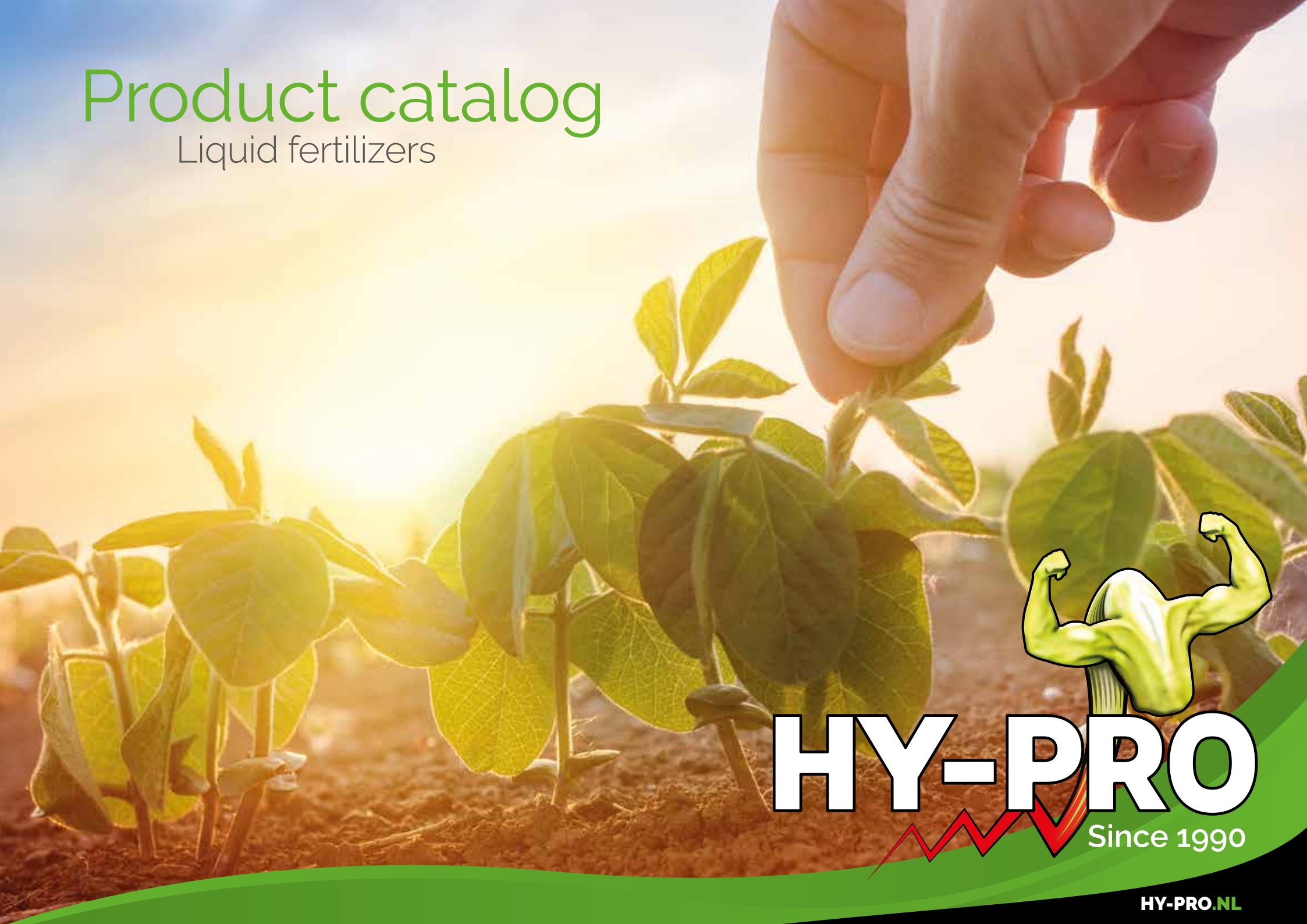


Product catalog

Liquid fertilizers



HY-PRO

Since 1990

HY-PRO.NL

water
wasser
agua
acqua
l'eau

&

HY-PRO





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HISTORY

HY-PRO has been a household name on the fertilizer market for more than 25 years.

