



DSV TerraLife® 2026

Greening seed mixtures with species-rich cover crops, companion crops and undersown crops

Soil life is key to
successful harvests



Innovation for
your growth

www.dsv-seeds.com



Deutsche Saatveredelung AG (DSV) is one of the leading medium-sized plant breeding and seed companies in Germany. DSV is specialised in the breeding, production and distribution of forage and turf grasses, oil crops, clovers, various cover crops, cereals, maize and sorghum.



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Companion crops
and undersown crops

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» Green manure mixtures improve soil structure, increase organic matter content and stimulate soil life. This results in stable, fertile soil that retains water better and utilises nutrients more efficiently. In this way, you lay the foundations for healthy, sustainable cultivation and optimal yields for the main crop. «

Jerry van Gremberghe,
field advisor in Ven-Zelderheide, Netherlands

TerraLife® CoverCrops – mixtures for every crop rotation

 Mixtures	legume		early sowing	allround mixture	Main focus		
	free	focused			potato rotation	beet rotation	late sowing
	page 6	page 8	page 9	page 10	page 13	page 15	page 17
AquaPro	•		•			•	
VitaMaxx DT	•						•
N-Fixx/N-Fixx 50		•					
EarlySummer			•				
WarmSeason			•				
MaizePro DT/DT30/DT50		•		•			
Rigol DT				•			
SolaRigol		•			•		
SolaRigol R					•		
BetaSola					•	•	
BetaMaxx DT						•	
BetaMaxx 30/50		•				•	
CoolSeason							•
SoilProtect							•
ForageRooter		•					•
Organic Mixtures in 100 % organic quality (Organic inspection body: DE-ÖKO-039)							
AquaPro Organic	•		•				
BioMaxx Organic	•			•			•
GreenPower Organic		•	•				
MaizePro Organic		•		•			
Solanum Organic		•			•		
BetaMaxx Organic						•	
ForageRooter Organic							•
DT = tillage radish Deeptill The following applies to all mixtures: If individual species and varieties are not available, they are replaced by equivalent ones. The seed percentages are subject to natural variation and the values given are for guidance only. • = Particularly suitable for oilseed rape crop rotations • = Focus suitability • = also suitable for							



Soil life is key to successful harvests

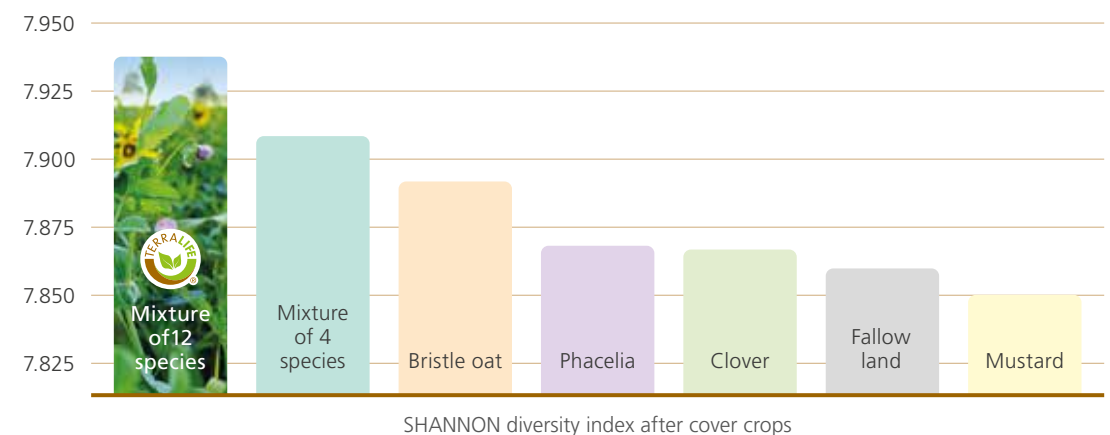
All plants live in symbiosis with countless microorganisms. Together, these are referred to as the microbiome. Microorganisms help plants by supplying nutrients, boosting their immune system and helping them cope with stress.

Cover crops are an effective tool for positively influencing the composition of the microbiome in agricultural soils. Nutrient uptake and plant health are both improved by the greater diversity of microorganisms that a plant finds in the soil. The aim of intelligent plant communities is to provide the various microorganisms in the soil with good nutrition.

TerraLife® makes the difference

TerraLife®-MaizePro cover crop mixture in the CATCHY trial resulted in significantly higher bacterial diversity in the soil. This promotes the growth, resilience and yield of the main crop.

Bacterial diversity in the soil after cover crops in maize



SHANNON diversity index after cover crops



Further CATCHY results

The mean value shown here indicates the average level of diversity in each case. The detailed original graph showing the dispersion and significance can be viewed on the DSV homepage (see QR code).

Source: CATCHY brochure, modified according to Reinhold-Hurek et al. 2024

TerraLife®-AquaPro

Safe nutrient conservation for water protection areas and oilseed rape crop rotations

- Without legumes and cruciferous plants
- High nitrogen uptake capacity
- Tolerates dry conditions

As a legume-free mixture, AquaPro is the first choice for water protection areas. The mixture components are particularly good at absorbing free nutrients and protecting against leaching. At the same time, AquaPro is suitable for use before grain legumes and as a crucifer-free cover crop in oilseed rape crop rotations. The mixture can also be used as a summer cover crop before winter cereals.

