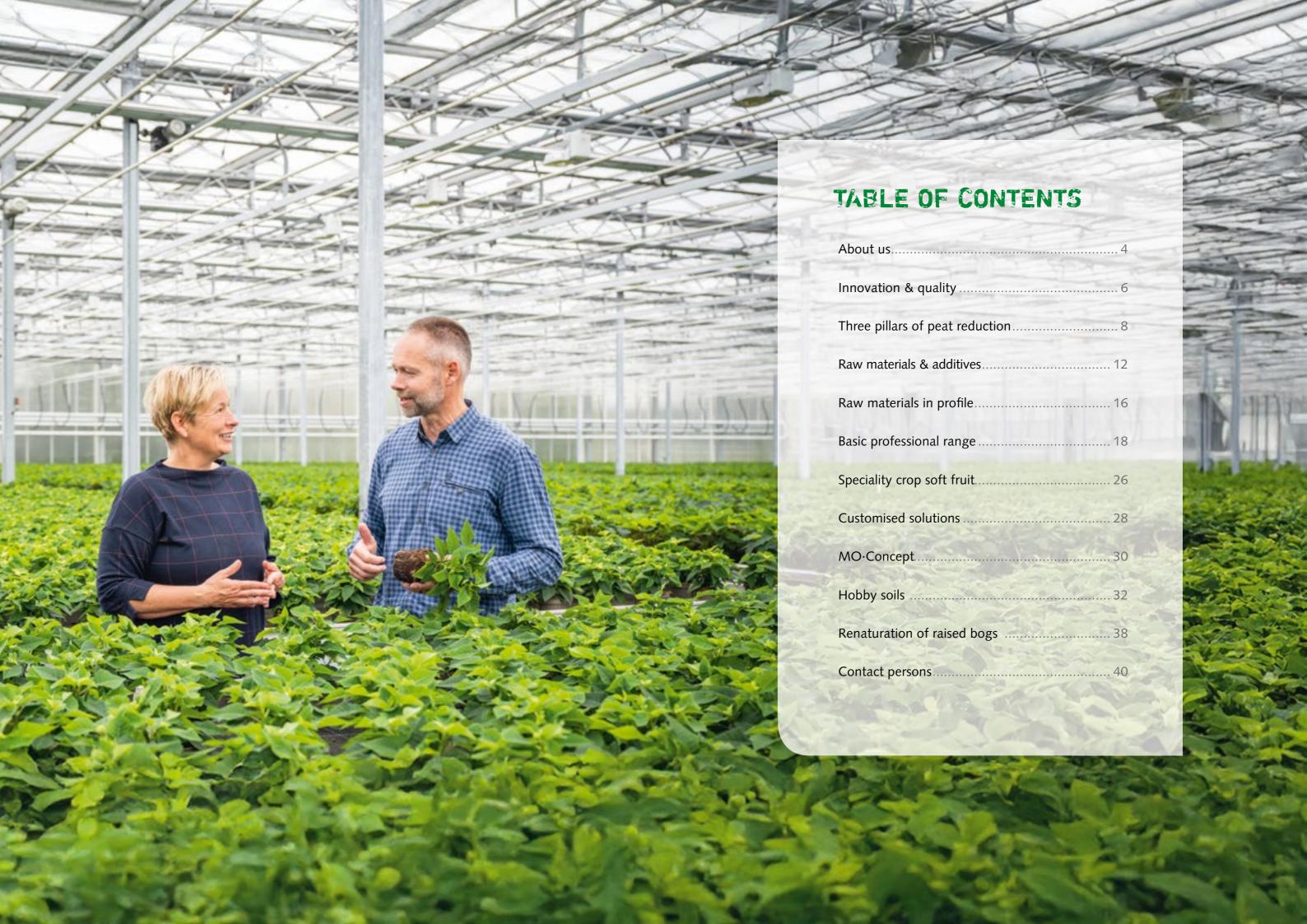


# GROWTH CATALOGUE

Professional substrates & potting soils for safe growth







# Your partner Gramoflor - Innovation meets family business

Founded in 1908 by Anton Gramann as a peat trading company, GRAMOFLOR is now a modern substrate company with German plants in Vechta and Neuenkirchen-Vörden as well as in Mogente, Spain.

We are the international quality supplier of sustainable and efficient high-performance substrates for professional commercial horticulture and potting soils for hobby gardeners.

The reduction of peat by using our own, regional and renewable raw materials wherever possible plays a central role for us today and will continue to do so in the future. We are very pleased that we have already reached the milestone of a peat substitution rate of 37% by volume for professional and hobby substrates.

Our successful HORTICERT certification in autumn 2024 gives us the opportunity to calculate our carbon footprint in substrate production transparently and verifiably in comparison to a specified reference mixture made from 100% peat.

At the same time, we are setting standards in the industry, as we are the first substrate manufacturer specialising in professional horticulture to be HORTICERT-certified.

Customer proximity and the continuous development of innovative product solutions are important cornerstones for us. The resulting real added value makes GRAMOFLOR your competent and strong partner.





## **Sustainable and safe**

Both Gramoflor Research and Development (R&D) and Sustainable Product Development (SPD) have been conducting intensive research work for years. They develop innovative quality substrates for the optimal



development of a wide variety of crops and plants. Crop safety for horticulture, healthy and vital plants and climate-conscious peat reduction are the top priorities. The well-trained team also focusses on the research into alternative, preferably renewable and regional substrate raw materials and uses its own greenhouse and laboratory for this purpose.

#### Tested and certified

"Quality right from the start" is our guiding principle. To live this actively, we introduced a comprehensive quality management system years ago.

Our raw materials and professional substrates are certified in accordance with the RAL quality procedure.\* This certifies compliance with the high quality standards of the Gütegemeinschaft Substrate für Pflanzen e.V.. The RAL quality and test specifications are subject to regular monitoring and correspond to the current state of the art.

In addition, all **LIGNO**FIBRE® variants as well as Cocopeat types, Cocofibre and our organic substrates and organic soils are suitable for organic farming and are **FiBL-listed**. Our organic substrates and organic soils are also ECOCERT certified\*.

With the **HORTICERT certification** obtained in autumn 2024 for our two German Gramoflor plants, we are underlining our credible commitment to sustainability. This independent, international certification system ensures ecological, social and economic sustainability criteria for peat substitutes, potting soils and growing media along the entire supply chain.