Well known. Reliable.

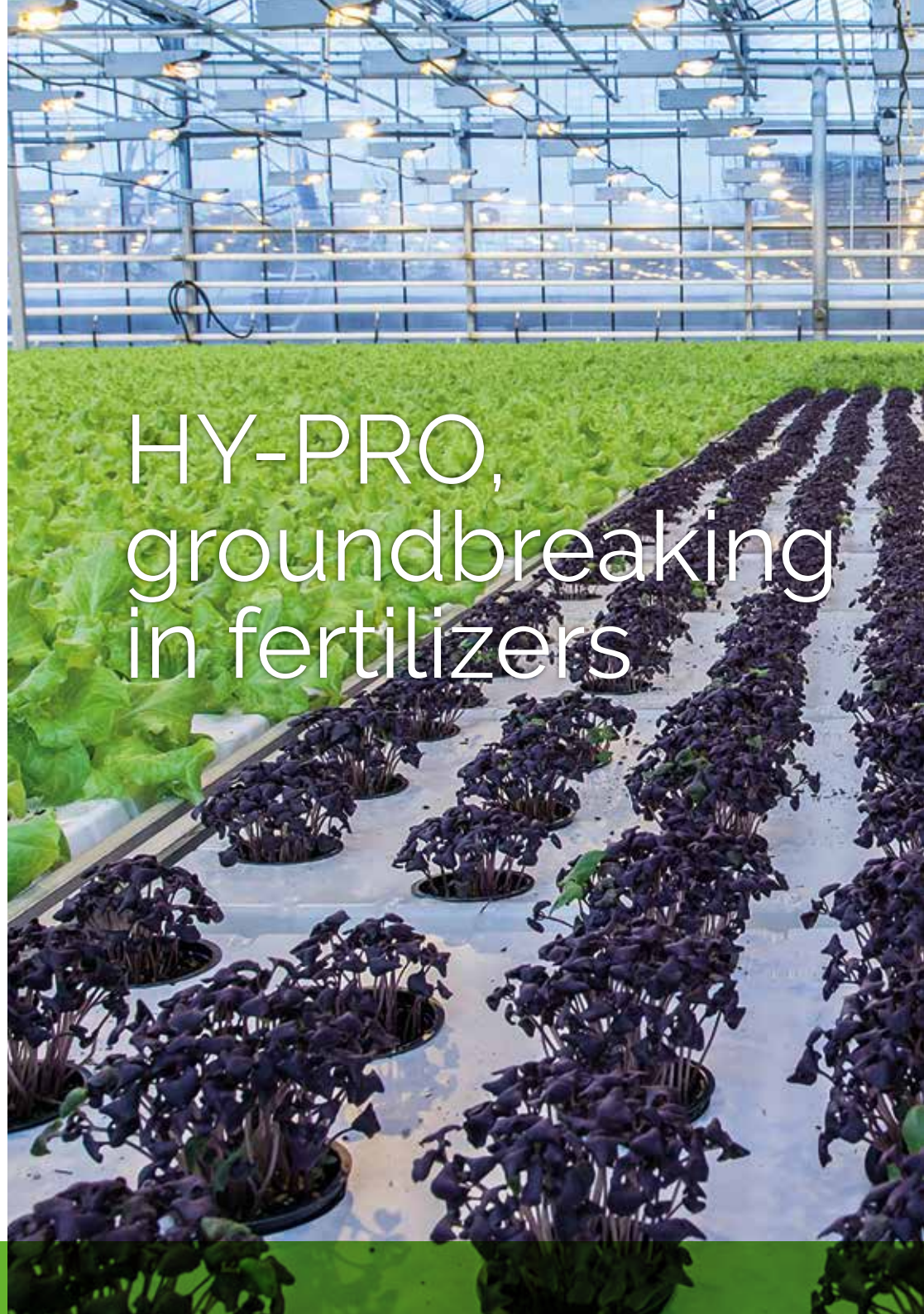
The company started with a simple, easy-to-use assortment:

1-component fertilizer, an A & B 2-component fertilizer, a root stimulator and a spray mix.