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

Sowing rate 25–30 kg/ha

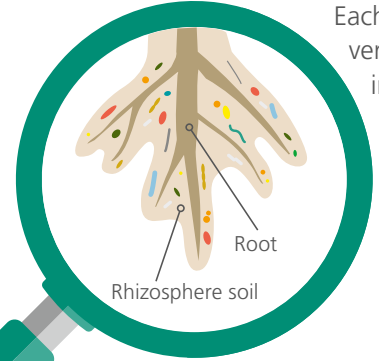
0 % Legumes

0 % Cruciferous plants

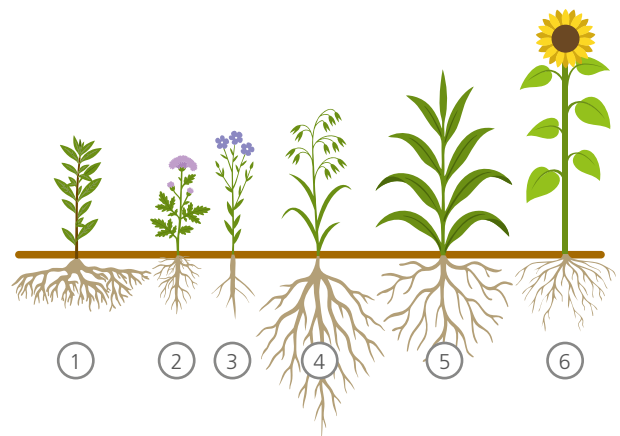
Seed content in % (Ø)

1 Niger, 2 phacelia, 3 linseed, 4 bristle oat, 5 sorghum, 6 sunflower

The root space: a hotspot for microorganisms



Each plant species establishes a very specific microbiome in its immediate root environment, the rhizosphere. The more species-rich a cover crop mixture is, the more diverse the soil life that nourishes the subsequent main crop.



TerraLife®-VitaMaxx DT

Fast-growing, legume-free mixture for late sowing

- For water protection areas and livestock farms
- High nutrient uptake and conservation
- Intensive rooting and biomass formation

VitaMaxx DT is a fast-growing, legume-free cover crop mixture and is ideal for use on livestock farms and in water protection areas. The mixture is designed for rapid soil coverage and rooting, especially in the case of late sowing dates. VitaMaxx DT absorbs plenty of nutrients, forms a lot of biomass and quickly suppresses weeds and volunteer cereals.

For organic farming:
TerraLife®-BioMaxx Organic

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

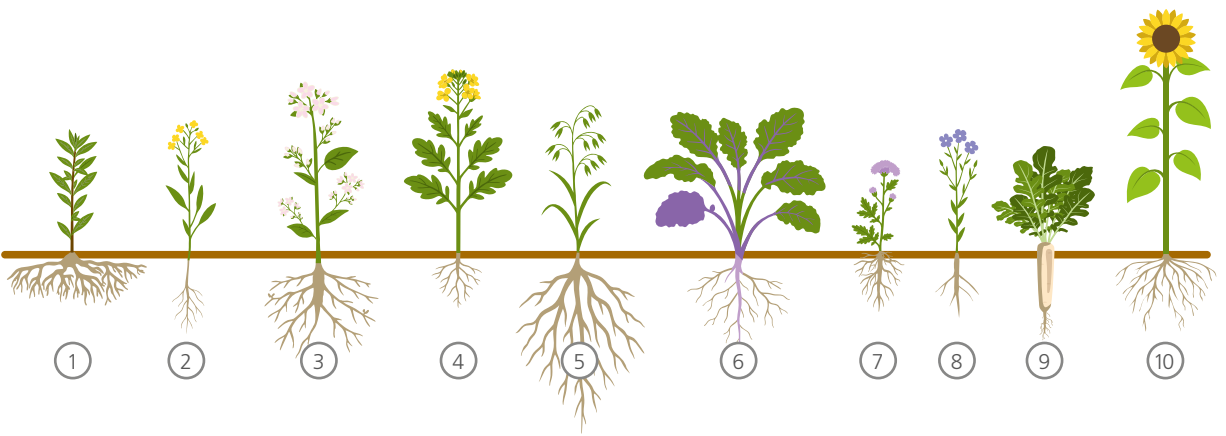
Sowing rate 20–25 kg/ha

0 % Legumes

<50 % Cruciferous plants

Seed content in % (Ø)

1 Niger, 2 false flax, 3 buckwheat, 4 mustard, 5 bristle oat, 6 Abyssinian cabbage, 7 phacelia, 8 linseed, 9 deep-rooted radish, 10 sunflower



- Legend crop rotations
-  Cereals
 -  Potatoes
 -  Legumes
 -  Maize
 -  Oilseed rape
 -  Sugar beet



TerraLife®-N-Fixx

TerraLife®-N-Fixx 50

Rapid soil coverage and nitrogen conservation

- Rich in legumes
- Very good nitrogen storage
- Ideal for oilseed rape crop rotations

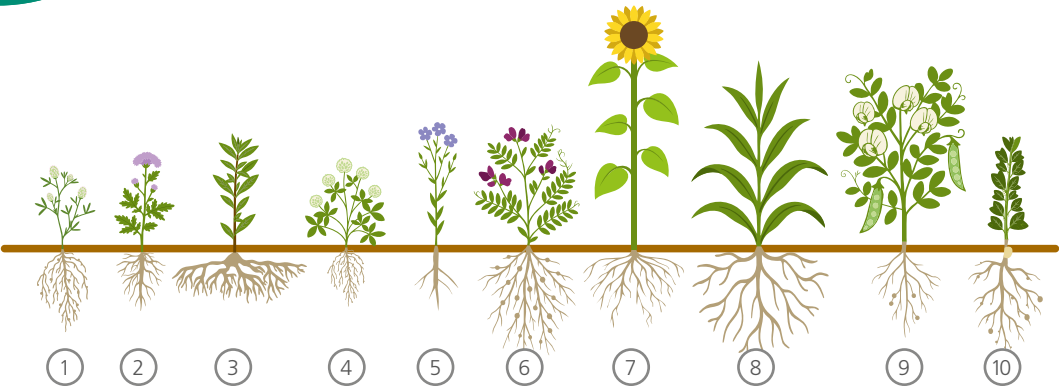
N-Fixx accumulates large amounts of nitrogen and is therefore particularly suitable for maize and cereal crop rotations. The mixture components are shooting resistant, suitable for early sowing dates and freeze reliably. At the same time, N-Fixx is ideal as a summer cover crop with a standing time of more than six to seven weeks. Due to the high number of flowering components, the mixture provides food for various pollinating insects.

