yield stability

CHIP CL

- Vigorous plant growth and robust early development
- Medium maturity and very high yield potential

CLICK CL

- Medium-late maturity
- Medium plant height
- Very high oil content

Oilseed rape





DSV cereal breeding – a story of success

Wheat and barley breeding

In our winter wheat breeding programmes the focus is on developing high-yielding varieties with well-balanced agronomic features, good resistance package and baking guality. In winter barley, varieties are selected mainly for the characteristics of yield, health, resistances, straw stability, winter hardiness and grain quality. Over the last twenty years, we have steadily expanded our breeding activities in cereals. In addition to the main seed breeding station in Leutewitz, Germany, DSV has now two other seed breeding stations in European key markets – in France and in the United Kingdom. Our own Europewide testing network allows the selective breeding on environmentally stable varieties suited to all of the major cereal growing regions in Western and Eastern Europe. DSV has also strong partnerships in spring wheat breeding.

International distribution

DSV is one of the market leaders in cereals in Germany and DSV varieties have been introduced to the market successfully in many other countries as well. Depending on the country, DSV cereal varieties are sold through wholly-owned subsidiaries o

Breeding milestones



Winter wheat varieties

AKTEUR E-guality

- Good guality characteristics and high specific weight Good HFN stability
- Longer straw, good standing ability
- Very suitable for late sowing

Distribution in: DF RO

ARKTIS E-guality

- Good bread making features
- Very high level of resistance to Fusarium head blight. mildew and evespot
- Medium straw length
- Very good winter hardiness
- **Distribution in:** BY

ARTIST B-guality

- Very high and stable grain yields, high specific weight
- Very good winter hardiness
- Medium to early ripening
- Short to medium straw length
- Distribution in: EE, LT, LV, PL

ASKABAN E-guality

- High and stable yielding E-variety
- Good standing ability and winter hardiness
- Well balanced disease resistance
- Good quality characteristics
- Distribution in: CZ, EE, LT, LV, PL

ASPEKT A-quality

- Early type with good baking guality (A+)
- Stable and high yield in official trials
- Good winter hardiness, good to medium standing ability • Good suitability after legumes, oilseed rape, maize and
- sugar beets

Distribution in: BY, EE, FI, LT, LV, PL, RO, UA

ATTRAKTION A-guality

- Stable grain yield and high specific weight
- Very good rust and mildew resistance
- Medium to early heading and medium ripening
- Good HFN stability
- Distribution in: RO, SK

ATTRIBUT A-quality

- High yielding A-guality wheat
- Good lodging resistance
- Well balanced disease resistance
- High and stable HFN and specific weight
- **Distribution in: DE**

- High yielding B-guality winter wheat • Balanced variety profile • Pch1 resistance gene against evespot included • Medium to good winter hardiness Distribution in: PL

- Short, stiff straw

- High quality single ear type Robust health package • Medium ripening and good winter hardiness Balanced agronomic features

- Very high yielding B-guality winter wheat • Earlier heading and medium ripening • Balanced variety profile • Orange wheat blossom midge resistance (Sm1) Distribution in: BE, DE, DK, PL

DJANGO BPS-quality

- French variety type with awns • High yield stability under different conditions • Early ripening • Resistance to orange wheat blossom midge (Sm1) **Distribution in: FR**

- - Early ripening • Very good winterhardiness • Good leaf and ear health Stable straw Distribution in: RO, UA

CHAMPION Gr.4-quality

- Very high yielding; number one in UK in the hard wheat segment
- Strong disease resistance package especially against septoria and rust
- Included resistance against orange wheat blossom midge (Sm1) • Good suitability after different pre-crops and high flexibility in sowing time
- Distribution in: BE, DE, DK, IE, NL, UK

CIRCUS B-guality

CH COMBIN E-quality

• Early harvest, ideal as previous crop before oilseed rape • Good baking guality • Winter hard and drought tolerant Distribution in: RO, SK, UA Breeder: DSP AG, Agroscope

DAVINCI E-quality

Distribution planned in: PL

DEBIAN B-quality



EMBLEM A-quality

Winter wheat varieties

ETANA A-quality

- High grain yield
- Stable quality due to the stable HFN, good protein content and high specific weight
- Good leaf and ear resistance
- Very good winter hardiness and stiff straw

Distribution in: BY, DE, EE, LT, LV, SE, SK, RU, UA

EXPO E-quality

- High treated and untreated grain yield for an E-guality wheat
- Good winter hardiness
- Well balanced disease resistance package
- Very good Fusarium head blight resistance

Distribution in: CZ, HU, PL, SK

EXSAL E-quality

- High yielding E-quality wheat
- Awned type with high lodging resistance
- Strong resistance package
- Espeially against yellow rust and Fusarium head blight

Distribution in: DE

JOKER A-quality

- High treated and untreated yield
- Medium straw length, with good lodging resistance
- Good leaf and ear disease resistance
- Good Fusarium head blight resistance package

Distribution in: BG, PL, RO

KAROQUE BPS-quality

- French variety type
- Early ripening
- Well rounded resistance package
- Good kernel quality and high protein content

Distribution in: FR

OXFORD Gr.4-quality

- Very high yielding hard feed wheat
- Strong disease resistance package especially against septoria and rust
- Included resistance against orange wheat blossom midge (Sm1)
- Medium ripening
- **Distribution in: UK**

PATRAS A-quality

- High and stable treated yield
- Good leaf and Fusarium head blight resistance
- Short to medium straw, good winter hardiness
- Good quality characteristics for an A-quality wheat

Distribution in: BY, CZ, DE, EE, LT, LV, PL, UA

POLARKAP A-quality

- Strong protein level for an A-quality wheat
- Strong resistance package
- Good kernel quality with high specific weight
- Medium ripening and good winter hardiness

Distribution in: DE

PRODUZENT A-quality

- High yielding baking wheat
- Good winter hardiness and straw stability
- Good stability of HFN
- Good leaf and Fusarium head blight resistance

Distribution in: PL, UA

THALAMUS A-quality

- High yielding milling and backing wheat
- Medium heading and ripening
- Balanced resistance package
- High resistance against rust

Distribution in: AT

THEODORE Gr. 4-quality

- Very high untreated yield performance, high treated yield
- Short straw, good standing power
- Excellent Septoria and yellow rust resistance
- Very good suitability for low input
- Distribution in: UK

XERXES E-quality

- Good bread making features with a high gluten content
- Medium to good disease resistance, good Fusarium head blight resistance
- Longer straw length, medium to good standing ability
- Medium to low winter hardiness, medium-early ripening **Distribution in:** AT. HR. IT

Spring wheat varieties

AKVITAN A-quality*

- Mid-early variety with high TGW
- High and stable yield
- Balanced health
- Good lodging resistance

Distribution in: CZ, EE, LT, LV, PL **Breeder:** LLA Triesdorf

BASTEI A-quality

- Strong yielding A-Quality spring wheat
- Well balanced disease resistance
- Short length with good lodging resistance
- Medium to late ripening

Distribution in: EE, LT, LV

BROCA A-quality*

- High yielding, mid-late low input variety
- Strong performance also in autumn sowing
- Very healthy, short and resistant to lodging
- Suitable HFN stability and high TGW
- Distribution in: DE, EE, LT, LV, RO Breeder: LLA Triesdorf

CONTINENTAL E-quality

- Medium to long plant length but good standing ability
- Good baking qualities
- Good Fusarium head blight resistance
- High yielding variety

Distribution in: KZ Breeder: DSP AG, Agroscope



TR • Go



KOSTANAI E-quality

High yield potential
Good disease resistance package
Stiff straw, medium plant height
Medium heading
Distribution in: KZ Breeder: DSP AG, Agroscope

SORBAS E-quality*

Stable HFN, good protein content and high specific weight
Medium ear emergence and ripening
Excellent Fusarium head blight resistance
Balanced resistance profile
Distribution in: EE, LT Breeder: LLA Triesdorf

TRISO E-quality*

Good yield stability
Very high protein content
High level of Fusarium head blight resistance, medium leaf health
Wide ecological adaption
Distribution in: RU, UA Breeder: LLA Triesdorf

E, *A*, *B*, *C*, *BPS*, *BP*, *BAU*, *Gr*.1, *Gr*.2, *Gr*.3, *Gr*.4 = *Wheat quality classes of the countries* *with the option for late autumn sowing



Winter barley varieties

We are very pleased that we are able to offer farmers resistant varieties which enable the cultivation of barley on sites with barley yellow dwarf virus (BYDV) or additional barley yellow mosaic virus (BaYMV type 2).

