



K Evolution of Growing Media

www.klasmann-deilmann.com





Your way to advanced solutions.

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we make it grow

A young man with brown hair, wearing a dark blue hoodie over a bright green shirt, is shown in profile, looking towards the right. The background is a soft-focus outdoor scene with green foliage and a blue sky.

K Evolution of Growing Media

Welcome to your advance

ADVANCED Substrates set the benchmark for future-oriented horticulture. They combine the most valued raw materials to high performance blends with a low carbon footprint. Wood fibre, perlite, cocos, green compost and peat boost essential characteristics in the substrate, thus ensuring the precise crop control in your nursery and the healthy growth of your plants.

ADVANCED Substrates cover all plant and cultivation segments for any horticultural

application. The mixes are tried and tested and have proven their suitability for all internationally common applications in commercial horticulture.

Decades of experience with all major raw materials and the widest range of growing media give us a unique edge. That makes your next step easier. When you're ready to advance, we're ready to join you.



The Klasmann-Deilmann Group

Klasmann-Deilmann is the leading group of companies in the international substrate industry with numerous sales and production companies in Europe, Asia and America, as well as a network of sales and production partners on all continents. Our growing media provide a vital basis for the growth of vegetables, fruit, edible mushrooms, herbs, ornamental plants, trees and shrubs. They ensure the success of our partners and customers in commercial horticulture and are an essential part of the value chain in the food industry.

Our product portfolio includes growing media and substrate constituents such as peat, wood fibre, green compost, cocos and perlite amongst others. We also market the Growcoon propagation system and are establishing ourselves as a provider of digital solutions for nurseries with the Log & Solve online platform.

Overview of our business fields

K SUBSTRATES

K SUBSTRATES
Advanced

K SUBSTRATES
Basic

K SUBSTRATES
ProLine

K SUBSTRATES
Florabella

K SUBSTRATES
Containermulch

K RAW MATERIALS

K RAW MATERIALS
GreenFibre

K RAW MATERIALS
TerrAktiv/FT/PLUS

K RAW MATERIALS
Peat

K RAW MATERIALS
Cocos

K RAW MATERIALS
Perlite

K INNOVATION

K INNOVATION
Growcoon

K INNOVATION
Log & Solve

K INNOVATION
Peat Bog Restoration

K INNOVATION
Academy

K BIOENERGY

K BIOENERGY
Wood Chips

K BIOENERGY
Wood Trading

K BIOENERGY
Wood Services

“ADVANCED Substrates by Klasmann-Deilmann ...”

“... are the result of decades of research, development and experience. The correct recipe for every crop. The best raw materials for every cultivation method. The highest quality for your nursery. And, the use of most sustainable resources for environment and climate. We are convinced that more advance means more success for your crops.”

Dr. Sebastian Kipp

Head of Advisory Services and Quality Management
at Klasmann-Deilmann



“... contain a proportion of alternative raw materials. We rely on proven constituents such as wood fibres, green compost, coir and perlite. The tried and tested recipes meet all requirements for future-oriented horticulture. They combine a maximum crop safety with reliable availability and a reduced carbon footprint.”

Hermann Konnemann

Technical Advisor at Klasmann-Deilmann



1913

we make it grow

*“... are the next logical step on a path we have been paving for more than thirty years. Modern raw materials create a wide range of possibilities for a globally increasing demand for growing media. We offer more alternative constituents without compromising on quality. We are focusing on greater sustainability and consistently high crop security. The game-changing **ADVANCED Substrates** ensure that you stay abreast of one of the most important horticultural developments in recent decades.”*

Moritz Böcking

Managing Director at Klasmann-Deilmann



From coir to wood fibre: Proven constituents for your **ADVANCED** Substrate



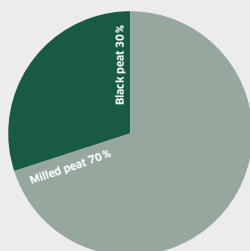
Why GreenFibre®?

GreenFibre® ...

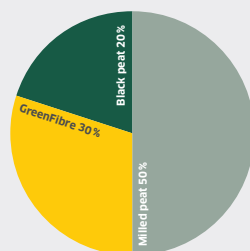
- ... is a wood fibre from sustainably managed forestry and manufactured by ourselves
- ... is a RHP certified raw material, specially developed for the needs of modern horticulture
- ... leads to better aeration and higher structural stability
- ... increases drainage in the root zone, thus less issues with waterlogging
- ... improves the water distribution in the substrate
- ... ensures easier rewetting of the substrate
- ... enables a healthy and fast root development
- ... ensures better drying off of the substrate surface, thus less pressure from root diseases
- ... prevents algae and moss, due to drier substrate surface
- ... provides a stable nitrogen balance to suit normal feeding regime

Reduce CO₂ emissions by up to 28%. With climate-friendly substrate blends

Bedding substrates

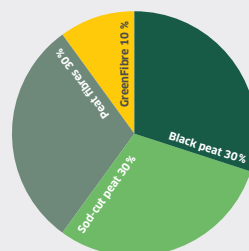


0% alternative constituents
= 230 kg CO₂ m⁻³

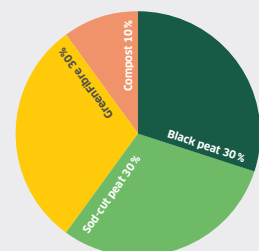


30% alternative constituents
= 28% CO₂-reduction

Container substrates



10% alternative constituents
= 204 kg CO₂ m⁻³



40% alternative constituents
= 24% CO₂-reduction



Why perlite?

Perlite ...

- ... increases air capacity and drainage
- ... prevents waterlogging
- ... provides excellent structural stability
- ... is pH-neutral and has an extremely low salt level
- ... is ideal for use in substrates for propagation and potting when strong drainage and structural stability is required
- ... is produced according to high quality standards in our own factory

Why cocos products?

Coir Pith ...

- ... shows good rewettability
- ... supports a quick water uptake into the substrate
- ... provides a balanced air-water ratio and good drainage

Coco Fibre ...

- ... is characterised by a very high air capacity and low water capacity
- ... provides a high capillarity for a very fast water transport within the root zone
- ... supports the structural stability of a growing media

Organic coir ...

- ... is suitable for the ecological plant cultivation
- ... is carefully washed and not treated with mineral fertilisers
- ... carries the ecolabel IMO ensuring organic and ethical standards



Why TerrAktiv®?

TerrAktiv® green compost ...

- ... provides a high microbial activity
- ... shows suppressive effects on root diseases
- ... stimulates root development and plant growth
- ... acts as a slow-release nutrient source
- ... has a high buffering capacity
- ... improves shelf life of crops
- ... improves rewettability
- ... improves the nutrient release from organic fertiliser
- ... is certified to RHP quality standards and approved for organic cultivation



Sustainable growing media

We appreciate that you aim to manage your nursery responsibly also in terms of nature and climate protection. That's why ADVANCED Substrates offer you the maximum crop security while supporting your sustainable development.

By the use of alternative constituents, we optimise the characteristics of your substrate and reduce its carbon footprint at the same time. That leads to additional benefits such as ...

- ... more resource-saving cultivation through the use of more renewable raw materials
- ... lighter mixes and thus more environmentally friendly transport
- ... fewer emissions and therefore a more climate-friendly greenhouse
- ... increased microbial life and thereby stronger plants with less need for plant protection applications




Why Peat?

Peat ...