Our successful HORTICERT certification gives us the opportunity to calculate our carbon footprint in



substrate production transparently and verifiably in comparison to a specified reference mixture made from 100% peat.









\*Coco Chips have not yet been RAL certified as of Dec. 2024. FiBL listing for Coco Chips is commissioned as of Dec. 2024.

# THREE PILLARS OF PEAT SUBSTITUTION

You are wondering why we guarantee crop safety?

# Simply because we can!

Peat substitutes perfectly combined.

Horticulture is currently undergoing an unprecedented paradigm shift in the field of soils and substrates. Peat, a raw material that has provided security for decades, is less and less available because it is considered a fossil raw material with a negative CO<sub>2</sub> balance.

According to the demands of the BMEL (Federal Ministry of Food and Agriculture), professional horticulture should therefore be largely peat-free by 2030. This presents the entire industry with major challenges that need to be tackled

We at Gramoflor have been focussing on this development for many years and have set the necessary course at an early for ever-increasing peat reduction. The topic of peat replacement has the highest priority in the company, so that I promise you a hand: We can do that! With the perfect combination of the best peat substitutes, we maximise the peat content of your substrates to a maximum and guarantee you the goal that is so important to you in this area, namely crop safety.

Peat reduction at Gramoflor currently focuses mainly on our three pillars: the premium wood fibre LIGNOFIBRE® from our own production and currently in five variants as well as Cocos and substrate compost from our own processing.

These glorious three are perfectly combined by us, so that we can offer you, whether peat-reduced or peat-free, future-proof substrates for every type of crop in our own plants.

Our future is based on experience and knowledge, simply because we can do it!

Managing Partner



# 1. WOOD FIBRE **Quality wood fibre LIGNOFIBRE®**

When it comes to describing the ideal peat substitute for substrates and soils, our own wood fibre with the brand name **LIGNO**FIBRE® provides all the necessary properties.

Using state-of-the-art refining technology, we have been producing this quality wood fibre since 2018 in what are now two of our own wood fibre plants.

In this way, we obtain a particularly high-quality substrate raw material with a good CO2 balance from the renewable and regional residual material wood chips (certified quality) through thermal-mechanical defibration.

The five structural variants available, from superfine to coarse, are an ideal replacement for peat in substrates and soils and are also suitable for the entire range of different crops, from press pots to containers. They can be perfectly combined with each other, but also with other peat substitutes, thus ensuring maximum peat reduction while taking crop safety into ac-

All variants are RAL quality-assured and FiBLlisted for use in organic horticulture.

count.

The advantages of **LIGNO**FIBRE® wood fibre at a glance:

- · effective combinability for maximum peat reduction
- local and reliable availability
- good drainage properties of the coarser variants
- good water storage capacity of the finer variants
- balanced air balance
- quick rewettability
- structural stability, i.e. low shrinkage
- rapid drying of the substrate surface
- low n-fixation (nitrogen stabilised)



#### 2. COCO

## **Diverse portfolio of coconut products**

Cocopeat (coconut pulp), Cocofibre (coconut fibres) and Coco Chips are sufficiently available in the countries of origin, such as India and Sri Lanka, as **residual materials** from coconut processing and have now also proven to be excellent peat substitutes in professional horticulture.

Our new **Coco Chips** are made from shredded coconut husks and offer an excellent, coarse-grained structure for substrates. As a peat-free alternative to coarse white peat, Coco Chips are characterised by their very good structural stability, which is demonstrably even superior to that of white peat.

The natural fibre content promotes the air capacity of the substrate, which is essential for healthy root development, among other things. Coco Chips, especially in combination with our wood fibre variants **LIGNO**FIBRE®c coarse and **LIGNO**FIBRE®, are the perfect addition to your substrate from pot size 13.

Thanks to the water retention in the coarse pieces, Coco Chips support sustained moisture despite their coarse structure.

We process the raw material **Cocopeat** ourselves at our production plant using a specially developed process.

A large proportion of the so-called leaching of unwanted salts/nutrients takes place under controlled conditions.

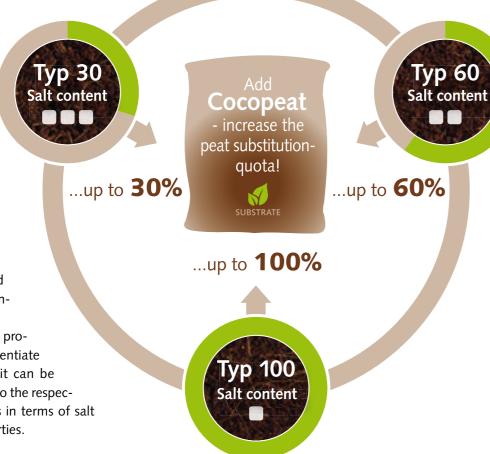
Gramoflor is therefore able to process the Cocopeat and differentiate it into **three types** so that it can be tailored even more precisely to the respective cultivation requirements in terms of salt content and chemical properties.

This enables continuity in the chemical properties and thus an effective and safe use of coco products in the substrate.

Three Cocopeat qualities are therefore available:

- Type 30 for proportions in substrates up to 30%
- Type 60 for proportions in substrates up to 60%
- Type 100 for proportions in substrates up to 100% and for particularly sensitive crops.
   Chemical buffering is no longer necessary.

All coconut products are RAL quality-assured and FiBL-listed for use in organic horticulture.\*



<sup>\*</sup>Coco Chips have not yet been RAL certified as of Dec. 2024. FiBL listing for Coco Chips is commissioned as of Dec. 2024.

# 3. SUBSTRATE COMPOST From our own processing

Substrate compost is another renewable raw and residual material that is obtained from green waste **in the spirit of a smart circular economy**. However, it can only be used for peat reduced and peat free substrates and soils if strict quality standards are met.

The substrate compost used by Gramoflor comes from long-term partnerships with regional suppliers from the waste management industry who recognise these high requirements and also achieve them with their compost. We only use high-quality green waste compost in accordance with the German Compost Quality Association (Bundesgütegemeinschaft Kompost) with rotting grade V.

And this compost material is further processed in the Gramoflor production plants by pre-screening, resulting in a more homogeneous product with further application possibilities in soils and substrates.