AVANTASIA 6-row



- High to very high grain yield
- Balanced agronomic characteristics
- BaYMV type 1+2 resistance
- Early heading and medium ripening

Distribution in: BE

DEEPLO 6-row

- Winter barley with malting quality
- Good winter hardiness
- Short straw length
- Good lodging resistance

Distribution in: BY

ESPRIT 6-row

- Very high yield with easy handling
- Healthy leaf
- Lodging resistant and steam stiff
- High hectolitre weight with top sorting

Distribution in: AT, BE, CH, DE, PL, RO

FASCINATION 6-row

- Tolerance to BYDV
- High to very high grain yield
- Balanced agronomic characteristics
- Early heading and medium ripening

Distribution in: AT, DE, FR

JULIA 6-row



BYDV

- Well rounded resistance profile
 Record vielding in official trials
- Resistance to BaYMV type 1 + 2
- Good kernel quality

Distribution in: AT, BE, CZ, DE, FR, PL





PARADIES 6-row



- Tolerance to BYDV and resistance to BaYMV type 1 and BaMMV
- High yield also under infection conditions
- No insecticide use necessary, early sowing dates possible
 Very good leaf health and winter hardiness
- **Distribution in:** AT. DE. HU. LU. UA

SAPHIRA 6-row

- Early to medium heading and ripening
- Medium straw length
- Good resistance package
- Good screening >2.2 mm and >2.5 mm
- Distribution in: RO

SENSATION 6-row



- World's first winter barley variety combining tolerance to BYDV and resistance to BaYMV type 1 + 2
- Top yielding and early maturing
- Good disease resistance package and good straw stability
 High specific weight

Distribution in: AT, BE, CH, DE, DK, FR, HU, UK

VIOLA 6-row

- High yielding variety
- Early heading
- Short and stem stiff
- Medium specific weight and high TGW

Distribution in: DE, RO

BYDV = Barley yellow dwarf virus BaYMV = Barley yellow mosaic virus BaMMV = Barley mild mosaic virus **EXPLOY** = BYDV tolerance

EXAMPLE = BaYMV type 1 + 2 resistance

Lupin

Since the mid 1990s, the cultivation of white lupin has rapidly decreased in Germany and other countries in Central Europe because of the fungal disease anthracnose. In collaboration with our breeding partner the development of new varieties with improved resistance is our target. The first anthracnose tolerant variety FRIEDA was registered in 2019 in Germany.

FRIEDA White Lupin

- Branching type with low content of bitter substances
- High protein yield for feed use
- Excellent drought tolerance due to taproot
- Tolerance against anthracnose
- **Distribution in:** AT, CH, DE, NL, UK **Breeder:** LLA Triesdorf

CELINA White Lupin

- Low bitter content, high tillering type
- High yield potential and stability
- Good to medium standing ability
- Tolerance against anthracnose

Distribution in: AT, CH, DE, NL, UK Breeder: LLA Triesdorf

CARABOR Blue Lupin

- Branching type with low content of bitter substances
- High yield potential with very good agronomic features
- Good standing ability and good pod shattering resistance
- Excellent drought tolerance and medium TGW

Distribution in: DE, DK, PL Breeder: Saatzucht Steinach







Turf grass breeding

For decades, DSV has bred outstanding varieties for all requirements – from sports pitches and golf courses to parks and private gardens. We maintain constant programmes of investment into research and breeding progress. In this way we put our motto "Innovation for your growth" into practice.

DSV is the No.1 breeder of turf grasses in Germany, we are one of the major suppliers in the international quality turf markets. Our premium varieties head the lists of all significant turf trials in Europe. They are ideal components in turf mixtures for various purposes. The complete portfolio and essential information can be found at www.dsv-seeds.com.



Innovation is breeding

Our breeders focus on a number of different characteristics such as:

- Fast germination and establishment
- Improved wear tolerance
- Recovery after wear
- Fineness of leaf
- Tolerance to close mowing
- Colour aspect
- Persistence and disease resistance
- Tolerance to drought
- Shoot density
- Traits with specific characteristics (e.g. heat and shade)

Top varieties

Perennial ryegrass Lolium perenne

Cultivar	Live ground cover	Visual merit	Mean	Recovery	Shoot density	Fineness of leaf	Resistance to Red thread	Winter greenness	Summer greenness
EUROPITCH	7.8	7.9	7.9	7.3	7.8	7.5	4.1	5.4	5.0
EUROSPORT	7.6	7.5	7.5	7.4	7.2	6.9	5.6	5.7	5.6
EURODIAMOND	7.7	7.7	7.7	7.0	7.4	6.4	3.8	5.4	5.3

EUROSPORT – The European player

• Withstands toughest conditions in stadiums

• Outstanding score of recovery speed

Kentucky bluegrass Poa pratensis

Cultivar	Live ground cover	Visual merit	Mean	Recovery	Shoot density	Fineness of leaf	Resistance to Red thread	Winter greenness	Summer greenness
LIMOUSINE	7.2	7.2	7.3	7.8	8.0	7.3	4.9	6.2	5.4
ZEPTOR	4.6	4.8	4.7	4.6	4.6	4.6	7.1	5.2	5.7

LIMOUSINE – A legend in its own time

• High shoot density compared with very fine leaves

• Quality variety with an outstanding wear tolerance

Tall fescue Festuca arundinacea

Cultivar	Live ground cover	Visual merit	Mean	Recovery
REGENERATE	7.5	7.8	7.6	6.7

REGENERATE – Generation future

- Variety with high quality concerning disease resistance
- Sports type, very good wear tolerance in combination with very fine leaves
- Outstanding recommendations in France, UK and Germany

Source: Series S, Turfgrass Seed 2023, British Society of Plant Breeders

Shoot	Fineness	Winter	Summer
density	of leaf	greenness	greenness
8.2	7.1	6.3	6.4



High quality varieties

Perennial ryegrass Lolium perenne

Cultivar	Recommended in	Sports	Lawn	Density	Cultivar
EVENTUS	UK, DE, FR, NL, SCAN	4	5	5	TRANSA
POLLEN	UK, DE, FR	3	3	4	TURFSU
VULCANUS	UK, DE	3	3	4	JUBILEE
PASCAL	UK, DE, FR	2	3	3	TETRASP
вескнам	UK, DE, SCAN	4	3	3	tetraploid

ultivar	Recommended in	Sports	Lawn	Density
RANSATE	UK, DE, FR	3	3	2
URFSUN	DE, SCAN	3	3	3
JBILEE EG	UK, DE, SCAN	2	3	3
ETRASPORT traploid	UK, DE, NL	4	2	2

Range: 1-5 (5 = best); breeders classification

EVENTUS – A paticularly fine perennial ryegrass

• Gives every ornamental mixture a big surplus on wear tolerance

• Extremly fine variety

• Highest guality and vitality on all desired turf parameters

Kentucky bluegrass Poa pratensis

Cultivar	Recommended in	Sports	Lawn	Density	Recovery
LIMOUSINE	UK, DE, FR, NL, SCAN	4	4	5	4
MARKUS	UK, NL, SCAN	3	3	3	3
DAUNTLESS	UK, DE	3	4	4	4

DAUNTLESS – A handsome US type

Range: 1-5 (5 = best); breeders classification

- US variety with high disease resistance inclusive a good winter performance
- Colourwise adapted to the European market
- High technical purity for sod production and for mixtures with high standards

Chewings fescue Festuca rubra commutata

Cultivar	Recommended in	Density	Appearance	Red thread tolerance	Close mowing
RAMONA	UK, DE, NL	5	5	5	5
EUROCARINA	UK, DE, FR, NL, SCAN	4	4	5	5
FILIUS	UK, DE, NL	4	4	4	5
ANTOINETTE	UK, FR	4	4	3	3

ANTOINETTE – The French beauty

• Phenomenal vegetations aspect

- Component for quality ornamental lawn
- Variety for a healthy and vital lawn



Slender creeping red fescue Festuca rubra trichophylla

Cultivar	Recommended in	Density	Appearance	Red thread tolerance	Close mowing
TASIDA	UK, NL	5	4	3	4
EUROMARIE	UK, DE	4	4	5	5
TOUAREG	FR	4	4	5	4
TEENIE	UK, DE, NL	4	4	3	3

TEENIE – Toughness in turf!

• Nice medium green colour and an outstanding shoot density

• Overall year a nice performance

Strong creeping red fescue Festuca rubra rubra

Cultivar	Recommended in	Density	Appearance	Red thread tolerance
MAGITTE	UK, DE	4	4	4
MELLORI	UK, DE, NL, SCAN	4	4	3
ROCKEFELLER	DE, NL	4	4	4
MARLENE	DE	3	4	3

MARLENE – Allrounder!

• Allrounder for lawn use with improved disease resistance

• Intensive green colour with very fine leaves

Tall fescue Festuca arundinacea

Cultivar	Recommended in	Sports	Lawn	Density	Fineness of leaf
MELYANE	UK, DE, FR	3	4	4	4
ΤΑΤΟΝΚΑ	DE, FR	4	5	4	4

TATONKA – Next level European type

• Recommended newcomer in France and Germany

• European breed tall fescue with improved quality towards wear and finess of leaves

Hard and Sheep's fescue Festuca trachyphylla

Cultivar	Recommended in	Sports	Lawn
MENTOR	UK, DE, NL, FR	2	3

MENTOR – The modest one!

- Low demand towards management, forms a nice dense and fine sward
- Outstanding quality within the hard fescues

Tufted hair-grass Deschampsia cespitosa

DESANTO – For the dark side of the ground!

- Improved wear tolerance, speed up greening in spring with a good recovery
- Deschampsia is the answer for shady areas

Range: 1-5 (5 = best); breeders classification



Range: 1-5 (5 = best); breeders classification

EUROGRASS

EUROGRASS is DSV's premium brand for turfgrass mixtures. The brand offers a framework that takes into account the different country- and market-specific requirements and needs for turf mixtures. To ensure this the brand is divided into target group-specific segments EUROGRASS Professional and EUROGRASS Home.

EURO GRASS

EUROGRASS quality turf mixtures are the product of a long-term breeding, research and trial process. Only varieties that have been officially tested, at least for two years and approved as lawn grass are going to be used in EuroGrass mixtures.

Mixture programmes

EUROGRASS Professional (EG PRO)

The EG PRO mixture programme is developed for professional usage and high requirements. We select species and varieties carefully for their different characteristics to make customised mixtures. The time of sowing, climatic and soil conditions, intention and subsequent maintenance are all important parameters which are considered within the compositions. Based on many years of research and experience, these mixtures offer our customer the best solution in the market.