- ... remains the key constituent in substrate production
- ... enables the use of any other alternative raw material
- ... is well available long-term all year round
- ... provides uniform properties
- ... ensure a stable pH value and optimum nutrient level
- ... shows good buffering capabilities
- ... has a high structural stability and good wettability
- ... allows an optimum ratio between air and water capacity
- ... is free from pathogens or harmful substances and almost free from weed seeds

Certified to the highest standards

Quality:	Regelings Handels Potgronden (www.rhp.nl)
Responsibility:	Responsibly Produced Peat (www.responsiblyproducedpeat.org)
Sustainability:	Global Reporting Initiative (www.globalreporting.org)
Organic:	EC No. 834/2007, certified by Ecocert®
Climate:	ISO 14064
Nature:	ISO 14001
Processes:	ISO 9001



“In terms of quality and service, we have been satisfied with Klasmann-Deilmann for decades. Alternative raw materials in the substrate do not change this. The opposite is the case. Our customers even expect it. And if the crops allow it, we would also be ready for 100 % alternative raw materials. This simply fits the times and thus also perfectly with our company slogan: Leading Breeding!”

Markus Schmülling, Head of production “Geranien Endisch GmbH” (Germany)



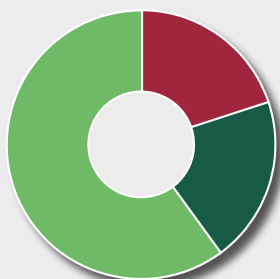
Propagation Substrates

Seedling and tray substrates for the propagation of vegetable and ornamental young plants



Seedling Substrate

080



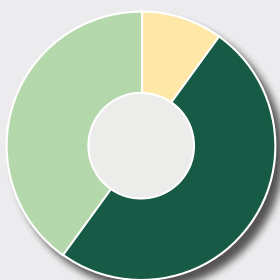
- Structure – extra fine
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 0.7
- Extra trace elements – ✓
- Water capacity – + + + +
- Air capacity / drainage – + +
- Water uptake – + + + + +
- Characteristics – Best water uptake and reduced nutrition
- Use for – Salt-sensitive ornamental plants, e.g. Begonia, Impatiens



● Coir ● Frozen through black peat ● White sod peat (1-7 mm)

Tray Substrate + 10 % GreenFibre®

4Q7



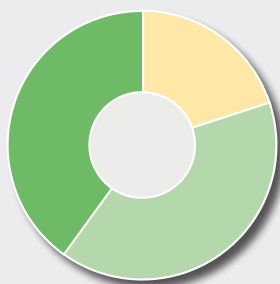
- Structure – extra fine
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 1.3
- Extra trace elements – ✓
- Water capacity – + + + +
- Air capacity / drainage – + +
- Water uptake – + + + +
- Characteristics – Universal tray substrate. Suitable for automatic filling lines
- Use for – Vegetable seedlings, tobacco seedlings



● GreenFibre® fine ● Frozen through black peat ● White peat (0-5 mm)

Plug Mix + 20 % GreenFibre®

9U5



Structure – fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 0.5
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – ++++
Water uptake – +++

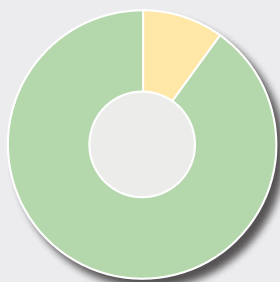
Characteristics – Provides increased air capacity and drainage
Use for – Vegetable young plants, ornamental young plants



GreenFibre® fine White peat (0 – 5 mm) White sod peat (1 – 7 mm)

Base Substrate 1 fine + GreenFibre®

6X2



Structure – extra fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Water uptake – +++

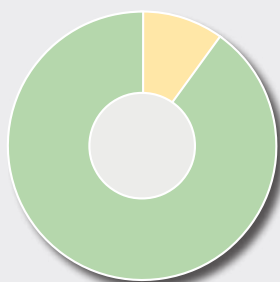
Characteristics – To mix with fertiliser on site or alongside liquid feed
Use for – Vegetable young plants, ornamental young plants



GreenFibre® fine White peat (0 – 5 mm)

TS 1 fine + GreenFibre®

6X3



Structure – extra fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.3
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Water uptake – +++

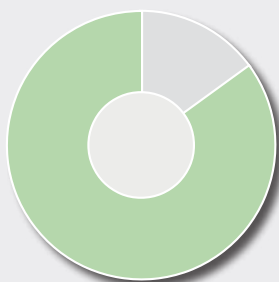
Characteristics – Extra light, free flowing seedling substrate. Suitable for automatic filling lines
Use for – Vegetable young plants, ornamental young plants



GreenFibre® fine White peat (0 – 5 mm)

TS 1 fine + 15 % Perlite

419



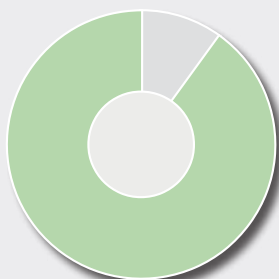
○ Perlite (1 - 1.75 mm) ● White peat (0 - 5 mm)

- Structure – extra fine
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 1.0
- Extra trace elements – ✓
- Water capacity – +++
- Air capacity / drainage – +++
- Water uptake – +++
- Characteristics – Extra light, free flowing, with improved drainage
- Use for – Vegetable young plants, tobacco seedlings



TS 2 fine + 10 % Perlite

S39



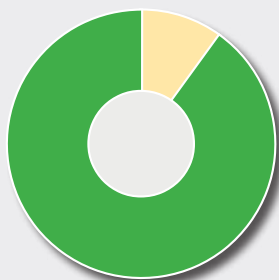
○ Perlite coarse (1 - 1.75 mm) ● White peat (0 - 5 mm)

- Structure – extra fine
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 2.0
- Extra trace elements – none
- Water capacity – +++
- Air capacity / drainage – +++
- Water uptake – +++
- Characteristics – For young plants with high nutrient demand and for growing conditions with frequent irrigation
- Use for – Vegetable seedlings, tobacco seedlings



TS 3 fine + 10 % GreenFibre®

1R1



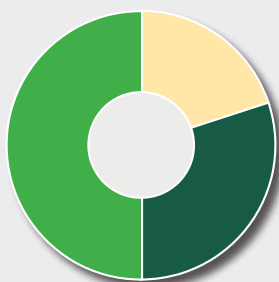
● GreenFibre® fine ● White peat, moderately decomposed (0 - 5 mm)

- Structure – extra fine
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 1.0
- Extra trace elements – ✓
- Water capacity – +++++
- Air capacity / drainage – ++
- Water uptake – +++
- Characteristics – Seedling mix with increased water capacity
- Use for – Vegetable young plants, ornamental young plants



TS 3 fine + 20 % GreenFibre®

5Q4



Structure – extra fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.3
Extra trace elements – ✓

Water capacity – + + + +
Air capacity / drainage – + + + +
Water uptake – + + + +

Characteristics – Good water retention combined with improved porosity

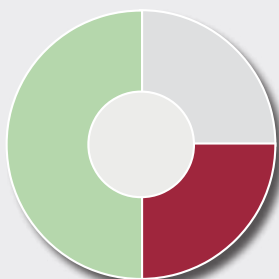
Use for – Vegetable young plants, ornamental young plants



● GreenFibre® fine ● Frozen through black peat ● White peat, moderately decomposed (0-5 mm)

TS Steckmedium with 25 % perlite + 25 % coir

T30



Structure – extra fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 0.5
Extra trace elements – ✓

Water capacity – + + + +
Air capacity / drainage – + + + +
Water uptake – + + + +