For organic farming:
TerraLife®-GreenPower Organic

Nodule bacteria (rhizobia) are effective nitrogen collectors



Rhizobia live in symbiosis with legumes and form root nodules in which they convert atmospheric nitrogen (N₂) into ammonium (NH₄⁺) that is available to plants. In this way, they also supply subsequent crops with nitrogen.



N-potential approx. 100 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

(As a summer cover crop before oilseed rape until 15th July)
Sowing rate 40–45 kg/ha

N-Fixx N-potential: approx. 100 kg/ha

<75 % Legumes

0 % Cruciferous plants

Seed content in % (Ø)

Squarrose clover, Egyptian clover, niger, phacelia, linseed, serradella, common vetch, pea, sorghum, field bean, sunflower

N-Fixx 50 N-potential: approx. 80 kg/ha

<50 % Legumes

0 % Cruciferous plants

Seed content in % (Ø)

1 Squarrose clover, 2 phacelia, 3 niger, 4 Egyptian clover, 5 linseed, 6 common vetch, 7 sunflower, 8 sorghum, 9 pea, 10 field bean

TerraLife®-EarlySummer

The mixture for early sowing dates

- Tolerates dry conditions
- Effective as a summer cover crop
- Ideal for oilseed rape crop rotations

The demand for cover crop mixtures after early cereal harvests is increasing. EarlySummer is excellent for early sowing dates and grows best in warm conditions. Due to its optimal species and variety composition, the potential for seed formation is low. As a crucifer-free mixture, EarlySummer is an ideal cover crop in oilseed rape crop rotations.

N-potential approx. 60 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

Sowing rate 20–25 kg/ha

<25 % Legumes

0 % Cruciferous plants

Seed content in % (Ø)

Niger, phacelia, squarrose clover, linseed, sorghum



TerraLife®-WarmSeason

For dry conditions and early sowing

- Dry-tolerant species composition
- Long vegetative growth
- Maximum photosynthesis

WarmSeason is ideal for early sowing, e.g. after early-harvested cereals or GPS mixtures. The specially tailored components tolerate very warm conditions well and have a long vegetative growth period. This reduces the risk of seed dispersal. Early-sown cover crops form a strong root system and suppress weeds at an early stage.

WarmSeason is not suitable for close beet crop rotations.

N-potential approx. 60 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

Sowing rate 25–30 kg/ha

<25 % Legumes

<25 % Cruciferous plants

Seed content in % (Ø)

Niger, Egyptian clover, linseed, Abyssinian cabbage, sorghum, common vetch, pea



*observe crop rotation diseases

With more than 40,000 hectares of cultivated land annually, it is the first choice as a cover crop

TerraLife®-MaizePro

Diversity wins the day – the No. 1 among the TerraLife® mixtures

TerraLife®-MaizePro DT 50
TerraLife®-MaizePro DT 30
TerraLife®-MaizePro DT

- Efficient nutrient supply throughout winter
- Promotion of deep root growth
- Frost-resistant and winter hardy components

The MaizePro family comprises our best-selling cover crop mixtures. With up to 16 components, some of them winter hardy, MaizePro promotes a diverse and active microbiome. It specifically supports the mycorrhization of maize crops and promotes diverse and fertile soil life. Deep-rooted species prevent compaction and protect against erosion.

MaizePro DT is available in 30 and 50 variants with a reduced proportion of legumes (<30 % and <50 % respectively).

For organic farming:
TerraLife®-MaizePro Organic

N-potential approx. 80 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

(As a summer cover crop before oilseed rape until 15 July)

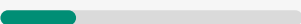
Sowing rate 30–35 kg/ha, MaizePro DT: 40–45 kg/ha

MaizePro DT 50 N-potential: approx. 80 kg/ha

< 50 % Legumes



< 25 % Cruciferous plants

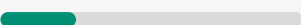


Seed content in % (Ø)

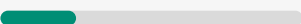
Niger, white clover, phacelia, linseed, Abyssinian cabbage, Egyptian clover, serradella, sorghum, squarrose clover, crimson clover, common vetch, red clover, deep-rooted radish, pea, Hungarian vetch, sunflower

MaizePro DT 30 N-potential: approx. 60 kg/ha

< 25 % Legumes



< 25 % Cruciferous plants



Seed content in % (Ø)

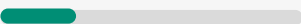
Niger, phacelia, white clover, linseed, Persian clover, Abyssinian cabbage, red clover, sorghum, serradella, deep-rooted radish, sunflower, field bean, common vetch, pea

MaizePro DT N-potential: approx. 80 kg/ha

< 50 % Legumes



< 25 % Cruciferous plants



Seed content in % (Ø)

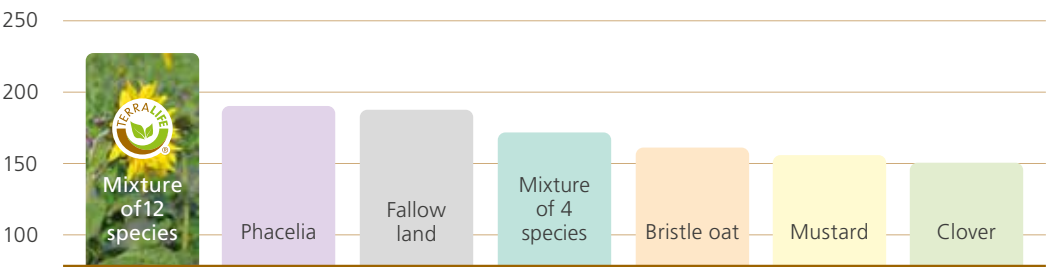
1 White clover, 2 niger, 3 Persian clover, 4 Abyssinian cabbage, 5 phacelia, 6 linseed, 7 winter rye, 8 sorghum, 9 crimson clover, 10 deep-rooted radish, 11 sunflower, 12 pea, 13 hairy vetch