Our customers have been very satisfied for many years with this range of products that contain all the ingredients that plants need in their life cycle. Over the years our market has become more professional, gardeners want more variety in liquids, so they can put together their own recipe. During intensive research, ingredients were valued and introduced, such as Super FK, Silicon, Chelates. It is a new challenge to put all this research and these discoveries into workable recipes.

Today at **HY-PRO** we are proud of our range that has grown considerably. We produce various liquids suitable for various media. We have different additives for these liquids. We have succeeded in retaining the old simplicity model, and it is also possible to mix various other additives with these products.

We would like to explain the possibilities of our products to you personally. We hope to see you soon and look forward to expanding / starting / continuing to do business with you.



HY-PRO,
groundbreaking
in fertilizers



THE INDUSTRY, GENERAL

HY-PRO, producer and supplier of high-quality liquid fertilizers.

The Netherlands has a long history of flowers, plants and everything that grows and blooms.

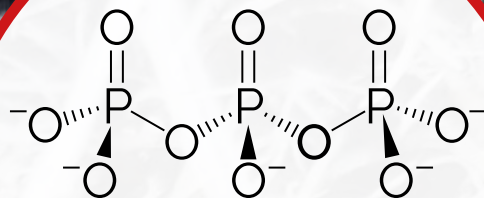
Nutrients are inextricably linked to this, resulting in enormous know-how. This know-how runs like a common thread through **HY-PRO**. For years we have been working with various companies that have established their name in the industry.

They are in different disciplines such as:

- genetic research
- research in practice
- climatic reactions

that come together in order to maintain Dutch domination in the market.

For **HY-PRO**, making liquid fertilizers is a profession, which means; a lot of experimenting and a lot of patience. We know the factors you will have to deal with like no other, which translates into our practical and successful product range.



Super FK function:

- phosphate uptake at high pH
- more active root zone, more roots
- more calcium, more resistant.

ROOTSTIMULATOR

Create extra strong and healthy roots in hydro, coco and terra systems.

Plants prefer a healthy environment.

The climate in which they grow up (inside and outside) is important.

During their, often short, life cycle, plants face new challenges every time. Each stage of the plant has its own needs that need to be met, so that optimal growth and flowering can occur. That is why it is important to start with a healthy basis: the root system.

A healthy and widely branched root system

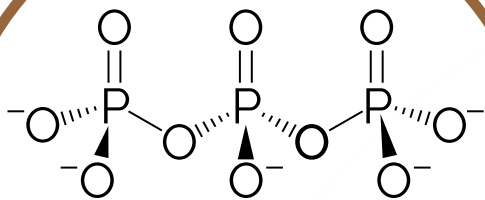
Plants depend on their root systems for their food supply. A healthy and widely branched root system ensures a good food supply. By administering **HY-PRO Rootstimulator** the roots are encouraged to create a solid base for your plant.

Use **HY-PRO Rootstimulator Hydro** always in combination with **Hydro A & B**.

Use **HY-PRO Rootstimulator Coco** always in combination with **Coco A & B**.

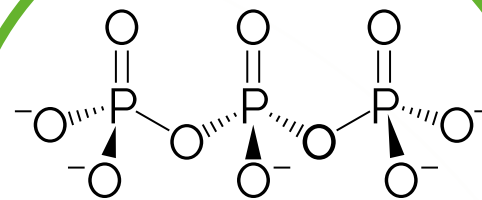
Use **HY-PRO Rootstimulator Terra** always in combination with **Terra**.





Super FK function:

- more Mg, Fe and P
- more growth power
- does not leave a residue.



Super FK function:

- phosphate uptake high pH
- more active root zone, more roots
- more calcium, greater resistance.



HYDRO A & HYDRO B

Specially developed for growing on hydro systems.

Hydro A and **Hydro B** nutrients are formulated in such a way that all plants will react optimally under all kinds of circumstances.

Most hydro culture soils contain insufficient nutrients and trace elements, these are supplemented with our **HY-PRO Hydro A & B**. Both factors are important for the plants to achieve exuberant growth and flowering.