The EUROGRASS PRO mixtures are divided into five groups:

• Classic • Ornamental • Shade • Sport • Renovation

EUROGRASS Home

The EUROGRASS HOME mixture programme is particular designed for the do-it-yourself market. It consists of quality class varieties that optimally complement one another in their respective characteristics. We use our knowledge to compose mixtures with the intention to offer our customers good value for money. Special attention is given to the mixtures to ensure no quality compromise in this range.





DynaSeed Plus inside:

DynaSeed Plus is DSV's innovative seed treatment for turf grasses. The customised coating mass ensures reliable germination under changing environmental conditions.

- Consistent and reliable germination
- Reliable emergence
- Health and vigour

oups: ovation





DynaSeed coating mass



EUROGRASS mixture assortment

					Comp	ositio	n in %	,				
EUROGRASS	Main characteristics	Perennial ryegrass	Italien ryegrass	Kentucky bluegrass	Chewings fescue	Slender creeping red fescue	Strong creeping red fescue	Tall fescue	Hard fescue	Tufted hair-grass	Annual ryegrass	Variety examples
EG PRO 120 CLASSIC	Fast establishment, good ground cover, good soil binding capacities, low maintenance effort	50					50					BECKHAM, JUBILEE MELLORI
EG PRO 230 ORNAMENTAL	Fine textured, nice appearance, good ground cover, very suitable for fairways, ornamental lawns, parks and sod production	10		30	30		30					LIMOUSINE, MARKI ANTOINETTE, JOANN
EG PRO 320 SHADE	Shade, drought and wear tolerant, suitable under trees and building shades, very suitable where shade is combined with dry conditions	10					20	70				MELYANE, REGENE TURFGOLD, VULCA
EG PRO 410 SPORT	Extremely wear tolerant, fast recovery, fast establishment, very suitable for all areas under intense wear	50		50								BECKHAM, EG RESI EUROSPORT, POLLE
EG PRO 420 SPORT	Wear tolerant all-round mixture, fast recovery, drought tolerant, very suitable for all areas including wear	40		40	10	10						BECKHAM, EUROD DAUNTLESS, LIMOI
EG PRO 520 RENOVATION	Fast establishment, extremely hard wearing, quick recovery from damages, ideal for renovation programmes	100										EG RESISTUS, EURO BECKHAM, EUROC
EG DIY UNIVERSAL LAWN	Wear tolerant, fast recovery, usable for nearly all activities on the lawn	50		25			25					TURFSUN, JUBILEE E
EG DIY LUXURY LAWN	Exclusive appearance, with very fine varieties for the luxury ornamental lawn	50			15		30		5			PASCAL, MARLENE
EG DIY SHADY LAWN	For shady and dry locations, only species with high shade tolerance, the solution for the problematic area					15	25	40	10	10		TROUBADIX, DIPPEI
EG DIY SUMMER LAWN	Withstands dry periods better than other mixtures due to the focus on root growth and water consumption	20		15				65				MANITOU, STARFIR
EG DIY LAWN RENOVATION	For frequent lawn renovation, fast germination and establishment, strong plus competitive di- and tetraploid perennial ryegrass varieties	100										POLLEN, LOLIUS, TR
EG DIY LAWN RENOVATION+	SOS repair mixture for old outworn lawns, includes tetraploids perennial ryegrasses, improved germination rate due to seed technology	90									10	POLLEN, TURFSUN,
The accurate state and the second state of the												

All specified information are given to the best of our knowledge and belief, but without gurantee on completeness and correctness. Despite care we cannot gurantee that the described characteristics are repeatable/comprehensive in practice in each case. Deutsche Saatveredlung AG excludes adhesion for damage or claims for damages, resulting from the use the mentioned products in this brochure. Mixture adaption might be possible due to availability and innovations.

es

LEE EG, PASCAL, TURFGOLD, VULCANUS, DIPPER,

EUROGRASS

RKUS, ZEPTOR, DIPPER, MELLORI, ANNALENA, ANNA, MISSION, EVENTUS, EUROCORDUS, VULCANUS

NERATE, DIPPER, MELLORI, PASCAL, TRANSATE, CANUS

ESISTUS, VULCANUS, EURODIAMOND, EUROPITCH, LLEN, LIMOUSINE, MARKUS, ZEPTOR

ODIAMOND, EUROPITCH, EUROSPORT, POLLEN, IOUSINE, MIRADOR, EUROMARIE, JOANNA

IROSPORT, EURODIAMOND, EVENTUS, POLLEN, OCORDUS, PASCAL

EE EG, MARLENE, MARKUS

NE, TURFSUN, MISSION, NEGEV

PPER, NICOLE, NEGEV, DESHADE

FIRE, MARKUS

TRANSATE, STARFIRE, TURFSUN

N, TETRASPORT, STARFIRE, CAIRO

21

Forage crops

DSV was founded 100 years ago to ensure the availability of forage seed. Even then it was clear, that high-quality forage could only be produced with high-quality seed. Since then, extensive breeding is carried out in the most important forage grass species and in small-seeded legumes. On four breeding stations and further testing sites across Europe, DSV forage breeders develop varieties, that cover all market and utilisation requirements of farmers in Europe and beyond. Apart from common breeding objectives like biomass yield, disease resistance and persistence, we especially focus on forage quality.

The following tables give an overview on the key varieties of the different species. Varieties with particular forage quality can be recognized by the Milk Index symbol (see page 36). Across all forage species there are varieties in organic quality available. The full portfolio can be found at www.dsv-seeds.com.

DSV is certified at EU level to sell organic products (EU Regulation 2018/848) DE-ÖKO-039

Annual ryegrass Lolium westerwoldicum

	Variety	Туре	Available in organic	Maturity	Yield	Rust resistance	National listing/ Official recommendation
	GEPETTO	I	\checkmark	early-inter	5	3	AR, CO, FR, MA
	IMPERIO	I	\checkmark	early-inter	5	4	EC, FR, MA, RU
diploid	LIFLORIA	I		early	4	3	AT, DE, LU, UK
dip	LIKOLOSS	I		very early-early	5	4	AR, CO, DE, EC, UY
	RAMIRO	M/I	\checkmark	late-very late	5	4	DE
	RODILLO	M/I		inter	5	5	BR, DE, FR
	ALBERTO	I	\checkmark	early	5	5	CL, DE, FR, MA, UK, UY
	FALLADINO	I		inter	4	4	EC, DE, BY
q	LIBONUS	I		early	5	3	AT, DE, EC, FR, LU, MA, UK
tetraploid	SOUVENIR	I		very early-early	5	4	DE
tetra	ARNOLDO	M/I	\checkmark	inter	4	5	AR, BY, DE, RU
	POLLANUM	M/I	~	inter	3	3	AR, BY, DE, EC, ES, FI, KZ, LU, PT, RS, RU, TR, UA, UK
	ELUNARIA	Μ		inter-late	3	3	BY, CA, DE, RU, UA

I=Intercrop M=Maincrop

Italian ryegrass Lolium multiflorum

	Variety	Available in organic	Maturity	Yield	Rust resistance	Persistence	National listing/ Official recommendation
	SHAKIRA	\checkmark	early-inter	3	4	3	DE, UK
diploid	BALANCE	\checkmark	inter	4	4	4	BY, DE, LU
dip			inter	3	4	3	UK
	SENDERO		inter	5	4	4	CA, DE, UK
	HUNTER	\checkmark	early	5	4	3	AR, BY, DE, RU, UK
	DOLOMIT	\checkmark	early-inter	5	4	3	BY, CA, DE
-	DORIKE	\checkmark	early-inter	5	5	4	AR, BY, DE, GB, RU, UY
ploid	FABIO	\checkmark	early-inter	4	3	3	CA, DE, FI, GB, IE, LU, NL, PL
tetraploid	KINGSGREEN		early-inter	5	4	4	DE, UK
Ļ	LIPSOS		early-inter	5	4	3	CL, DE, LU, NO
	NABUCCO		early-inter	4	5	4	CA, CO, DE, EC, LU, NL, UY
	ARMAN		inter	4	4	4	UK