Characteristics – Rooting cuttings in small trays and small paper pots

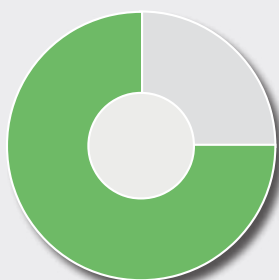
Use for – Ornamental plants



○ Perlite (0.6-2.5 mm) ● Coir ● White peat (0-5 mm)

TS Steckmedium

686



Structure – fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 0.5
Extra trace elements – ✓

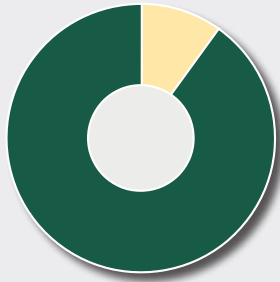
Water capacity – + + +
Air capacity / drainage – + + + +
Water uptake – + + + +

Characteristics – Rooting cuttings in modular trays, small pots and paper pots

Use for – Ornamental plants, shrubs and trees



○ Perlite (1-7.5 mm) ● White sod peat (1-7 mm)



Structure – fine
 pH-value (H₂O) – 6.0
 Fertilisation (g/l) – 1.5
 Extra trace elements – ✓

Water capacity – + + + + +
 Air capacity / drainage – +
 Water uptake – + + + + +

Characteristics – Provides extra water retention, suitable for sowing in trays

Use for – Vegetable seedlings, tobacco seedlings



● GreenFibre® fine ● Frozen through black peat

“We have seen just perfect results of seedlings grown with 20 % GreenFibre® fine. Especially when there’s a lot of rain and humidity, the young plants grow healthier roots. We feel the substrate is more forgiving during cultivation and we get great crops with a substrate providing improved sustainability.”

Hermann Konnemann, Technical Advisor, Klasmann-Deilmann (Germany)

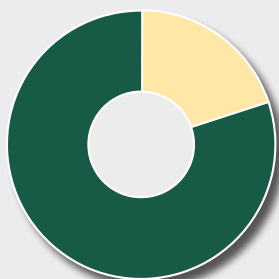


Blocking Substrates

Substrates for the propagation of ornamental and vegetable young plants in press pots

Potgrond H80 + GreenFibre®

479



Structure – fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.5
Extra trace elements – none

Water uptake – +++++
Water capacity – +++++
Block stability – +++++

Characteristics – Good block stability also for larger press pots

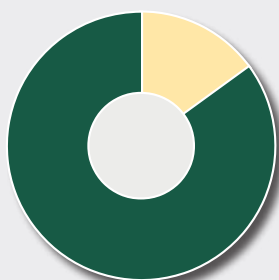
Use for – Vegetable young plants



● GreenFibre® fine ● Frozen through black peat

Potgrond H85 + GreenFibre®

078



Structure – fine
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.5
Extra trace elements – none

Water uptake – +++++
Water capacity – +++++
Block stability – +++++

Characteristics – Produces very strong blocks

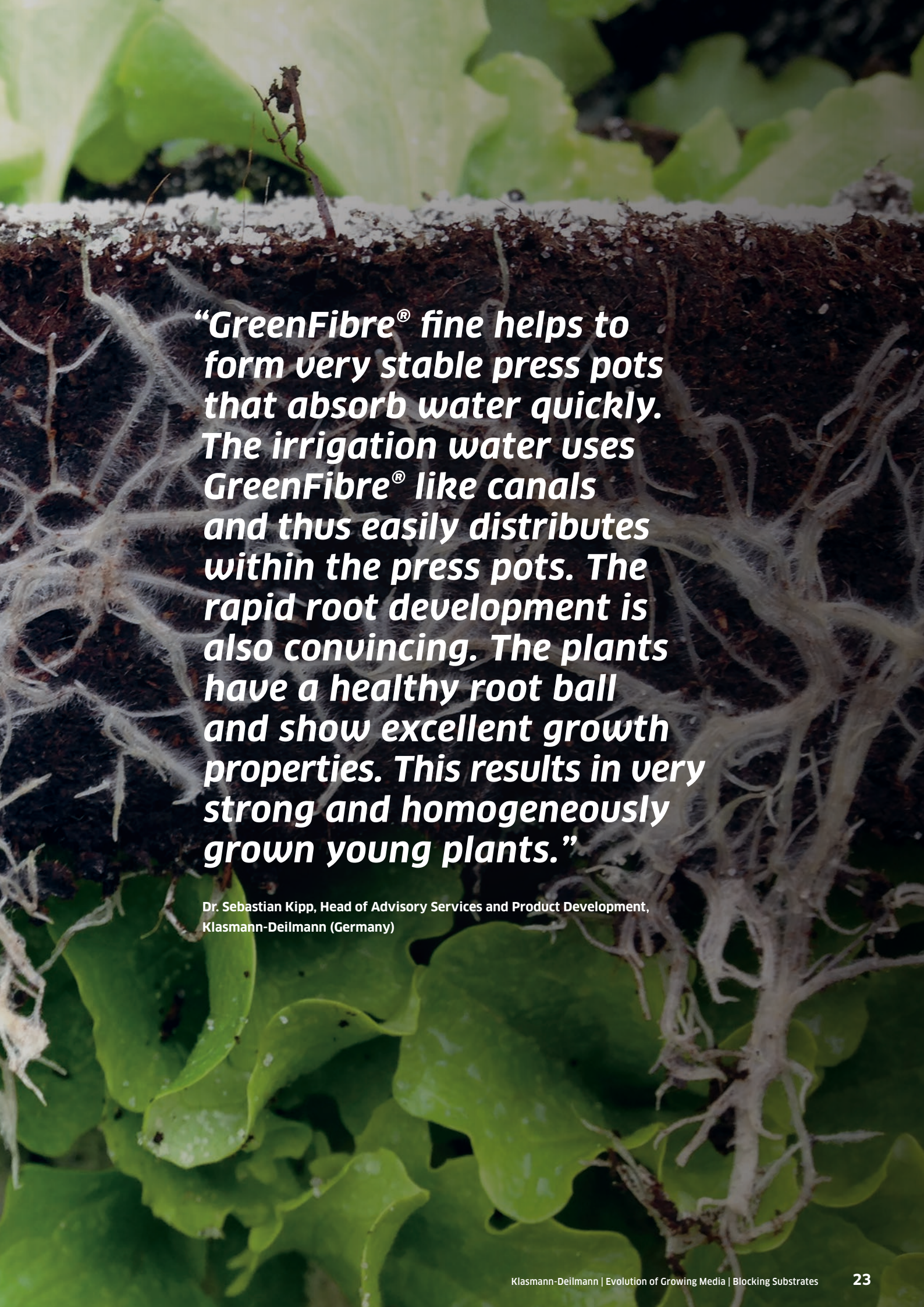
Use for – Vegetable young plants, ornamental young plants



● GreenFibre® fine ● Frozen through black peat







“GreenFibre® fine helps to form very stable press pots that absorb water quickly. The irrigation water uses GreenFibre® like canals and thus easily distributes within the press pots. The rapid root development is also convincing. The plants have a healthy root ball and show excellent growth properties. This results in very strong and homogeneously grown young plants.”