HY-PRO Hydro A & B has been developed to optimally meet the nutritional needs of your plant. It provides all necessary nutrients and trace elements for a healthy and strong plant.

Your plants will respond gratefully during different circumstances and stages of life. The complete formula allows you to add the product throughout the life cycle of the plant.

HY-PRO Hydro A & B is a concentrated fertilizer that provides your plants in a sublime way. **HY-PRO Hydro A & B** provides essential nutrients for strong growth and flowering of plants. Unlike other products, it already contains all the necessary nutrients and trace elements for a good development of your plant, which will result in an unprecedented yield.

HY-PRO provides vital plants and is suitable for use during the growth and flowering period. Add **HY-PRO Hydro A & B** with each water session, mix 5 ml of **Hydro A** with 1 liter of water. Stir, add 5 ml **Hydro B** and stir again.

Tips and benefits:

- suitable for growing and flowering plants
- easy to use, just give in every water turn
- always measure your EC and pH.
- can be used for both hydroponics, rockwool and mapito
- use together with our **Rootstimulator** and **Spraymix** for the best result
- always follow the instructions on the label
- no residue due to high quality ingredients. As a result, no blockages in drip systems and computers.



EPIC BOOST

Specially developed for the flowering phase of your plant in hydro systems.

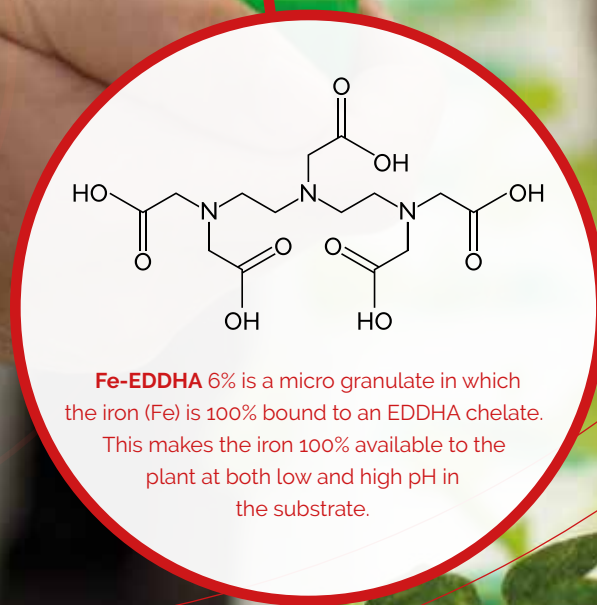
Epic Boost accelerates photosynthesis and strengthens the flower and fruits.

HY-PRO Epic Boost is a specially balanced mixture of chelated minerals and trace elements, tailor-made for the flowering phase. Super phosphates for extra large flowers and fruit. Strong stimulating effect on the flowering process. It also stimulates the production of proteins, phytohormones and vitamins.

HY-PRO Epic Boost accelerates photosynthesis, which increases the sugar production and the firmness of flowers and fruits. Completely soluble in water and leaves no residue, in the same way as the rest of the **HY-PRO** products.

- for explosive boost in bloom
- stimulates the build-up of cells
- super phosphate for better cell building.

Use **HY-PRO Epic Boost** as an addition to our **HY-PRO Hydro** nutrition.



HY-PRO products are produced and assembled by **HY-PRO** themselves.

Ingredients are purchased in liquid form, which means that minerals have been brought into solution. This requires so-called agents, substances that keep these minerals in solution so that they do not crystallize. These substances partly determine the quality of a fertilizer. **HY-PRO** uses the highest quality ingredients for its recipes, so crystallization is minimized.

Especially drip systems and food computers benefit from the use of high-quality ingredients in fertilizers that do not settle down or crystallize to achieve the best possible result. The use of these fertilizers obviously also affects the maintenance of such systems.



TERRA

The ideal 1 component nutrient for growing on soil.

Terra provides essential nutrients for strong growth and flowering of plants.