Video insights into forage production



| 23

Perennial ryegrass Lolium perenne

		Variety	Available in organic	Yield	Sward density	Winter hardiness	Rust resistance	Persis- tence	Forage quality	National listing/ Official recommendation
	diploid	TEMPRANO		3	4	4	3	2	2	AR, BY, DE, DK, RU, TR, UA, UK
		ALGIRA	✓	4	4	5	5	5	5	CH, LU
early	oid	KARATOS (M)	✓	4	4	4	4	4	3	DE, RU
	tetraploid	MIRTELLO (M)	✓	4	4	4	5	5	3	AR, BE, DE, LU
	te	PRANA		3	4	4	3	2	2	AR, AT, BY, EC, NL, NO, RU, TR, UA
		ARELIO (M)	\checkmark	4	4	4	3	4	4	DE, EC, NL, RU, UK
	diploid	ARSENAL	~	4	5	3	3	3	3	BY, DE, KZ, NL, RU, UA
	di	ASTONCONQUEROR	\checkmark	4	4	2	3	3	3	DE, IE, UK
		GUSTO	\checkmark	4	4	2	4	4	3	ie, uk
		ALLIGATOR	\checkmark	5	4	5	3	5	2	AT, CH, DE, LU
inter		ASTONENERGY M	~	4	3	3	4	3	5	FR, AR, BY, CL, CO, GB, IE, UY
.=	-	ASTONHOCKEY (M)	\checkmark	4	4	4	3	5	4	BE, DE
	tetraploid	ASTONVISION		4	5	3	5	4	4	NL, UK
	tetra	BOTOND		4	4	4	4	5	4	DE, NL
	-	EUROCONQUEST (M)	✓	4	4	5	4	4	5	DE, LU
		EXPLOSION (M)	✓	5	4	5	5	4	5	BY, DE, NL, UK
		TRIVOS	✓	4	4	4	4	5	3	CH, CO, DE, EC, LU, NL, RU, UA
		ARNANDO		4	4	4	4	3	3	DE, NL
		ASTONCHIEFTAIN		4	4	2	3	2	4	DE, UK
	.p	ASTONKING		4	4	2	4	3	3	IE, NL, UK
	diploid	KAIMAN M	✓	5	4	3	4	4	5	DE, LU, NL
	0	ΜΑΙΚΟ (Μ)		3	5	4	5	4	4	DE, NL
		ROSSERA	✓	3	4	3	3	5	5	DE, FR, NL, RU, UK
late		ROSSIMONTE M		5	4	3	3	4	4	DE, NL
		BEAU		4	4	2	4	3	3	FR, NL
		CHEVALIER (M)		5	4	4	4	4	3	DE
	bid	NEUVILLE		5	4	4	5	3	4	DE, FR, NL
	tetraploid	RIVALDO	✓	4	4	4	4	3	3	DE, NL
	tetr	SHERLOCK (M)	~	4	4	4	5	4	3	CA, DE
		VALERIO (M)	✓	5	4	5	4	5	4	BE, BY, CA, DE, LU, RU, UK

M = especially suitable for peat soils

Hybrid ryegrass Lolium hybridum

		Variety	Available in organic	Туре	Maturity	Yield	Sward density	Winter hardiness	Rust resistance	Per- sistence	National listing/ Official recommendation
bioloid		PIROL	\checkmark	Lm	inter	4	3	3	3	4	AT, DE, IE, LU, UK
	5	ASTONCRUSADER	\checkmark	Lm/Lp	early-inter	5	3	3	4	4	CO, DE, GB, LU, RU
tetranloid		IBEX	✓	Lm	early-inter	5	2	4	4	5	CH, CL, DE, EC, FR, LU, UY
+o+				Lm/Lp	inter-late	5	3	4	4	4	NL, UK

Festulolium Festulolium

Variety	Available in organic	Туре	Maturity	Yield	Sward density	Winter hardiness	Rust resistance	Persistence	National listing/ Official recommendation
FEDORO	\checkmark	Fp x Lm	late	4	2	4	4	4	BY, DE, RU, UA, UK

Meadow fescue Festuca pratensis

	Variety	Available in organic	Maturity	Yield	Sward density	Winter hardiness	Rust resistance	Per- sistence	Forage quality	National listing/ Official recommendation
	LIHEROLD	~	early	5	4	5	4	5	4	BY, DE, KZ, LU, NO, RU, UA, UK
oid	BALTAS		early-inter	5	4	5	4	5	3	BY, CA, DE
diploid	PREVAL	~	early–inter	4	3	5	4	5	3	BE, CA, CH, CZ, DE, FR, LU, NL, SK
	ALFIO		late	4	4	5	4	4	4	FR
tetraploid	SCHWETRA 🕅		inter	4	2	5	4	4	5	BY, CA, DE, GB
tetra	TETRAX M	\checkmark	inter	4	2	5	4	4	5	FR, AT, BY, CA, CH, RU

Tall fescue Festuca arundinacea

Variety	Available in organic	Maturity	Yield	Winter hardiness	Rust resistance	Leaf flexibility	National listing/ Official recommendation
FERGUSON		early	4	3	3	2	DE
LIPALMA	✓	early	3	3	3	2	BY, CL, DE, KZ, RU, UA, UY
ROSCATI		inter	4	5	4	4	DE, FR
ROSPARON	~	inter	5	5	5	3	AR, BY, CA, CL, FR
ROSTUQUE	~	early-inter	4	4	4	3	AR, CA, DE, FR
ROTINO		late	5	4	5	5	DE, FR

Lm=Lolium multiflorum; Lp=Lolium perenne

Fp=Festuca pratensis; Lm=Lolium multiflorum

Range: 1–5 (5 = best); breeders classification

Cocksfoot Dactylis glomerata

Variety	Available in organic	Maturity	Yield	Sward density	Winter hardiness	Rust resistance	Persistence	National listing/ Official recommendation
LIDACTA	\checkmark	early-inter	4	-	3	3	4	AR, AT, CA, CL, DE, LU, RU, UA, UK
PASADO		inter	4	-	4	3	4	BY, SK
REVOLIN	\checkmark	inter	5	-	3	4	4	BY, DE, RU, UA, UY
ROSSEUR 🔤	\checkmark	inter	5	-	4	4	4	AR, DE, FR
HUSAR	\checkmark	inter-late	5	-	4	2	4	DE
DUERO		late	4	-	4	3	4	BE, CA, CO, EC, FR, UY

Timothy Phleum pratense

Variety		Available in organic	Maturity	Yield	Sward density	Winter hardiness	Rust resistance	Persistence	National listing/ Official recommendation
ATURO		✓	early	4	4	3	-	4	DE, FR, GB, LU, RU
LISCHKA		~	early	4	4	4	-	4	AT, BY, CA, DE, KZ, LU, PL, RU, TR, UA, UK
RADDE	NEW!		early	5	3	4	-	4	CA, BY, DE, SE
PRESTO (M	✓	inter	4	4	4	-	4	BY, FR, LU, NL, UA, UK

Smooth-stalked meadow-grass/Kentucky bluegrass Poa pratensis

Variety	Available in organic	Yield	Sward density	Winter hardiness	Rust resistance	Persistence	National listing/ Official recommendation
LIBLUE	✓	3	5	4	4	5	BE, DE
LIMAGIE	~	4	4	4	3	5	AT, BY, DE, DK, KZ, LU, NO, RU, UA, UK

Creeping red frescue Festuca rubra

Variety	Available in organic	Yield	Sward density	Winter hardiness	Rust resistance	Persistence	National listing/ Official recommendation
RAFAEL	✓	4	5	4	-	5	BY, DE, RU, TR, UA



White clover Trifolium repens

Variety	Available in organic	Yield	Winter hardiness	Crude protein content	Sward density	Leaf size	National listing/ Official recommendation
BIANCA		4	4	4	4	medium	BY, DE, FR
LIFLEX	~	4	3	4	5	medium	BY, CO, DE, NL, NO, RU, TR, UA, UK
VYSOCAN		5	4	4	4	medium	CH, CZ, DE, LU
MUNIDA		4	4	-	4	large	AT, CH, LU

Red clover Trifolium pratense

	Variety	Available in organic	Yield	Winter hardiness	Crude protein content	Persis- tence		Resistance to Anthracnose	Mildew	National listing/ Official recommendation
	DIPLOMAT		3	4	3	3	3	3	4	AT, CH, DE, FR, LU, UK
diploid	HARMONIE	✓	4	4	5	4	4	4	4	BY, CH, DE, EE, FR, GB, UA
dij	MILVUS**	~	3	4	3	5	3	4	4	AT, CH, DE, GB, LU, PL, UA
	SEMPERINA**		4	3	4	4	4	3	4	AT, CH, DE, GB
loid	LARUS**	✓	5	5	3	5	4	4	4	CH, DE, LU
tetraploid	TAIFUN	~	5	5	5	4	3	4	2	AT, BY, CH, DE, KZ, RU, SE, UA

**Mattenklee-type

Lucerne/Alfalfa Medicago sativa

Variety	Available in organic	Dormancy group	Yield	Winter hardiness	Crude protein content	National listing/ Official recommendation
FLEETWOOD 🕥		4-5	4	3	5	AT, DE, LU
FRAVER		4	4	4	4	AT, BY, CH, DE, RU, UA
MADALINA		4	4	4	3	BY, RO, RU, UA
PLANET	\checkmark	3	4	5	4	BY, DE, KZ, RU, TR, UA

Crimson clover Trifolium incarnatum

Variety	Available in organic	Yield	Winter hardiness	Crude protein content
LINKARUS	\checkmark	5	3	3

Range: 1-5 (5 = best); breeders classification

National listing/ Official recommendation BY, DE

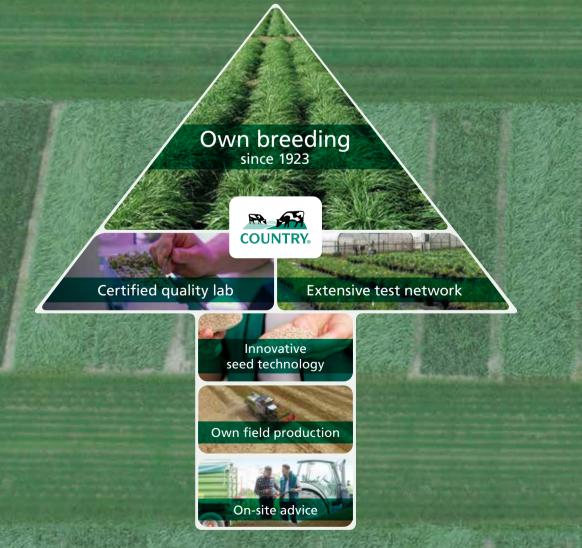
COUNTRY: Your guide to achieve the best basic ration



To guarantee highest forage guality from your grassland, the crop stand has to be perfectly adapted to the site-conditions: this means, the best performing varieties of suitable species in the perfect mixing ratio.