* observe crop rotation diseases

Fungi are also part of a healthy microbiome

In addition to mycorrhizal fungi, many different species colonise the roots of plants. The diversity of beneficial root fungi is also positively influenced by cover crops. In the CATCHY trial, the diversity was highest in the soil of the subsequent maize crop after the cultivation of the species-rich cover crop mixture TerraLife®-MaizePro. This significantly increases the benefit to the microbial community compared to pure sowing of cover crops or leaving the field vegetation-free as fallow land.

Diversity of fungi after cover crops in maize



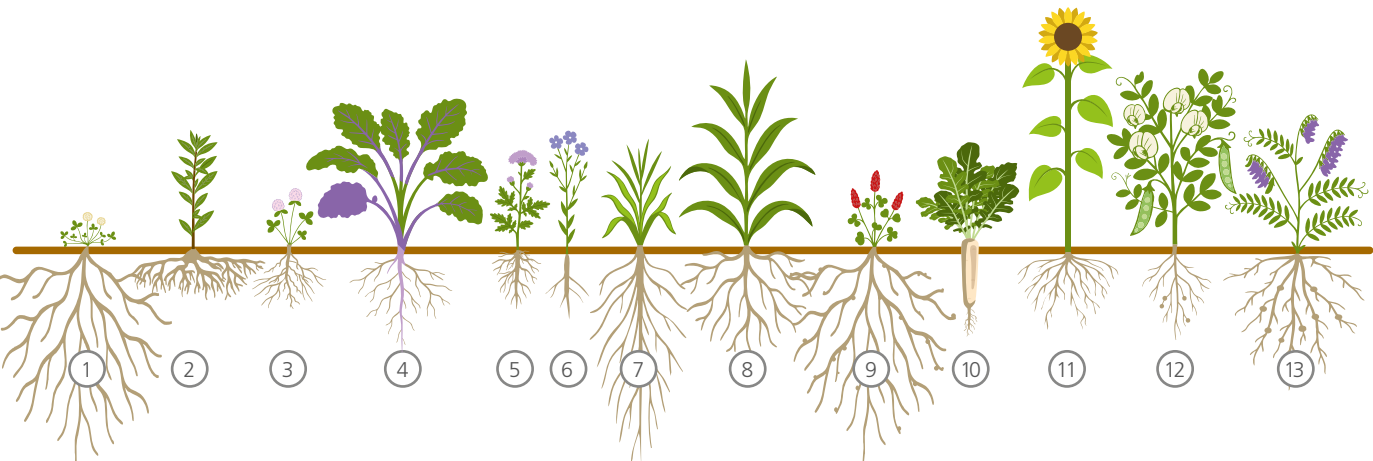
CHAO diversity index after cover crops



Further CATCHY results

The mean value shown here indicates the average level of diversity in each case. The detailed original graph showing the dispersion and significance can be viewed on the DSV homepage (see QR code).

Source: CATCHY brochure, modified according to Reinhold-Hurek et al. 2024



TerraLife®-Rigol DT

Strong root formation stabilises the soil structure

- Intensive and deep rooting
- Proven in practice over many years
- Ideal before maize and in cereal crop rotations

As one of the first TerraLife® mixtures, Rigol DT has proven itself in agricultural practice for over a decade. It provides the ideal combination of deep-rooting and nutrient-efficient species. Rigol DT leaves behind fertile, well-rooted topsoil that provides a secure food source for soil life and the main crop. At the same time, it develops lush above-ground biomass and effectively suppresses weeds and volunteer cereals.

N-potential approx.30 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

Sowing rate 20–22 kg/ha

<25 % Legumes

<50 % Cruciferous plants

Seed content in % (Ø)

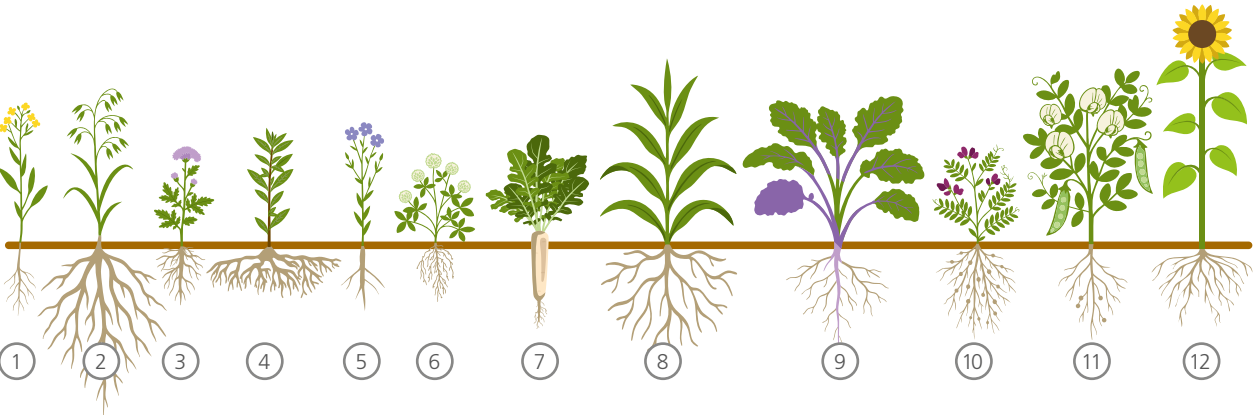
1 False flax, 2 bristle oat 3 phacelia, 4 niger, 5 linseed, 6 Egyptian clover, 7 deep-rooted radish, 8 sorghum, 9 Abyssinian cabbage, 10 common vetch, 11 pea, 12 sunflower

* Consider crop rotation diseases



Stable soil – habitat for soil life

Cover crops with different root systems penetrate, loosen and stabilise the soil. Species-rich mixtures are particularly effective as they open up the entire root space and store nutrients across different horizons.



