

Fito Horm[®]

...PLANT NATURALLY DESERVES IT

20
26

PACKAGE OFFERS

FitoHorm® POPPY SEED PACKAGE

...PLANT NATURALLY DESERVES IT

FitoHorm Turbo Magnesium 20 L + FitoHorm Turbo Sulfur 20 L
(10 ha / package)



POPPY SEED PACKAGE



FitoHorm® GRAIN PACKAGE:

...PLANT NATURALLY DESERVES IT

FitoHorm Grain 20 L + FitoHorm Fulvo Max 20 L
(10 ha / package)



GRAIN PACKAGE



FitoHorm® OIL PACKAGE:

...PLANT NATURALLY DESERVES IT

Polyboron Plus 20 L + FitoHorm Turbo Potassium 20 L
(10 ha / package)



OIL PACKAGE



FitoHorm® CORN PACKAGE:

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FitoHorm Turbo Nitrogen 100 L + FitoHorm Turbo Zinc 20 L
(10 ha / package)



CORN PACKAGE



FitoHorm® START PACKAGE:

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FitoHorm Turbo Start 20 L + FitoHorm Turbo Copper 20 L
(10 ha / package)



START PACKAGE



FitoHorm® GLUTEN PACKAGE:

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FitoHorm Turbo Nitrogen 60 L + FitoHorm Turbo Potassium 20 L
(10 ha / package)



GLUTEN PACKAGE



DEAR READER,

The world around us is changing at an almost unimaginable speed. In the past five or six years, Hungarian agriculture has gone through so many changes and crises that it had not seen in twenty years. We started with the Covid virus, then the war broke out next door, in the meantime the new KAP was introduced, and perhaps the biggest challenge was climate change, which put brutal pressure on our lives: on farmers, producers and traders.

Thanks to your trust, we have been serving Hungarian agriculture for 46 years. During this long time, we have learned that the most difficult times can only be survived if we are able to continuously develop and constantly adapt to changing circumstances. In response to the changing ecological, market and legal environment, we try to offer new products in addition to the products we have been offering for decades. This year will be no different!

The winner of the drought of recent years was the sunflower. Its cultivation area grew primarily in the Alföld, but it is also becoming increasingly popular in the western part of the country. Among the many challenges that arise during its cultivation, one of the most significant is the early, few-leafed game damage, which has generated serious conflict between those entitled to hunt and farmers in recent years. The basis of successful protection is prevention, which the law expects from both parties proportionally, in which the use of game repellent approved by the authorities is an essential technological element! We hope that the FitoProtekt product, which will also be available in our offer from this year, will provide effective assistance in the effective protection of sunflowers!

The list of our products that earn AÖP points is also growing, with a new entrant whose use is increasingly becoming more prominent, primarily in the field of improving the quality indicators of our grains. Numerous research results and our own experiments prove year after year that nitrogen-containing foliar fertilizers applied during ear protection significantly contribute to the fulfillment of various bakery values. Although we already had a well-functioning solution to this problem, we still felt that it was necessary to create a new nitrogen fertilizer that would also be a plus point in the support system, containing biostimulants. With our new product called FulvoN, we can kill three birds with one stone: with the nitrogen it contains, we help the incorporation of proteins into the grains, with the fulvic acid content we speed up the assimilation of the crops, and the product's approval as a plant conditioner helps farmers to obtain an AÖP point!

We have no doubt that the year 2026 ahead of us will also hold many challenges and difficulties for all of us. However, let us never forget that the obstacles left behind will make us stronger! We wish you a lot of strength, perseverance and good health!

Sincerely,



SZABÓ ATTILA
Executive Director



GYÓI GÁBOR
Sales Manager

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SMALL BOOK



ABOUT FOLIAR FERTILIZERS

CHELATIZED MICRO-ELEMENT FERTILIZER AND THE FITOHORM!

FITOHORM KFT is committed to chelated, true solution foliar fertilizers, based on licensing experiments 45 years ago and in the light of practical experience to date.

Chelates are metal complexes of special structure, with ligands surrounding the metal ion in a "chelate" (Greek "chelate") and thus forming stable metal ring complexes. Because of their water solubility and stability, metal chelates can be used as both spray and soil fertilizers. The use of chelated micronutrient foliar fertilizers allows for a more even distribution of nutrients, which in itself provide good adhesion and therefore better utilization as these formulations penetrate the waxy cuticle of the leaves more easily and quickly..

DISPERSE SYSTEMS:

The **pure salts**, due to their unformulated nature, have inadequate foliar efficacy.

An **emulsion** is a colloid in which particles of a liquid are dispersed in another insoluble liquid. As these products are referred to as a kind of physical solution, it is difficult and slow to take up the active ingredient.

The **suspension** is a mixture in which there is no dissolution of the components. Most commonly, a mixture of solid particles suspended in a liquid is referred to as a suspension. After some time, the heavier components settle on the bottom of the vessel (gravity separation; settling). Usually a group of particles larger than 500 nanometers distributed in a liquid. Often unstable, their mixability and application time are significantly more critical. Floating solids particles are much more difficult to penetrate into plants due to their size, so they have a much lower efficiency than true solution foliar fertilizers.

Az **solution** is a multi-component system (mixture) in which one component is usually present in greater amounts (solvent) than the other components (solute).

The **Real solutions** can be classified as homogeneous dispersion systems. Among the components, the solvent (continuous medium) was highlighted, the rest being the dissolved (dispersed) material. In real solutions, the particles have a particle size of 0.1-1 nm.

The nutrient requirement of a rapidly developing stock often exceeds the nutrient uptake capacity of the roots. In case of unfavorable soil conditions (compaction, sludge, drought, etc.) or extreme weather conditions (drought, too cold weather, leaching losses, etc.), nutrient uptake becomes inhibited. In these cases, well-applied foliar fertilization is an effective aid to the stock, as the necessary nutrients can be quickly and purposefully introduced into the plants. The most effective means of this is chelating agents. Chelated leaf fertilizers are widely used to improve the nutritional status of micronutrient deficient populations.

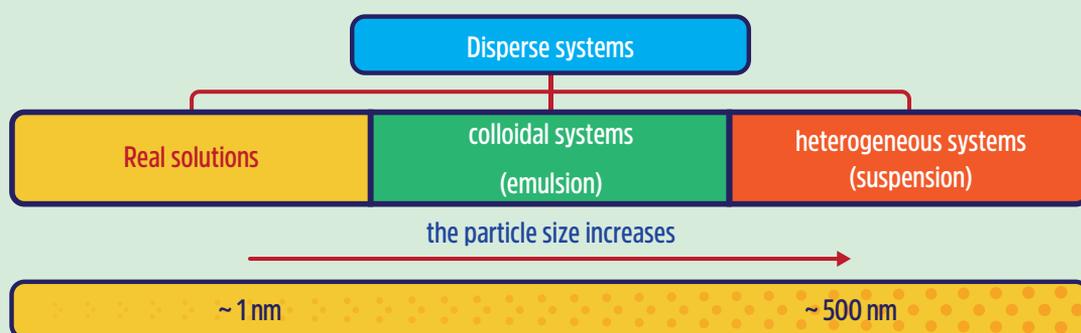


Why use
foliar fertilizer?



Foliar fertilizer formulations,
foliar fertilizer compatibility

Advice based on soil and leaf studies, which FitoHorm KFT has been using successfully since 1980, facilitates the correct selection of trace elements. We also encourage our new partners to carry out these tests prior to a reasonable nutrient supply.

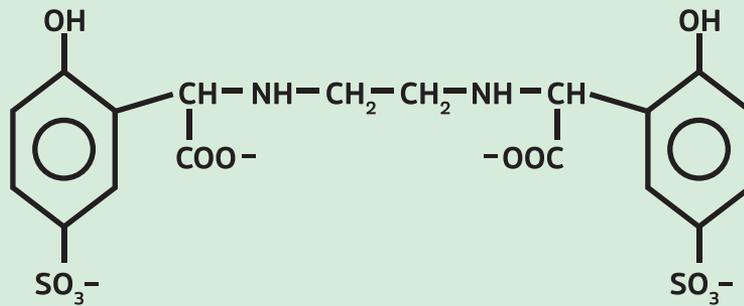


the particles	real solutions	colloidal systems	heterogeneous systems (suspension)
size	0,1-1 nm	1-500 nm	500 nm
visibility	invisible	with ultra and electron microscope	with light microscope
deposition	don't settle	don't settle	willingly takes place
filterability on a paper filter	no filterable	no filterable	filterable
example	sugar solution	sugar solution	plant protection solution with elemental sulfur

FitoHorm's chelated, true solution foliar fertilizers have been guaranteeing good mixability, adequate efficiency and high content for users for 45 years.

Chelated formulations can be stored in solution for a much longer period of time without the risk of precipitation, and are more problematic when co-applied with pesticides. The use of chelated micronutrient foliar fertilizers allows for a more even application of nutrients, which in themselves provide good adhesion and therefore better utilization as these formulations penetrate the waxy cuticle of the leaves more easily and quickly. Chelates can also be ranked based on different parameters. The best known of these is EDTA (**ethylenediamine tetraacetate**), the most modern and the most environmentally friendly is EDDHSA **ethylene diamine-N, N'-bis [(2-hydroxy-5-sulfo) ferric acetate]**. FitoHorm KFT foliar fertilizers are chelated with EDDHSA chelator, which has Reach registration.

EDDHSA: Unique Micronutrient Enhancement Formula is an organic chelating molecule. With its amino acid formula, it brings microelements into the form most easily absorbed by the plant. Numerous plant experiments have proven its effectiveness. It does not have the disadvantage of EDTA.



	PH stability (>7)	efficiency of absorption	duration of effect
EDTA	•	•	•
STPA	••	••	••
EDDHMA	•••	•••	••
EDDMA	•••	•••	•••
EDDHSA	••••	••••	••••

FITOHORM SMALL BOOK

WHAT, WHEN, WHAT TO USE IT FOR?

> Seed treatment (dressing)

Why use FitoHorm dressing material?

- » Because it provides the necessary nutrients for the germinating seeds - until the root and foliage of the seedling is formed,
- » Because it improves the germination power and percentage of seeds with lower germination capacity (older items),
- » Because it accelerates the growth of plants and thus ensures uniform emergence,
- » Because it allows the plant to excel in rooting: faster access to deeper, nutrient-rich layers of soil - and more efficient nutrient uptake from these layers,
- » Because it increases the resistance of the plant to adverse environmental conditions at germination (drought, inland water, cold).

> ROOTING

Occasionally, the rate of growth is even unsatisfactory, even with a higher root mass, because the root system is unable to absorb sufficient nutrients due to its rapid development. It is more common that nutrient uptake is inhibited for some environmental reason (eg drought). It is important for the nutrient uptake to have the root as early and as large as possible, since only plants with a strong root can withstand environmental stress and can subsequently produce high yields. Root cultivation requires a lot of energy and its production and transport must be accelerated. For this, it is important to create the largest possible root mass.