Based on DSV's unique experiences in breeding, production and usage of forage grasses and legumes, DSV's COUNTRY mixture programme provides comprehensive, customised forage crop solutions for all sites and usages. By using only varieties from the top of international recommendation lists, COUNTRY has become the biggest brand range programme for forage seed mixtures in Germany and Poland. Over several years COUNTRY has expanded into more international markets (e.g. the Netherlands, Austria, Hungary, Belarus, the Baltic States and Russia).

COUNTRY is divided into four sub programmes (see next pages), within which the mixtures are adapted to different sites, uses and intensities (e.g. cutting, grazing, intercropping, new sowing, overseeding).



COUNTRY sub programmes





In all COUNTRY mixtures with legumes: DynaSeed LegumeMaxx – for a maximum yield

DynaSeed LegumeMaxx is DSV's innovative seed treatment for alfalfa and clovers. The customised coating-mass ensures improved root growth and a faster establishment. The addition of species-specific rhizobia and molybdenum promotes nodulation and thus nitrogen fixation and yield.



• High N-fixation • More yield

• Disburdened fertilizer balance

COUNTRY



DynaSeed coating mass



| 29

COUNTRY Energy – the highest forage quality and dig estibility

COUNTRY Energy mixtures provide the best forage quality. For highest forage performance, the mixtures ensure the establishment of high performance swards on all sites, with maximum breeding progress in every mixture.

										Co	mposi	tion in	1 %						
COUNTRY	Designation	Overseeding	New sowings	Seeding rate for new sowings in kg/ha	With DSV's innovative seed treatment programme OynaSeed	Lolium perenne inter	Lolium perenne late	Phleum pratense	Festuca pratensis	Poa pratensis	Dactylis glomerata	Festulolium	Festuca arundinacea	Trifolium repens	Trifolium pratense	Cichorium intybus	Plantago lanceolata	dry	
COUNTRY E 2020	Late with clover	Х	Х	35-40	Intensive cutting and grazing on fresh mineral sites with good nutrient supply	40	45	10						5				••	
COUNTRY E 2021	Medium to late without clover	Х	Х	35	Intensive cutting on mineral and peat soils	60	15	25										•	
COUNTRY E 2022	Medium to late with clover	Х	Х	40	High yielding mixture for cutting and grazing	50	40							10				••	
COUNTRY E 2023	Late for high quality forage	Х	Х	40	Highest energy densities and flexibility of use		100												
COUNTRY E 2024	Peat soils and higher altitudes	(X)	Х	30-35	Top performance in yield and quality on peat soils and in low mountain ranges	70		20		10								•	
COUNTRY E 2025	Special	(X)	Х	35-40	Best forage quality on difficult sites: dry, cold, peat soils and low mountain ranges	10	10	25	40	15								•••	
COUNTRY E 2026	Protein	Х	Х	35-40	High yielding, protein-optimized quality mixture with clover	40	35							5	20			••	
COUNTRY E 2027	Milk Index	Х	Х	40	High-performance mixture for maximum forage quality	40	60												
COUNTRY E 2030	HerbMeadow MultiLife	Х	Х	35-40	Intensive mixture with herbs for cutting and grazing	40	42	10						5		2	1	••	
COUNTRY E 2031	HerbCloverGrass MultiLife	(X)	Х	35-40	HerbCloverGrass for perennial field forage		22	12	15		5	10	12	5	15	2	2	•••	

All specified information is given to the best of our knowledge and belief, but without guarantee on completeness and correctness. Despite care we cannot guarantee that the described characteristics are repeatable/comprehensive in agricultural practice in each case. Deutsche Saatveredelung AG excludes adhesion for damage or claims for damages, resulting of the use for the variety specified in this description.

Species-rich grassland

Under the name MultiLife, the COUNTRY Energy mixtures 2030 and 2031 combine at least 5 species from at least 3 plant families. Beside forage and clover species, these mixtures contain herbs like plantain and chicory. The intelligent combination of different grass, legume and herb species leads to deeper and more intensive root systems. These allow better growing conditions and more robust plant stands even under difficult conditions.



COUNTRY

	Site				Use		
normal	wet	peat soil	high altitudes	grazing	grazing and cutting	cutting	
•••	•••	••	•••	•••	•••	•••	
•••	•••	•••	•••	•••	•••	•••	
•••	••	٠	••	•••	•••	•••	
•••	•••	••	••	•••	•••	•••	
••	•••	•••	•••	•••	•••	•••	
••	••	•••	••	•	••	•••	
•••	•••	٠	•••	٠	••	•••	
•••	•••	••	••	•••	•••	•••	
•••	•••	••	•••	•••	•••	•••	
•••	•••	٠	•••	•	••	•••	
uitable		cuitabl		conditi	opolly c	uitabla	

••• highly suitable •• suitable • conditionally suitable

COUNTRY Grassland – site-adapted and high-perform ance grassland mixtures

COUNTRY Grassland stands for persistent mixtures with high yields and guality niveaus.

					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					1	1						1	First	-	1				
									C	Compo	sition	in %							Site	e			Use	
Mixture	Designation	Overseeding	New sowings	Seeding rate for new sowings in kg/ha	With DSV's innovative seed treatment programme OynaSeed Description	Lolium perenne early	Lolium perenne inter	Lolium perenne late	Phleum pratense	Festuca pratensis	Poa pratensis	Dactylis glomerata	Festulolium	Festuca arundinacea	Festuca rubra	Trifolium repens	Tritolium pratense drv	normal	wet	peat soil	high altitudes	grazing	grazing and cutting	cutting
COUNTRY G 2001	Common site conditions	Х	Х	40	Top performing mixture for intensive grassland	20	20	60										••	• •••	•	٠	•••	•••	•••
COUNTRY G 2002	Higher altitudes and peat soils	Х	Х	40	For difficult peat soils, mineral sites and altitudes	25	25	40	10									••	• •••	•••	•••	•••	•••	•••
COUNTRY G 2003	Dry sites	Х	Х	40	Suitable for dry sites	50	30						20				••		•	٠	••	••	•••	•••
COUNTRY G 2004	With clover	Х	Х	40	Top performing mixture with clover for intensive grassland	25	25	45								5	•	•1	•••	•	••	•••	•••	•••
COUNTRY G 2010	Universal with clover		Х	35-40	Broad site suitability for cutting and grazing	15	20		15	35	10					5	••		• •••	•••	•••	•	••	•••
COUNTRY G 2011	Universal without clover		Х	35-40	Broad site suitability for cutting and grazing	15	25		15	35	10						••	••	• •••	•••	•••	•	••	•••
COUNTRY G 2012	Hay and silage		Х	35-40	Intensive cutting and grazing for medium to good sites	5		30	20	20	10	5				5	5 ••		• •••	•••	•••	•	•••	•••
COUNTRY G 2013	Hay and silage for dry sites		Х	35-40	Intensive cutting and grazing for dry areas	10	10					45	20		10	5	••	• ••	•	٠	•••	•	••	•••
COUNTRY G 2014	High yielding on dry sites		Х	40	Secures good yields on dry sites with soft-leafed and high-digestible tall fescue		25	10	10	10		5		40			••	• ••	•••	••	••	•	••	•••
COUNTRY G 2015	Permanent meadow for extensive sites		Х	25-30	Mixture for extensive meadows on dry sites with white clover	10	10	10	5	25	10				10	10	10 ••	• ••	•••	•	•••	•	•••	•••
COUNTRY G 2016	For higher altitudes	Х	Х	30-35	For a late start of vegetation, persistence and winterhardiness	25	20	10	20		10	5				5	5 ••		• •••	•	•••	••	•••	•••
COUNTRY G 2018	For higher altitudes, intensive	Х	Х	35-40	Mixture for high use intensities and a high basic ration	10	40	25	10		10					5	•	••	• •••	•	••	•••	•••	•••
					ut guarantee on completeness and correctness. Despite											•••	highly su	uitable	•• •	uitable	e • c	onditio	nally	su

All specified information is given to the best of our knowledge and belief, but without guarantee on completeness and correctness. Despite care we cannot guarantee that the described characteristics are repeatable/comprehensive in agricultural practice in each case. Deutsche Saatveredelung AG excludes adhesion for damage or claims for damages, resulting of the use for the variety specified in this description.

Grassland management

Correctly timed maintenance measures, such as harrowing and reseeding, help to introduce valuable forage species in the sward and keep them here. Defecient grassland management leads to degenerated swards with undesirable species, which have a negative impact on the quality and profitability of the grassland.

COUNTRY

Organic mixtures



COUNTRY Field Forage – forage production at the hig hest level

COUNTRY Field Forage mixtures bring highest yields and forage quality through the intelligent combination of grasses, clovers and alfalfa.

