



Quality of growing media
matters



Annual report 2022

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Foreword

We are proud to present you our annual report 2022! This annual report covers the year in which I was appointed Managing Director of RHP by the Supervisory Board. In 2023 I will start this wonderful challenge with great pleasure!

Challenges

Challenges were also central to our sector in 2022. At the beginning of the year, the impact of the corona crisis decreased, but rising energy prices kept us busy. As well as the availability of raw materials and the increasing demand for renewable raw materials.

Sustainability

In the Netherlands, the covenant 'Environmental impact potting soil and substrates' was signed by a broad coalition on November 18th. Also by RHP. Other Western European countries will also focus more on renewable raw materials. In this raw materials transition, RHP, as the knowledge centre for substrates, supports affiliated producers with research and development. In addition, RHP continues to fulfil its role as the 'guardian of quality' during this process.

Opportunities and risks

New raw materials offer opportunities, but also more often entail risks and possible damage. Last year, certified companies were given practical tools that provide insight into the properties of renewable and circular raw materials. This supports them in the production of RHP-certified new growing media. Quality and safety remain of paramount importance.

New raw materials

Acrotelm and composted bark are two new substrate raw materials, which are certifiable since last year. For plugs and other small preformed growing media, RHP, together with a group of producers, has started a standardisation and certification process. RHP, together with coir producers worldwide, also took the initiative for the start of a trajectory for responsible and sustainable production of coir products: Responsibly Produced Coir (RPC).

New certified companies

We also welcomed two new companies in 2022, including the first certified company in the United States!

In short, all interesting developments. In this annual report we would like to tell you more about it. Enjoy reading!

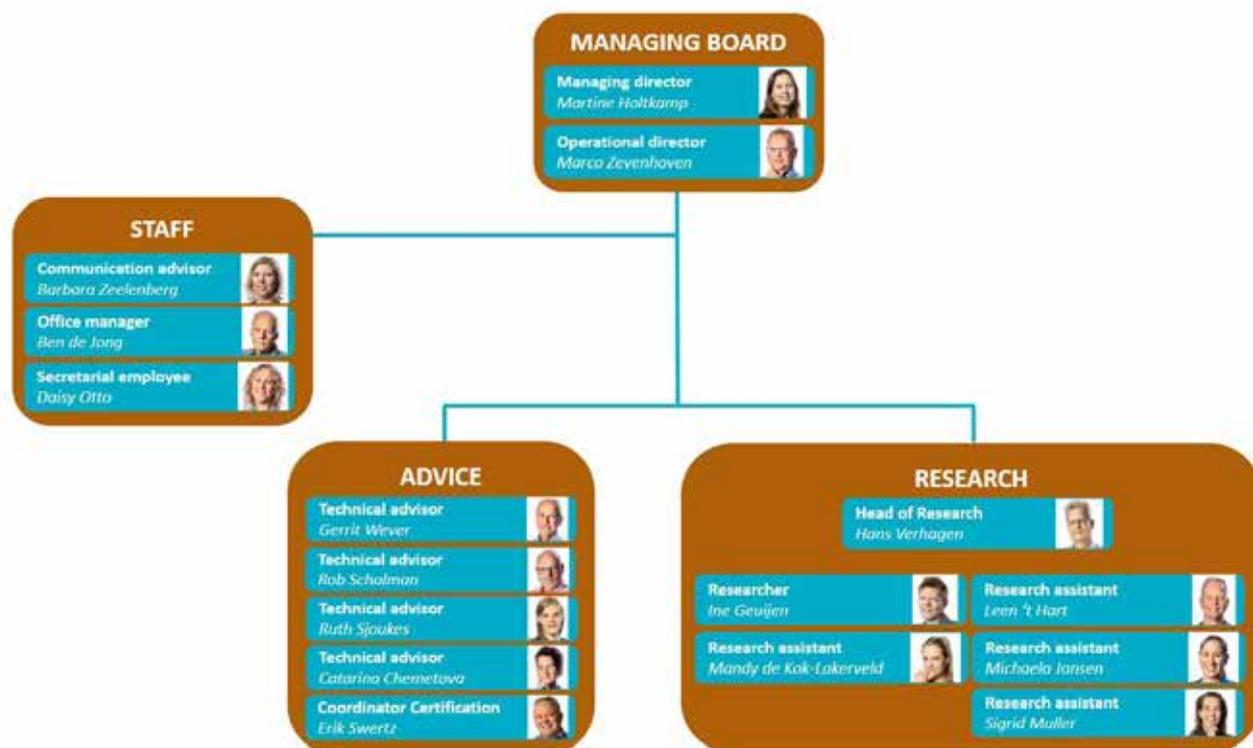
's-Gravenzande, The Netherlands, May 2023

