

# Cultivation programme Perennials and tree nursery



For profitable and sustainable cultivation



**PHC**  
Plant Health Cure

## We Grow Soil.

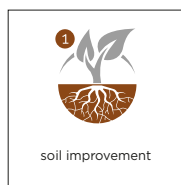


PHC cultivation programmes are developed specifically to improve the health of soil, plants, humans and animals, while simultaneously fixing more CO<sub>2</sub> in the soil. This programme restricts the use of synthetic fertilizers to the greatest extent possible.

Organic fertilizers are needed to increase the humus content, soil life and the mineral supply. Optimum plant feed is more than simply the sum of various minerals. The health of trees and plants depends, above all, on the soil. The majority of plant diseases can easily be prevented by ensuring healthy soil, good growing conditions and a root system colonized with mycorrhizae.

**For questions and advice:**  
send an email to [info@phc.eu](mailto:info@phc.eu)  
or call +31 (0)13 7 200 300

## Plant preparation



**To enable plants to grow every soil needs to meet three requirements. The soil must be easily penetrated by roots, the right minerals must be present**

**and the soil biology must be in order.**

Soil is often tilled so thoroughly during cultivation process and before planting that very little healthy soil life – or any

soil life at all – remains. This is why PHC advises growers to apply useful rhizo bacteria and fungi before planting.

Additionally, mycorrhizal fungi can be applied to the soil before and during planting. This will enhance soil biology and improve the rhizosphere of the plants.

## Optimizing rhizosphere



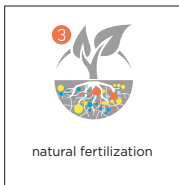
**The absorption of water and minerals is controlled by the root system. The more roots a plant has, the better.**

New and sterile soil does not contain mycorrhizae and very few

or no useful bacteria. Additionally, the soil biology is seriously disrupted when holes are dug for planting.

PHC's pure germinable mycorrhizal spores and selected useful soil bacteria are easy to apply and ensure better response and a more vigorous growth.

## Natural fertilization



**Healthy soil can only be achieved through a change in your fertilizer application method.**

Chemically fertilized soils deplete all the factors that contribute to the building up of healthy soil in just a few years.

It is better to use primarily natural fertilizers. This stimulates soil life, while strongly improving root penetration and absorption capacity. At the same time, the bond between mineral particles and organic substances is restored. A healthy soil will, as a result, need considerably less fertilizers.



## Defence strengthening & resilience

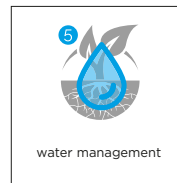


**While a plant is being grown, it will experience stress under influence of various environmental factors and cultivation operations.**

Following extreme weather conditions such as torrential rain, hail, storm or frost, plants often become damaged, making them an ideal breeding ground for bacteria and fungi.

Additionally, cultivation operations such as potting plants, putting plants outside for the winter or pruning can also cause stress to a plant. The application of natural plant strengtheners and foliar fertilizers based on amino acids can anticipate on stressful situations by spurring the plant to create its own antibodies.

## Water management



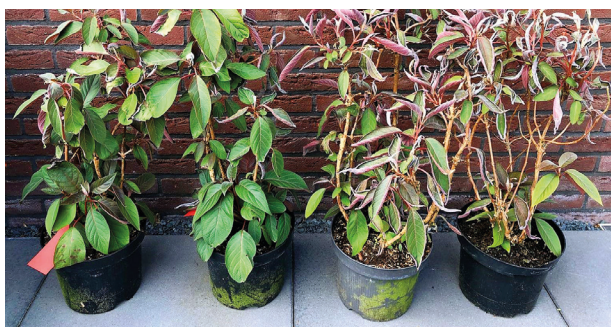
**Water is crucial to all forms of life.**

Lack of water in the soil will cause the plants and soil life to dry out, whereas too much water will cause lack

of oxygen.

This will cause soil life to die, nutrient uptake will become impossible and the plant will experience difficulties.

A good moisture balance is crucial for healthy plant growth. In addition to the amount of water a plant is given, the quality of the irrigation water is very important. The bicarbonate content of the water and the soil must be at the right level for optimum fertilizing. Good pH control is essential for this.



**Demo:** FrosTect  
**Crop:** Hydrangea  
(Hydrangea aspera Hot Chocolate)

Application of PHC FrosTect 36 hours prior to the onset of frost.  
Left: treated; right: untreated



## Open-field horticulture

Sowing	Method	Dose
Biovin Granular	Strewing	500-600 kg / ha
VA-PWI or MycorGran	Spraying / Sowing	VA-PWI: 1 kg / ha MycorGran: 3-6 kg / ha
Planting (bare root)	Method	Dose
Biovin Granular	Strewing	500-600 kg / ha
MycorDip or VA-PWI	Dipping / Spraying	MycorDip: according to instructions on package VA-PWI: 1 kg / ha
Planting (soil blocks/pots/root balls)	Method	Dose
Biovin Granular	Strewing	500-600 kg / ha
VA-PWI	Spraying	1 kg / ha
Crop care	Method	Dose
OPF Liquid	Spraying	5-10 L / ha
Fulvic 25	Spraying	1-2 L / ha
Natural Green	Spraying	0,5-3 kg / ha
PreTect	Spraying	1-2 kg / ha

## Container cultivation

Sowing and taking cuttings	Method	Dose
Biovin powder	Mix in	3 - 5 kg / m <sup>3</sup>
Mini Plug or VA-PWI	Mix / Spraying over tray, half-filled	Mini Plug: 4 gr / 100 cups tray VA-PWI: 5 gr/L
Treatment of cuttings and seedlings	Method	Dose
Biopak/Biopak Plus/Compete Plus	Pouring onto the soil	Depending on the product 1-2 kg/ha
Biovin Liquid	Pouring onto the soil	0,5 - 1 L / 100 L water
Potting container cultivation	Method	Dose
Biovin powder	Mix in	3 - 5 kg / m <sup>3</sup>
Mini Plug or VA-PWI	Mix in / Spraying and mix in	Mini Plug: depends on pot size 25-50 gr / m <sup>3</sup> VA-PWI: 1 kg / 10.000 plants
OPF Granular	Mix in	3 - 5 kg / m <sup>3</sup>
Compete Plus	Pouring onto the soil	2 kg / ha
Container cultivation treatment	Method	Dose
Compete Plus	Pouring onto the soil	2 kg / ha
OPF Liquid	Spraying / Adding to irrigation water	5-10 L / ha
Fulvic 25	Spraying / Adding to irrigation water	1-2 L / ha
Natural Green	Spraying	0,5 - 3 kg / ha
PreTect	Spraying	1 - 2 kg / ha

## Water management

Moisture regulation/hygiene	Methode	Hoeveelheid
Yuccah	Pouring onto the soil	Depending on the application
AgroAcid	Adding to irrigation water	Depending on the application
Pond Saver	Pouring in basin	Initial dosage 1 - 2 g / m <sup>3</sup> , maintenance 0,25g / m <sup>3</sup>