OUR PRODUCT RECOMMENDED FOR SEED DRESSING:

- » FitoHorm MagMAX
(1-3 liters/ton of seed)



OUR RECOMMENDED PRODUCTS FOR ROOTING:

Primary effect:

- » FitoHorm Turbo Magnesium
- » FitoHorm Turbo Start

Secondary effect:

- » EcoActiv
- » FitoHorm Turbo Macro

> Growth-incentive (green weight increasing)

It is extremely important to know the agrotechnical optimum of each plant, and in particular the specific nutrient requirements of the varieties / hybrids, which ensure the optimum yield and maximum yield under specific ecological conditions. Without the right amount of green mass, plants cannot be expected to produce high yields.

OUR RECOMMENDED PRODUCT FOR INCREASING GREEN MASS:

- » FitoHorm Turbo Nitrogen
- » FitoHorm Turbo Mg



> Stimulation of crop fixation

The basis of our yields is the sum of the bound fruits. Unfortunately, the ideal circumstance is very rare during the harvesting season, so stimulating it is of utmost importance in Hungary. There are two ways we can promote FitoHorm products at the same time:

1. Stimulate pollen production to increase pollen production. This will increase the likelihood of the stigma getting into pollen.
2. Another method is to increase the stamina's capacity to stay wet for longer, to adhere to the pollen, and to provide enough power to shoot the pollen tube.

OUR RECOMMENDED PRODUCTS:

- » Polyboron 140
- » Polyboron Plus
- » EcoBoron



➤ Maturation acceleration, quality improvement

There are several reasons for accelerating the maturation process: unfavorable environmental conditions, market, work organization or extremes (gluten, color, sugar level, etc.). Each is a strong argument for using a maturation accelerator!

OUR RECOMMENDED PRODUCTS FOR QUALITY IMPROVEMENT AND MATURITY ACCELERATION:

- » FitoHorm Turbo Potassium



➤ Our products that can be mixed with liquid UAN solutions:

The use of UAN solutions (Nitrosol, Nikrol, etc.) as head fertilizers is a very widespread method in our country in early spring. Its utilization through the foliage and its scorch-free application, in all cases, depends on the chemical form and weather conditions. Thanks to the combined effect, our micronutrient foliar fertilizers, which can be applied in one pass with various UAN solutions, are utilized and activated even faster in the plant. In our products, the active ingredients and the chelating molecule are mixed both physically and chemically without any damage. Thanks to their mixability, they allow targeted micronutrient replacement at no additional cost.

OUR RECOMMENDED PRODUCTS FOR MIXING (1-2% ACTIVITY):

- » FitoHorm Bio Grain
- » MicroMax
- » FitoHorm Turbo Sulfur
- » FitoHorm Turbo Copper
- » FitoHorm Turbo Potassium
- » FitoHorm Turbo Start
- » EcoActiv

DEFICIENCY SYMPTOMS

> Nitrogen deficiency (N)

Dwarf growth: Due to the lack of N, the growth of the plant is inhibited and therefore unable to reach the ideal size. The inhibitory effect is exerted by longitud.

N-deficiency is characterized by „**stiffness**”, which is manifested on the stem and leaves.

Nitrogen deficiency always first shows signs of **yellowing and necrosis on older leaves and plant parts** while the younger parts of the plant retain their green color for a long time. Symptoms of N-deficiency differ from other deficiency **diseases in that the reddish tones on the leaves always accompany the lighter green or yellow color of the whole plant.**

In case of N-deficiency use **FitoHorm Turbo Nitrogen** solution foliar fertilizer.



> Phosphorus deficiency (P)

Symptoms of P deficiency are less characteristic than other deficiencies. In many cases, the affected plant may give the appearance of N-malnutrition or optimal nutrient supply. Anthocyanin formation associated with P deficiency may result in reddish, purple, or dark purple discoloration. In cereals, this can occur mainly on the leaf pod and stalk, in the corn itself on the leaf, while on other plants it can occur on the back or possibly on both sides of the older leaves.

Symptoms often **first appear only on older leaves.** The plant produces only tiny, mostly deformed flowers. P-deficiency reduces the quality of cereals in the bakery industry and prevents the starch fro.

In case of P deficiency use **FitoHorm Turbo Macro** or **FitoHorm Turbo Start** fertilizer.



HIÁNYTÜNETEK



> Potassium deficiency (K)

Insufficient K supply can be recognized even before the appearance of obvious symptoms of deficiency. **K-deficient plants**, due to disturbances in the turgor regulation and stomach mechanism, **lose sleep faster** in dry, warm, sunny days than well-potassium-rich plants.

K-deficiency begins with yellowing on the older, lower leaves, beginning at the apex of the leaves, and later the **tissue between the leaves becomes dry**. In monocotyledons, K-deficiency symptoms always start at the apex of the leaves and spread most rapidly along the edges towards the leaf base.

The K-deficiency **results in reduced plant resistance to disease, drought and cold tolerance and deterioration in fruit coloring**. In case of K-deficiency use

FitoHorm Turbo Potassium fertilizer.



> Magnesium deficiency (Mg)

Characteristic symptoms of **Mg deficiency**, first of all on the older leaves, stem from the destruction of chlorophyll. Deficiency symptoms can also begin on the younger leaves if the plant grows very fast and the magnesium is not transported sufficiently from the older leaves..

In grasses and cereals, due to local chlorophyll accumulation, older leaves, along the veins, exhibit a **bead-like marble appearance** while the rest of the leaf retains its green color. Keeping the letter light, this phenomenon is particularly visible. Later, pale green or yellowish green chloroses occur. The yellowing extends from the apex and the margin of the leaf to the base of the leaf.

In case of Mg deficiency use **FitoHorm Turbo Magnesium, Eco Activ** or **Fito Activ** foliar fertilizer.

DEFICIENCY SYMPTOMS

> Sulfur deficiency (S)

Sulfur deficiency, like **nitrogen deficiency**, appears as a **yellowish-green or markedly yellow color**, which makes it difficult in many cases to distinguish the deficiency symptoms of the two elements..

The obvious difference between sulfur and nitrogen deficiency is that **the former usually first appears on the youngest leaves**. In this case, older leaves do not die as with nitrogen deficiency. Sulfur-deficient **plants are lower than normal**, and when deficient, they grow stubbornly, as do nitrogen-deficient plants. The **leaves are smaller**, often **narrower**. In the case of a deficiency of sulfur, protein production deteriorates, along with the baking industry parameter, and the oil content of the oil plants decreases.

In case of S-deficiency use **Fitohorm Turbo Sulfur**, **Eco Activ** or **Fito Activ** foliar fertilizer.



> Boron deficiency (B)

Boron deficiency always occurs on the youngest leaves and on the tops of the shoots and roots. **Boron deficiency manifests itself in a variety of visually detectable morphological changes, such as**

- » Chlorotic discoloration of the youngest rosette leaves;
- » Shorter flavors;
- » Terminal bud and shoot death;
- » Leaf stalk, stem paralysis and run-up;
- » Less flower and seed training combined with kicking of seed boxes;
- » Inhibited root growth with abnormal root formation abnormally;
- » Brown blotch, vitrification, dry rot, loose tissue, often with cavities in the fruit, carrot, torso, especially near the bundles and conveying tissues.

In case of B-deficiency use **Polyboron 140**, **Polyboron Plus** or **Eco Boron** foliar fertilizer.



DEFICIENCY SYMPTOMS



> Calcium deficiency (Ca)

Ca-deficiency is strongly correlated with the functions of calcium in the plant. Symptoms first appear on the youngest and most diffusing organs, so the growth of the plants is inhibited and their bushiness is bushy. **The youngest leaves, which are primarily affected, are usually smaller, deformed, and their tips and edges curl in a spoon.** The edge of the leaf is irregular. Starting from the edges and especially from the apex, spreading to the intervertebral fields, there is chlorotic scab and **coherent chloroses**, which produce brown, necrotic, over time patches. Occasionally, the leaf disc may also develop necrosis. It is characteristic of Ca-deficiency that the color of the vessels, even on fully necrotized leaves, is always **darker than that of the intercostal fields.**

In the case of poor Ca supply, the otherwise normally developing plant may have a sudden onset of so-called. "**Softening of the stalk**" or "**fracture of the stalk**".

LACK OF CALCIUM CAN CAUSE MANY OTHER SYMPTOMS AS EXAMPLES:

- » Cereals often have only frivolous eyes
- » In spring intensive growth of rape , rape stems and cracks not caused mainly by the cold,
- » Common beans, locusts, mustard and alfalfa often kick their flowers,
- » With peppers "Sunburn", a dry dead crop of fruit,
- » Melons and tomatoes show" peak "and" flower peak rot ", especially at high temperatures,
- » On the lettuce there is a tan.

For Ca deficiency use **FitoHorm Turbo Calcium** foliar fertilizer, **FitoHorm 40 Ca**, **FitoHorm** or **40 Ca nitrogenfree** potassium solution.

DEFICIENCY SYMPTOMS

> Copper deficiency (Cu)

The occurrence of copper deficiency can fluctuate significantly from year to year, depending on the weather conditions at the same site. In drier years, copper deficiency is more common in the early stages of juvenile development. **Copper deficiency is very difficult to detect with the eyes.** Symptoms usually first appear on the leaf, still on very active metabolic leaves and organs. Copper deficient plants often produce higher vegetative masses, but severe disturbances occur during the generative developmental phase. Mostly fruit trees are characterized by an increased grafting of side buds. In the case of copper deficiency, the herbaceous species may exhibit sustained wilting, the formation of "flaccid" tactile leaves, leaf blemishes, or leaf deflection.

In case of Cu deficiency use **EcoCopper**, or **FitoHorm Turbo Copper Fertilizer**.



> Iron deficiency (Fe)

Iron deficiency is still the most difficult remedy for deficiency disease, which can cause significant damage and loss of yield to certain crops and certain soils. At a slight deficiency, **the youngest leaves of the plant lighten to yellowish-green.** As the deficiency increases, the interstitial fields become yellow to orange or orange. The discoloration is manifested on the youngest leaves, in the form of a chlorotic stripe covering the entire leaf. The younger the leaf, the more intense the symptoms of specific chlorosis appear. **In the case of a very severe deficiency, the youngest leaf emerging is yellowish-white or almost white,** or only green at the base of the leaf, contrasting sharply with the other leaves.

In case of Fe deficiency use iron solution **FitoHorm 55 Fe** or **FITO-FERR T-3**.



DEFICIENCY SYMPTOMS



> Manganese deficiency (Mn)

Chlorophyll is degraded in manganese deficient cells. As a result, the cells lose their green color and small, yellowish-green, tiny, punctate necrosis first develops in the smaller blood vessels, initially confined to areas farther from the blood vessels and exhibiting light spots in the incident light. The spots will turn yellowish white.



In the case of persistent deficiency, the flesh of the leaves also becomes chlorotic, leaving only a narrow green border around the vein at the base of the leaf. Symptoms of manganese deficiency are most often found on leaves of younger or middle age, and are most pronounced on leaves closer to the base. At high levels of growth inhibition due to manganese deficiency, **reduced flower and fruit production, weak leaf and root growth** can also be observed.

For Mn deficiency use **FitoHorm 54 Mn Manganese Solution** or **FitoHorm Turbo Manganese Fertilizer**.



> Zinc deficiency (Zn)

Zinc deficiency develops in plants in different ways, which can be:

- » Small leaf
- » Rosette
- » Chlorotic congestion due to patchy chlorosis in the interveinal fields, which gives the leaves a mosaic appearance.