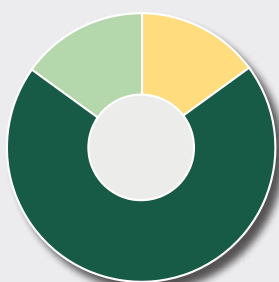
**Dr. Sebastian Kipp, Head of Advisory Services and Product Development,
Klasmann-Deilmann (Germany)**

Bedding Substrates

Substrates for balcony, patio and bedding plants in small to medium-sized pots and packs

Substrate 1 + GreenFibre®

098



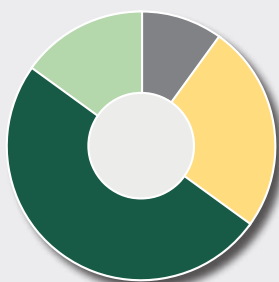
- Structure – fine
- pH-value (H₂O) – 5.8
- Fertilisation (g/l) – 1.2
- Extra trace elements – none
- Water capacity – + + + + +
- Air capacity / drainage – + +
- Water uptake – + + + + +
- Characteristics – Allround substrate for pricking out and growing on
- Use for – Bedding and patio plants



● GreenFibre® medium ● Frozen through black peat ● White peat (0-10 mm)

Substrate 1 with 10 % TerrAktiv® + 25 % GreenFibre®

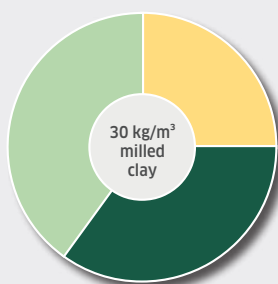
6X5



- Structure – fine
- pH-value (H₂O) – 5.8
- Fertilisation (g/l) – 1.2
- Extra trace elements – none
- Water capacity – + + + + +
- Air capacity / drainage – + + +
- Water uptake – + + + + +
- Characteristics – Improved nutrient buffer and strong microbial activity for healthy plants
- Use for – Bedding plants, vegetables in pots, pot herbs



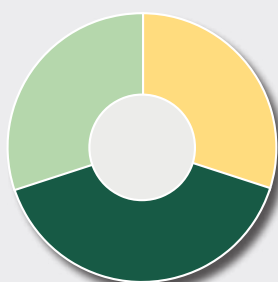
● TerrAktiv® ● GreenFibre® medium ● Frozen through black peat ● White peat (0-10 mm)



- Structure – fine
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 1.2
- Extra trace elements – none
- Water capacity – + + + + +
- Air capacity / drainage – + + + +
- Water uptake – + + + + +
- Characteristics – High water retention combined with improved drainage
- Use for – Bedding and patio plants



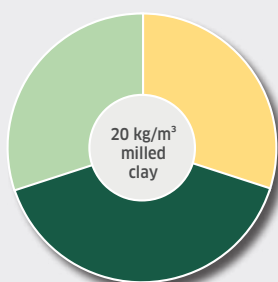
● GreenFibre® medium ● Frozen through black peat ● White peat (0 – 10 mm)



- Structure – medium
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 1.2
- Extra trace elements – ✓
- Water capacity – + + + + +
- Air capacity / drainage – + + + +
- Water uptake – + + + + +
- Characteristics – Allround bedding mix with good structure and drainage
- Use for – Bedding and patio plants



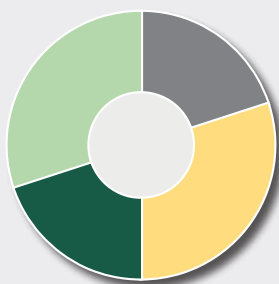
● GreenFibre® medium ● Frozen through black peat ● White peat (0 – 25 mm)



- Structure – medium
- pH-value (H₂O) – 6.0
- Fertilisation (g/l) – 1.0
- Extra trace elements – ✓
- Water capacity – + + + + +
- Air capacity / drainage – + + + +
- Water uptake – + + + + +
- Characteristics – Good structure and drainage with extra nutrient buffer
- Use for – Bedding and patio plants, pot herbs



● GreenFibre® medium ● Frozen through black peat ● White peat (0 – 25 mm)



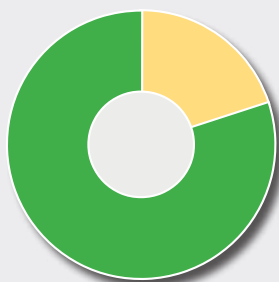
Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Water uptake – ++++

Characteristics – Universal bedding substrate with stable air capacity and extra microbial activity

Use for – Bedding and patio plants, shrubs

● TerrAktiv® ● GreenFibre® medium ● Frozen through black peat ● White peat (0 - 25 mm)



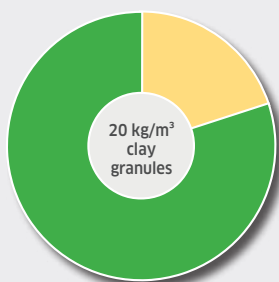
Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – ++++
Air capacity / drainage – ++
Water uptake – +++

Characteristics – Good water retention combined with improved porosity

Use for – Bedding plants, perennials

● GreenFibre® medium ● White peat, moderately decomposed (0 - 25 mm)



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – ++++
Air capacity / drainage – ++
Water uptake – ++++

Characteristics – Good water retention combined with improved porosity and extra nutrient buffer

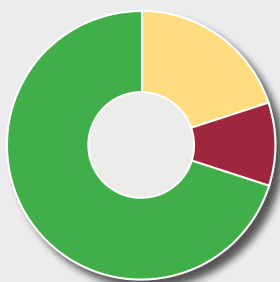
Use for – Bedding plants, perennials, pot herbs

● GreenFibre® medium ● White peat, moderately decomposed (0 - 25 mm)



TS 3 medium basic with 10 % coir + 20 % GreenFibre®

6F6



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – + + + +
Air capacity / drainage – + +
Water uptake – + + + +

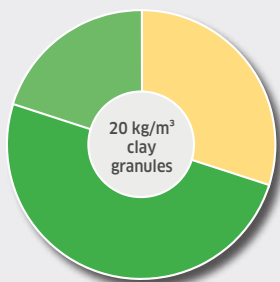
Characteristics – Good water retention
Use for – and quick water uptake
– Bedding and patio plants,
perennials, pot herbs



● GreenFibre® medium ● Coir ● White peat, moderately decomposed (0 – 25 mm)