TerraLife®-SolaRigol TerraLife®-SolaRigol R

The cover crop mixture for potato crop rotations

- Ensures rapid root penetration of the potato
- High proportion of legumes for decomposition and N fixation
- Regenerates intensively used soils

SolaRigol is a balanced cover crop mixture specially tailored to potato cultivation. The diverse species composition promotes a fertile and resilient soil microbiome. The diverse organic matter protects the soil from erosion and prepares it for ridge cultivation. Blue lupin reduces tobacco rattle virus infestation in potatoes more effectively than any other crop. Common vetch has a particularly positive effect on soil bacteria, which protect potatoes from infestation by various pathogens. SolaRigol R contains multi-resistant oil radish, which is effective against both beet cyst nematodes and root-knot nematodes.

For organic farming:
TerraLife®-Solanum Organic

N-potential approx.80 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

SolaRigol R: Early August to early September
Sowing rate 55–60 kg/ha

SolaRigol N-potential: approx. 80 kg/ha

<50 % Legumes

0 % Cruciferous plants

Seed content in % (Ø)

Niger, linseed, squarrose clover, Egyptian clover, bristle oat, blue lupin, common vetch, serradella, pea

SolaRigol R* N-potential: approx. 30 kg/ha

<75 % Legumes

<25 % Cruciferous plants

Seed content in % (Ø)

Persian clover, Egyptian clover, niger, oil radish, common vetch, pea, blue lupin

* Crop rotation: potato, cereals, maize

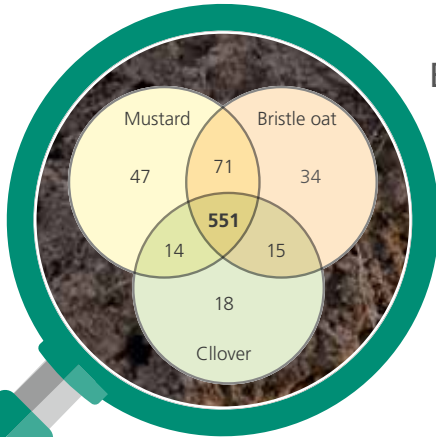


TerraLife®-BetaSola

The nematode-reducing mixture for sugar beet and potato cultivation

- Combines soil protection and nematode reduction
- Broad spectrum of activity
- Protection against erosion and weed pressure

The combination of species in BetaSola provides a broad spectrum of activity. The different varieties of oil radish help to reduce beet cyst nematodes. At the same time, multi-resistant oil radish reduces root-knot nematodes. The different degrees of maturity of the radish varieties ensure a long period of effectiveness. Bristle oat also reduces the reproduction rate of root nematodes (*Pratylenchus*). Vetch and Egyptian clover fix nitrogen and promote soil tilth through shading.



Bacterial diversity for active soil life

Egyptian clover, mustard and bristle oat each promote different bacterial communities at their roots. The intersections show the number of bacterial genera that occur in several plant species: in the CATCHY trial, 551 genera were found in all three species. Overall, the more diverse the cover crop, the higher the number of beneficial soil bacteria.

Source: CATCHY, modified according to Reinhold-Hurek et al. 2024

N-potential approx. 60 kg/ha

Crop rotation

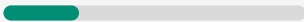


Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

Sowing rate 35–40 kg/ha

<25 % Legumes



<50 % Cruciferous plants



Seed content in % (Ø)

Niger, oil radish, Egyptian clover, bristle oat, common vetch

TerraLife®-BetaMaxx

The cover crop mixture for sugar beet cultivation

TerraLife®-BetaMaxx 50

TerraLife®-BetaMaxx 30

TerraLife®-BetaMaxx DT

- Creates ideal seedbed conditions for sugar beet
- Reliable die back in frost
- Also ideal for oilseed rape crop rotations

BetaMaxx creates ideal conditions for the successful cultivation of spring crops, especially sugar beet. As the TerraLife®-BetaMaxx 50 and -BetaMaxx 30 mixtures do not contain any cruciferous plants, they are also suitable for use in vegetable cultivation or in combined oilseed rape and beet crop rotations. BetaMaxx is not suitable for biological control of *Heterodera schachtii* (in this case, we recommend TerraLife®-BetaSola).

BetaMaxx is available in 30 and 50 variants with a reduced proportion of legumes (<30 % and <50 % respectively).

BetaMaxx DT is not suitable for close beet crop rotations with nematodes.

For organic farming:
TerraLife®-BetaMaxx Organic

N-potential approx. 80 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

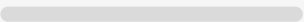
Sowing rate 40–45 kg/ha, BetaMaxx DT: 30–35 kg/ha

BetaMaxx 50 N-potential: approx. 80 kg/ha

<50 % Legumes



0 % Cruciferous plants

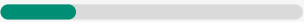


Seed content in % (Ø)

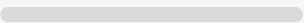
Egyptian clover, niger, phacelia, linseed, bristle oat, serradella, common vetch, blue lupin, pea

BetaMaxx 30 N-potential: approx. 60 kg/ha

<25 % Legumes



0 % Cruciferous plants

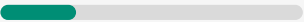


Seed content in % (Ø)

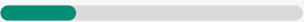
Niger, phacelia, Egyptian clover, bristle oat, serradella, linseed, blue lupin, common vetch, pea