The RAL quality assurance guarantees a continuously consistent high quality in order to fulfil the requirements of a substrate for professional horticulture and the cultivation safety necessary there.



## Substrate compost Quality requirements

A compost suitable for professional substrates has good pH buffering and therefore has a stabilising effect. It also has a good water retention capacity. It is also characterised by a relatively low salt content and a balanced amount of trace elements with a good binding of nutrients. The compost can contribute to the health of the plant through microbial vitalisation.



# Peat substitutes perfectly combined.

Are you looking for a peat-reduced or peat-free professional substrate with guaranteed cultivation safety? Then come to us, because we can really do it!

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# **Our raw materials – your choice**



# Our raw materials - your choice

# Mineral peat substitutes

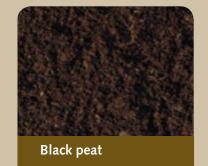
Perlite 0-3 mm / 0-6 mm



## **Peat-based raw materials**



fine











# **Additives and fertiliser** Osmocote mineral fertiliser Viscotec Blue - organic-mineral eco-fertiliser Horn shavings organic biofertiliser gramoXchange Damp clay Sand

## Your choice - our basis

The basis for our Gramoflor high-performance substrates and soils is this diverse range of both renewable and mineral peat substitutes, high-quality peat, additives and fertilizers. It enables you to make the ideal choice for your Gramoflor substrate and thus for effective, safe and climate-friendly cultivation of your crops.

The most important cornerstones of our raw materials are our three pillars of peat reduction, our wood fibre LIGNOFIBRE®, the coconut products Cocopeat, Cocofibre and Coco Chips as well as our quality-assured substrate compost. These enable us to successfully reduce peat in our substrates without loss of quality.

Peat as a raw material will continue to play a certain role in commercial horticulture in the coming years. Here, too, we have done our homework and use our own North German peat wherever possible. We extract this in our own upper subsoil process, which involves starting the renaturalisation process at the same time.

You can read more about our commitment to peatland and climate protection on page 39.

# RAW MATERIALS IN PROFILE



# Ideal properties for your substrate - perfectly combined.

Our substrate starting materials are very heterogeneous in terms of their chemical, physical and biological properties. Depending on the intended use, the desired properties of the substrate are perfectly reproduced through a perfect combination with each other in order to achieve the required physical and chemical properties with pinpoint accuracy.

In terms of sustainability, for example, the combination of the different peat substitutes with each other and the different structures within a peat substitute is crucial. Depending on the substrate's area of application, peat itself still has its justification. Gramoflor develops the optimum professional substrate for your crops and areas of application.

	Chemic properti		Physica	l propertie	es	1	Biological properties	Application		
Raw material	Salinity PH-value buffering		Air reten- tion/cir- culation	Influence on structural (permea-stability bility)		Max. water absorption capacity	Biological activity	Stage of the plant		
<b>LIGNO</b> FIBRE®c coarse	***	★☆☆ ☆☆	*** **	★★★ ☆☆	<b>★★★</b> <b>★☆</b>	★☆☆ ☆☆	*** \$\$	Pot plants, container plants, bucket plants		
<b>LIGNO</b> FIBRE®	***	★☆☆ ☆☆	***	**☆	*** \( \therefore\)	★★☆ ☆☆	*** \( \triangle \triangl	Timber wood propagation, young plants, pot plants, container plants, bucket plants		
<b>LIGNO</b> FIBRE®c	***	★☆☆	*** \( \triangle \triangle \triangle \)	★★☆ ☆☆	*** \( \triangle \triangle \triangle \)	★★☆ ☆☆	*** \( \therefore\)	Sowing & seeding, timber wood propagation, young plants, pot plants, container plants		
<b>LIGNO</b> FIBRE®c Xtrafine+	***	★☆☆ ☆☆	★★☆ ☆☆	★☆☆ ☆☆	★★☆ ☆☆	*** \( \triangle \triangle \triangle \)	★★★	Sowing & seeding, cuttings, timbe wood propagation, young plants, pot plants, container plants		
<b>LIGNO</b> FIBRE®c hydro	***	★ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆	★☆☆ ☆☆	★公公公公公	★公公公公公	*** **	*** 公公	Sowing & seeding, cuttings, timber wood propagation, young plants, pot plants		
Cocopeat Type 30	*** \( \triangle \triangle \triangle \)	★★☆ ☆☆	★★☆ ☆☆	*** \( \triangle \triangle \triangle \)	★★☆ ☆☆	***	***	Sowing & seeding, propagation, pot plants, container plants		
Cocopeat Type 60	*** **	★★☆ ☆☆	★★☆ ☆☆	★★★ ☆☆	★★☆ ☆☆	***	***	Sowing & seeding, propagation, pot plants, container plants		
Cocopeat Type 100	***	★★☆ ☆☆	★★☆ ☆☆	*** \( \triangle \triangle \triangle \)	★★☆ ☆☆	***	***	Young plants, sowing & seeding, propagation, pot plants, container plants		
Cocofibre Type 100	***	★★☆ ☆☆	***	***	***	★☆☆	***	Normally pot and container crop		
Coco Chips	*** \( \triangle \triangle \triangle \)	★★☆ ☆☆	***	***	***	*** \( \triangle \triangle \triangle \)	***	Normally pot and container crop		
Bark humus	★★☆ ☆☆	★★★ ☆☆	★★☆ ☆☆	★★☆ ☆☆	★公公公公公	***	★☆☆ ☆☆	Limited to shares; mainly pot and container plants		
Pine bark	*** **	★★☆ ☆☆	***	***	***	★ ☆ ☆ ☆ ☆	<b>***</b>	Limited to shares; mainly container plants		
Substrate compost	★公公公公公	***	★公公公公公	★★☆ ☆☆	★公公公公公	*** **	★☆☆ ☆☆	Limited to shares; mainly pot and container plants		
Expanded clay	★★☆ ☆☆	★公公公公公	***	***	***	★☆☆	***	Limited to shares; mainly pot and container plants and also specialities like cemetry soils		
Perlite 0-6 mm	***	★公公公公公	*** *\$	***	*** **	★★☆ ☆☆	***	Depending from its fraction size and amount mainly for all applications		
Mixed peat fibre	***	***	★☆☆	★★☆	**☆	***	***	Pot plants, container plants, bucket plants		
Black peat	***	***	★☆☆	★☆☆ ☆☆	★☆☆ ☆☆	***	***	Sowing & seeding, cuttings, timber wood propagation, young plants, pot plants		
Black peat special	***	***	★☆☆	★☆☆	★☆☆	***	***	Press pot young plants		
White peat fine	***	***	★★☆ ☆☆	★★☆ ☆☆	★★☆ ☆☆	***	***	Sowing & seeding, cuttings, timber wood propagation, young plants, pot plants, container plants		
White peat medium	***	*** *\$	***	*** \( \therefore\)	*** \( \therefore\)	*** *\$	***	Timber wood propagation, young plants, pot plants, container plants, bucket plants		
White peat coarse	***	*** *^	*** *^	***	*** *\$	*** \( \triangle \triangle \triangle \)	***	Pot plants, container plants, bucket plants		

Our raw materials are RAL certified and FiBL listed.