Martine Holtkamp
Managing Director RHP

1. BOARD & ORGANISATION

1.1 The organisation in 2022

RHP is located in 's-Gravenzande in The Netherlands and is a foundation. In 2022, RHP had 16 employees.



Changes in personnel

On 1 January 2022, the departure of Hein Boon created a vacancy for managing director at the RHP foundation. From February to August 2022, this position was filled by Raymond Hedges, after which it became available again. At the end of November 2022, the Supervisory Board decided to appoint Martine Holtkamp as the new managing director of RHP as of 1 February 2023. In the intervening period, operational director Marco Zevenhoven was acting as managing director.

In 2022, there was also a change in the position of coordinator Certification. Liesette van Schie left and was succeeded by Erik Swertz at the beginning of October 2022.

Since 11 July 2022, RHP has temporarily hired Remco Jansen one day a week. Remco works, among other things, on strengthening contact with trading companies, retailers and other scheme managers in the field of sustainability and the Responsibly Produced Coir (RPC) trajectory.

Employees in 2022

Number of employees

16
13,25 FTE

Average age

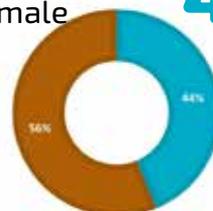
48,5
years

Duration of employment

10,5
years

Male/female

56% female **44%** male



1.2 Composition of the Supervisory Board

The Supervisory Board is the supervisory body of the RHP Foundation. The Supervisory Board consists of people who feel involved in substrate. They represent various disciplines in the substrate sector and horticultural chain. The Supervisory Board meets quarterly with the managing board of RHP. The composition of the Supervisory Board in 2022 was as follows:

Name: Bernard Koeckhoven
Position: chairman
Since: 1 January 2020



Name: Ronald Grootcholten
(Florpartners)
Position: member
Since: 22 September 2022



Name: Jaco Dijkshoorn
(Kekkilä-BVB)
Position: member
Since: 1 January 2020



Name: Martin Uittenbroek
(Vreugdenhil Young Plants)
Position: member
Since: 1 January 2015



Name: Henri van Beerendonk
(Jiffy Products International)
Position: member
Since: 1 January 2017



Martin Uittenbroek said goodbye at the end of 2022 after 2 terms. There is one vacancy.

2. STRATEGIC POLICY

1.2 Mission and strategy

We have laid down our mission and strategy for the period up to 2025 in the strategic policy plan 'RHP 2025'.

The role RHP wants to fulfill:

- ✓ RHP wants to realise that the RHP quality mark is the quality standard for the European substrate industry
- ✓ RHP wants to be a certification scheme that is a user-friendly system with a high standard and that is propagate that actively to substrate companies
- ✓ RHP wants the requirements for CE marking to be part of the RHP scheme and thus the 'all-in' solution for the substrate industry
- ✓ With its knowledge of the facts, RHP wants to be the executor of Risk Analyses and the auditor for product quality assessment of raw material and substrate companies
- ✓ RHP wants to be the recognised laboratory for (plant) safety by analysing phytosanitary aspects and as a performer of plant response tests
- ✓ As 'Recognised substrate specialist' RHP wants to be a specialist in education and training for the substrate sector with a connection of knowledge to professional cultures

Mission

Our mission is:

RHP wants to function as a knowledge center in the field of growing media and soil-improving materials. RHP offers affiliated companies support in technical development, which can therefore reach

a distinctive level in the market. This is achieved through innovative research, quality improvement and assurance. The RHP quality mark promises users security, safety and insight into quality.