BetaMaxx DT* N-potential: approx. 30 kg/ha

<25 % Legumes



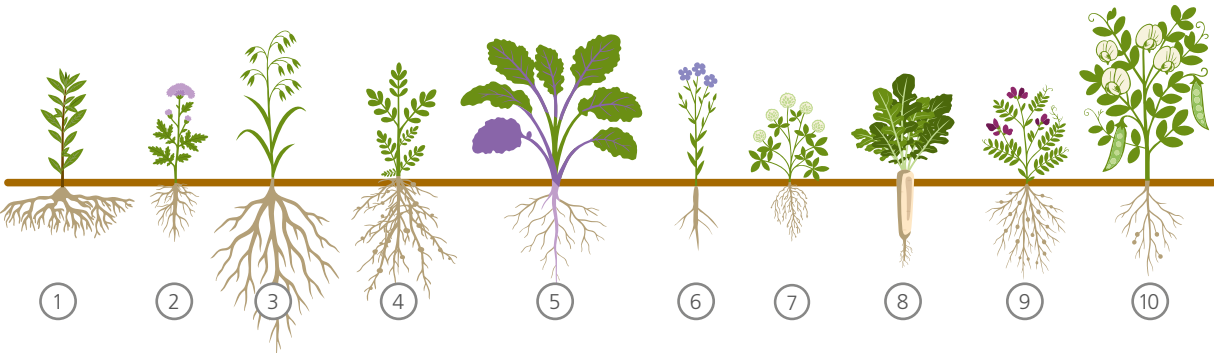
<25 % Cruciferous plants



Seed content in % (Ø)

1 Niger, 2 phacelia, 3 bristle oat, 4 serradella, 5 Abyssian cabbage, 6 linseed, 7 Egyptian clover, 8 deep-rooted radish, 9 common vetch, 10 pea

*Crop rotation: Cereals, maize, sugar beet, oilseed rape (take crop rotation diseases into account)



TerraLife®-CoolSeason

Ideal for late sowing and cool regions

- Very good erosion protection over winter
- Excellent formation of soil structure and soil organic matter
- Versatile use: cover crop, fallow land greening and wild field

CoolSeason consists of frost-resistant and winter hardy species. This ensures that nutrients are extremely well preserved and protected from leaching. The mixture is very structure-forming and promotes a diverse, resilient microbiome. The high cruciferous content makes the mixture particularly tasty. This makes the mixture ideal for grazing.



Tip: The winter hardy TerraLife®-CoolSeason, -SoilProtect and -Forage Rooter mixtures are ideal for grazing, especially for mob grazing. For high-quality feed for grazing and cutting, we recommend our **COUNTRY** mixtures.



N-potential approx. 30 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

(As ground cover for fallow land and wild fields: sowing from the end of March)

Sowing rate 12,5–15 kg/ha

< 50 % Legumes



< 75 % Cruciferous plants



Seed content in % (Ø)

Turnip, Persian clover, false flax, crimson clover, forage rape, Abyssinian cabbage, bristle oat, winter rye, linseed, deep-rooted radish, Hungarian vetch

TerraLife®-SoilProtect

Winter hardy base mixture

- Ideal as a cover crop and undersown crop
- Rich in legumes and free from cruciferous plants
- Deep-rooting and nutrient-enriching

SoilProtect creates intensive, winter hardy vegetation. Various components with strong roots and rich in humus ensure a fertile and lively soil structure. At the same time, the various legumes fix valuable nitrogen. SoilProtect is also an ideal mixing partner with other TerraLife® mixtures. SoilProtect is also very well suited as a maize undersown crop. The species tolerate shading from the main crop and provide excellent winter greenery after the maize.



Tip: Winter hardy addition to the TerraLife®-MaizePro DT 50, -N-Fixx und -Rigol DT

N-potential approx. 80 kg/ha

Crop rotation



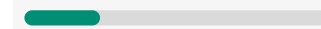
Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

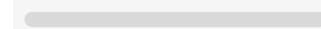
(As undersown crop: from mid-May in e.g. winter wheat, maize)

Sowing rate 30–35 kg/ha, as undersown crop: 15–20 kg/ha

< 25 % Legumes



0 % Cruciferous plants



Seed content in % (Ø)

Perennial ryegrass, linseed, crimson clover, ribwort plantain, Hungarian vetch, squarrose clover



TerraLife®-Forage Rooter

The high-yielding traditional DSV mixture

- Protein-rich feed
- Good winter hardiness
- Excellent improvement in crumb structure

Since 1923, Forage Rooter has been actively promoting soil life thanks to its intelligent composition. Ryegrass, clover and vetch form a lush root system that provides food and habitat for various soil organisms. This promotes humus formation, structure and fertility of the area. The mixture is suitable both as a cover crop and for high-quality feeding.

For organic farming:
TerraLife®-Forage Rooter Organic

N-potential approx. 80 kg/ha

Crop rotation



Optimal sowing date

May | June | July | Aug. | Sep. | Oct.

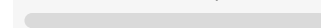
(As undersown crop: from mid-May in e.g. winter wheat, maize, for fodder use: as early as possible)

Sowing rate 50 kg/ha

< 50 % Legumes



0 % Cruciferous plants



Seed content in % (Ø)

Italian ryegrass, crimson clover, hairy vetch

TerraLife® CompanionCrops

TerraLife® CompanionCrops use species and mixtures, which meet the specific requirements of undersowing and companion cropping. When grown alongside the main crop, they make an efficient use of water and light.

Companion crops support the main crop from early development to harvest. The plant mixtures occupy free space and protect the soil from erosion, heating and nutrient leaching. At the same time, weeds are suppressed and additional organic matter is enriched.

Undersown crops support soil organic matter formation and are extremely efficient at reducing erosion. They can remain in place after the main crop harvest and provide active ground cover for the rest of the growing season, binding nutrients and allowing grazing.