HY-PRO Terra contains all essential elements, as well as all necessary trace elements. **Terra** is a compact and complete formula, suitable for plants in pots, or in open ground. **Terra** can be used both indoors and outdoors. Add **Terra** with each water session, mix 5 ml with 1 liter of water.

Can your plants use some extra vitamins and minerals?

Because plants often grow up outside their natural habitat, they can usually use an extra boost. **HY-PRO Terra** offers essential nutrients for plants in pots and flower boxes, but is also ideal for plants in the open ground.

HY-PRO Terra contains all important nutrients for vital growth and flowering. For an optimal symbiosis, use our **Rootstimulator Terra**, **Spraymix** and possibly the **Epic Bloom**.

EPIC BLOOM

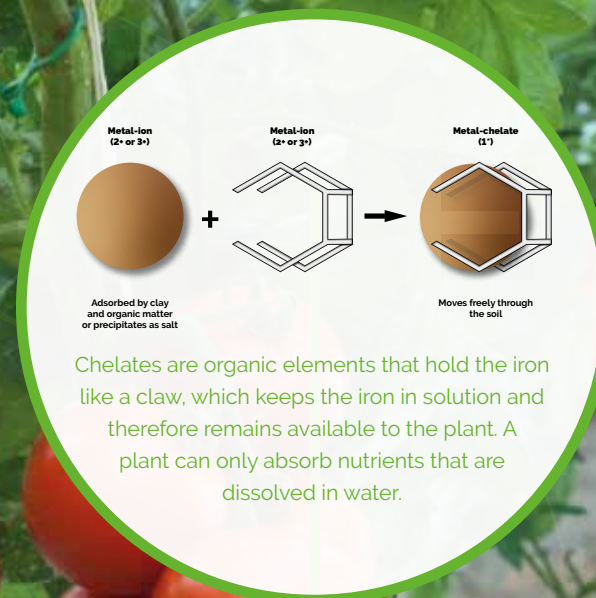
Specially developed for the flowering phase of your plant in soil.

Stimulates the production of cells so that nutrients are transported faster to flowers and fruits.

HY-PRO Epic Bloom is a specially balanced mix of minerals and trace elements based on chelates, developed for the flowering phase. Stimulates the build up of cells, so that the food is transported faster to the flowers and fruits.

Thanks to the optimal formula, the **HY-PRO Epic Bloom** booster works to increase protein production, which leads to higher production. Presence of phosphate, iron and potassium in the right proportion. Together they form the perfect combination with our **Terra** nutrition. **Epic Bloom** contains superphosphates for more energy and flowering power in the plant. The use of **Epic Bloom** accelerates photosynthesis and therefore increases the production of sugar in flowers.

Use **HY-PRO Epic Bloom** as an addition to our **HY-PRO Terra** nutrition.



Chelates are organic elements that hold the iron like a claw, which keeps the iron in solution and therefore remains available to the plant. A plant can only absorb nutrients that are dissolved in water.

COCO A & COCO B

Let the effect of coco nutrition fully come into its own.

Coco A & B nutrients are formulated in such a way that all plants will react optimally under all kinds of circumstances.

HY-PRO Coco A & B is specially tailored for growing on cocos. These soils contain insufficient nutrients and trace elements that are perfectly complemented with our **HY-PRO Coco A & B**. Both factors are important for the plants to achieve exuberant growth and flowering. The naturally good fungi that occur in a coco culture are retained, just like the spongy fiber structure. **HY-PRO Coco A & B** is suitable for both the growth and the flowering period.

HY-PRO Coco A & B is a high-quality 2-component fertilizer which contains all the necessary minerals and trace elements for a healthy plant life and a successful harvest. This basic food provides essential nutrients for strong growth and flowering of plants.

During your life cycle your plant has different nutritional needs. **HY-PRO Coco A & B** already contains all necessary nutritional elements and can therefore be used during both the growth and flowering phase.