TS 3 medium with clay + 30 % GreenFibre®

3B2



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

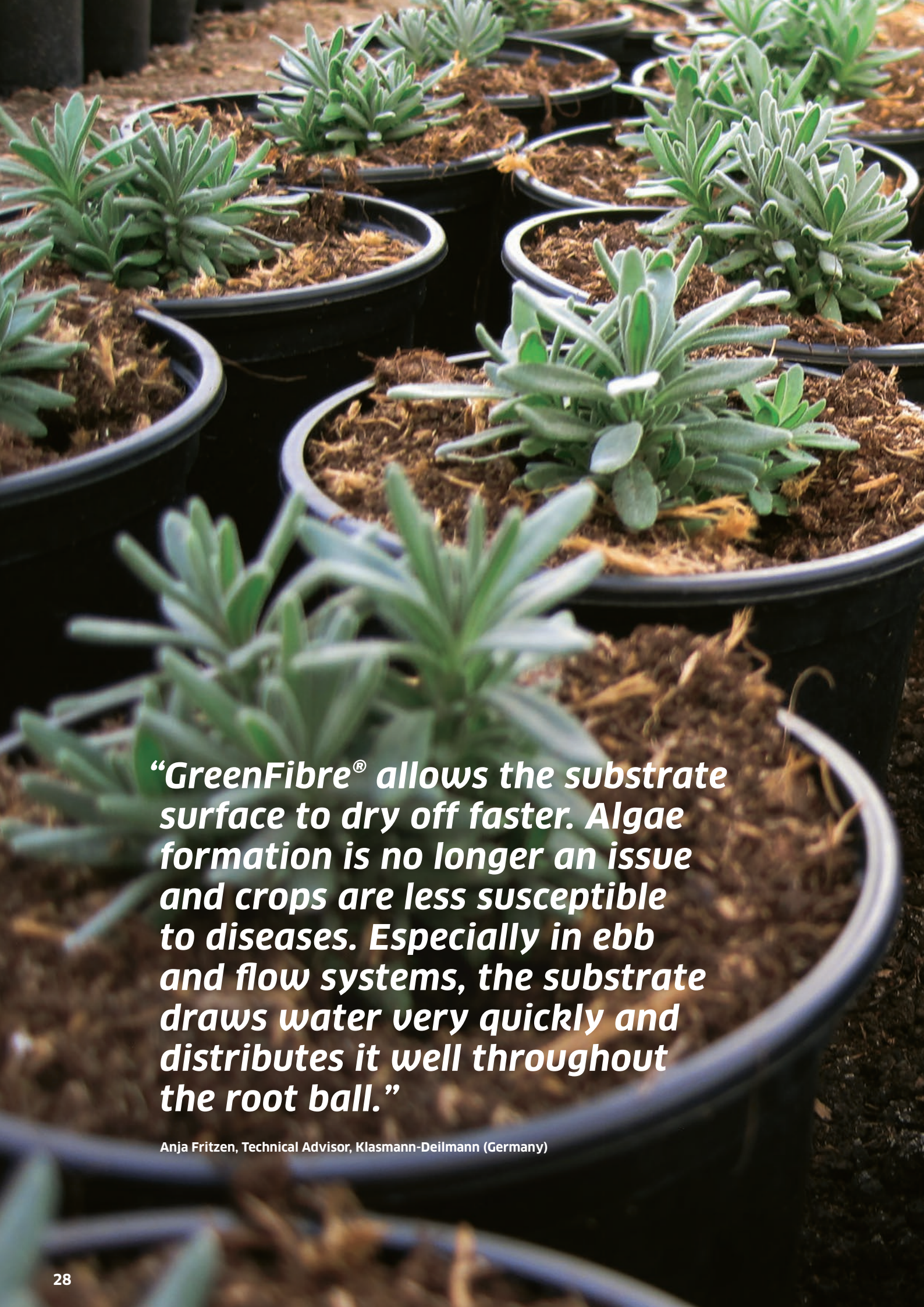
Water capacity – + + +
Air capacity / drainage – + + +
Water uptake – + + + +

Characteristics – Very stable structure,
improved drainage, with
extra nutrient buffer
Use for – Bedding plants, pot
plants, perennials



● GreenFibre® medium ● White peat, moderately decomposed (0 – 25 mm) ● White sod peat (10 – 25 mm)





“GreenFibre® allows the substrate surface to dry off faster. Algae formation is no longer an issue and crops are less susceptible to diseases. Especially in ebb and flow systems, the substrate draws water very quickly and distributes it well throughout the root ball.”

Anja Fritzen, Technical Advisor, Klasmann-Deilmann (Germany)



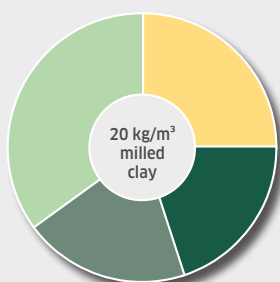
Potting Substrates

Substrates for growing on of indoor pot plants



Substrate 5 with clay + GreenFibre®

666



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – +++

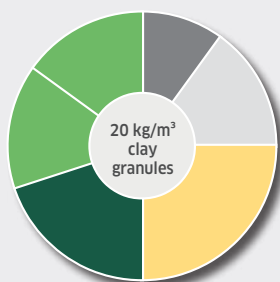
Characteristics – Allround potting substrate.
Good capillary distribution,
with extra nutrient buffer
Use for – Cyclamen, Geranium,
perennials, bedding plants



● GreenFibre® medium ● Frozen through black peat ● Peat fibres (10 - 25 mm) ● White peat (0 - 25 mm)

Substrate 5 TerrAktiv® / perlite + GreenFibre®

6L7



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.2
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

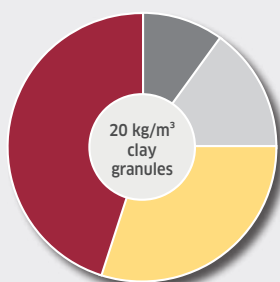
Characteristics – Allround potting mix with
increased drainage and air
capacity
Use for – Ornamental plants, Cyclamen,
Geranium, perennials



● TerrAktiv® ● Perlite coarse (1 - 7.5 mm) ● GreenFibre® medium ● Frozen through black peat ● White sod peat (5 - 15 mm) ● White sod peat (10 - 25 mm)

Substrate 5 TerrAktiv® / coir + GreenFibre®

5L9



Structure – medium
pH-value (H₂O) – 6.5
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Universal potting mix with strong drainage and fast water uptake

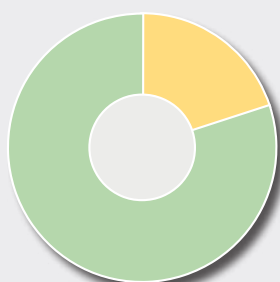
Use for – Poinsettia, Cyclamen, Begonia



● TerrAktiv® ● Perlite (1–7.5 mm) ● GreenFibre® medium ● Coir

TS 1 medium basic + GreenFibre®

814



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – ++
Structural stability – ++++

Characteristics – Extra light, free flowing, with improved drainage

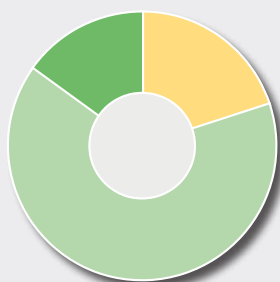
Use for – Salt-sensitive ornamental plants



● GreenFibre® medium ● White peat (0–25 mm)

TS 2 medium basic + GreenFibre®

6X7



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 2.0
Extra trace elements – ✓

Water capacity – ++++
Air capacity / drainage – ++
Structural stability – ++++

Characteristics – Extra light, good drainage, for pot plants with higher nutrient demand

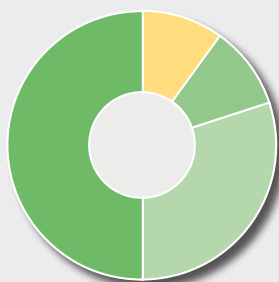
Use for – Geranium, Fuchsia, Chrysanthemum



● GreenFibre® medium ● White peat (0–25 mm) ● White sod peat (5–15 mm)

TS 4 medium + 10 % GreenFibre®

1R4



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – ++++
Structural stability – +++++

Characteristics – Extra light potting mix with improved structural stability, ideal for ebb-flow irrigation systems

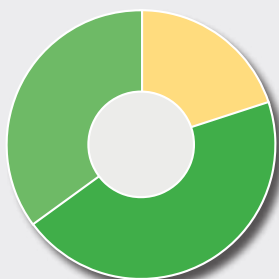
Use for – Ornamental plants, foliage plants



GreenFibre® medium White peat fibres (0-30 mm) White peat (0-25 mm) White sod peat (10-25 mm)

TS 4 PLUS medium + GreenFibre®

616



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – +++++

Characteristics – High structural stability and increased water retention

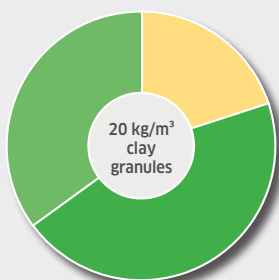
Use for – Ornamental plants, foliage plants



GreenFibre® medium White peat, moderately decomposed (0-25 mm) White sod peat (10-25 mm)

TS 4 PLUS medium with clay + GreenFibre®

816



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – +++++

Characteristics – Good structure, increased water retention, extra nutrient buffer