		Cover crop				
		Composition	Cereals	Oilseed rape	Potatoes	Maize
Species-rich companion crops and undersown crops	Mixtures					
	CerealPro	Perennial ryegrass, white clover, bird's-foot trefoil, false flax, phacelia, ribwort plantain, crimson clover, linseed	●			
	BrassicaPro	Persian clover, serradella, linseed, Egyptian clover, niger, blue lupin		●		
	SolanumPro	Ribwort plantain, Persian clover, perennial ryegrass, linseed, niger, common vetch			●	
Grass-dominated undersown crops	ZeaPro NEW	False flax, linseed, crimson clover, ribwort plantain, squarrose clover, Hungarian vetch				●
	HumusPlus 1.1	Perennial ryegrass, Italian ryegrass				●
	HumusPlus 1.2	Red fescue (chewing), sheep fescue				●
	HumusPlus 2.1	Perennial ryegrass, white clover	●			
	HumusPlus 3.1	Red fescue, white clover, perennial ryegrass	●			
	HumusPlus 3.1 Organic	Red fescue, white clover, perennial ryegrass	●			
	HumusPlus 3.2	Red fescue, white clover	●			
	HumusPlus 5.1 Organic	White clover, perennial ryegrass, red clover, alfalfa, crimson clover	●			

Species-rich companion and undersown crops

TerraLife®-BrassicaPro

The companion crop for oilseed rape professionals

- Optimises nutrient dynamics
- Promotes soil life
- Erosion protection and stabilisation of soil structure

The carefully selected combination of different plant species improves the soil structure and the nutrition of the soil life. At the same time, the interaction of the different species with the soil can balance nutrient dynamics. BrassicaPro also suppresses weeds without competing with the main crop. The high legume content has a positive effect on the C/N ratio. Filling the free space between the oilseed rape plants protects against erosion and increases the soil-bearing capacity of the area. BrassicaPro can also be used as a legume-focused cover crop mixture, for example in oilseed rape crop rotations.

Crop rotation



Sowing date:
At the same time as oilseed rape or shortly after or before sowing the main crop.

Sowing technique:
One pass with a 2-tank seed drill or two passes with two seed drill runs or by scattering the cover crop after sowing the oilseed rape.

Sowing rate: 10–15 kg/ha for drill sowing, 20 kg/ha for scattered sowing, 40 kg/ha for pure sowing.

> 75 % Legumes



0 % Cruciferous plants

Seed content in % (Ø)

Persian clover, serradella, linseed, Egyptian clover, niger, blue lupin



» I rely on BrassicaPro because it allows me to establish oilseed rape with significantly fewer herbicides and no loss of yield. The mixture is an excellent fit for our direct sowing system: stable crops, less weed pressure and an overall smooth process. I would advise anyone to simply give it a try. «

Cord Müller-Scheeßel,
farmer in North-Eastern Germany

TerraLife®-CerealPro

Species-rich companion crop and undersown mixture for cereal crops

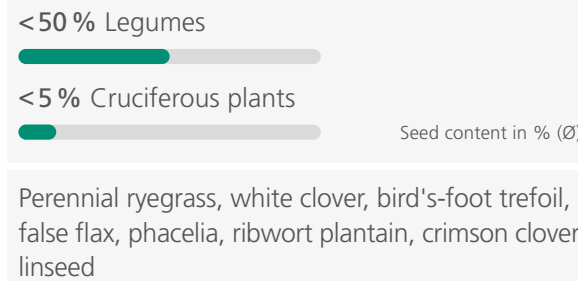
- Diverse composition
- Intensive root penetration
- Humus formation and nutrient retention

CerealPro brings species diversity to cereal crops. The balanced mixture ratio prevents competition with the main crop and stimulates soil life in a variety of ways. The additional soil cover between the rows protects against erosion, surface silting and weed pressure. After the cereal harvest, the mixture develops into lush vegetation that covers and protects the soil over the winter.

Sowing date:
Winter cereals: in early spring, approximately February to April.

Sowing technique:
Scatter or harrow the undersown crop into the cereal crop (harrows for grassland reseeding have proven effective here).

Sowing rate: 10 kg/ha, in pure sowing: 20–25 kg/ha



TerraLife®-SolanumPro

The companion crop for potato professionals

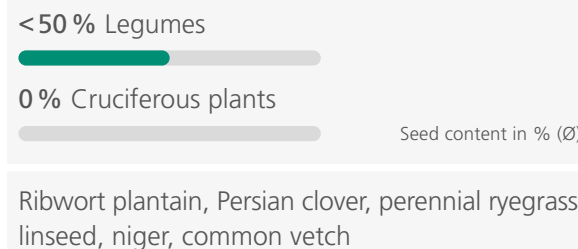
- Temperature control in potato ridges
- Promotion of diverse soil life
- Erosion protection and stabilisation of the soil structure

The companion crop SolanumPro in potatoes significantly improves soil structure and the vitality of soil life. Green ridges have a significant impact on soil temperature, which greatly benefits potatoes. The interaction of different plant species with the soil balances nutrient dynamics throughout the entire growth phase. At the same time, the companion crop protects nutrients from leaching and provides soil organisms with a diverse food source. The intensively rooting species stabilise the soil and protect it from erosion.

Sowing date:
Depending on the growth rate of the potato, approximately BBCH 9.

Sowing technique:
Scatter the seed into the crop after ridging the potato beds. Pneumatic spreaders have proven effective.