As of December 2024: Coco Chips have not yet been RAL certified, FiBL listing has been commissioned.



# From professionals for professionals

The production of standardised and individual substrates for professional horticulture is one of our core competencies. The Gramoflor basic professional range includes suitable substrates for ornamental plant cultivation, for tree nurseries, for perennial plants and for the cultivation of vegetables or soft fruit. We keep

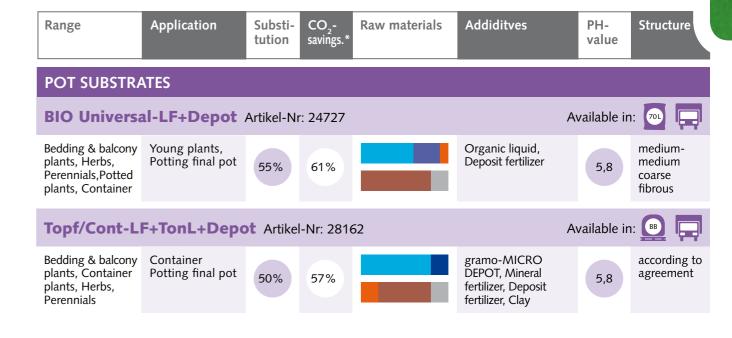
this range in stock for you with the aim of ensuring short delivery lead times.

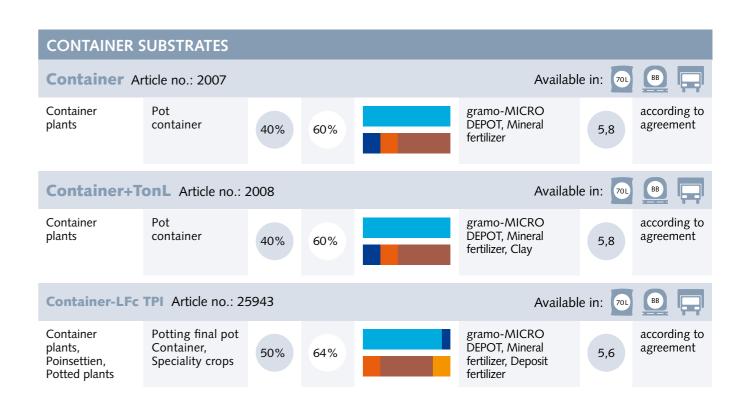
In close co-operation with the Gramoflor specialist consultant, the substrate formulations are determined on site at the customer's premises and a substrate is recommended according to the existing requirements.

Range	Application	Substi- tution	CO <sub>2</sub> - savings.*	Raw materials	Addiditves	PH- value	Structure				
CULTIVATIO	ON AND PROPAG	GATION S	UBSTR	ATES							
Presstopf	Spezial Article no	o.: 27603			Avail	able in: 701	BB F				
Vegetables	Sowing, Press pots, Propagation	30%	34%		gramo-MICRO DEPOT, Mineral fertilizer	5,6	fine				
Tray superfine Article no.: 31883 Available in:											
Vegetables	Sowing, Propagation	15%	39%		gramo-MICRO DEPOT, Mineral fertilizer	5,6	super fine				
Aussaat Tr	ay Article no.: 382	21			Avail	able in: 701					
Vegetables	Sowing, Propagation	15%	47%		gramo-MICRO DEPOT, Mineral fertilizer	5,6	super fine				
GRAMOSE	Article no.: 20	950				Available in	; <b>70</b> 1				
Vegetables	Sowing, Propagation	15%	49%		gramo-MICRO DEPOT, Mineral fertilizer	5,8	super fine fine				
Presstopf Tray Article no.: 2001 Available in: 701 BB											
Vegetables	Sowing, Press pots, Propagation	15%	29%		gramo-MICRO DEPOT, Mineral fertilizer	5,6	fine				
Calculated CO <sub>2</sub> s	savings using HORTICEI	RT GHG meth	odology vs	. 100% peat. Basis:	ex works, loose.						
EGEND: Raw mat	terials										
White peat  Black peat	Mixed peat fibre  Coco	LIGN(	<b>)</b> FIBRE® (w	=	· =	Wood chippin Bark humus	gs				

