



The first shoots are coming out of the ground. The plant wants to get its sugar transport going again. Especially in this initial phase the crop needs boron, silicon and calcium. These three elements play a crucial role in the start of the growth:

- 1) Boron activates silicon;
- 2) Silicon starts the absorption of elements, starting with calcium;
- 3) Calcium, with Silicon, takes care of strong cell walls and thus a resilient crop.



Boron increases the silicon and calcium efficiency, is involved in cell wall strength and is important for root development. The starting dose is 20 liters per hectare of Humi-B (old name: Liquid Boron Humate). This is a pure humic with 2 percent buffered boron.

It is a ready-to-use solution for easy application. But boron is the most unstable trace element and it leaches easily in soils with a low humus content. This is because boron is negatively charged. When boron is coupled to a humic acid, the boron does not flush out.

Silicon is important for the firmness of the cell walls, making diseases and insects less likely to affect the plant. Silicon is also important for a good flower setting. Silicon can be given via the soil through 30 liters per hectare of Phos-Life. Next to silicon, this product also contains calcium and phosphate.



Calcium is important for the firmness of the cell walls. As a result, the basis of a resilient crop is laid. Calcium can be given through the soil by spreading Bio-Gips or by spraying Phos-Life on the soil. This contains a high concentration of natural calcium, silicon and phosphate.



In addition to the silicon, calcium and boron content, we recommend a starting dose of 10 liters of **Root & Shoot** per hectare. This is a unique mixture of vitamins, humic and fulvic acid, nutrients and three different kinds of seaweed extracts with natural plant hormones like cytokinin, gibberellin and auxin. Root & Shoot stimulates root and shoot growth.

De standaard startdosering in pioenen binnen en buiten is dus :

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| 10 liter per hectare | Root & Shoot | nutrients, seaweed extract, vitamins |
| 20 liter per hectare | Humi-B | boron bound to humic acid |
| 30 liter per hectare | Phos-Life | silicon, calcium and phosphate |



We can give you an individual advice by doing a SoilBalanceAnalysis.

Optimum soil for peonies with SoilBalanceAnalysis and customized compost mixture

For a good air and water management, the correct ratio between calcium and magnesium is very important. Because too much magnesium will compress the soil and an excess of calcium inhibits the absorption of, amongst other things, magnesium and potassium. You will gain insight into the total buffer capacity of the soil (TEC), the amount of organic matter and the state of nutrition after using a [SoilBalanceAnalysis](#). The amount of nutrients are not the only important things, especially the correct ratios ensure proper absorption of these nutrients.



After this has been sorted out, the ratios can be restored with a [Vigro RecipeMix](#). But... 'less is more'. In order to prevent excess, it is important to properly adjust the compost gift to accommodate the current status of the soil and the needs of the crop. Based on a SoilBalanceAnalysis Van Iersel Compost and KaRo can mix the necessary amount of calcium and magnesium through the compost, together with the right ratio of sulfur and trace elements.

In the peony cultivation we make special use of [Vigro Fungal Humus](#) and [Vigro Worm Humus](#). We use this to improve the soil biology. Beneficial fungi and Protozoa are soil organisms that are often present in low amounts in the soil. But these organisms are crucial for freeing the nutrients, defensibility, improving the soil structure and the development of humus in the soil.

Both products can easily be added to the Vigro RecipeMix. With the use of a customized compost mixture, humus, nutrition and soil life will be placed on the plot in one go. This way, the soil will get easily and efficiently balanced and then the soil will be in optimum condition for the next season. Organic matter and nutrients will be given to the soil life so that it is put to work for you. The soil will absorb the nutrition to release it when the plants needs it.

The plant will make this clear by secreting exudates through the roots. Therefore the interplay between the plant and soil life will improve, which in turn results in more roots and a better yield and better quality of the peony cultivation.

A customized compost mixture can be applied before planting a new plot. But it can also be sprinkled on top during cultivation.



For more information, please contact:

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