Since zinc plays an important role in auxin metabolism, the deficiency symptoms are also due to auxin deficiency. Thus, the leafy foliage, coupled with smaller or larger leaf deformation, and the growth inhibition coupled with rosette formation due to shorter flaves, are considered to be typical symptoms of zinc deficiency. In maize, in the case of a deficiency of zinc, the development of fertilization disorders is very noticeable, which is often accompanied by the formation of small deformed grains.

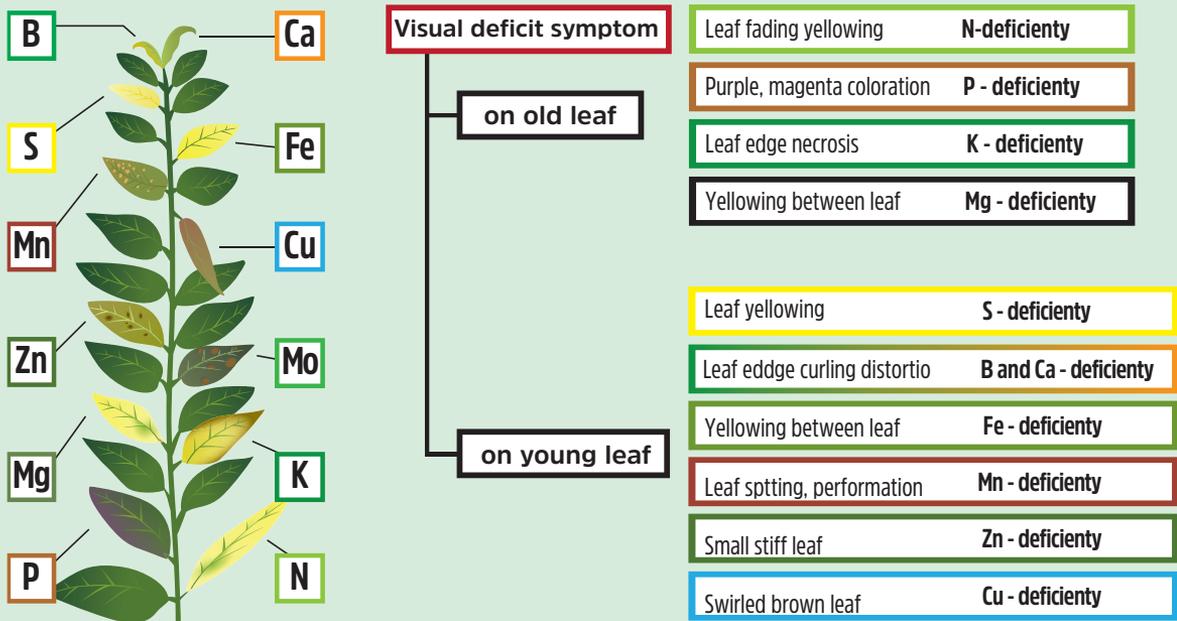
For Zn deficiency, use **FitoHorm Turbo Zinc Fertilizer**. When applying together with phosphorus, a mixing test is recommended every time!.

RECOGNIZING DEFICIENCY SYMPTOMS

It often happens that the plants we produce take on an abnormal color or shape (e.g. the leaves become deformed, stained, or develop improperly).

At first, we always think the worst, that some kind of disease or pest is causing the change, but often the plant has nutrient absorption problems.

Plants absorb macronutrients and secondary nutrients in quantities thousands of times greater than micronutrients per day, but despite the small amounts, micronutrients play an essential role in life processes. For the healthy development of the plant, we must monitor the development of nutrient levels and replace them in case of deficiency. The figure below helps us in this, visualizing the symptoms and locations of each nutrient deficiency through the foliage of a plant.



NUTRIENT INTERACTION

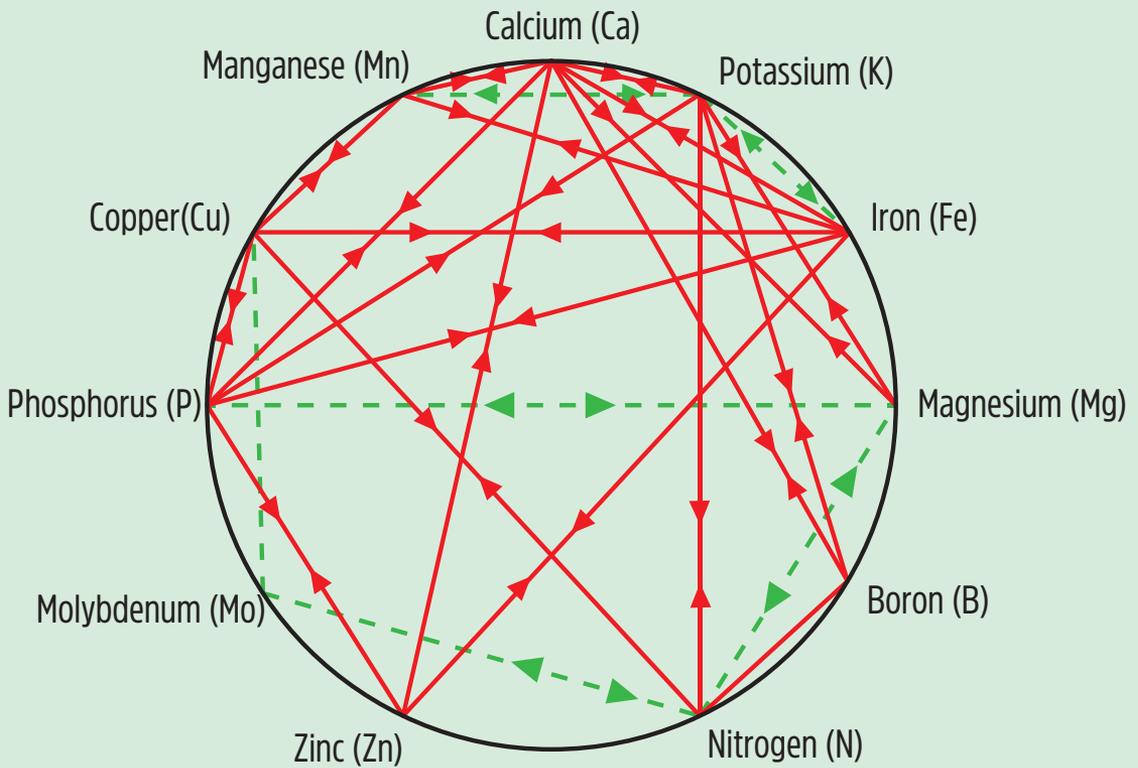
Synergistic (helping each other's effects) and antagonistic (inhibiting each other's effects) processes refer to how the simultaneous presence of individual metals helps or impairs each other's physiological effects. These are chemical relationships where one element binds the usual binding site of the other element and thus prevents it from taking effect in the biochemical process, or protects the given element from a physiologically inhibiting substance

Antagonist

The excess of one element inhibits the uptake of another element.

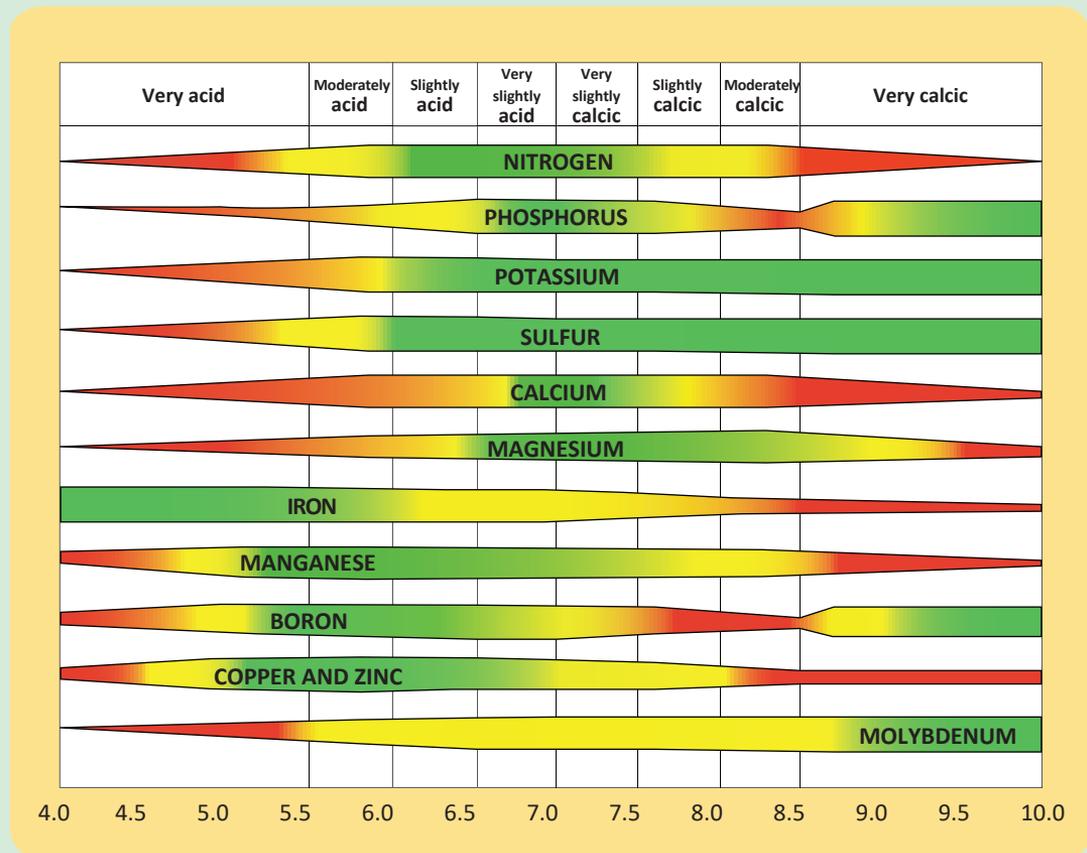
Synergistic

A positive interaction where one element helps the uptake of another element.



NUTRITIONAL CAPACITY ON THE SOIL PH FUNCTION

The diagram shows that as the pH increases, the uptake of many trace elements in the soil is greatly reduced. This is especially true for iron and manganese. From the diagram you can see which nutrients are blocked by the host, so effective replenishment of these nutrients by foliar fertilization is essential.



HOW EFFECTS SOIL PH ON NUTRIENT CONSUMPTION (PH FACTOR)

The pH of the growing medium is very important and is also the most misunderstood factor. The plant carries the elements in the water, so their water solubility is essential for immediate utilization. This is a function of pH.

The best pH for any medium is in the range of 5.4 to 6.0 Nutrient utilization is a function of pH. The width of the strips indicates the degree of utilization.



INHIBITORS

Nitrogen inhibitors are chemical compounds that reduce the loss of nitrogen applied to plants. By extending the active time, the nitrogen component of the fertilizer remains in the soil (either urea-N or ammonium-N), thus the inhibitor improves nitrogen use efficiency (NUE) and reduces environmental emissions.

There are two main types of nitrogen inhibitors:

1. Urease inhibitors (UI), which inhibit the hydrolytic action of the urease enzyme on urea.
2. Nitrification inhibitors (NI), which inhibit the biological oxidation of ammonium to nitrate.

> Urease inhibitors (UI)

Due to numerous professional and efficiency reasons, primarily preparations that inhibit the dynamics of urea – i.e. urea – nitrogen uptake have become widespread on the fertilizer market.