Application			Raw materials	Addiditves	PH- value	Structure	Range	Application	Substi- tution	CO <sub>2</sub> - savings.*	Raw materials	Addiditves	PH- value
N AND PROPAC	GATION S	UBSTRA	ATES				POT SUBSTR	RATES					
Article no.: 3236				Av	ailable in: 70		Topf-LF+To	<b>nL</b> Article no.: 24	731			Ava	uilable in:
Sowing, Young plants, Pricking	25%	49%		gramo-MICRO DEPOT,Mineral fertilizer	5,6	medium	Bedding & balcony plants, Perennials, Potted plants	Potting final pot	45%	59%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,8
+PERL. Article no	o.: 2051				Available	in: 📶 📮	TR70 Unive	ersal Article no.: 3	34180			Ava	uilable in:
Sowing, Propagation	30%	54%		gramo-MICRO DEPOT, Mineral fertilizer	5,7	superfine fine	Bedding & balcony plants, Perennials, Potted plants	Pots from pot size 9 cm	70%	68%		gramo-MICRO DEPOT, Mineral fertilizer	5,5
rmehrung MC	Article no	o.: 23001			Available	in: 📶 📮	Topf/Pikier	Article no.: 2003				Ava	uilable in: 70
Sowing, Propagation	30%	51%		gramo-MICRO DEPOT, Mineral fertilizer, MO·Co	mbi 5,6	fine	Bedding & balcony plants, Vegetables, Potted plants	Young plants, Pricking	35%	57%		gramo-MICRO DEPOT, Mineral fertilizer	5,8
opf Article no.: 35	5174			Av	ailable in: 🔽		Topf/Pikier-	+TonL Article no	.: 2004			Ava	uilable in: 70
Sowing, Propagation, Press pots	30%	27%		gramo-MICRO DEPOT, Deposit fertilizer, Organic liquid	5,6	fine	Bedding & balcony plants, Vegetables, Potted plants	Bedding plants (also primula/ viola) from pot size 9cm	35%	56%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,8
ıt/Semi+Depo	t Article no	o.: 24741		Av	ailable in: 70		<b>Topf</b> Article n	o.: 2005				Ava	uilable in: 70
Sowing, Propagation	50%	59%		Deposit fertilizer, Organic liquid	5,8	fine	Bedding & balcony plants, Herbs, Potted plants	Potting final pot	40%	59%		gramo-MICRO DEPOT, Mineral fertilizer	5,8
							Topf+TonL	Article no.: 10955				Ava	uilable in: 70
							Bedding & balcony plants, Potted plants	Potting final pot	40%	59%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,6
							Topf+TonXL	Article no.: 2006				Ava	uilable in:
							Bedding & balcony plants, Potted plants	Potting final pot	40%	59%		gramo-MICRO DEPOT, Mineral	5,8
	Article no.: 3236  Sowing, Young plants, Pricking  +PERL. Article no.: Sowing, Propagation  rmehrung MC  Sowing, Propagation  pf Article no.: 35  Sowing, Propagation, Press pots	Article no.: 3236  Sowing, Young plants, Pricking  PERL. Article no.: 2051  Sowing, Propagation  Sowing, Propagation  Opf Article no.: 35174  Sowing, Propagation, Press pots  At/Semi+Depot Article no.  Sowing, Propagation, Press pots	Article no.: 3236  Sowing, Young plants, Pricking  PERL. Article no.: 2051  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation  Opf Article no.: 35174  Sowing, Propagation, Press pots  At/Semi+Depot Article no.: 24741  Sowing, Propagation, Press pots	Article no.: 3236  Sowing, Young plants, Pricking  PERL. Article no.: 2051  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation  Opf Article no.: 35174  Sowing, Propagation, Press pots  Article no.: 24741  Sowing, Propagation, Press pots	Article no.: 3236  Article no.: 3236  Sowing, Young plants, Pricking  PERL. Article no.: 2051  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation  30%  51%  Sowing, Propagation  Sowing, Propagation  30%  51%  Sowing, Propagation  Sowing, Propagation  30%  51%  Sowing, Propagation  Sowing, Propagation  Sowing, Propagation, Press pots  Sowing, Propagation, Press pots  Sowing, Propagation, Press pots  Depot, Mineral fertilizer, MO-Co  Sowing, Propagation, Press pots  Depot, Mineral fertilizer, MO-Co  Define the management of the propagation fertilizer, organic liquid  Av  Sowing, Propagation, Press pots  Deposit fertilizer, Deposit fertilizer, Deposit fertilizer, Deposit fertilizer, Deposit fertilizer, Deposit fertilizer,	N AND PROPAGATION SUBSTRATES  Article no.: 3236  Sowing, Young plants, Pricking  PPERL. Article no.: 2051  Sowing, Propagation  Sowing,	Available in:  Sowing, Propagation  Sowing, Propaga	Article no.: 3236  Available in:   gramo-MICRO DEPOT, Mineral fertilizer, MO-Combi Friespots  Sowing, Propagation Sowing, Prop	NAND PROPAGATION SUBSTRATES  Article no.: 3236  Available in:   Sowing, Young plants, Pricking Propagation  Sowing, Propagation  Propagation  Sowing, Propagation  Sowing, Propagation  Propagation  Propagation  Sowing, Propagation  Propagation  Sowing, Propagation  Propagation  Propagation  Propagation  Sowing, Propagation  Prop	NAND PROPAGATION SUBSTRATES  Article no.: 3236  Available in:   Sowing, Young plants, Procking  Sowing, Propagation  Sowing, Propagatio	NAND PROPAGATION SUBSTRATES  Article no.: 3236  Available in:   OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Available in:  OFFOTAllineral fertilizer  Tropf-Pikier Article no.: 34180  Bedding & Be	NAND PROPAGATION SUBSTRATES  Article no.: 3236  Available in:   Sowing, Pricking  Sowing, Propagation  30%, 54%, Sawing, Propagation  30%, 54%, Sawing, Propagation  Sowing, Propaga	N AND PROPAGATION SUBSTRATES  Article no.: 3236  Available in:   POT SUBSTRATES  Topf-LF+TonL Article no.: 24731  Available in:   Sowing, Propagation  Availabl

POT SUBSTRA			savings.*			value				
Tonf. TonVI	TES									
10bi+10uxr+	<b>Depot</b> Article r	no.: 1737	5		Availab	le in: 70L	BB 📮			
Bedding & balcony plants, Potted plants	Potting final pot	40%	58%		gramo-MICRO DEPOT, Mineral fertilizer, Deposit fertilizer, Clay	5,8	medium coarse fibrous			
Topf+TonL+P	<b>Perl</b> Article no.: 1	Availab	le in: 70L							
Bedding & balcony plants, Potted plants	Potting final pot	40%	60%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,6	medium coarse fibrous			
TR50 Univers	sal Article no.: 30	0820			Availab	le in: 70L	BB 🗐			
Bedding & balcony plants, Perennials Potted plants	Potting final pot	50%	56%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,8	medium coarse fibrous			
Torffrei Unive	ersal Article no.:	: 32598			Availab	le in: 70L				
Container plants, Herbs, Perennials, Potted plants	Soft irrigation water is essential only plants with pH > 5.5	100%	72%		gramo-MICRO DEPOT, Mineral fertilizer	6,4	according to agreement			
Topf/Pikier-L	F+TonL+MO	Article no	o.: 24726		Available in: OL BB I					
Bedding & balcony plants, Vegetables, Potted plants	Young plants, Pricking	35%	61%		gramo-MICRO DEPOT, Mineral fertilizer, MO·Combi, Clay	5,8	medium- medium coarse fibrous			
Topf+TonL+D	Pepot Article no	.: 13686			А	vailable in	: 70L			
Bedding & balcony plants, Perennials, Potted plants	Potting final pot	40%	57%		gramo-MICRO DEPOT, Mineral fertilizer, Deposit fertilizer, Clay	5,6	medium coarse fibrous			
Topf-LFc TPI	Topf-LFc TPI Article no.: 25936 Available in:									
Potted plants, Speciality crops	Potting final pot	40%	58%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,8	medium coarse fibrous			
EGEND: Raw materials	s									





Coco Perlite 0-6 Substrate compost Bark humus

\* Calculated CO<sub>2</sub> savings using HORTICERT GHG methodology vs. 100% peat. Basis: ex works, loose.