	RR AN								(Compo	ositior	n in %						
	COUNTRY	Designation	Seeding rate for new sowings in kg/ha	Use in years	With DSV's innovative seed treatment programme DynaSeed	Lolium multiflorum italicum	Lolium multiflorum westerwoldicum Lolium hybridum	Lolium perenne	Phleum pratense	Dactylis glomerata	Festuca pratensis	Festuca arundinacea	Festulolium	Trifolium repens	Trifolium pratense	Trifolium resupinatum Medicado sativa		dry
	COUNTRY F 2048	Robust and dry	35-40	2-4	Perennial field forage growing on very dry areas					35	25	40					•	••
	COUNTRY F 2049	Without clover, intercropping	40-45	1	Fast growing grass mixture for intercropping use		100											•
	COUNTRY F 2050	Without clover, annual	40-45	1	Mixture for annual field forage growing on medium to good areas	50	50											•
	COUNTRY F 2051	Without clover, 1–2 years	40-45	1-2	Mixture for annual field forage growing for 1-2 years on medium to good sites	85	15											•
	COUNTRY F 2052	Without clover, 2–4 years	35-40	2-4	Two to four years forage growing mixture for medium to good areas	10	10	30	10		20		20				•	••
	COUNTRY F 2053	Intercropping Turbo	40	1	Fast growing clovergrass mixture for intercropping purpose		80									20		•
	COUNTRY F 2054	Clovergrass, 1–2 years	40	1-2	One to two years clovergrass mixture for medium to good sites	55	10							10	25			•
	COUNTRY F 2055	Clovergrass, 2–3 years	20-25	2-3	Two to three years clovergrass mixture for medium to good sites			20	20		30				30		•	••
	COUNTRY F 2056	Alfalfa grass	20-25	2-3	Persistent alfalfa mixture for all sites where alfalfa is well suited				5		15					8	0	••
	COUNTRY F 2057	Alfalfa grass robust	20-25	2-3	Robust alfalfa grass for perennial field forage							20				8	0	••
	COUNTRY F 2058	Perennial field forage dry	40	2-4	Two to four years field forage for medium to very dry areas			20		20	20	20	20				•	••
	COUNTRY F 2059	Perennial alfalfa- clovergrass dry	35-40	2-3	Perennial alfalfa-clovergrass for medium to dry sites			20	10		20	10			10	3	0	••
	COUNTRY F 2060	Alfalfa Powermix	20	2-3	Persistent alfalfa mixture for perennial use on all areas where alfalfa is well suited											10	00	••
	COUNTRY F 2061	Alfalfa grass, very dry	20-25	2-3	Persistent alfalfa mixture for very dry sites					10						9	0	••
1000	CONTRACTOR CONTRACTOR	Sector and a sector of the sector of the sector of the																

All specified information is given to the best of our knowledge and belief, but without guarantee on completeness and correctness. Despite care we cannot guarantee that the described characteristics are repeatable/comprehensive in agricultural practice in each case. Deutsche Saatveredelung AG excludes adhesion for damage or claims for damages, resulting of the use for the variety specified in this description. ••• highly suitable •• suitable • conditionally suitable



Site

normal	wet	peat soil	high altitudes	
••	••	٠	•••	
•••	•••	••	••	
•••	•••	••	••	
•••	•••	••	••	
•••	•••	••	••	
•••	•••	••	••	
•••	•••	••	••	
•••	•••	••	••	
•••	••		••	
•	••		••	
••	•••	••	•••	
••	••		••	
•••	••		•••	
•••	••		•••	

The sign for high forage quality



For many years, DSV breeders have been selecting new forage crops not only for yield and tolerance to diseases and abiotic stress factors, but they also place a special focus on forage guality. The aim is to select highly digestible and nutrient-rich forage plants for a high milk yield. Only our best varieties of forage grasses, legumes, maize and sorghum receive the Milk Index guality award. Milk Index varieties are not only tested by DSV: Their outstanding forage quality is also proven by results of independent European institutes (like the Chamber of Agriculture in Germany) or recommended lists (e.g. NIAB list for recommended grass and clover varieties).

More Milk with Milk Index



Average digestibility of a plant cell



Milk Index digestibility of a plant cell



Forage grasses:

At the optimum cutting date, Milk Index grass varieties contain less of the indigestible cell wall component lignin than conventional varieties of each species. This accelerates the digistiblity of the remaining cell wall consisting of cellulose and hemicullose. It increases feed intake and ensures a better and more stable energy supply as the nutrients of the cell content are more guickly available to the ruminant, resulting in higher animal performance.



Legumes:

As a homegrown protein source, clover and alfalfa grass stands are particularly good at meeting protein needs in ruminant diets. Milk Index varieties are characterized by particularly high crude protein contents and thus increase the protein value and content in the fodder.



Maize and Sorghum:

The DSV also provides premium cultivars with top-notch fodder quality. In addition to the starch content, the plant fiber has a considerable breeding potential to enhance the digestion of the maize stover. Increased starch levels in maize plants result in higher starch contents in silages. Thus, the amount of feed consumed is increased through a reduced resistance period of the fodder in the rumen. The digestibility of the structure-rich plant fiber is crucial, particularly in daily diets with a high share of maize. The starch content and ELOS* of a variety are used to describe its digestibility.

*ELOS: enzyme-soluble organic substance ~ digestibility

DSV's top Milk Index forage grass and legume varieties:

ROSSIMONTE

Stable yield meets quality

- Perennial ryegrass, late, diploid
- High digestibility of cell wall fraction
- High yielding, especially in second cut
- Combined with a good sward density

KAIMAN

Healthy genetics with high forage value Perennial ryegrass, late, diploid

- Very good persistence, very good rust resistance
- High sugar content
- High yielding, especially further cuts

SCHWETRA

Unique in forage quality Meadow fescue, tetraploid

- High digestibility and sugar content, verified in official trials
- Best forage quality of all meadow fescues
- Top palatability based on good rust resistance because of little susceptibility to rust

TETRAX

All-rounder with high forage value Meadow fescue, tetraploid

- Especially robust, healthy and winter hardy variety
- Digestibility above average
- Fast early growth and high persistence

EXPLOSION

Forage guality, yield and peat soil suitability Perennial ryegrass, intermediate, tetraploid

- - Suitable for peat soils

FLEETWOOD

characterics



A unique variety

Perennial ryegrass, intermediate, tetraploid

• High sugar contents combined with excellent digestibility • Outstanding forage quality meets high dry-matter yields • Based on good rust resistance and winter hardiness

EUROCONOUEST

• High dry matter yield over all cuts, especially of further cuts • Good rust resistance and persistence

ASTONENERGY

Leader in digestibility Perennial ryegrass, intermediate, tetraploid • Extraordinary forage quality (approved in trials of the

German chamber of agriculture) • High sugar content und high digestibility of the cell wall

• Recommended for a broad range of sites

When it comes to crude protein Alfalfa, dormancy 4–5

• By far highest crude protein content on the German National list

• High quality variety in alfalfa segment

• Combined with good yield and persistence



Maize

DSV offers high-quality forage plants in its portfolio. Accordingly, this also includes maize. In addition to yield, our breeders pay attention to the highest forage quality in silage and energy maize. Our Milk Index varieties convince with a very high digestibility of the whole plant as well as a pronounced starch content. Our grain maize hybrids impress with the best agronomic properties, early maturity in their respective segment and very high yields.



Maize varieties

For the next season, DSV offers a portfolio of high-performing maize varietes which provides solutions for all uses.

FORTARIS FAO 180/180

- Early maturing silage hybrid with a significant share of dent genetics
- Suitable for early harvest dates due to a rapid water release
- Good yield performance, even in trials in the Baltic states

MOVANNA FAO 220/210

- Early maturing silage maize with a strong cold tolerance and a good juvenile development
- High starch and energy outputs
- Good stem stability and resistance to eyespot and fusarium

GLUTEXO FAO 250/250

- Mid-early maturing dual purpose variety
- For the production of energy-rich silages
- Cobs with a double tip and two kernel rows more than an average cob
- Good stress resilience and an excellent stem and leaf health

- grain yields

PROPULSE FAO 270/350 east

• Mid-late maturing and energy rich forage maize • Good results for fodder quality and high yields in German and Swiss trials

- Quick dry-down behavior of the kernels



AKANTO FAO 260/260

- Medium-late maturing maize hybrid with high
- High disease resistance and good stem stability
- Alternative use as high quality silage maize hybrid
- Medium-late maturing grain maize
- High grain yields due to its excellent cob filling
- Good health and great stem stability till harvest

PURPLE FAO 260/260

GALAKTION FAO 320/370

- Late maturing dual purpose variety
- Medium-length hybrid with a great yield potential for grain and biomass