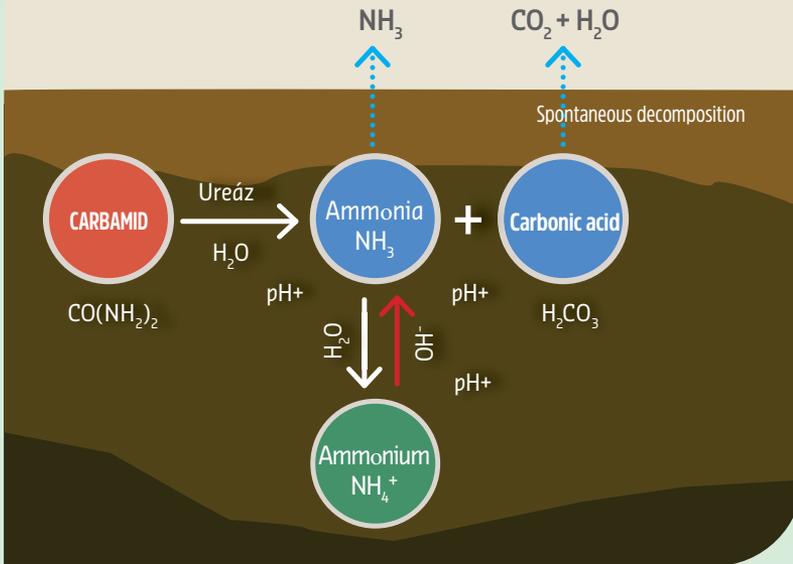
The uptake of dissolved urea by plants through their leaves is relatively smooth, but its uptake from the soil by the roots is already hampered. In order for urea to be used as a nitrogen source, it must first be converted into ammonium (NH_4^+) and nitrate (NO_3^-). This process is carried out by microorganisms living in the soil, with the help of the urease enzyme responsible for the breakdown of urea. Urea is unstable in an aqueous medium due to the presence of the urease enzyme, so the transformation process usually starts immediately, but not directly into ammonium. Urea is first converted into ammonia and carbonic acid, which decompose spontaneously. (Figure 1)

The rate of ammonium conversion and ammonia loss depend on several factors:

- » the most important are soil temperature and moisture,
- » the amount of plant residues on the soil surface,
- » the cation exchange capacity of the soil and the soil pH value.

High ammonia loss occurs most often in light soils and in the cultivated layer, and its extent has reached up to 80% ammonia loss in laboratory tests.

Figure 1 : Transformation of urea in soil

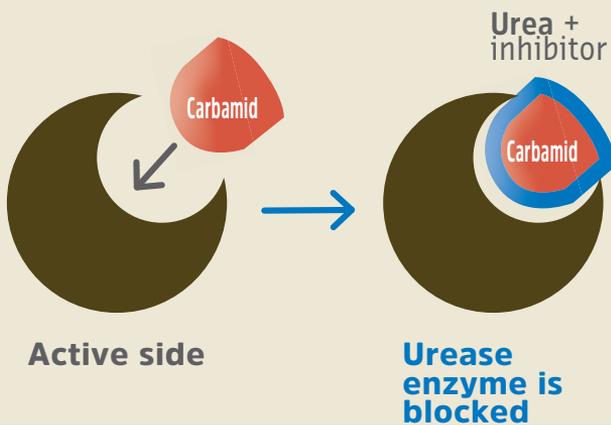


Reducing ammonia loss

The most effective method for reducing ammonia loss is to treat urea-based fertilizers with urease inhibitors, or in the case of liquid UAN (urea, ammonium nitrate) solutions, to add a urease inhibitor to the solution. This method effectively delays the conversion of urea into ammonia and carbonic acid, and blocks the function of the urease enzyme for approximately two weeks (Figure 2).

By using this technology, ammonia loss can be reduced by an average of 70%, the availability of nitrogen sources increases, and the utilization rate of the active ingredients of our applied nitrogen fertilizer increases.

Figure 2: HOW UREASE INHIBITORS WORK



FitoHorm®

..PLANT NATURALLY DESERVES IT

RECOMMENDED BY THE FITOHORM TEAM



UREAFIN

Dosage: 1dl for 100l UAN solution

- ✓ CAN BE APPLIED WITH UAN SOLUTION
- ✓ NITROGEN UTILIZATION RATE SIGNIFICANTLY INCREASES
- ✓ FAVORABLE COST PER HECTARE

CONTACT OUR ADVISORS FOR FREE, PERSONALISED ADVICE !

www.fitohorm.hu

Tel.: +36 30 708 1461

EFFECTS OF FULVO AND AMINO ACIDS ON PLANTS

The plant can absorb fulvic and amino acids through both the roots and the leaves, and with their help, various stress effects, such as frost, drought, heat stress, water pressure, windstorms or phytotoxicity, can be more easily tolerated.

› Fulvic acids in plants

Humic acids are a combination of humic acid, hematomelanin acid, and fulvic acid. Humic acids effectively strengthen the immune system, can be used to treat various viral infections, and can be used for general recovery after a serious illness.

- › Potassium humate (better known as humic acid) is characterized by its large size and mass of molecules... Their area of application is mainly the soil and the root zone of plants. They provide excellent and long-lasting nutrition for soil-dwelling microorganisms, thereby enhancing their activity and reproduction.
- › In contrast, fulvic acids are small in size and low in molecular weight. However, when applied to plant leaves, they are quickly absorbed without residue due to their size and natural nature. They penetrate the plant cell wall and even the membranes of cell components.

› The positive effect of fulvic acid on plant life processes:

- › A natural chelator, it helps metal ions enter plant cells..
- › It increases the metabolism of plant cells, improves oxygen uptake, and resistance to wilting
- › The plant's immune system is strengthened, thus its resistance
- › Binds heavy metals, active ingredients of pesticides, and helps break down pollutants.
- › It restores the natural chemical balance of the living cell and activates its life processes.
- › It plays an important role in the production of protein components (amino acids) and growth, thus in the development of crop quantity and quality.s

› Amino acids in plants

Amino acids play many roles in plants, including acting as signaling molecules, regulating root and shoot structure, and regulating flowering time and stress response. In most plants, nitrogen moves primarily in the form of amino acids, so amino acids taken up through the leaves do not need to be converted by the plants. From a plant physiology perspective, the most beneficial effects are found in our FulvoMax product with essential amino acids.

› Positive effects of amino acids on plant life processes:

- › They serve as a natural source of nitrogen
- › They promote the synthesis of proteins, serving as their building blocks
- › They improve the energy balance of plants and thus their condition.l
- › They increase the effectiveness of antioxidant enzymes, slowing down the aging process.



SUGGESTED USE

Product	Dose	Usage method
Fulvo Max	2 - 3 l/ha	Foliar fertilizer Fulvic and Amino acids and microelements!
FulvoN	5 - 8 l/ha	Nitrogen-containing foliar fertilizer with Fulvic acid and chelated copper

FITOHORM MAGMAX

MICRO - ELEMENT COMPOSITION FOR COATING



More about the theme

A good start is important in all areas of life, and this is exponentially true for the early stages of our cultivated cultures. If you think about it, all the negative effects that lurk on a young plant can be greatly reduced if germination, rising and the subsequent juvenile life stage take place quickly, explosively, in proper condition. Homogeneous, vitally emerging vegetation fights weed competition more effectively, grows out of the "mouth" of pests sooner, and, thanks to its strong roots, provides a basis for further development that can be the key to survival in a later stressful period.



FitoHorm's product range has so far not included a microelement formulation specifically intended for dressing, however, our seed treatment experiments with microelements in recent years have drawn attention to the benefits and necessity of this type of formulation.

The following microelements in the product help the initial / germination of the plant:

> Zinc (Zn)

- » both specific and non-specific activators of enzymes
- » **multiplies the elongation of the primary root hairs**
- » an activator of the synthesis of auxin as a growth hormone in association with manganese.

> Manganese (Mn)

- » enzyme (Peptidase, Prolidase Glutamyl transferase, Enolase,)
- » affects cellular respiration, i.e. ensuring the smooth flow of carbohydrates,
- » **linked to zinc affects the formation of auxin, it helps the elongation of both root formulas and shoot initiation formulas to be faster.**

Another outstanding advantage of MagMAX is that it can be mixed well with other dressings, increasing their adhesion, efficiency and coloring effect.



MATE Kaposvár Campus
experimental results

FitoHorm

> Boron (B)

- » "switching element" of carbohydrate metabolism processes
- » carbohydrate "mobilizer" element
- » **it regulates the water uptake of the germinating seed, i.e. it affects the swelling processes of the seed in the first days.**

> Molybdenum (Mo)

- » Catalytic nutrient in almost all enzymatic processes bound to metal components,
- » helps to absorb and incorporate boron,
- » **regulates initial nitrogen uptake.**



FITOSERVICE

THE LEAF ANALYSIS!

In the '80s, the spread of FitoHorm mono foliar fertilizers was helped by nutrition consultancy. One of the pillars of this system was leaf analysis. Following the change of regime, the structure of farmers was completely transformed, so the nutrient supply through the foliage was also neglected. It took many years for farmers to re-learn how to target macronutrients and micronutrients. And over the past decade, the optimal application of different types of fertilizers has been learned. The correct use of basic, starter and head fertilizers has been replaced.

OPINIONS ABOUT THE FOLIAGE MICROELEMENT REPLACEMENT

- » They do not believe in the efficiency of foliar fertilizers.
- » Generalize all kinds of liquid preparations for use in leaves.

Solution:

- ✓ The different formulations and their effectiveness (bacterial fertilizers, biostimulants, plant conditioners, foliar fertilizers, etc.) must be handled and known.
- ✓ The correct application of foliar fertilizers must be learned.

FITOSERVICE ~ THE RENEWABLE LEAF ANALYSIS!

A system that includes leaf analysis, consulting and a complete offer. A suite of services based on leaf analysis, where, after personalized research, our consultants use a program to provide a nutrient supply offer through the leaf.

BENEFITS

- ✓ Comprehensive service in the field, plantations and horticulture
- ✓ More than 50 types of cultivated plants nutrient testing is provided
- ✓ National coverage.
- ✓ Our consultants are professionals.
- ✓ Complete, controlled content complex foliar fertilizer supply.
- ✓ Study accepted in AKG program.



Test data from consecutive years provide an important basis for comparison and significantly increase the reliability of leaf analysis.

Hundreds of plant studies carried out in recent years have in many cases yielded surprising results. Although leaf analysis can be considered as a snapshot of the complex development process of plants, evaluating the results of samples together with soil test results and nutrient supply and agrotechnical interventions already made, very valuable relationships have been found, which are the correct conclusions. After deduction, they have contributed significantly to improving either the qualitative or the quantitative parameters of a given culture. Leaf analysis can thus be useful not only in plants showing symptoms of deficiency, but in fact wherever we want to grow healthier, more resistant plants, or produce higher yields and better quality crops.

FITOSERVICE offers accredited examination of the most important macro and micro elements of leaf samples: N, P, K, Ca, Mg, Cu, Zn, Mn, Fe, S and B

The value of leaf analysis data is highly dependent on correct sampling, method and time of sampling. Consult our consultants for the most accurate information.