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Range	Application	Substi- tution	CO <sub>2</sub> - savings.*	Raw materials	Addiditves	PH- value	Structure
SPECIAL SUB	STRATES						
Paperpot-Pl	lus+CC+MO A	rticle no.:	18321		Availab	le in: 701	BB 🔲
Plug	Rooting	45%	61%		gramo-MICRO DEPOT, Mineral fertilizer, MO-Combi	5,7	fine
Paperpot-Special+Perl+MO Article no.: 14680					Availab	le in: 701	BB
Plug	Rooting	55%	63%		gramo-MICRO DEPOT, Mineral fertilizer, MO·Combi	5,6	fine
Friedhof+W	asserspeicher	Article n	io.: 4804		A	vailable ir	n: 70L
Cemetery	Planting & covering substrate	40%	41%		Mineral fertilizer, Clay	5,6	fine
Friedhof (sp	oezial) Article no	o.: 4450			Availab	le in: 701	BB 📮
Cemetery	Planting & covering substrate	45%	48%		Mineral fertilizer, Clay	5,6	fine
Calluna Top	f-LF Article no.:	24735			A	vailable ir	n: BB
Calluna	Potting final pot	30%	56%		gramo-MICRO DEPOT, Mineral fertilizer	4,2	medium coarse fibrous
Cycl/Poins	LFc+TonL+Λ	<b>ΛΟ</b> Artic	le no.: 25	945	Availab	le in: 📶	BB 🔲
Cyclamen, Poinsettien	Potting final pot	50%	65%		gramo-MICRO DEPOT, Mineral fertilizer, MO-Combi, Clay	5,8	according to agreement
Primula/Vio	la+TonXL Artic	le no.: 31	96		Availab	le in: 👊	BB
Primula, Viola	Potting final pot	20%	53%		gramo-MICRO DEPOT, Mineral fertilizer, Clay	5,7	medium- medium coarse fibrous

Available in: 701 gramo-MICRO DEPOT, Mineral mediummedium 5,7 fertilizer, Deposit coarse fertilizer, Clay fibrous ВВ Available in: 701 gramo-MICRO DEPOT, Mineral medium coarse 4,8 fertilizer, Clay fibrous BB Available in: 701 gramo-MICRO medium DEPOT, Mineral coarse 5,6 fertilizer, Deposit fibrous fertilizer, Clay Available in: BB gramo-MICRO DEPOT, Mineral mediummedium 5,5 fertilizer coarse fibrous Available in: 🔢 gramo-MICRO DEPOT, Mineral according to agreement 4,5 fertilizer Available in: 701 according to agreement \* Calculated CO<sub>2</sub> savings using HORTICERT GHG methodology vs. 100% peat. Basis: ex works, loose. Coco Perlite 0-6 Substrate compost Bark humus

Addiditves

PH-

value

Structure

# SPECIALITY CROP SOFT FRUIT

# Substrates for safe and high-yield cultivation

Are you looking for a suitable substrate for growing soft fruit such as strawberries, raspberries or blueberries? Our Gramoflor soft fruit substrates offer you the optimum

solution for crop-safe cultivation and high yields customised to your farm.

Substrate	Structure	Application	Target ph-value	PS	Raw materials	Additives	Article no.
Topf-Berry Red	medium- medium coarse-fibrous	Universal soft berry substrate for strawberries and raspberries.	5,5	70%		Mineralfertilizer, gramoMICRO- DEPOT	30644
Raspberry (Long-Canes) + Strawberries	according to agreement	Especially for long canes + remontant strawberries in common cultivation methods. Increased substrate moisture.	5,8	55%		Mineral fertilizer, gramoMICRO- DEPOT	34603
Topf- Blueberry	according to agreement	Universally applicable, highly peat-reduced container substrate for blueberries. Increased substrate moisture	4,5	65%		Mineral fertilizer, gramoMICRO- DEPOT	35172
Strawberries	according to agreement	Proven, highly peatreduced substrate for strawberries in common cultivation methods outside the natural soil.	5,4	75%		Mineral fertilizer, gramoMICRO- DEPOT	29115

**LEGEND:** Proportion of raw materials = colour bar / PS = Peat substitution

White peat LIGNOFIBRE® (wood fibre) Mixed peat fibre

## All advantages at a glance

- 1 Greater **crop safety** because of protected cultivation and the use of substrates
- 2 More reliability and controllability thanks to standardised, safe raw materials
- Protected cultivation enables higher yields with good fruit quality
- **4 Optimum adaptation** to the cultivation method, e.g. cultivation of young plants, yield cultivation in containers, on gutters, racks or as ridge cultivation
- 5 Tried and also completely customised substrates
- 6 On-site support





In addition, we offer individual and therefore highly specialised substrate solutions according to customerspecific requirements.



# **Customised and tailored to your culture**

Our extensive basic professional range does not have the right professional substrate for you? No problem: Gramoflor also offers individual and therefore highly specialised substrate solutions.

The Gramoflor specialist consultant develops the customised special mixture on site in consultation with the customer. Here, too, peat reduction and crop

safety have top priority. Our Gramoflor consultants know what is important in professional cultivation management: they can look back on many years of experience and are horticultural technicians, master craftsmen or horticultural engineers. Throughout the entire cultivation period, they are at your side with commitment and advice.

As part of a comprehensive service, we analyse the customer-specific requirements of your crops at the start of the cultivation planning phase. Especially for substrates with a higher peat substitute content, the desired properties of the substrate are then matched with the raw materials and nutrient combinations for the start-up phase using our nutrient calculator (gramoNUTRI-concept). Here we draw on extensive

data collection and years of expertise at Gramoflor.