Maize varieties

							Seedin	a rate		ield	_						Susce	ptibili	ty to	
Variety	Maturity forage/ grain	Use	Available in organic	Hybrid	Type of grain	Seeding date	Kerne		Location	Dry matter yield	Energy yield	Starch yield	Starch-%	Digestibility	Grain yield	Lodging	Maize smut	Fusarium	Helmintho- sporium	Growth h
AMBIENT	120/130	grain, silage, energy	✓	three-way- cross	flint	early-very late	10-12	9	fresh-medium	6	5	6	6	5	6	3	2	3	5	compact p
JOY	150/160	silage, energy	✓	double- hybrid	flint	early-very late	10-12	_	fresh-medium	6	5	5	5	5	_	2	3	4	5	mid-comp stem's par
FORTARIS	180	silage		double- hybrid	dent/flint	early-late	8-11	_	fresh-medium	6	7	6	5	5	-	3	3	3	5	early matu of dentge
LIKEit	180/180	grain, silage, energy	✓	single-cross	flint	early-late	8-10	8-9	fresh-medium	7	7	7	6	6	7	3	2	2	3	tall plant v good cold
LIROYAL	190/190	silage		single-cross	flint	early-late	9-10	-	fresh-medium	7	7	7	6	6	7	3	2	2	3	tall plant v
DAVOS	210/220	grain, silage, energy		single-cross	flint/dent	early-late	9-10	8-9	all	6	6	7	6	6	7	3	2	4	4	medium ta
MOVANNA	220/210	silage, energy	✓	single-cross	flint	early-late	_	-	fresh-medium	7	5	6	6	5	-	5	3	3	4	tall, robus and a very
PETROSCHKA	230/230	silage, energy		single-cross	flint/dent	early-medium	8-9	7-8.5	all	7	_	7	7	5	-	4	3	3	4	tall plant,
CRUSH	250/230	grain		single-cross	dent	early-medium	9-10	7-8.5	fresh-medium	6	7	6	7	6	8	3	2	4	4	long cobs
GLUTEXO	250/250	silage, grain, energy	✓	single-cross	flint	early-medium	8-9	7-8.5	all	7	8	7	5	6	8	2	2	4	3	good yield environme
WAKEFIELD	260/240	grain, energy		single-cross	dent	early	8-10	7-8.5	medium-drought	7	8	7	7	6	8	3	3	4	3	medium t
AKANTO	260/260	grain, silage		single-cross	dent/flint	early	8-10	7-8.5	all	7	6	6	5	6	9	2	2	2	3	mid-early yields and
PURPLE	270/260	silage, energy		single-cross	flint/dent	early	8-10	-	all	7	8	7	6	7	-	4	3	4	4	high diges results in l
BADIANE	270/360 east	grain		single-cross	dent	early	8-10	7-8.5	medium-drought	-	_	-	-	-	4	4	4	4	4	maize for
PROPULSE	270/350 east	grain		single-cross	dent	early	8-10	7-8.5	medium	8	8	7	6	6	8	3	3	3	3	high grain
PIATOV	290/350 east	grain		single-cross	dent	early	8-10	7-8.5	fresh-medium	_	_	-	-	-	5	4	4	4	4	dent gene
GALAKTION	320/370 east	grain, silage, energy		three-way- cross	dent	early	8-10	7-8.5	medium	7	7	7	6	5	8	3	3	3	3	dual-purp
																			F	ange: 1_9 (1



h habit/Structure of yield

act plant, high stability

ompact plant, cobs are set on the lower part

naturing hybrid with a significant share Itgenetics, strong cob development

ant with a good cob development, cold tolerance

Int with a strong cob development

m tall plant, visible dent genetics

bust plant with broad leaves very good health status

int, dense foliage

obs, good health status

yields due to rapid cob growth in all nments

m tall plant

arly grain type with very high grain and a good health status

igestible forage maize, strong trial in Middle Europe

for dry locations

rain yields, good cob filling

enetics, yield stability

urpose variety

Range: 1-9 (1 = low, 9 = very high); breeders classification



Sorghum – the drought-tolerant alternative

Many farmers are reviewing their choices for making feed and cultivating arable crops in the future after the recent droughts. Due to the species' great stress tolerance to abiotic factors, sorghum is receiving more attention in this context.

It uses nitrogen very efficiently while tolerating less water and it even has low demands on soil. Assessing the production area of cereals, sorghum is the fifth-largest crop in the world. The crop is very versatile and is used for human or animal nutrition as well as for biomass production.

Cover crops

Cover crops, grown between two main crops (i. e. cereals, sugar beets, maize, potatoes), improve quality and yield of the main crop, promote soil fertility and beneficial microorganisms, improve soil structure, soil water regime and erosion control. Therefore, DSV offers a large range of different single components (e.g. oil radish, phacelia, buckwheat) and well balanced mixtures.

POWER-STARCH-MIX

	/		
1	Maturity:	Use:	Grain colou
ļ	early	silage	brown

DUAL sorghum hybrid

- Very early maturing
- Medium tall plant
- Good forage quality

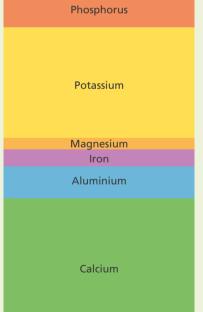
Early maturing, grain-focused DUAL sorghum types with heights of 1.80 to 2.50 m have been developed by DSV. Due to their high fodder value, the combination of several DUAL-hybrids is attractive for cow feeding. The mixture is a great supplement or substitute for maize silage due to its high GTM yield and high starch content.



YIELDS

How TerraLife[®] works: more nutrients for the main crop

BETTER HIGHER QUALITY REINFORCED MORE NUTRIENT SOIL LIFE HUMUS BUILD-UP AVAILABILITY Each cover crop has specific nutrients in the shoot and root. After they die, soil organisms decompose the cover crop biomass. In this process, the nutrients from the cover crop are mineralised and into a form that is available to plants. By combining different species, a broader spectrum of nutrients can be tapped from the soil, decomposition is controlled and transfer to the main crop is optimised. Preceding crop Main crop TerraLife[®]-MaizePro DT mixture of 12 species Phosphorus





Measured nutrient concentration (mg g-1) in the catch crop before maize within the CATCHY project

Practical solutions for your requirements

State of the second sec					Key areas			
Mixtures	Legi Free	umes Focused	Early sowing	Allround	Beet crop rotation	Potato crop rotation	Late sowing	Companion cropping
AquaPro •	•		•		•			
VitaMaxx DT	•						٠	
N-Fixx •		•						
WarmSeason •			•					
MaizePro DT				•				
Rigol DT				•				
BetaMaxx DT					•			
BetaMaxx					•			
BetaSola					•	•		
SolaRigol •						•		
SolaRigol DT						•		
SoilProtect							•	
ForageRooter		•					•	
BrassicaPro •		•						•
SolanumPro						•		•
Organic Mixtures								
AquaPro Organic	•		•					
BioMaxx Organic	•			•			•	
GreenPower Organic •		•						
MaizePro Organic	•			•				
BetaMaxx Organic •					•			
Solanum Organic	٠					•		
Landsberger Gemenge Organic							٠	
Composition can differ, dependin	a on the leas	l framawark a	within differen	at countries o	r availabilition	of single com	nononto	

Composition can differ, depending on the legal framework within different countries or availabilities of single components. ● ● = especially suitable for oilseed rape crop rotations ● ● = especially suitable ● ● = also suitable for | DT = Radish Deeptill

TerraLife®



Potentia

approx. 80 kg/ha

Early Sowing:

TerraLife[®]-WarmSeason

It's time for growth

- Suitable for early sowing
- Also for dry conditions
- Maximum photosynthesis

Composition	Niger, egyptian clover, linseed, abyssinian cabbage, sorghum, common vetch, field pea
Sowing rate	20 – 30 kg/ha
Sowing date	Mid-August to early September
Crop rotations	Cereals, maize, legumes, sugar beets

Allrounder:

TerraLife[®]-MaizePro DT

Balanced, partly hardy cover crop for maize crop rotations

- Leaves an optimal soil structure
- Promotes root penetration
- Very good N-utilisation

Composition Linseed, phacelia, niger, rye, abyssinian cabbage deep-rooted radish, persian clover, sorghum, crims clover, winter vetch, field pea, sunflower, white clo				
Sowing rate	40–45 kg/ha			
Sowing date	End of July until end of August			
Crop rotations	Cereals, maize, oilseed rape			



Allrounder:

TerraLife®-Rigol DT

Strong root formation stabilises the soil structure

- Proven in practice over the long term
- Very deep rooting
- For compacted soils

omposition	Linseed, phacelia, false flax, niger, abyssinian cabbag bristle oat, egyptian clover, field pea, sorghum, deep-rooted radish, common vetch, sunflower
owing rate	20–22 kg/ha
owing date	Mid-August to early September
rop rotations	Cereals, maize, oilseed rape

Rapid soil coverage and nitrogen fixation

• Freezing off very well

Leguminous:

• Very good nitrogen accumulation

TerraLife[®]-N-Fixx

• Rich bee forage

Composition	Egyptian clover, serradella, phacelia, linseed, persian clover, common vetch, field pea, niger, sunflower, sorghum
Sowing rate	40–45 kg/ha
Sowing date	Mid-August to early September
Crop rotations	Cereals, maize, oilseed rape, sugar beets

Composition can differ, depending on the legal framework within different countries or availabilities of single components.