HY-PRO Coco A & B basic food provides essential nutrients for strong growth and flowering of the plants. **HY-PRO Coco A & B** ensures highly developed growth followed by heavy flower formation. Add **HY-PRO Coco A & B** with each water session, mix 5 ml of **Coco A** with 1 liter of water. Stir, add 5 ml of **Coco B** and stir again. The ratio remains the same throughout the cycle, both during the growth and flowering period. Use **HY-PRO Coco A & B** together with our **Rootstimulator** and **Spraymix** for optimal results. As the flowering phase progresses, **Epic Blast** can be added.

The product is suitable for both the novice, the experienced and professional grower.



EPIC BLAST

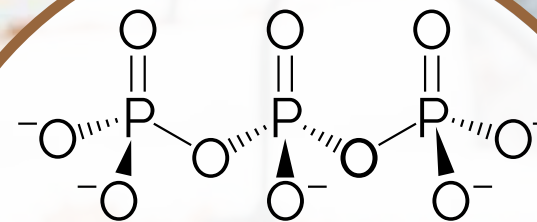
Specially developed for the flowering phase of your plant in coco systems.

Epic Blast uses super phosphates for more energy and cell production.

HY-PRO Epic Blast is a specially balanced mix of minerals and trace elements based on chelates and coco extracts, tailored to the flowering stage. Accelerates photosynthesis.

HY-PRO Epic Blast increases yield, has a powerful stimulating effect on the flowering process and strengthens the flowers. The administering of **Epic Blast** gives extra 'Blast' for the bleeding phase by ensuring optimal transport of nutrients to the flower.

Use **HY-PRO Epic Blast** as an addition to our **HY-PRO Coco A & B** nutrition.



SUPER FK is a unique liquid PK fertilizer in which the phosphate is present in the form of a polyphosphate. Polyphosphate has special properties. Where the standard ortho-phosphates start to precipitate as soon as the pH in the root environment increases, the ortho-phosphates remain in the solution and can therefore be absorbed by the roots.

With the use of **SUPER FK**, the grower has received an extra instrument to steer crop growth and development.

GENERATOR

The next generation in additives

Crops have the ability to be selective when taking minerals and trace elements.

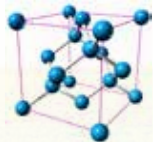
The relationship with climatic conditions, the quality of the elements offered and the type of genetics give the plant this selective capacity. **HY-PRO Generator** contains an ideal mix of trace elements. These elements can, in optimal doses, help the crops grow more constantly and, therefore, will carry more fruits in flourishing. These fruits themselves can use the newly created building blocks in the plant to grow larger and denser.

- Stimulates maximum growth and flowering
- Protects against stress factors
- Strengthens the immune system

HY-PRO additives are highly concentrated. They contain mainly trace elements that are necessary and vital for plants. Like all **HY-PRO** products, the **Generator** recipe is formulated to be suitable for any type of soil or substrate.

- Leaves no residue

Always measure the EC and pH before adding any additive. It is recommended to use the **Generator** with other **HY-PRO** products. Strictly follow the user manual. An overdose is possible.



Si

Plants benefit from the presence of Silicon(Si) and it is found that Si can increase biomass production and increase the tolerance to abiotic and biotic stresses and it helps the plant with stability and protection. Silicon is taken up in the form of silicic acid and Si transporters mediate the transport. Inside the plant amorphous SiO_2 sk. phytolites, are formed. Those phytolites returns to the soil when plants are decomposed and by this Si returns to the soil and can be taken up by the next generation of plants.





SPRAYMIX

Spraymix helps plants to develop stronger and healthier leaves.

Spraymix is quickly absorbed by the leaves and our version contains a sophisticated formula of more than 25 different minerals and trace elements.

HY-PRO Spraymix helps plants build resistance against possible negative external influences. In addition, **HY-PRO Spraymix** helps the plant to develop new leaves.

This makes your plant more resistant to:

- fungi such as mildew and botrytis
- attacks of sucking insects such as thrips
- harmful effects from too much sunlight
- also helps to develop new leaves.

Shake well before use and then mix the product with water in proportion: 5 mL **HY-PRO Spraymix** with 1 liter of water. During the growth period spray the product well over and under the leaf (dripping wet).