The gramoNUTRI-concept enables sustainable and economical crop planning in the start-up phase, as it only contains components that are actually needed.



- Nutrient optimisation when using peat substitutes
- Professional advice with precise nutrient calculation for the start phase
- Consideration of N-immobilisation of all substrate components



# MO-CONCEPT



## **Natural vital substances**

The regular use of pesticides is known to be a risk factor for humans and plants. MO-CONCEPT offers an innovative, natural alternative! This intelligent complex of plant-strengthening fungi and soil bacteria promotes vigorous, stress-free plant growth and almost completely reduces the need for chemical plant protection products in the root zone.

The result: healthy, residue-free plants, safe cultivation times and considerable savings on pesticides - a sustainable winwin situation for your business. MO·CONCEPT combines the high-performance substrate mix MO·COMBI® with

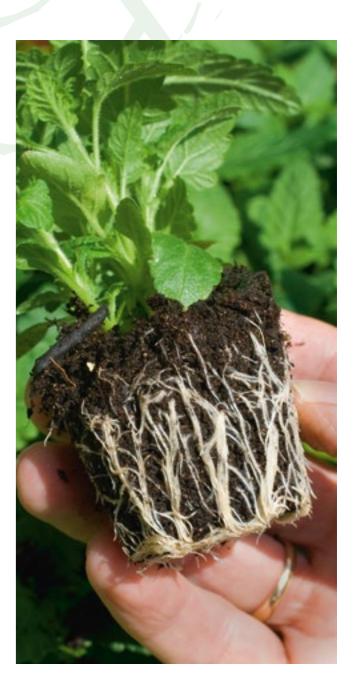
the post-treatment solutions MO·VITAL® or MO·VITAL 5X® to create a comprehensive system for healthy and successful plant cultivation.



You can find more details about Gramoflor MO·CONCEPT here:

### 10 advantages at a glance

- Healthy start for almost all horticultural crops
- Better rooting
- Uniform, vigorous stock from the beginning to the end of the crop
- Reduced failure in young plant production
- Improved stress resilience (drought, moisture, transport, etc.)
- Increased resistance
- Avoidance of plant stress caused by the degradation of chemical active ingredients
- Free from residue
- Without chemical components
- When handled properly, no stress on the environment and employees



# HOBBY 50ILS BIO & PEAT FREE umen-&Pflanzerde GRAMOFLOR ALS HOCHBEETERDE GEEIGNET Torffrei (räuter-& Gemüseerde ALS ANZUCHTERDE GEEIGNET 501

# **Professional quality hobby soils**

Our promise "Quality from the start!" applies not only to the professional gardener, but also to the hobby gardener at home. With our high-quality hobby soil range in professional quality, we support the discerning garden enthusiast in caring for their plants.

All hobby soils are at least **peat reduced**. In addition to verifiably responsibly sourced peat, they use renewable, horticulturally processed raw materials such as our LIGNOFIBRE® wood fibre, Cocopeat or green waste compost. As a result of our endeavours to set the course towards peat free soils in the hobby sector at an early stage, we already have four completely peat-free, conventional soils in our range.

With our BIO potting soils, we also offer a 100% ecological solution for all gardening enthusiasts who

want to consciously avoid peat altogether. They are completely peat-free and offer an environmentally friendly alternative for every garden.



## Bio & peat free

Our series for growth with a clear conscience - 100% ecological

#### Bio Blumen- & Pflanzerde

#### Article no.: 1032



Peat-free organic universal soil with purely organic fertiliser. Particularly suitable for raised beds, also for larger bedding and balcony plants, perennials and other ornamental plants as well as for repotting. Can also be used outdoors and for filling plant holes.

Peat substitution rate: 100%

CO, savings\*: 70% Available in:





peat free

#### Bio Kräuter- & Gemüseerde

#### Article no.: 1037



Peat-free organic soil for the organic cultivation of herbs and vegetables. Ideal for the further cultivation of young vegetable plants, as seedling soil and for planting herb beds. The nourishing fertiliser is purely organic.

Peat substitution rate: 100%

CO<sub>2</sub> savings\*: 74% Available in:



peat free

<sup>\*</sup> Calculated CO., savings using HORTICERT GHG methodology vs. 100% peat. Basis: ex works, loose.

# HOBBY SOILS GRAMOFLOR & NATURAHUM



#### Gramoflor soils peat-free

#### Tomaten- & Gemüseerde torffrei

Article no.: 1088

The peat-free vegetable soil is ideal for tomatoes, cucumbers, peppers, aubergines, courgettes, pumpkins, chilli peppers and pepperonies. For self-sufficiency with fruit vegetables in raised beds, tubs or balcony boxes. Mineral fertilisation.

Peat substitution rate: 100% CO<sub>2</sub> savings\*: 73%

Available in:

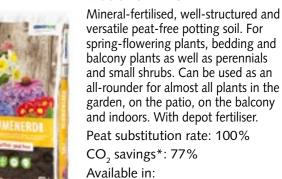




peat free

#### Blumenerde torffrei

Article no.: 1475







peat free

#### **Gramoflor soils**

Our peat-reduced full range for the sophisticated hobby gardener

#### Blumenerde

Article no.: 1075

Universal soil with clay minerals and micronutrients. It ensures healthy growth of all balcony plants, indoor and garden plants. Peat substitution rate: 70%

CO, savings\*: 56% Available in:











#### **Pflanzerde**

Article no.: 1085

This is the perfect soil for planting perennials, shrubs and trees.

Peat substitution rate: 75%

CO<sub>2</sub> savings\*: 58% Available in:





#### Orchideenerde

Article no.: 1082

This structurally strong material is the ideal soil for orchids and provides for a healthy root climate.

Peat substitution rate: 100% CO<sub>2</sub> savings\*: 95% Available in:



## Pinien-Dekorrinde

Article no.: 1090 (fine) Article no.: 1091 (medium) Article no.: 1092 (coarse)



For creative garden design and ground cover, we recommend Gramoflor Pinien-Dekorrinde in coarse, medium and fine grain sizes, depending on requirements. It suppresses weed growth in a natural way and at the same time protects the soil from drying out. Peat substitution rate: 100%

Available in:

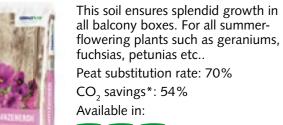


<sup>\*</sup> Calculated CO., savings using HORTICERT GHG methodology vs. 100% peat. Basis: ex works, loose.