FitoHorm®

...PLANT NATURALLY DESERVES IT

Fitoprotekt



Fitoprotekt

Double effect:

Alarm

Nutritional Obstruction

FOR THE MANAGEMENT OF SUNFLOWER STOCKS, MOST CONVENIENTLY IN THE STATE WITH SOME LEAVES

CONTACT OUR ADVISORS FOR FREE PERSONALIZED ADVICE!

www.fitohorm.hu

Tel.: +36 30 708 1461

FIELD



FOR ARABLE LAND CULTURES

COMPOSITION OF PRODUCTS

Multi-active solution fertilizers (w / v%)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Field dose
		%	%	%	%	%	%	%	%	%	%	%	%	l/ha
1	FitoHorm Grain	18	-	-	-	5	-	-	0,25	1,5	0,25	-	0,002	4-5
2	FitoHorm Bio Grain	-	-	-	-	-	-	0,5	1	1,8	0,3	0,3	0,03	4-5
3	FitoHorm Corn Plus	19	-	-	-	6	-	0,15	0,06	0,006	1,9	0,013	0,003	4-5
4	FitoHorm Oil plant	18	-	-	-	6	-	-	-	-	-	4	0,04	4-5
5	FitoHorm Grapes-Fruit	-	-	-	2	5	-	2	-	-	-	0,5	-	4-5
6	FitoHorm Vegetable	18	-	-	5	13,5	-	-	0,2	-	-	0,2	0,004	4-5
7	MACROSOL	8	4	5	-	-	-	-	-	-	-	-	-	3
8	MicroMax	-	-	-	-	-	-	3	1,32	0,15	0,23	0,26	0,07	2-3
9	FitoHorm Soy	-	-	-	-	-	-	0,4	0,5	0,5	1,5	0,5	0,3	3
10	FitoActiv	-	-	-	6,6	10,6	-	-	-	-	-	-	-	5-10
Solution fertilizers with high active ingredient content (w / v%)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Field dose
		%	%	%	%	%	%	%	%	%	%	%	%	l/ha
1	Polyboron140	-	-	-	-	-	-	-	-	-	-	14	-	2-3
2	Polyboron Plus	-	-	-	-	-	-	-	-	0,15	-	12,5	0,03	2-3
3	FitoHorm Turbo Nitrogen	30	-	-	3	6,5	-	-	-	0,01	-	-	-	10-15
4	FitoHorm Turbo Sulfur	20	-	-	-	60	-	-	-	-	-	-	-	2-3
5	FitoHorm Turbo Potassium	4	-	36	-	57	-	-	-	-	-	-	-	2-3
6	FitoHorm Turbo Calcium	12	-	8	2,7	-	13,5	-	-	-	-	-	-	2-4
7	FitoHorm Turbo Copper	20	-	-	-	11,5	-	-	-	8	-	-	-	2-3
8	FitoHorm Turbo Zinc	-	-	-	-	-	-	-	-	-	10	-	-	2-3
9	FitoHorm Turbo Manganese	-	-	-	-	-	-	-	8	-	-	-	0,5	3-5
10	FitoHorm Turbo Molibden	-	-	-	-	-	-	-	-	-	-	1	1	1-2
Eco products (w / v%)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Field dose
		%	%	%	%	%	%	%	%	%	%	%	%	l/ha
1	EcoBoron	18	-	-	-	-	-	-	-	-	0,25	6	0,005	2-3
2	EcoActiv	-	-	-	3	6,5	-	0,2	0,4	0,72	0,12	0,12	0,012	3-5
3	EcoCopper	12	-	-	-	5	-	-	-	4	-	-	0,05	2-3

COMPOSITION OF PRODUCTS

Starter solution fertilizers (w / v%)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Field dose
		%	%	%	%	%	%	%	%	%	%	%	%	I/ha
1	FitoHorm Turbo Magnesium	4	35	-	10	-	-	-	-	-	-	-	-	2-3
2	FitoHorm Turbo Start	11	23	-	-	-	-	0,025	-	0,003	0,3	0,017	0,0014	3-4
3	FitoHorm Turbo Makro	10	10	10	-	-	-	-	-	-	-	-	-	4-5

Mono-element solution fertilizers (w / v%)		Composition(%)					Field dose
							I/ha
1	FitoHorm 10 B	Boron solution		B	2,5		5
2	FitoHorm 14 N	Nitrogen solution		N	32		5-10
3	FitoHorm 24 Mg	Magnesium solution		MgO	6,6	+ SO ₃ 10,6%	5-10
4	FitoHorm 30 P	Phosphorus solution		P ₂ O ₅	18	+ N 7%	5-10
5	FitoHorm 39 K	Potassium solution		K ₂ O	9	+ P ₂ O ₅ 6% + N 3%	5-8
6	FitoHorm 40 Ca	Calcium solution		CaO	21	+ N 12%	5-7
7	FitoHorm 40 Ca (nitrogen free)	Calcium solution		CaO	17		5-7
8	FitoHorm 54 Mn	Manganese solution		Mn	4		3-5
9	FitoHorm 55 Fe	Iron solution		Fe	4		3-5
10	FitoHorm 63 Cu	Copper solution		Cu	4		4
11	FitoHorm 65 Zn	Zinc solution		Zn	4		3-5
12	FitoFerr T-3 for soil management	Iron solution		Fe	3		50-100 ml/vine

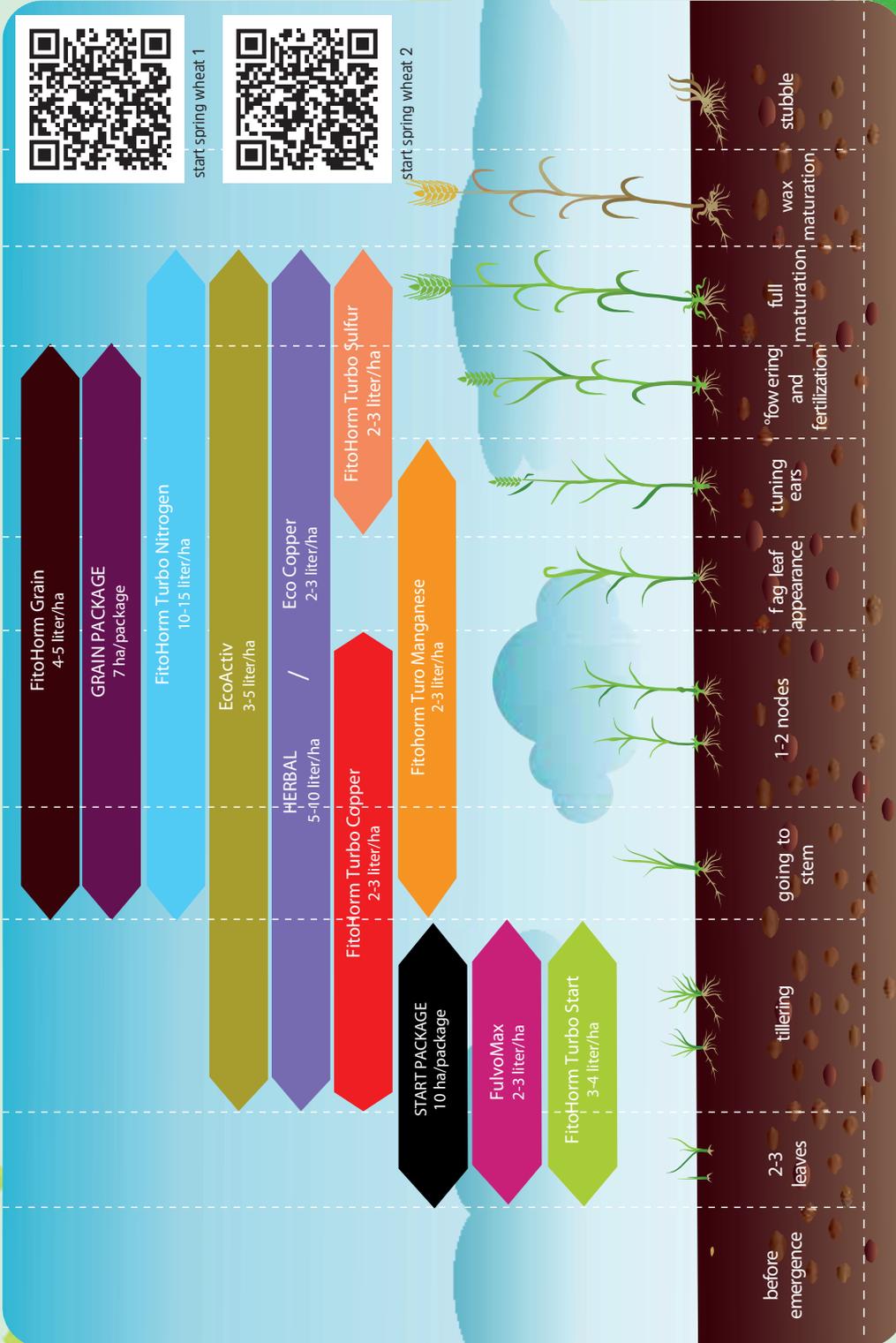
Plant conditioners		N	Fulvo acid	Amino acid	MgO	SO ₃	Fe	Mn	Cu	Zn	B	Mo	Field dose
		%	%	%	%	%	%	%	%	%	%	%	I/ha
1	FulvoMax	-	18	5	-	-	1,5	0,66	0,075	0,115	0,13	0,035	2-3
2	FulvoN	27,7	7	-	-	-	-	-	0,5	-	-	-	5-8
3	HERBAL	Multi-phase, biologically high organic matter.										5-10	

AOP
+ 1pAOP
+ 1pAOP
+ 1p

Seed fertilizer (m/v %)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Seed dose
		%	%	%	%	%	%	%	%	%	%	%	%	I/t
1	FitoHorm MagMAX	-	-	-	-	-	-	-	1,3	-	2,5	0,2	0,1	1-3

Inhibitors		Composition	Field dose For 100 l Nitrosol
2	Ureafin	Soil improver containing a urease inhibitor substance: NBPT	1 dl

CEREALS



Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

DURUM WHEAT

Durum wheat cultivation is on the rise in Hungary due to the significant changes in the crop market in recent years, but we are struggling with a slight lag in terms of cultivation experience. The use of foliar fertilizers in durum technology is of greater importance worldwide compared to traditional wheat technology, as both the sensitivity of the plant and the desired quality require fine-tuning of the technology

Durum producers with decades of experience complement their basic and top dressing practices with plant protection treatments in the following way:

To support initial development, 2l/ha of Turbo Start is recommended in the autumn or early spring, which we recommend supplementing with Turbo Copper at a dose of 2L/ha.

To replenish the general other microelement needs of durum wheat, it is recommended to use 5L/ha of Grain or Bio Grain, which is typically applied in one pass with the first fungicide treatment.