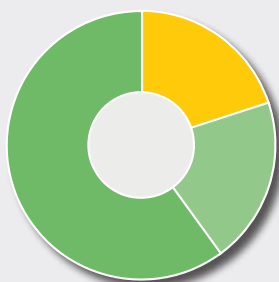
Use for – Ornamental plants, foliage plants



GreenFibre® medium White peat, moderately decomposed (0-25 mm) White sod peat (10-25 mm)

TS 4 GreenPlant coarse + GreenFibre®

T89



Structure – coarse
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – +++++
Structural stability – +++++

Characteristics – Very high air capacity and drainage for best root development

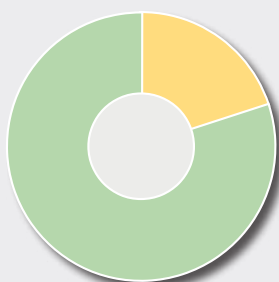
Use for – Foliage plants, Anthurium, Calathea, Cyclamen



● GreenFibre® coarse ● White peat fibres coarse-fibrous ● White sod peat (25 - 45 mm)

Base Substrate 2 medium basic + GreenFibre®

6X8



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – ++
Structural stability – +++++

Characteristics – To mix with fertiliser on site or alongside liquid feed

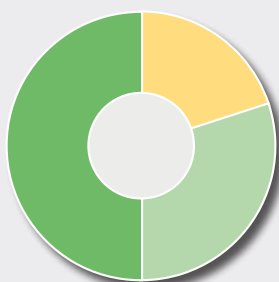
Use for – Bedding and pot plants



● GreenFibre® medium ● White peat (0 - 25 mm)

Base Substrate 4 medium + GreenFibre®

523



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – +++
Structural stability – +++++

Characteristics – To mix with fertiliser on site or alongside liquid feed

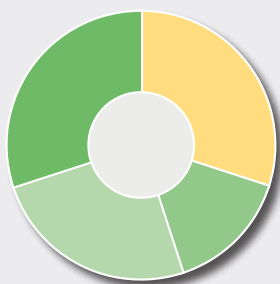
Use for – Ornamental plants, foliage plants



● GreenFibre® medium ● White peat (0 - 25 mm) ● White sod peat (10 - 25 mm)

Base Substrate 4 coarse + GreenFibre®

9B4



Structure – coarse
pH-value (H₂O) – 6.0
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++ +

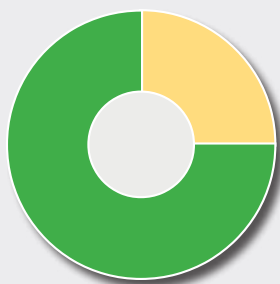
Characteristics – To mix with fertiliser on site or alongside liquid feed
Use for – Ornamental plants, foliage plants



● GreenFibre® medium ● White peat fibre (70 mm) ● White peat (0 - 25 mm) ● White sod peat (25 - 45 mm)

Base Substrate 5 PLUS + GreenFibre®

540



Structure – medium
pH-value (H₂O) – 6.0
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – ++++
Air capacity / drainage – ++
Structural stability – +++

Characteristics – To mix with fertiliser on site or alongside liquid feed
Use for – Bedding and pot plants



● GreenFibre® medium ● White peat, moderately decomposed (0 - 25 mm)

“Helleborus is a niche product. This is where the right substrate recipe is essential. We see great success with TerrAktiv® and GreenFibre® in our mixture. The plants are stronger, more compact and resistant. We are very grateful to have such a reliable partner in Klasmann-Deilmann.”

Thierry van Paemel, BVBA Helleborus (Belgium)

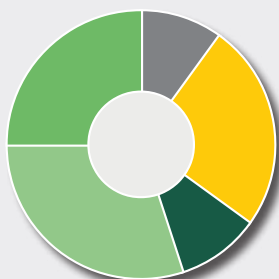


Container Substrates

Substrates for growing on of shrubs and trees as well as ericaceous crops

Container Substrate 2 coarse with 10 % TerrAktiv® + 25 % GreenFibre®

6X9



Structure – coarse-fibrous
pH-value (H₂O) – 5.7
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++ +

Characteristics – Extra water and nutrient buffer plus strong microbial activity for healthy plants

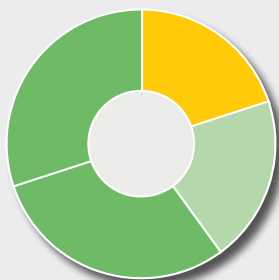
Use for – Trees, conifers



● TerrAktiv® ● GreenFibre® coarse ● Frozen through black peat ● Peat fibres ● White sod peat (25 - 45 mm)

TS 4 coarse + 20 % GreenFibre®

1G8



Structure – coarse
pH-value (H₂O) – 5.5
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++ +

Characteristics – Allround container substrate with good capillary distribution

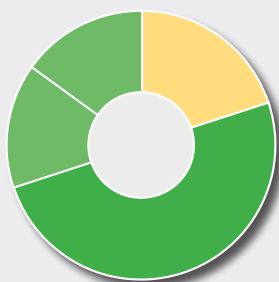
Use for – Shrubs and trees, foliage plants



● GreenFibre® coarse ● White peat (0 - 25 mm) ● White sod peat (10 - 25 mm) ● White sod peat (25 - 45 mm)

TS 4 PLUS coarse + GreenFibre®

620



Structure – coarse
pH-value (H₂O) – 6.0
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – ++++

Characteristics – Allround container substrate with increased water retention

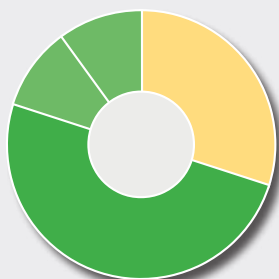
Use for – Shrubs and trees, foliage plants



● GreenFibre® medium ● White peat, moderately decomposed (0-25 mm) ● White sod peat (10-25 mm) ● White sod peat (25-45 mm)

TS 4 PLUS coarse + 30 % GreenFibre®

P24



Structure – coarse
pH-value (H₂O) – 5.5
Fertilisation (g/l) – 1.0
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – ++++

Characteristics – High structural stability and increased drainage

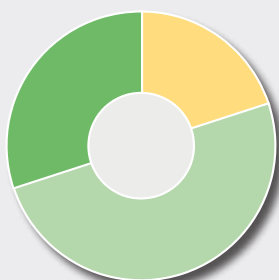
Use for – Shrubs and trees, foliage plants



● GreenFibre® medium ● White peat, moderately decomposed (0-25 mm) ● White sod peat (10-25 mm) ● White sod peat (25-45 mm)

TS 4 Ericaceous + GreenFibre®

254



Structure – medium
pH-value (H₂O) – 4.8
Fertilisation (g/l) – none
Extra trace elements – ✓