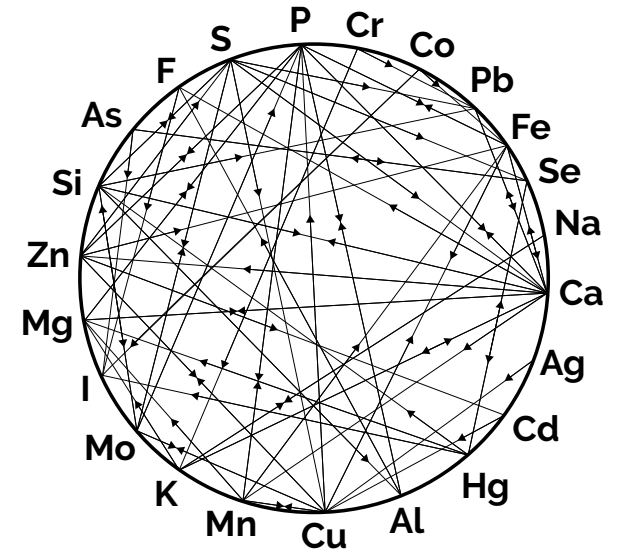
Do not spray the product on flowers, only use it during growth. Always use the spray at the beginning of the morning when the sun just rises or in the evening when the sun has just set. Store and use the product at room temperature.

Our **HY-PRO Spraymix** is also available in handy ready-to-use spray bottle!



MINERAL INTERACTIONS

P - Phosphorus
Cr - Chromium
Co - Cobalt
Pb - Lead
Fe - Iron
Se - Selenium
Na - Sodium
Ca - Calcium
Ag - Silver
Cd - Cadmium
Hg - Mercury
Al - Aluminium
Cu - Copper
Mn - Manganese
K - Potassium
Mo - Molybdenum
I - Iodine
Mg - Magnesium
Zn - Zinc
Si - Silica
As - Arsenic
F - Fluorine
S - Sulfur

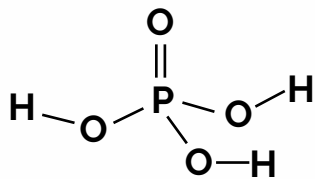


Arrows pointing at each other indicate **mineral synergy**.

Arrows pointing away from each other indicate mutual **mineral interference**.

The above diagram shows mineral interaction.

This means that a certain amount of an ingredient (mineral) is decisive for the possible amount of another ingredient (mineral). It makes clear how important the ratio of elements to each other, and therefore the recipe, is.



Phosphoric acid is a weak acid with the chemical formula H_3PO_4 . Orthophosphoric acid refers to phosphoric acid, which is the IUPAC name for this compound. The prefix ortho- is used to distinguish the acid from related phosphoric acids, called polyphosphoric acids.



pH-

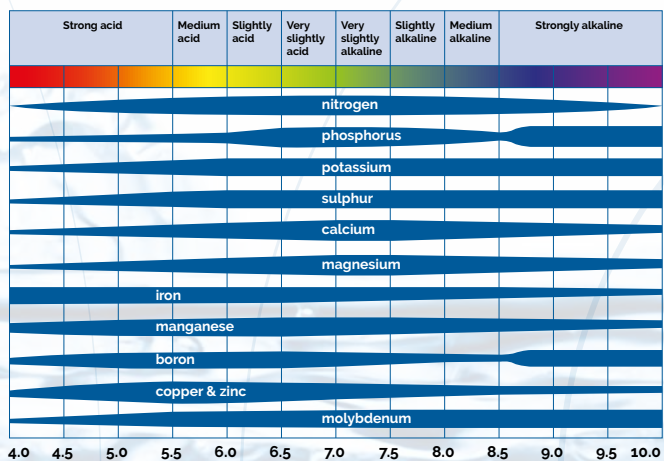
Reduces the pH value of the irrigation water.

A pH value too high of the irrigation water / nutrient solution, obstructs the mineral absorption. If the pH of the irrigation water is too high, you can lower it with **pH-**.