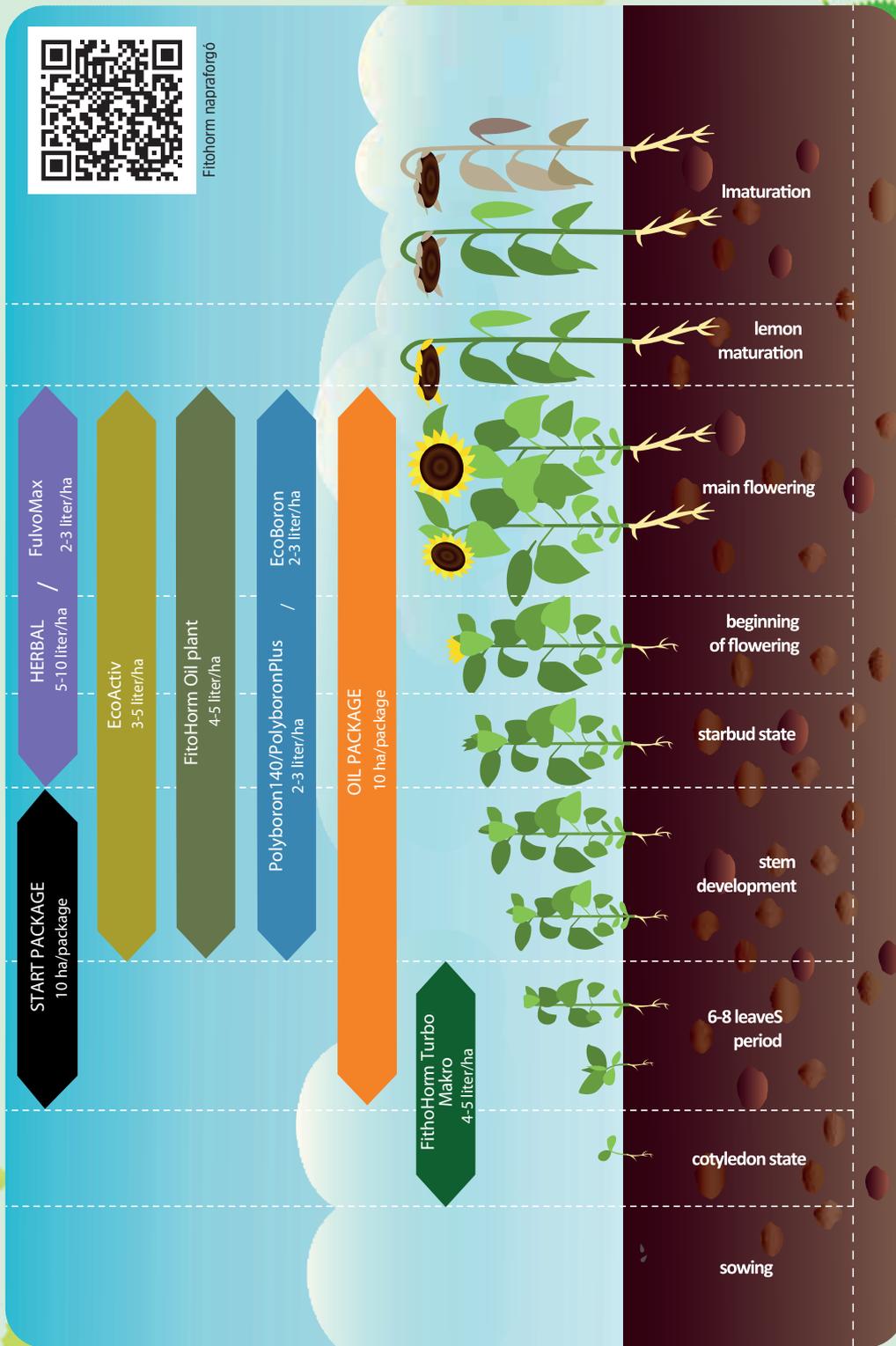
The development of quality - especially glassiness - in the phenological phase before ripening is achieved by using the most effective foliar fertilizers. Therefore, it is essential to supplement nitrogen, potassium, magnesium and sulfur in one pass with the final, ear protection intervention, which elements are included in the largest quantities in our Gluten technology package by packaging Turbo Nitrogen and Turbo Potassium products. (6+2L/ha)

APPLICATION		
1. IN AUTUMN	II. AT THE END OF BUSHINESS, WHEN THE STEM STARTS TO FORM IN SPRING	III. AT EARING / BEGINNING FLOWERING
Purpose:		
1. Inducing the formation of a large number of bushiness nodes.	1.Completion of bushiness and increase in fiber number	1.Completing the bond.
	2. Assisting in smooth stem initiation and stem growth.	2.Improving quality.
	3. To promote strong ear lifting and pushing.	3. Reducing the stress of drought damage.
Recommended foliar fertilizer:		
FitoHorm Turbo Start 2-3 liters / ha	FitoHorm Grain or Bio Grain 4-5 liters / ha	FitoHorm Gluten Package 10 ha / package*

*Note: 1 Gluten package contains: 20 liters of FitoHorm Turbo Potassium + 60 liters of FitoHorm Turbo Nitrogen product.

FURTHER USAGE POSSIBILITIES		
Product	Dosage per hectare	Purpose of application
FitoHorm Turbo Copper	2-3 liters	It improves the drought tolerance of cereals and can be applied together with UAN solutions.
MikroMax	2-3 liters	We recommend using it mainly on sandy soils, as these generally have a low micronutrient content.
FitoHorm Turbo Manganese	2-6 liters	Besides Potassium, Manganese reduces drought stress to the greatest extent.
FitoHorm Turbo Nitrogen	8-10 liter	During stem growth, nitrogen absorption is ensured by the urea form, while the other components in it help provide a gradual and even supply of nutrients over several weeks.

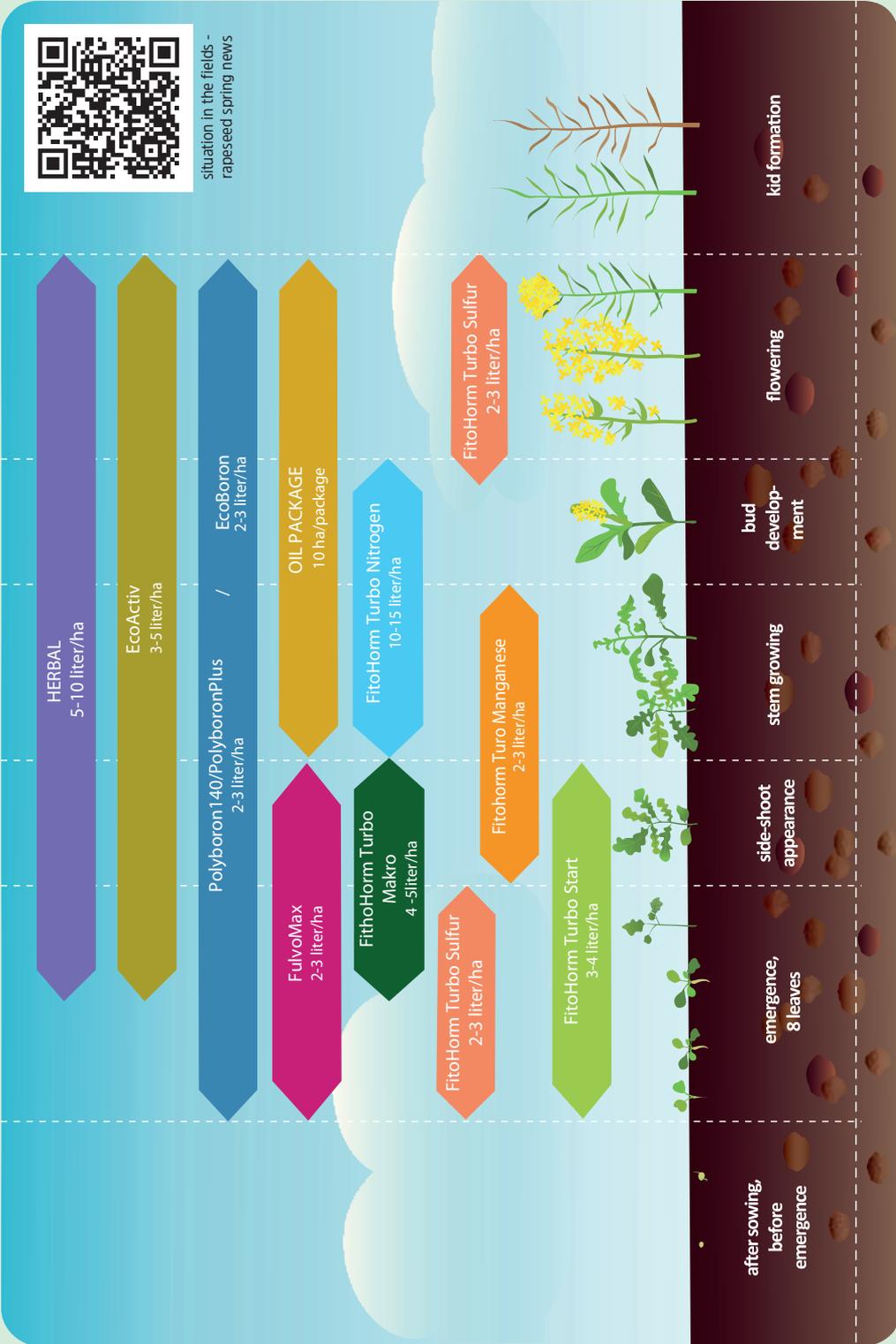
SUNFLOWER



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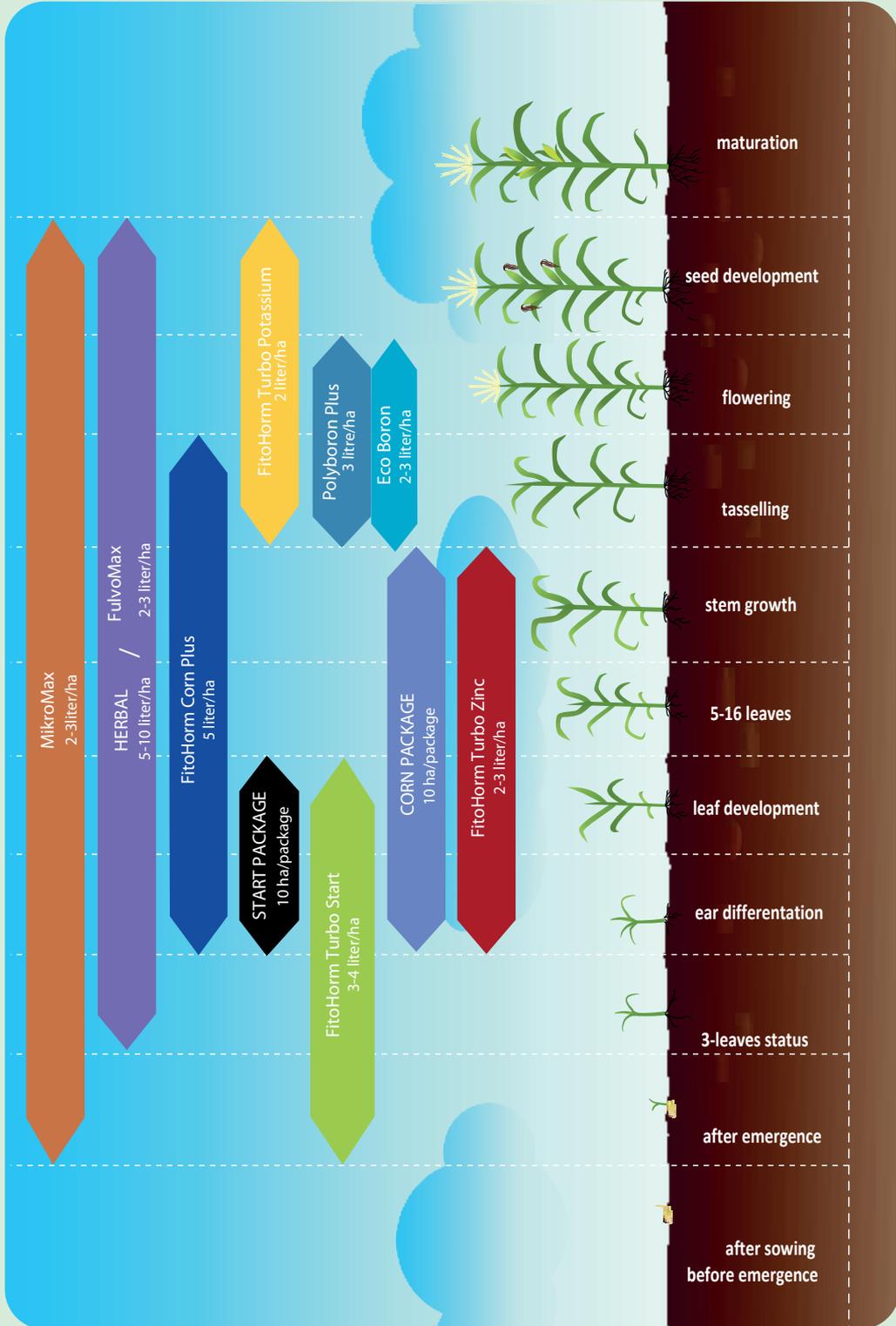
AUTUMN COLESEED