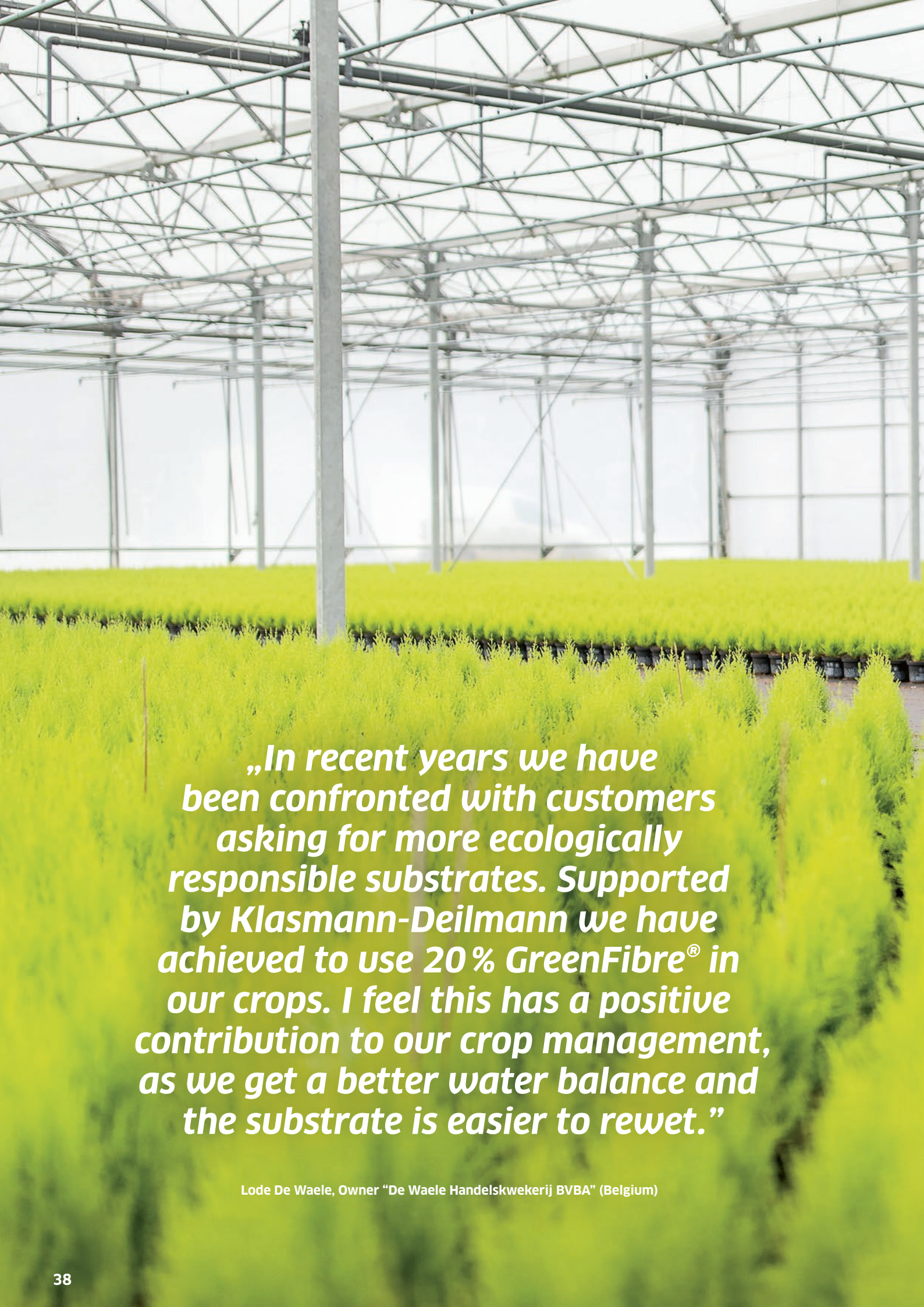
Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – For crops with acidic soil requirements

Use for – Ericaceous plants, Gardenia, Camelia, Gaultheria



● GreenFibre® medium ● White peat (0-25 mm) ● White sod peat (10-25 mm)



„In recent years we have been confronted with customers asking for more ecologically responsible substrates. Supported by Klasmann-Deilmann we have achieved to use 20% GreenFibre® in our crops. I feel this has a positive contribution to our crop management, as we get a better water balance and the substrate is easier to rewet.”

Lode De Waele, Owner “De Waele Handelskwekerij BVBA” (Belgium)

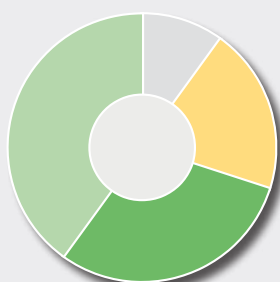


Soft Fruit Substrates

Substrates for a sustainable cultivation of blueberries, strawberries and other soft fruit

TS 1 medium Blueberry propagation

382



Structure – medium
pH-value (H₂O) – 4.8
Fertilisation (g/l) – 0.3
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – ++++

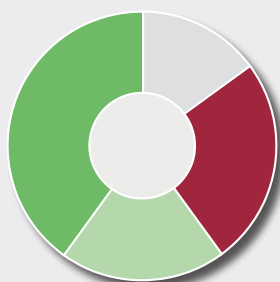
Characteristics – For propagation in pots and large modular trays
Use for – Blueberry young plants



○ Perlite (1 – 7.5 mm) ○ GreenFibre® medium ● White sod peat (10 – 15 mm) ● White peat (0 – 25 mm)

TS 4 medium Blueberry with perlite + coir

Z33



Structure – medium
pH-value (H₂O) – 4.8
Fertilisation (g/l) – 0.3
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Fruit production in containers > 2L. Provides stable air capacity and drainage
Use for – Blueberry



○ Perlite coarse (1 – 7.5 mm) ● Coir ● White peat (0 – 25 mm) ● White sod peat (10 – 25 mm)

TS 4 medium Blueberry with perlite + coco fibre

V58



Structure – coarse
pH-value (H₂O) – 4.8
Fertilisation (g/l) – 0.3
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Fruit production in containers up to 100 L. Strong drainage for outdoor cultivation. Suitable also with irrigation water high in EC

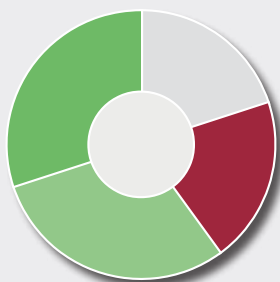
Use for – Blueberry



○ Perlite coarse ● Coco fibres ● White peat fibres (0 - 70 mm) ● White sod peat (10 - 25 mm)

TS 4 coarse Blueberry with coir + 20 % GreenFibre®

979



Structure – coarse-fibrous
pH-value (H₂O) – 4.8
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Indoor and outdoor cultivation in containers up to 100 L. High structural stability with optimal water and air capacity

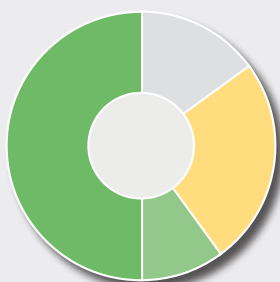
Use for – Blueberry



○ Perlite coarse (1 - 7.5 mm) ● Coir ● White peat fibres (0 - 70 mm) ● White sod peat (25 - 45 mm)

TS 4 coarse Blueberry with perlite + GreenFibre®

U55



Structure – coarse-fibrous
pH-value (H₂O) – 4.8
Fertilisation (g/l) – 0.3
Extra trace elements – ✓