2.2 Sustainability

In 2022, RHP held conversations about sustainability with various international organisations: floriculture trading companies, scheme owners, industry initiatives and retail. These conversations have given RHP a good idea of where the needs lie in the market when it comes to sustainability in relation to the RHP quality mark and substrate. RHP is working on integrating sustainability into its policy strategy for the coming years. The contacts with RHP-certified companies and the aforementioned parties show that there is a need for the knowledge of RHP in relation to sustainability. The knowledge that RHP has about the chain is essential.



Sustainability, including the footprint and responsible production, is not unrelated to the safety and quality of raw materials and substrates. Things are so intertwined that future solutions need to focus more broadly than in the past.

Below this is visually displayed with the means to guarantee this.



European Parliament

RHP gave a presentation on this topic in November 2022 at the European Parliament in Brussels. RHP talked about new growing media and the importance of quality and safety of raw materials and substrates. Risks were identified and also the processes necessary to reduce these risks to an acceptable level. If the safety or quality of growing media is not sufficient, this results in loss of yield or even damage.

Raw materials transition

In view of the raw materials transition, RHP shared research knowledge with the globally affiliated companies over the past year. For example, they were given practical tools that provide insight into the physical and chemical effects of renewable raw materials in a substrate. The

knowledge centre supports producers in the production of RHP-certified new growing media for an optimal start of the culture.

Responsibly produced coir products

At the request of 15 coir producers, including some not yet RHP certified companies, RHP took the initiative in 2022 to start a trajectory for responsible and sustainable production of coir products: Responsibly Produced Coir (RPC). RHP started this trajectory together with the producers of coir products all over the world. The process will take 2 years.

Member of FSI

In April 2022, RHP joined the Floriculture Sustainability Initiative (FSI2025), the most important sustainability initiative in the floriculture sector. FSI has more than

80 members, including producers, trading companies and retailers. RHP joined in sharing its knowledge of the safe use of substrate and raw materials with the floriculture chain, where the use of renewable raw materials is increasingly high on retailers' priority list.

Covenant

On 18 November 2022, RHP, together with a broad coalition of parties, signed the covenant 'Environmental impact potting soil and substrates'. Governments, sectors in the chain and NGOs have agreed that by 2050 the use of potting soil and substrates in the chain will not have a negative environmental impact and will be CO₂ neutral. For this, growing media

must consist of at least 90% renewable raw materials by 2050.

By 2025, the objective is to achieve a greater use of renewable raw materials (on average 35% for professional use, 60% for consumer market) and to double the use of compost to 600,000 m³. It has also been agreed to only use 100% responsibly produced peat (RPP label or equivalent) for peat raw materials.

For 2030, the objective is to further increase the percentage of renewable raw materials. For the consumer market, the goal is to use at least 85% renewable raw materials. For the professional market, the targets for 2030 still need to be



set. To this end, it has been agreed that Wageningen University & Research will first carry out a broad study to gain insight into which renewable raw materials are available. As the knowledge centre for substrates, RHP has been asked to provide technical expertise for this project. RHP, for example, will give an initial technical review of the potentially new materials. In addition to what is already available in terms of raw materials, we also look at flows that are not yet in use and can only be made suitable after a certain process.



3. KEY FIGURES

CERTIFIED COMPANIES



71

Including 2 new certified companies in 2022:

Olde Bolhaar Eco Service and **Profile Products**, the first certified company based in the United States.