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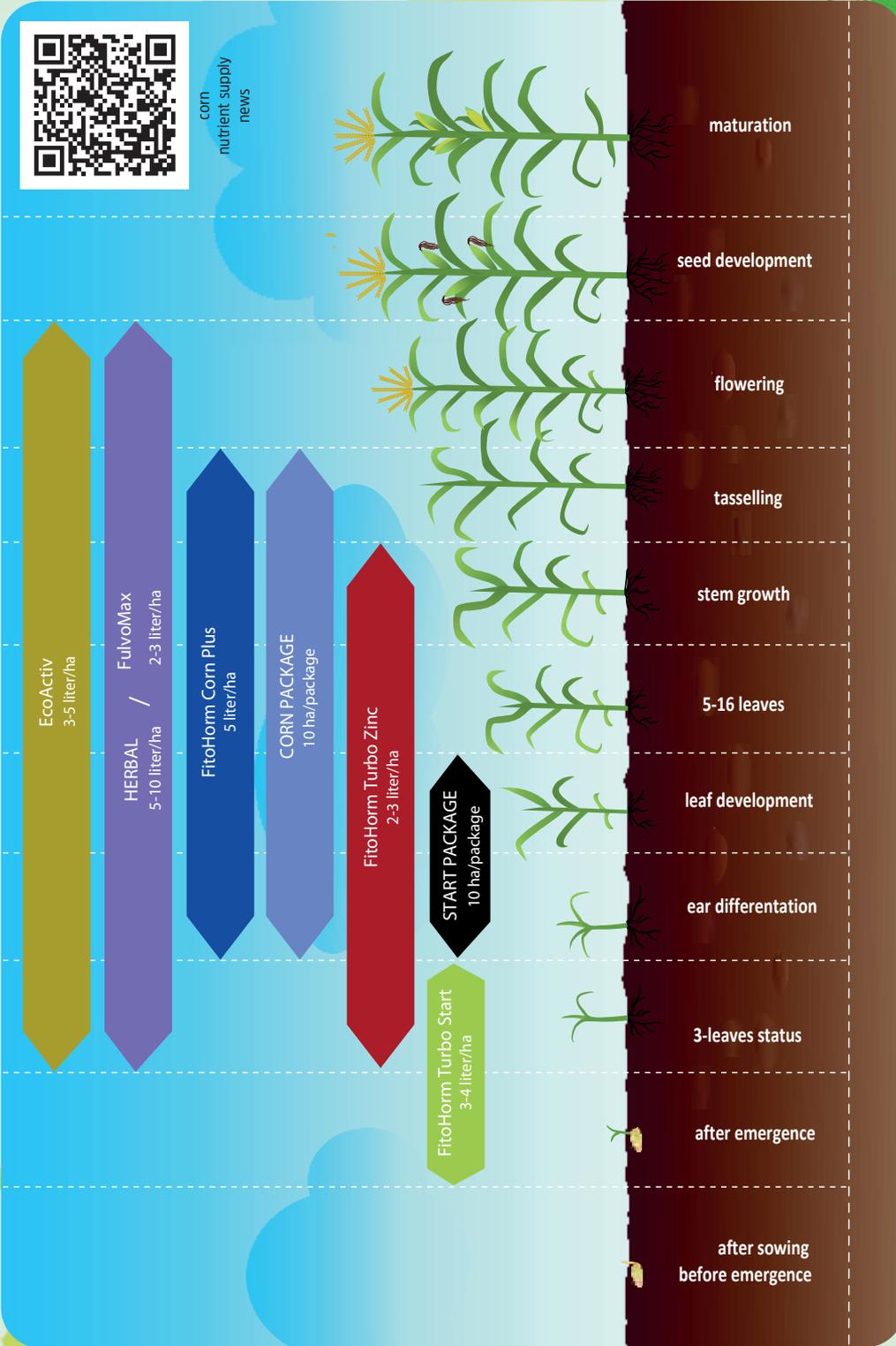


SWEETCORN

Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!