Sowing rate: 15 kg/ha



More about growing companion and undersown crops



TerraLife®-ZeaPro

The grass-free solution for species-rich maize undersowing

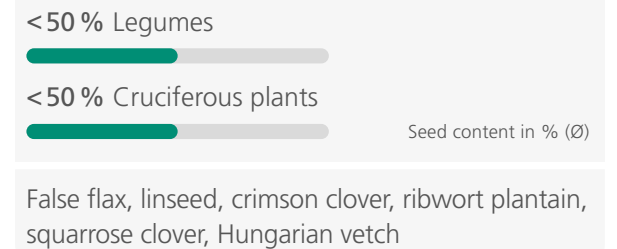
- Provides biodiverse winter cover after maize
- Temperature control and erosion protection
- Promotion of nutrient dynamics and the microbiome

With predominantly hardy species, ZeaPro provides optimum erosion protection and promotes sustainable soil life. The mixture stabilises the soil structure and ensures efficient winter greening after maize cultivation. Ribwort plantain provides deep-rooted, winter hardy greening during and after maize cultivation. Its nitrification-inhibiting effect can protect valuable ammonium from being converted into nitrate and subsequent leaching.

Sowing date:
Approximately at the 6- to 8-leaf stage of the maize crop.

Sowing technique:
Scatter the undersowing into the maize crop, e.g. using a pneumatic spreader or slug pellet spreader. Depending on the size of the maize plants, the mixture can also be applied using a hoe or harrow.

Sowing rate: as undersowing 15–20 kg, as pure sowing 30–35 kg/ha



NEW



» Despite the dry summer, the ZeaPro undersown mixture has developed a beautiful, lush crop that creates a fine-crumbled, fertile soil structure. Soil probes and spades show that it also roots intensively in the wheel tracks. «

Johannes Heiting,
farmer in Western Germany

What diversity triggers in the soil – a professional reports

DSV specialist article

Cover crops are more than just a way to feed the soil, they also have many other benefits. They not only improve soil structure, but also influence water balance, nutrient dynamics and the microbiome – and thus the performance of the subsequent main crop. This is also evident in practice: Hajo Haake is a sales consultant at Deutsche Saatveredelung AG. He also runs his own farm, where he has been working with TerraLife® mixtures for years. His experiences show how the scientific findings of the CATCHY project are reflected in practice and confirm what diverse mixtures can really achieve in everyday farming.



More about
CATCHY

Hajo Haake talks about drought stress, mulch sowing and stable systems

"For me, cover crops, undersown crops and companion crops are the key to successful crop rotation," says Hajo Haake. The machinery used is only a tool. First, you have to understand the system. "Soil, nutrient flows, plant communities – and then, at some point, the machine comes into play," he explains.

Four eye-opening moments with cover crops

Hajo Haake has transferred a lot of experience from his own practice. He describes four key moments in which CATCHY knowledge was reflected on his land:

1. Dry years 2018–2020: Stable wheat yields – beet wheat in particular benefited from significant yield increases from the TerraLife®-BetaMaxx cover crop mixture, which was grown before the sugar beets.

2. Beets in the hot summer of 2021:

At 33 °C, his plants remained upright thanks to the good water retention capacity of the soil, while those on the neighbouring field wilted. The difference: his fields had been planted in advance with the diverse TerraLife® cover crop mixture BetaMaxx, which is tailored to beet cultivation.



3. Spring 2022: After using TerraLife®-AquaPro, the soil was moist and dark, while grey, dry soil dominated in one section (without cover crops).

4. Winter 2023/2024: While many areas were silted up and unable to absorb the high precipitation, his soil remained loose and capable of infiltration. The valuable water could be stored.



Hajo Haake demonstrates in the field: on the left, water trickles onto soil covered with plants; on the right, onto fallow earth. No soil is eroded from the sample protected by a cover crop, while on the right, the soil particles are eroded.

Think strategically, implement sustainably

"Sowing the cover crop actually begins a year earlier," explains Hajo Haake. Those who harvest early wheat varieties can already drill cover crops at the end of July. TerraLife® mixtures such as TerraLife®-AquaPro, -BetaMaxx, -N-Fixx or -EarlySummer offer the right solution for many crop rotations – suitable for the location, species-rich and with a balanced C/N ratio. They are a key tool for visualising the stabilisation of soil structure, microbiome diversity and yield stability in the crop, as confirmed by CATCHY.

Longer-term stable yields – adapted fertilisation

Another practical example: 15 years ago, Hajo Haake converted the first area of his farm to no-till farming – since then, the crop rotation there has been sugar beet/winter wheat/oilseed rape/winter wheat. In combination with cover crops, including companion crops in oilseed rape, this area has never disappointed him. The yield has been consistent, even in extreme years. "This success has meant that the plough has not been used at all for six years," he says. It is important to use lime with a balanced Ca-Mg ratio, combined with organic and ammonium-based mineral fertilisation – this is the foundation of a resilient, evergreen crop rotation.

Biodiversity pays off

Hajo Haake criticises the return to simple cover crop concepts such as pure mustard or oil radish. "Once you have experienced and understood the effects of biodiverse mixtures, you never want to go back." He particularly values the fact that cover crops, in combination with companion crops, "feed" the soil biology – and thus supply the crop with nutrients exactly when it needs them.

Conclusion

Hajo Haake's experiences impressively demonstrate how the scientific results from the CATCHY project are confirmed in practice. Biodiverse cover crop mixtures strengthen soil life, improve nutrient and water availability, and increase the stress stability of crops. TerraLife® offers the right tool, because the mixtures promote an active microbiome and thus support long-term success in agriculture. This effect has been observed on Haake's farm for many years – not just sporadically, but as a lasting systemic effect.



Hajo Haake in winter oilseed rape crop with companion crop TerraLife®-BrassicaPro

» Once you've experienced the effects of biodiverse mixtures, there's no going back. «

Hajo Haake, DSV consultant in Lower Saxony, Germany



The CATCHY cover crop project was launched by the Federal Ministry of Research, Technology and Space (BMFTR) in 2015. The main objective was to use cover crops to develop innovative cultivation systems that maintain and improve soil fertility. The following areas were investigated: the effect on soil structure and quality, the microbiome, the nutrient and water balance, as well as the effect on yield and profitability.

With funding from the:





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