#### Balkonpflanzenerde

#### Article no.: 1078



20 45 70



#### Kübel- & Zitruspflanzenerde

This soil is the perfect breeding ground for all citrus plants as well as for potted plants such as passion flower, oleander, angel's trumpet, daisies and hibiscus.

Peat substitution rate: 70%



#### Article no.: 1084



CO<sub>3</sub> savings\*: 61% Available in:



## Kakteenerde

#### Article no.: 1083



The cactus soil offers the best nutrient and pH value conditions for cacti and other succulents. It is based on quartz sand and exchangeactive clay.

Peat substitution rate: 45% CO<sub>2</sub> savings\*: 52% Available in:



Naturahum potting soils Good quality at an attractive price

#### Rosenerde

#### Article no.: 1086

Roses in pots, tubs and beds are well cared for with this soil and are rewarded with strong flowers and healthy flowers and healthy growth. Clay ensures good rewetting and nutrient buffering.

Peat substitution rate: 60% CO<sub>2</sub> savings\*: 54%





Available in:

## Aussaat- & Jungpflanzenerde

#### Article no.: 1081

Specialised soil for sowing and growing of young plants. In addition it can be used for pricking out and propagation of cuttings.

Peat substitution rate: 55% CO, savings\*: 47% Available in:



#### Blumen- & Pflanzerde

#### Article no.: 1250

Universal soil for all indoor, balcony and patio plants. It is a soil rich in structure that is also suitable for planting perennials, shrubs and trees and ensures vital plant

Peat substitution rate: 70% CO<sub>2</sub> savings\*: 60% Available in:



growth.





#### Graberde

#### Article no.: 1052

A dark soil that is ideal for planting and covering graves.

Peat substitution rate: 55% CO<sub>2</sub> savings\*: 44% Available in:







#### Graberde

#### Article no.: 1080

Fine crumbly and deep dark special soil for decorative covering of graves and for grave planting.

Peat substitution rate: 50% CO<sub>2</sub> savings\*: 36% Available in:



GRABERDE



## Rhododendron- & Moorbeeterde

#### Article no.: 1079

Special soil for plants that require a low pH value (< 5.0). These include bog bedding plants such as rhododendrons, azaleas and heathers.

Peat substitution rate: 50% CO<sub>2</sub> savings\*: 46% Available in:











#### Article no.: 1258

Rindenmulch

A natural coniferous wood bark for decorative and practical ground

Peat substitution rate: 100% Available in:

# 60

#### Gärtnersubstrat

Professional quality from the gardener you trust

#### Gärtnersubstrat

#### Article no.: 1025

## Your own tried and tested

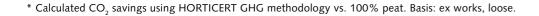


formulation for your customers or our tried and tested professional standard formulation for lush and healthy plant growth.

Peat substitution rate: 55% Available in:







# RENATURATION OF RAISED BOGS



# We create living raised bogs



In northern Germany, peat extraction is being used to create genuine CO<sub>2</sub> reservoirs exclusively on land that was previously used for agriculture. Living raised bogs are being developed in the interests of peatland and climate protection and this work will later be handed over to the "Lebensraum Moor" foundation set up by Gramoflor in 2012.

The non-profit nature conservation foundation under civil law follows the guiding principle

of contributing to a respectful and responsible approach to nature. Its objective is the preservation and further development of the raised bog areas - safeguarded for generations. The foundation also aims to promote moorland and nature conservation, ecological education and research and development.

With our many years of expertise and in cooperation with nature conservation organisations, we can also create permanent nature conservation areas and climate-friendly CO<sub>2</sub> sinks. One pilot project for this is the peatland restoration in the Ahlen-Falkenberger Moor near Cuxhaven, which was launched in 2023. This will be realised via the NABU climate fund.

With all these measures, we are wholeheartedly committed to the restoration of living raised bogs - yesterday, today and in the future!



Gramoflor's roots lie in the agricultural history of the founding Gramann family, which has always been closely

associated with the peatlands of northern Germany.

This gave rise to Josef and Gabriela Gramann's deep

attachment to the moorland habitat, which continues to this day, and the renaturalisation work that Gramoflor has been carrying out for years on former peat extraction areas.

Over many years, the company has developed its own upper subsoil process, in which renaturalisation takes place during peat extraction. This creates the best possible conditions for successful raised bog development. The process is now also recognised by renowned nature conservation organisations.



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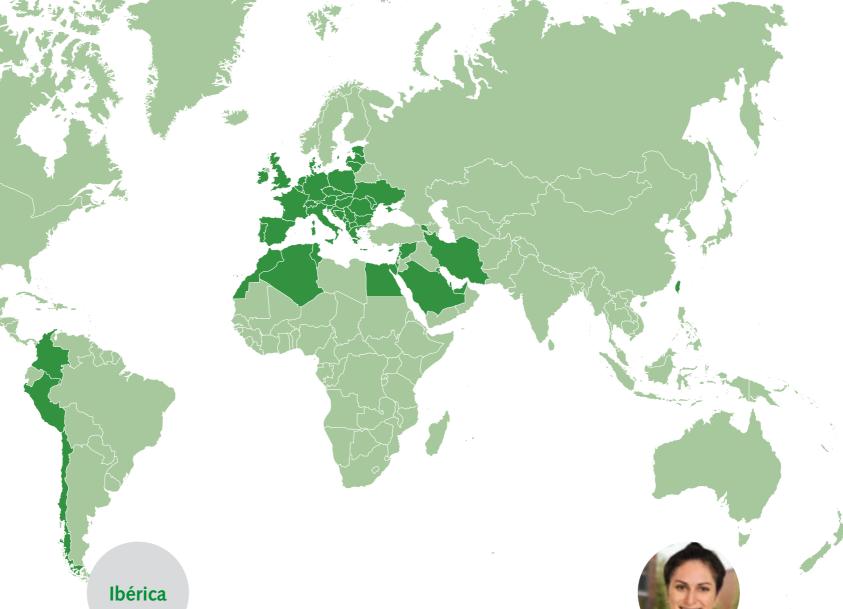
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Quality from the start!



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