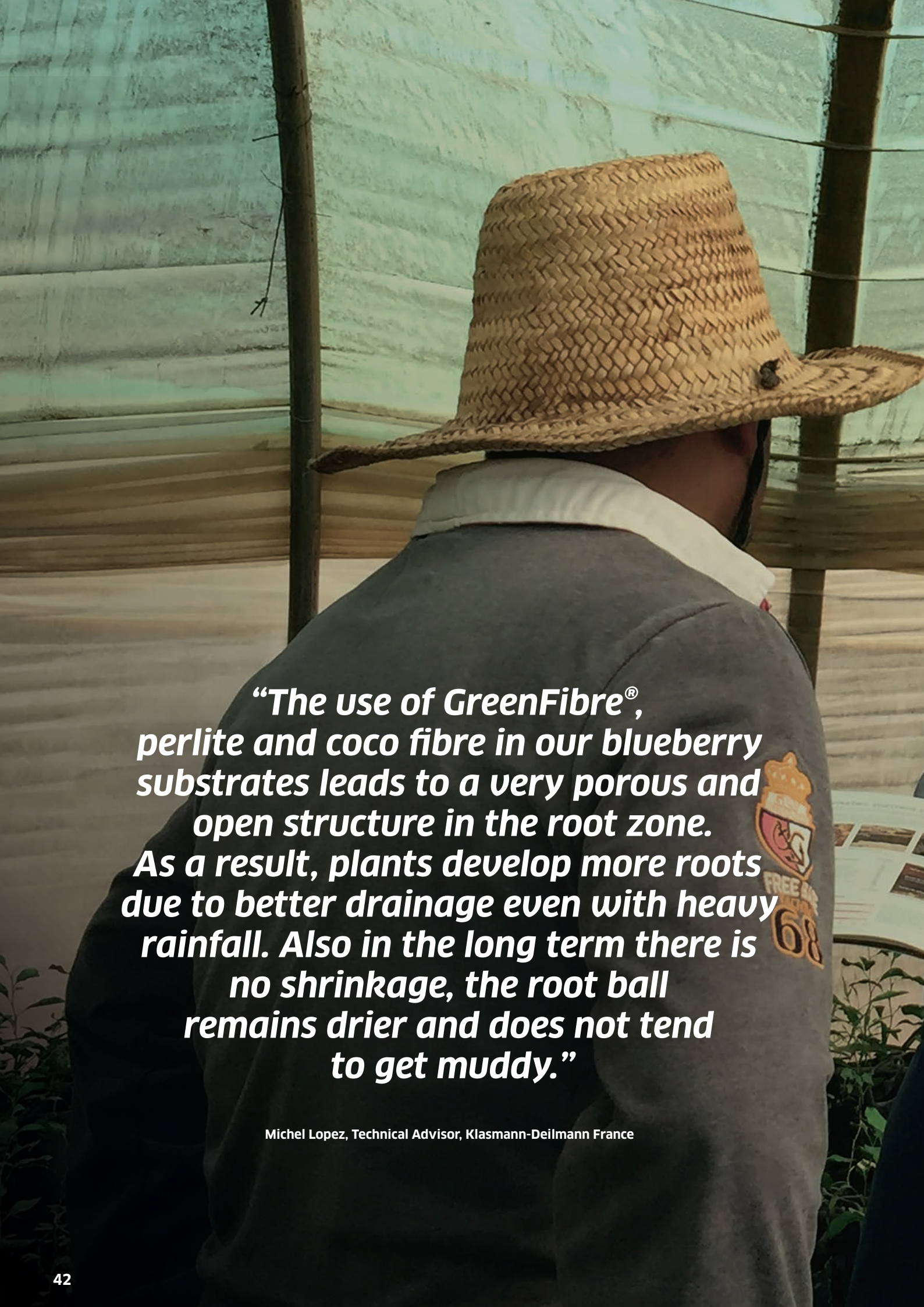
Water capacity – +
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Indoor and outdoor cultivation in containers up to 100 L. Ideal for use also with high EC irrigation water and areas with heavy rain fall

Use for – Blueberry



○ Perlite ● GreenFibre® medium ● White peat fibres (0 - 70 mm) ● White sod peat (10 - 25 mm)



“The use of GreenFibre®, perlite and coco fibre in our blueberry substrates leads to a very porous and open structure in the root zone. As a result, plants develop more roots due to better drainage even with heavy rainfall. Also in the long term there is no shrinkage, the root ball remains drier and does not tend to get muddy.”

Michel Lopez, Technical Advisor, Klasmann-Deilmann France



PREMIUM GRADE APPAREL
- 07823 -
STYLE REF: 0-3282 ITEM NO: 00-22-05
- HIGH GRADE GOODS -

TS 1 medium basic Strawberry with 50 % GreenFibre®

X68



Structure – medium
pH-value (H₂O) – 5.7
Fertilisation (g/l) – 0.5
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Yearround strawberry cultivation in rack systems. Perfectly suitable for protected cultivation due to well balanced water and air capacity

Use for – Strawberry in gutter systems

● GreenFibre® medium ● White peat (0 – 25 mm)



TS 4 medium Strawberry with 25 % coir + 25 % GreenFibre®

Y77



Structure – medium
pH-value (H₂O) – 5.7
Fertilisation (g/l) – 0.5
Extra trace elements – ✓

Water capacity – ++
Air capacity / drainage – ++++
Structural stability – ++++

Characteristics – Single and double cropping strawberries on rack system, in troughs and containers

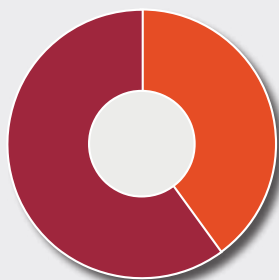
Use for – Strawberry, raspberry and other soft fruit

● GreenFibre® medium ● Coir ● White peat (0 – 25 mm) ● White sod peat (10 – 25 mm)



Container Substrate 3 Soft Fruit coir

237



Structure – medium-fibrous
pH-value (H₂O) – 6.2
Fertilisation (g/l) – none
Extra trace elements – ✓

Water capacity – +++
Air capacity / drainage – +++
Structural stability – ++++

Characteristics – Fully coir based solution with good structural stability and drainage

Use for – Strawberry, raspberry and other soft fruit

● Coco fibres ● Coir pith, buffered



“Our substrates with GreenFibre® for strawberries in gutters have proven to be a great alternative to coir. GreenFibre® ensures structural stability and drainage also for perennial cultivation. Moreover, GreenFibre® leads to a lower substrate weight and less carbon emissions. As a renewable raw material, it is locally sourced from sustainably managed forestry and well available all year.”

Frank Lenkens, Soft Fruit Specialist, Klasmann-Deilmann Benelux (Netherlands)



ADVANCED Substrates – The forms of supply

Our substrates are available in following standard forms



Packaged goods:
70-litre-bags



Big Bales
2.5 – 6.0 m³



Packaged goods:
210-litre-bags



Bulk

For all growing media manufactured by Klasmann-Deilmann, the volume is measured in accordance with European Standard EN 12580. The standard lays down the procedure to be used for measuring the volume of growing media and other peat products which are supplied in bulk or as packaged products. The quantity indication generally relates to the quantity at the time of production.

Average substrate consumption for different pot sizes

Pot size ø in cm	Substrate requirement in l for 1,000 pots**	Number of pots per m ³ substrate*
6	130 – 160	6900
8	230 – 280	3,920
9	330 – 380	2,820
9 x 9 x 9,5	600 – 650	1,600
10	460 – 510	2,060
10 x 10 x 11,5	920 – 970	1,050
11	670 – 720	1,440
12	880 – 930	1,150
13	1,100 – 1,200	870
1.5 l cont.	1,700 – 2,000	540
2.0 l cont.	2,300 – 2,600	410

* Average figures only, based on the volume as per EN 12580. Variations may arise in particular through different pot types, varying substrate moisture levels and the compression during potting. The size of the seedling root ball also has a significant impact.

DISCLAIMER

The information in this brochure is based on our current knowledge and does not claim to be complete or correct. We reserve the right to make changes. We do not assume any guarantee or liability for successful cultivation, as the use of our products must be adapted to the individual site, storage and cultivation conditions of the respective nursery, which is beyond our knowledge and influence. The information in this brochure cannot replace individual advice. They are neither binding nor part of a consulting or information contract.



we make it grow

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