The acidity of your nutritional mix is very important for plants; it determines the absorption of nutrients. The value used to indicate the acidity is called pH. For most plants, the best pH value is between 5.5 and 6.0. It is also important that the pH value is stable. When the pH value fluctuates, the absorption of nutrients will not be stable. This can be seen in irregular growth of the plants.

After you have mixed the nutrients with the water and the EC has been checked, you should measure the pH value. If the pH is too high, add **HY-PRO pH-** dropwise and stir well. Keep adjusting until the desired pH value is reached (5.5 / 6.0). This allows the plant to easily absorb all available nutrients, which will result in a powerful plant with a higher yield.

Due to the current EU legislation, potassium can only be offered at a lower concentration. Therefore, we have our new product Phosphoric Acid in the **HY-PRO** assortment. It has the same properties and is highly concentrated. Plants absorb more phosphorus in the flowering phase.



The above shows at which pH-value an element is best absorbed. As can be seen, the most suitable values for this are between 6.0 and 7.0.

Because the pH value increases in mediums (due to temperature and light), it is advisable to administer a feed mixture with a pH of 5.5.



STARTER PACK

The complete plant nutrition for every grower.

You will be amazed!

The **HY-PRO Starter Pack** is designed to introduce the excellent **HY-PRO** liquid fertilizers. Designed for an easy use with maximum results; for indoor and outdoor use.

HYDRO STARTER PACK CONTENT:

Rootstimulator - 250 ml
Spraymix - 100 ml
Hydro A + B - 2 x 500 ml
Epic Boost - 100 ml
Generator - 50 ml

TERRA STARTER PACK CONTENT:

Rootstimulator - 250 ml
Spraymix - 100 ml
Terra - 2 x 500 ml
Epic Bloom - 100 ml
Generator - 50 ml

COCO STARTER PACK CONTENT:

Rootstimulator - 250 ml
Spraymix - 100 ml
Coco A + B - 2 x 500 ml
Epic Blast - 100 ml
Generator - 50 ml





GROWTH SCHEDULE - HY-PRO

*  MÍN 24°C / MÁX 29°C

* Ph 5,5 / 6,0



GROWTH PHASE

FLOWERING PHASE

80%						40%						H2O
EC 1,2	EC 1,2	EC 1,2	EC 1,4	EC 1,4	EC 1,7	EC 1,7	EC 2,0	EC 2,0	EC 2,2	EC 2,2	EC 2,2	
SPRAYMIX												
ML/L 5	ML/L 5	ML/L 5	ML/L 5									
ROOTSTIMULATOR												
ML/L 2,5	ML/L 2,5	ML/L 2,5	ML/L 5	ML/L 5	ML/L 5	ML/L 5	ML/L 5	ML/L 5	ML/L 5	ML/L 5	ML/L 5	
HYDRO A&B												
ML/L 2,5	ML/L 2,5	ML/L 2,5	ML/L 3	ML/L 3	ML/L 4	ML/L 4	ML/L 4,5	ML/L 4,5	ML/L 5	ML/L 5	ML/L 5	
						EPIC BOOST						
						ML/L 0,5	ML/L 0,5	ML/L 1	ML/L 1	ML/L 1,5	ML/L 1,5	
TERRA												
ML/L 2,5	ML/L 2,5	ML/L 2,5	ML/L 4	ML/L 4	ML/L 4	ML/L 4,5	ML/L 4,5	ML/L 4,5	ML/L 5	ML/L 5	ML/L 5	
						EPIC BLOOM						
						ML/L 0,5	ML/L 0,5	ML/L 1	ML/L 1	ML/L 1,5	ML/L 1,5	
COCO A&B												
ML/L 2,5	ML/L 2,5	ML/L 2,5	ML/L 3	ML/L 3	ML/L 4	ML/L 4	ML/L 4,5	ML/L 4,5	ML/L 5	ML/L 5	ML/L 5	
						EPIC BLAST						
						ML/L 0,5	ML/L 0,5	ML/L 1	ML/L 1	ML/L 1,5	ML/L 1,5	
GENERATOR												
ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	ML/L 0,16	

Nice to meet you!



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MADE IN HOLLAND**

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 Hyprofertilizers

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