Potato rotations:

TerraLife®-SolaRigol (Available as DT mixture)

The cover crop mix for potato crop rotations

- Reduces disease susceptibility in potato crop rotations
- Soil fertility enhancing
- Ensures rapid root penetration of the potato

Composition	Niger, egyptian clover, linseed, bristle oat, bitter lupin, common vetch, serradella, persian clover, field pea				
Sowing rate 55–60 kg/ha; SolaRigol DT: 30–35 kg/ha					
Sowing date	Mid-August to early September				
Crop rotations Oilseed rape, potatoes, cereals, maize, sugar be					

Sugarbeet rotations:

TerraLife[®]-BetaMaxx (Available as DT mixture)

The cover crop mix for sugar beet cultivation

- Freezes off very well
- Creates ideal seedbed conditions for sugar beet
- Also for rapeseed crop rotations

Composition	Egyptian clover, niger, phacelia, linseed, bristle oat, serradella, common vetch, bitter lupin, field pea				
Sowing rate 40–45 kg/ha; BetaMaxx DT: 30–35 kg/ha					
Sowing date	Mid-August to early September				
Crop rotations	Oilseed rape, sugar beets, cereals, maize				

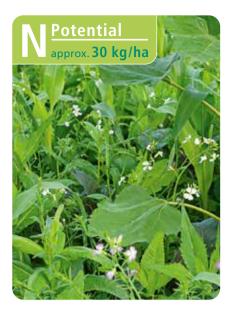
Composition can differ, depending on the legal framework within different countries or availabilities of single components. DT = Radish Deeptill



DT = Radish Deeptill







Potential

approx. 80 kg/ha

Winterhard mixture for late sowing:

TerraLife[®]-SoilProtect

Winter-hardy base mix

- For winter-hardy soil cover
- For a long greening and photosynthesis performance
- As pure seed and hardy combination with other TerraLife[®] mixtures

Composition	Perennial ryegrass, ribwort-plantain, linseed, crimson clover, winter vetch, alsike clover
Sowing rate	30–35 kg/ha, as undersown crop: 15–20 kg/ha
Sowing date	End of August to mid-September, from mid-May in undersowing
Crop rotations	Oilseed rape, cereals, maize, potatoes, sugar beets

Winterhard mixture for late sowing:

TerraLife[®]-ForageRooter

A high-yielding classic

- High protein forage
- Good winter hardiness
- Excellent improvement of the crumb structure

Composition	Italian ryegrass, crimson clover, winter vetch
Sowing rate	50 kg/ha
Sowing date	End of August to mid-September
Crop rotations	Oilseed rape, potatoes, sugar beets, cereals, maize

The interactive combination with the main crop:

Companion cropping

Benefits:

- Stabilisation of the soil structure
- Improvement of the nutrient dynamics
- Increase of the photosynthetic active leaf area
- Optimum nutrition of the microbiom



TerraLife[®]-BrassicaPro

The companion cropping mixture for oilseed rape experts

- Supports the nitrogen supply
- Increasing biodiversity

Composition	Serra persia
Sowing rate	15-2
Sowing date	Short
Crop rotations	Oilse



TerraLife[®]-SolanumPro

The companion cropping mixture for potato experts

- Temperature control in potato ridges
- Promotes soil life

Composition	Sumr niger,
Sowing rate	15 kg
Sowing date	Depe variet
Crop rotations	Oilsee

• Possible support weed supression and distraction of insect pests

della, linseed, field bean, egyptian clover, an clover, niger

20 kg/ha

tly before or at the same time as the rape

ed rape, cereals, maize

• Strengthens the vitality of the potato plant

mer vetch, oilseed rape, perennial ryegrass, , persian clover

g/ha

ending on the growth type of the potato ties, approx. EC 9

ed rape, potatoes, sugar beet, grain, maize

Our best single components

Our intercrop varieties ensure the success of the cultivated species. DSV offers a wide range of catch crop varieties and has solutions for different requirements.

White mustard and oil radish have always been very common in cover cropping. Breeding of nematode reducing varieties often secures or even allows the intensive cultivation of beets and vegetables in many regions. Our varieties combine just the best characteristics.

			Susceptibility		Matter production Tendency		Sowing time			
Name	Available in organic	Species	for H. schachtii	Other nematode resistances	at the	for flowering	Early sowing*	Medium sowing*	Late sowing*	
RADETZKY	✓	oil radish	2	Meloidogyne chitwoodi, M. falax, M. minor	5	3				
RESET		oil radish	1	Meloidogyne chitwoodi	6	3				
TRIDENT		oil radish	2	Meloidogyne chitwoodi, M. hapla	7	3				
BRUTUS	\checkmark	oil radish	2**							
PASSION		white mustard	2		6	3				
CONVEX		white mustard	2		4	2				
ConceptOne	✓	white mustard	1		6	3				
POLE POSITION		white mustard	1		6	3				
LITEMBER	\checkmark	white mustard			7	5				
Based on BSA-results, Germany 2021				Range: 1–9 (1 = low expr	ession degree, 9	9 = high expres	sion degre	e)		

*in warm temperate climate zones like in Central Europe **based on Belgium trial results

Oil radish (Raphanus sativus) RADETZKY

Combines four resistances

- Resistances: Heterodera schachtii (cat.2): Meloidogvne chitwoodi, falax and minor
- Far window for sowing due to good standing ability and low tendency for flowering

RESET

Best for sugar beets

- Highest possible resistance against Heterodera schachtii
- Low tendency to lodging and flowering

Mustard (Sinapis alba) CONVEX

The waxy type

- Very thick cuticle \rightarrow more lipids to feed the soil life
- Well adapted to early sowings
- Resistance to beet nematods

TRIDENT

Three times excellent against nematodes

- Resistances: *Heterodera schachtii* (cat.2): Meloidogvne chitwoodi, hapla, and clubroot
- Nematode control in intensive crop rotations with sugar beets, potatoes and vegetables
- Fast early growth for good weed suppression combined with a low tendency to flowering

POLE POSITION Late all-rounder

- Tolerates late sowing
- Offers much organic matter
- Short, stable growth type

Abessinian mustard (Brassica carinata) PURPLEFIRE

Fast growing and storing nitrogen

- Very dark purple leaves
- In most areas winterhard
- Very good nitrogen uptake

MARCO

LICAPO

Winter forage rape (Brassica napus) **GORILLA**

High yield and dry matter content

- The dark purple green and re-growing forage rape • Early sown (late spring) GORILLA can be grazed or cut
- two times in the same year • Very good standing ability and tolerant to club root

Crimson clover (Trifolium incarnatum) LINKARUS*

Suited for many uses

- Overwintering crimson clover with flexible usage (cover crop, forage, green manuring)
- Characterised by fast growth, intermediate flowering, mass of fibrous roots and dense foliage
- Very good bee pasture

Buckwheat (Fagopyrum tataricum) LIFAGO*

Large leaves for excellent ground cover

- Especially bred for cover crop use
- Impressive high organic matter production
- based on fast early growth
- Freezes off reliably

Linseed (Linum usitatissimum L.) LIRINA*

Blue flowering and deep rooting

- Medium-early heading
- Good drought tolerance
- Good competitiveness

Camelina (Camelina sativa) LIGENA

Great adaptability to different conditions

- Suitable for cultivation under low-input conditions
- Low susceptibility to disease
- Good weed suppression

*also available in organic quality

- and root crops

LIVIOLETTA*

- or forage use

Turnip (Brassica rapa rapa)

Grazing preference

• Early maturing tetraploid variety • Mid-summer sowing for grazing in autumn and winter • Resistant to bolting and tolerant to clubroot and alternaria

Palatability and high digestibility

• High-yielding 00 forage rape \rightarrow free of erucic acid and low content of glucosinolates • Good general resistance and high leaf to stem ratio ensure a good palatability and digestibility • Well-suited for silage production or grazing

Hairy vetch (Vicia villosa)

Ostsaat Dr. Baumann's*

N-fixing and soil improving

• For winter cover crop cultivation with a good winter hardiness and tillering as well as lush foliage • Ideal overwintering green manure previous to maize

• Part of the cover crop mixture TerraLife[®] ForageRooter

Field pea (Pisum sativum)

Top variety for green manuring

• One of the top field pea varieties for green manuring

• Shows good standing ability

• High protein contents and dry matter yields





Deutsche Saatveredelung AG

Weissenburger Straße 5 59557 Lippstadt Fon 02941 296 0 Fax 02941 296 100 info@dsv-saaten.de

www.dsv-seeds.com

Contacts

Burkhard Middendorf | burkhard.middendorf@dsv-seeds.com Head of Sales Central Europe

Steve Genis | steve.genis@dsv-seeds.com Head of Sales & Business Development

Europe

Denmark · Iceland Belgium · Netherlands Austria · Bosnia-Herzegovina Bulgaria · Croatia · Hungary Romania · Serbia · Slovenia UK · Ireland Finland · Norway · Sweden Luxembourg · Switzerland Czech Republik · Estonia · Latvia Lithuania · Slovak Republic · Poland France Germany

Moldova · Ukraine

Spain · Greece · Cyprus · Italy Portugal · Turkey

Americas

Canada · USA Argentina · Brazil · Chile · Columbia Ecuador · Paraguay · Peru · Uruguay

Middle East / Africa / Asia

Republic of South Africa

China · Japan

Armenia · Azerbaijan · Kazakhstan Kyrgyzstan · Mongolia · Uzbekistan Belarus · Georgia · Russian Federation

Algeria · Egypt · Iran · Lybia · Marocco Tunesia · Syria

Australia / New Zealand

Lasse Bech | lasse.bech@dsv-froe.dk Jos Deckers | jos.deckers@dsv-zaden.nl Martin Deubzer | martin.deubzer@dsv-seeds.com

Dr. Alexander Doering | alexander.doering@dsv-uk.co.uk Ole Sams Falkenberg | ole.sams.falkenberg@dsv-froe.dk Michael Hamann | michael.hamann@dsv-saaten.de Jerzy Krzyzak | jerzy.krzyzak@dsv-seeds.com

Yann Marioton | yann.marioton@dsv-france.fr Tobias Philipp | tobias.philipp@dsv-saaten.de Yaroslav Telychko | yaroslav.telychko@dsv-ukraina.com.ua Robert Wich | robert.wich@dsv-seeds.com

Sheldon Hains | sheldon.hains@dsv-northstar.com Gonzalo Luna | gonzalo.luna@dsv-semillas.com.ar

Gonzalo Luna | gonzalo.luna@dsv-semillas.com.ar Dr. Heino Schaupp | heino.schaupp@dsv-saaten.de Waldemar Utte | waldemar.utte@dsv-seeds.com

Robert Wich | robert.wich@dsv-seeds.com

Sheldon Hains | sheldon.hains@dsv-northstar.com

More Information can be found on our website: www.dsv-seeds.com