422

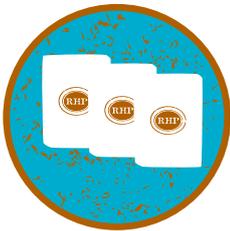
CERTIFIED LOCATIONS



14.822

PRODUCT ANALYSES

CERTIFIED RAW MATERIALS AND END PRODUCTS



26

Including 2 new certifiable raw materials in 2022: **acrotelm** and **composted bark**



10.500.000m³

CERTIFIED PRODUCT

FINANCES



NETTO TURNOVER: € 1,682,289
RESULT € 7,330

RHP is a non-profit foundation. The result is added to the reserves of the foundation for the continuity of both the organisation and the research and developments for the substrate sector.

MEETINGS



PRODUCT GROUPS 16

TECHNICAL COMMITTEE 3

CENTRAL COLLEGE OF EXPERTS 2

WEBINARS 5 of which:

> for certified companies

- Online Research Updates (March, June, October) 3
- hybrid meeting 'The latest in new growing media' (December) 1

> for growers, their consultants and sellers and buyers and sellers of trading companies

- webinar 'Facts & fables of potting soil and substrates' (May) 1





IMPROVEMENT ANALYSES **295**

RISK ANALYSES **14**

HYGIENE PROTOCOLS **19**

INTERNAL AUDITS **36**

CONSULTATION IN THE CONTEXT OF SUPPORT AND ADVICE **131**

DAMAGE / PRACTICAL PROBLEMS **15**



COURSES **12**

> for certified companies

- Newly developed course RAG Landscaping A (in-company) **1**
- Course Growing Media B (Dutch) **1**
- Basic course Potting soil and substrates (Dutch) **1**
- In-company courses **8**



> for auditors

- Training and harmonisation day for auditors of the quality marks RHP and RAG **1**

PRESENTATIONS

On several occasions in Europe, a representative of RHP spoke about our quality mark, research and the challenging developments surrounding new growing media.

- during a webinar of LTO 'Vakgroep Bomen, Vaste planten en Zomerbloemen' about potting soil with less peat and more alternatives (December),
- in the European Parliament on new growing media and the importance of quality and safety (November),
- at Delphy about new growing media and the importance of quality and safety (October),
- during the Baltic Peat Producers Forum in Riga, Latvia (September),
- during the 'Boominfodag' (May),
- during the Floriade Symposium Circular Greenhouse (May),
- during the webinar 'Kwaliteit Landscaping substraten' of Koninklijke Vereniging Stadsmerk Nederland about the RAG quality mark and quality requirements for tree substrates (April),
- during Grow22 on the opportunities and challenges in securing safe food production and delivery to consumers (February),
- during various meetings at certified companies for their customers, growers.



INTERNATIONAL VISITORS

In addition, RHP received international visitors, including from:

- Growing Media Europe from Brussels,
- Canadian Sphagnum Peat Moss Association (CSPMA),
- employees of RHP-certified companies,
- directors of companies that showed interest in certification.



4. RESEARCH AND DEVELOPMENT

Start standardisation and certification process for plugs and other small preformed growing media

In 2022, RHP started with a standardisation and certification process for plugs and other small preformed growing media. The reason for this was an explicit request from growers and breeders via 'Glastuinbouw Nederland' and from plug producers due to problems they experienced. RHP organised 3 meetings in 2022 for interested producers, and experts from RHP visited their companies. The certification of plugs was seen as useful by the parties involved.

9 plug manufacturers committed to the RHP certification process in 2022.

RHP has started developing methods to test the materials. After that, standards for plugs and other small preformed growing media can be developed. Subsequently, plug manufacturers can start the route to certification for their product. 9 plug manufacturers committed to the RHP certification process in 2022, including 5 non-certified companies. It could be expected to become even more in 2023. If the manufacturers successfully complete the process, they are expected to be able to bring RHP-certified plugs to the market by the end of 2023.

“Certification helps companies achieve greater consistency in quality.”

Ever-increasing quality requirements

Customers are increasingly demanding quality, while there are currently few opportunities to bring certified plugs to the market. On the other hand, RHP's technical advisors see increasingly large and complex claims in the cultivation of plants. According to operational director Marco Zevenhoven, certification of plugs can limit claims. "Certification helps companies to achieve more consistency in quality, by determining quality requirements and making process agreements and guaranteeing them. That is better for everyone."





Clear framework for assessment and communication residues in substrate raw materials

The substrate sector is increasingly using renewable raw materials and residual flows. These raw materials may contain residues as a result of (culture) activities. RHP started in 2022 to establish a clear framework for the assessment and communication of residues. A distinction is made between the different groups of chemical agents: on the one hand insecticides, biocides and fungicides and on the other hand herbicides and growth regulators. RHP analyses how concentrations of residues should be interpreted based on analyses and bio assays. This research runs until 2024.

Specific test for plant safety qualification organic fertilisers in growing media

In the spring of 2022, RHP conducted a routine analysis to test the RHP-certified organic fertilisers in a growing medium for plant safety. RHP has developed this specific test for the qualification of organic fertilisers, taking into account the properties that these products have with regard to dynamic release.

Research shows: possibilities wood fibre greater than expected

Research into the properties of wood fibres has resulted in new knowledge, which makes it increasingly possible to predict the effect of wood fibre. Experiments were carried out with the participating RHP-certified companies with new types of wood in combination with fibrening techniques. It became clear that the possibilities with wood fibre are even greater than expected. In the meantime, the 'Toolbox' that RHP has developed to characterise organic fibers has become more complete. The knowledge is available to the RHP-certified companies. The research will continue at the request of the Product Group Organic Products. The effect of storage will be one of the new

research topics.

Participation in Top Sector research project on microbiological quality growing-media

RHP participates in the Top Sector research project on the microbiological quality of growing media. Together with other parties, we are working towards eventually realising growing media with a guaranteed microbiological activity, including a sound culture advice to maintain the right microbial properties during the culture.

In full, this PPP project (public-private partnership) is called 'Towards a standard for measuring the microbiological quality of growing media based on renewable raw materials'. Project management is the responsibility of 'Glastuinbouw Nederland'; Wageningen University & Research is carrying out the research. RHP and other private parties contribute with knowledge and skills. Knowledge and methodologies resulting from this project are important to RHP and its affiliated, certified companies.

5. QUALITY MARK

The foundation RHP manages 2 quality marks for substrates and potting soil: the RHP quality mark and the RAG quality mark, with a total of 6 different fields of application:



Certified for
Horticulture



Certified for
Mushrooms



Certified for
Consumer



Certified for
Landscaping



Certified for
Green Roof



Certified for
Soil Improvement

Further development of the RHP quality mark

On 1 February, the standards for the RHP quality mark were updated. Every year, these substantive adjustments are implemented in the RHP product certification scheme, partly based on developments in the sector. The affiliated, certified companies were then given three months to implement these in their business operations and quality management system. The new requirements came into effect on 1 May.

More new growing media available with RHP quality mark

RHP standards are regularly updated to current events. An important adjustment in 2022 has made it possible for multiple renewable raw materials in a growing medium to be applied in higher dosages. This adjustment was preceded by research to determine what was possible. The RHP plant response test was used for this purpose. The changes were approved by the Technical Committee and the College of Experts. As a result, significantly more RHP-certified growing media can be supplied.

New raw materials certifiable

In 2022, acrotelm and composted bark were added as two new, certifiable substrate raw materials. Two new modules have been added to the RHP product certification scheme for this purpose,

in which all quality mark standards for acrotelm and composted bark are described in detail. The development of the standards for acrotelm was preceded by an extensive risk analysis, which also involved external experts. Acrotelm and composted bark that meet the developed quality mark standards can be safely applied in growing media within the RHP quality mark. The RHP quality mark offers the greatest possible certainty, to ensure that the raw materials and growing media can be used without risks to the culture. RHP is working on research and standard development of new substrate raw materials.





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