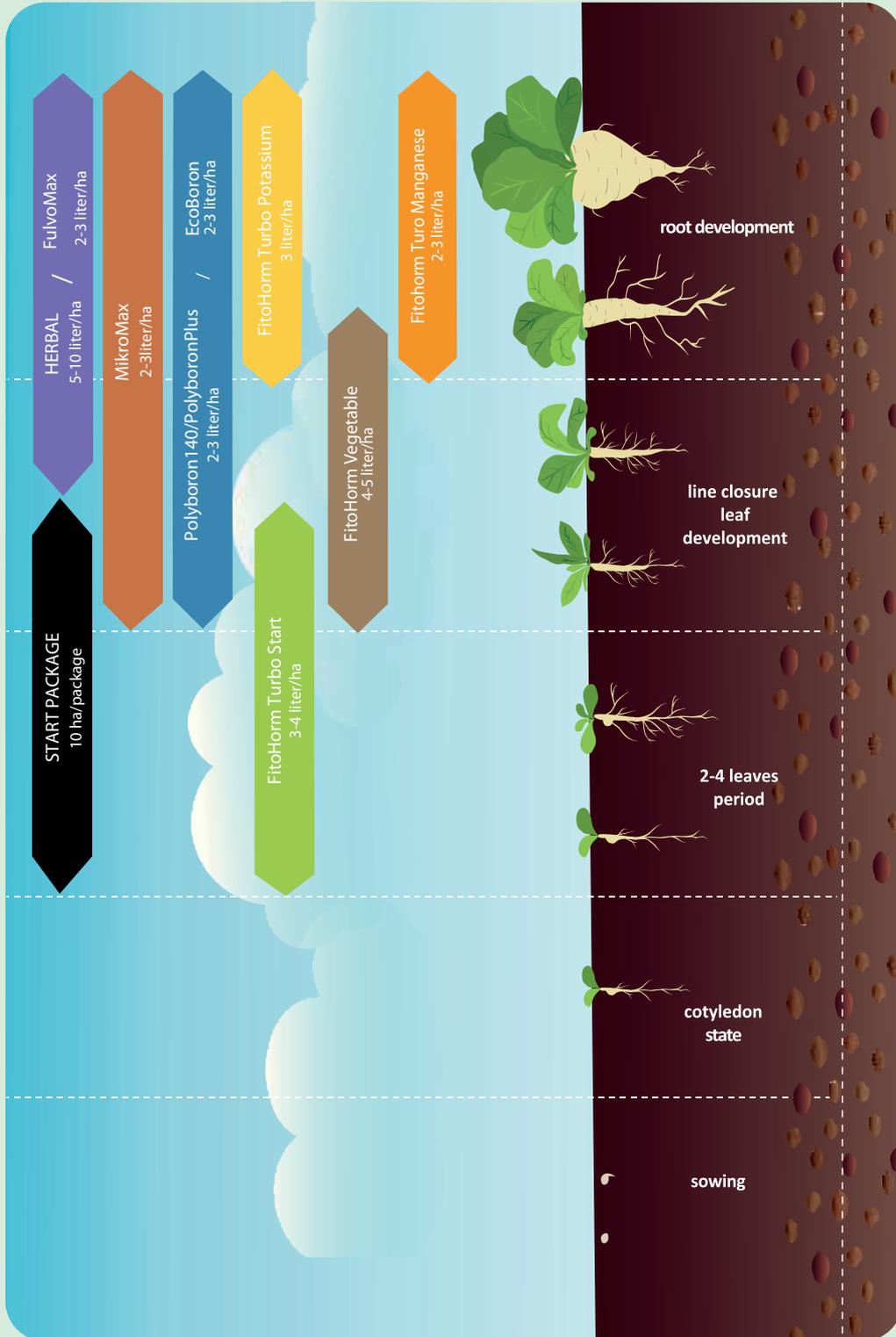
CORN



Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

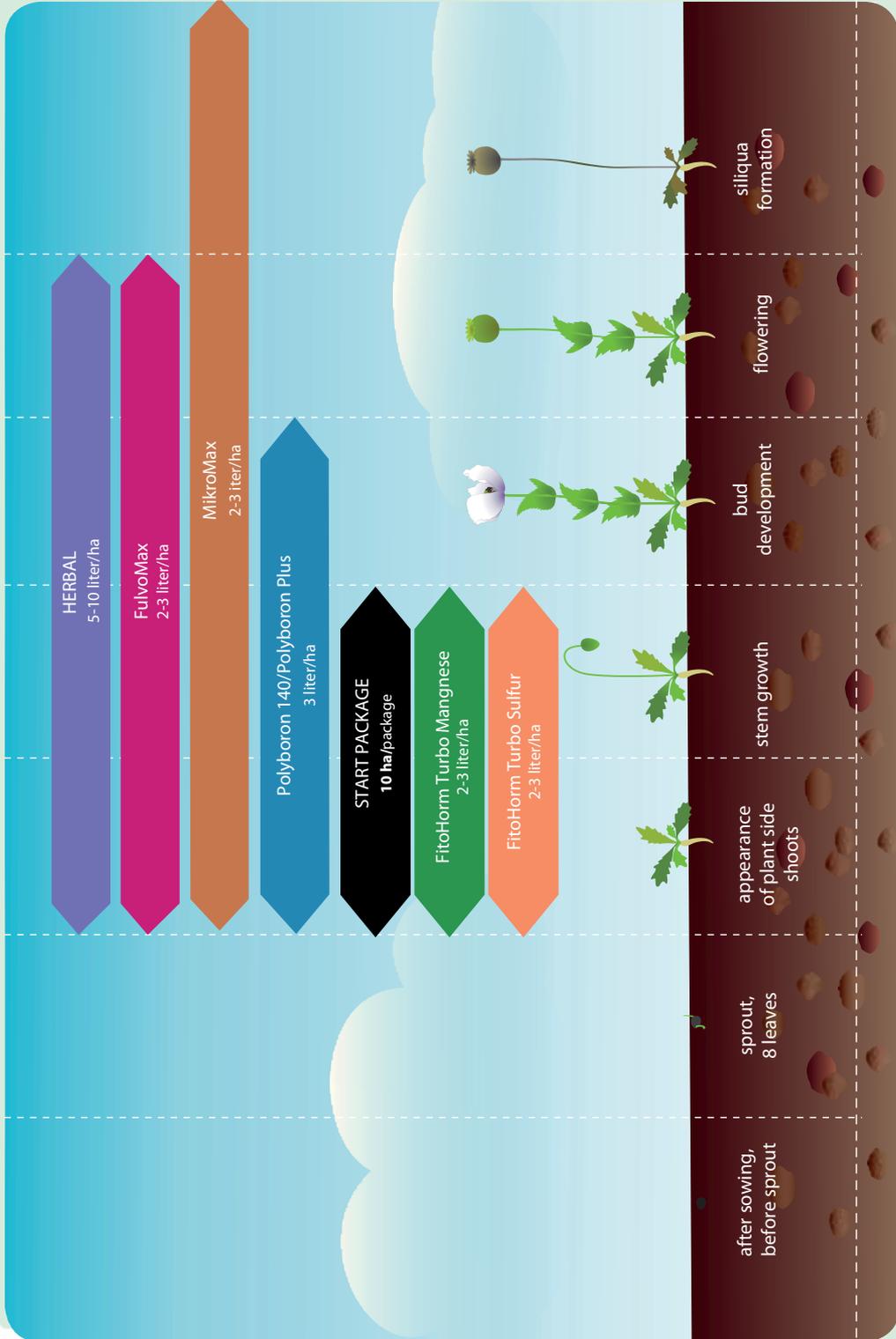
SUGAR BEET

FIELD



Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

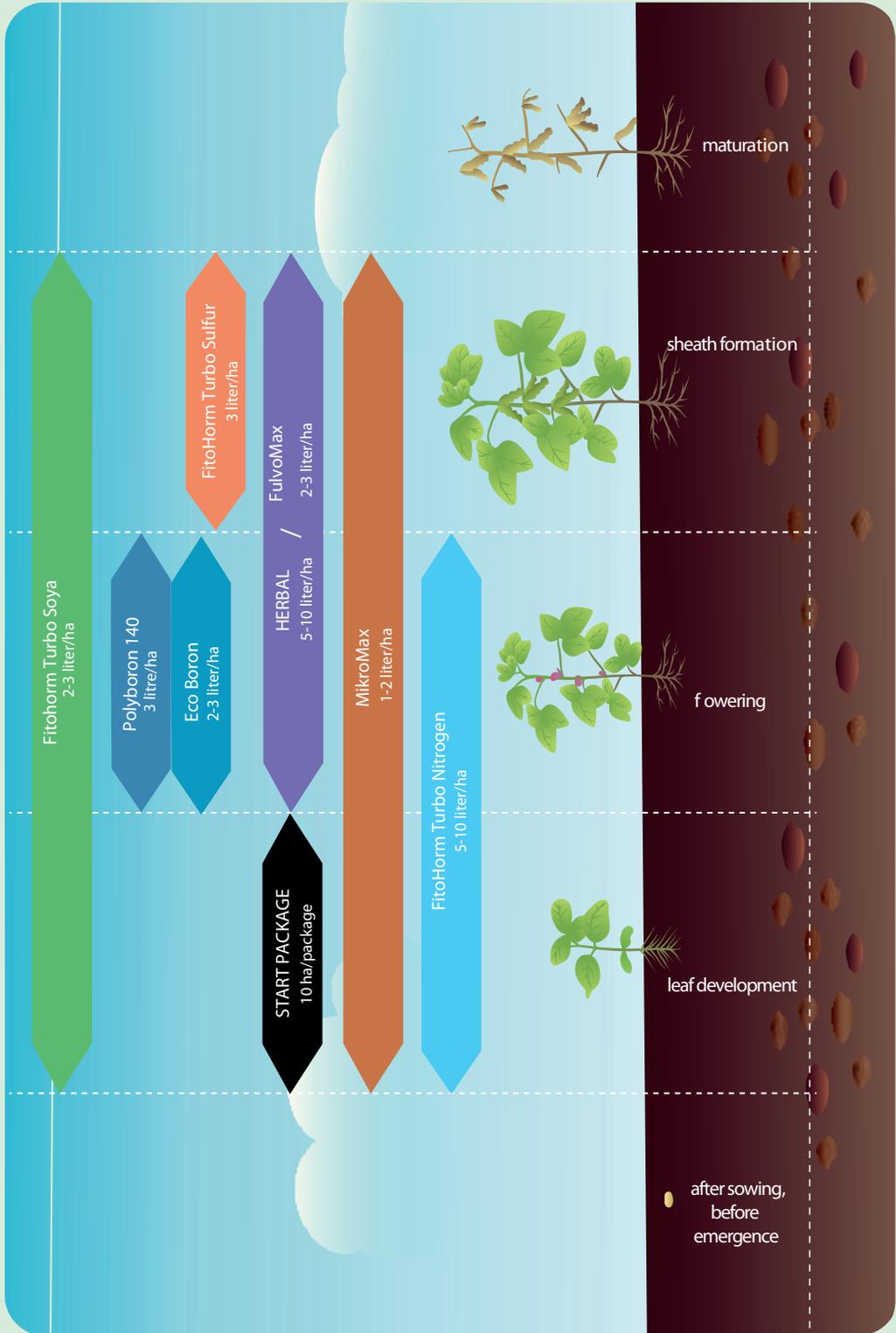
POPPY



Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

SOYA, BEANS, PEAS

Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!



SOY

Recent economic and climatic changes have prompted us to rethink our crop production “habits”, and one of the old and new players in this is soybean. As an oilseed crop, soybean offers many opportunities to encourage higher yields through its nutrient supply, but this element of its cultivation is highly controversial, it is a plant with high nutrient requirements, but compared to our other spring-sown crops, it is perhaps more modest in terms of inputs. It is a very responsive and grateful plant when fed through the leaves at the right time, with the right nutrients. Our Turbo Start product, recommended to support its post-emergence development, responds well to high phosphorus content from its initial development to the end of maturation, especially until the leaf closure period. Similar to sunflower, it requires potassium supplementation through the leaves, especially in the period after leaf closure.

Among the micronutrients, sulfur is definitely worth paying attention to during pod setting and grain saturation. Sulfur can be supplemented together with potassium with our Turbo Potassium product at a dose of 3 l/ha.

In terms of microelements, the first thing we have to do is boron. It is continuously required until flowering and, influencing numerous physiological processes, can be applied several times in smaller doses to ensure continuous access to boron for soybeans. We recommend Polyboron Plus at a dose of 3 l / ha.

Molybdenum is the next thing we need to talk about, its importance in soybeans is so important in nodule formation and nitrogen metabolism. Our recommended product is Turbo Molybdenum at a dose of 2 l / ha.

Application		
From the 4-leaf stage to flowering 1-3 times	In blooming 1-2 times	1-2 times during the seed growth period
Purpose:		
1. Helping root nodules develop	1. To promote fertilization.	1. Improve nutrient and water uptake from the soil.
2. Ensuring dynamic development	2. To help the flow and incorporation of assimilates into the plant	2. Prevent the development of micronutrient deficiencies due to stress.
		3. Ensure the incorporation of large amounts of protein and oil.
Recommended foliar fertilizer:		
Fitoform Start package 10 ha/package*	Polyboron Plus 2-3 liters / ha	Fitoform Turbo Potassium 2-3 liters / ha

*Note: 1 Fitoform Start package contains: 20 liters of FitoHorm Turbo Start + 20 liters of FitoHorm FulvoMax product

FURTHER USAGE POSSIBILITIES		
Product	Dosage per hectare	Purpose of application
Fitoform Soy	4-5 liters / ha	It provides sufficient nutrients for the development of a strong shoot system.
Fitoform Turbo Sulfur	2-3 liters	It increases the dry matter content of plants and reduces drought damage.

FitoHorm®

...PLANT NATURALLY DESERVES IT.

Plant conditioners



FulvoMax

Fulvic acids +
Amino acids
2-3 liter/ha

**AÖP
+ 1p**

FulvoN

Nitrogen-containing
Fulvic acid +
Chelated copper
5-8 liter/ha

**AÖP
+ 1p**



BOTH PLANT CONDITIONERS WORTH 1 POINT IN THE AGROECOLOGY PROGRAM

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HORTI- CULTURE



FOR HORTICULTURAL CULTURES

COMPOSITION OF PRODUCTS

High Fertilizer Solution Fertilizers (w/v %)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	plantation dose	Horticultural dose
		%	%	%	%	%	%	%	%	%	%	%	%	%	%
1	Polyboron 140	-	-	-	-	-	-	-	-	-	-	14	-	0,5-1,5	3-5
2	Polyboron Plus	-	-	-	-	-	-	-	-	0,15	-	12,5	0,03	0,5-1,5	3-5
3	FitoHorm Turbo Nitrogen	30	-	-	3	6,5	-	-	-	0,01	-	-	-	0,5-1,5	12-18
4	FitoHorm Turbo Magnesium	4	35	-	10	-	-	-	-	-	-	-	-	0,5-1,5	3-5
5	FitoHorm Turbo Sulfur	20	-	-	-	60	-	-	-	-	-	-	-	0,5-1,5	3-5
6	FitoHorm Turbo Potassium	4	-	36	-	57	-	-	-	-	-	-	-	0,5-1,5	3-5
7	FitoHorm Turbo Calcium	12	-	8	2,7	-	13,5	-	-	-	-	-	-	0,5-1,5	4-6
8	FitoHorm Turbo Copper	20	-	-	-	11,5	-	-	-	8	-	-	-	0,5-1,5	3-5
9	FitoHorm Turbo Zinc	-	-	-	-	-	-	-	-	-	10	-	-	0,5-1,5	3-5
10	FitoHorm Turbo Makro	10	10	10	-	-	-	-	-	-	-	-	-	0,5-1,5	5-7

Multi-fertilizer solution fertilizers (w/v %)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Plantation dose	Horticultural dose
		%	%	%	%	%	%	%	%	%	%	%	%	%	%
1	MikroMax	-	-	-	-	-	-	3	1,32	0,15	0,23	0,26	0,07	0,5-1,5	3-5
2	MAKROSOL	8	4	5	-	-	-	-	-	-	-	-	-	0,5-1,5	5-7
3	FitoHorm Grapes-Fruits	-	-	-	2	5	-	2	-	-	-	0,5	-	0,5-1,5	5-7
4	FitoHorm Vegetable	18	-	-	5	13,5	-	-	0,2	-	-	0,2	0,004	0,5-1,5	5-7

Eco products (m/v %)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Plantation dose	Horticultural dose
		%	%	%	%	%	%	%	%	%	%	%	%	%	%
1	EcoBoron	18	-	-	-	-	-	-	-	-	0,25	6	0,005	0,5-1	3-4
2	EcoActiv	-	-	-	3	6,5	-	0,2	0,4	0,72	0,12	0,12	0,012	0,5-1	3-4
3	EcoCopper	12	-	-	-	5	-	-	-	4	-	-	0,05	0,5-1	3-4

COMPOSITION OF PRODUCTS

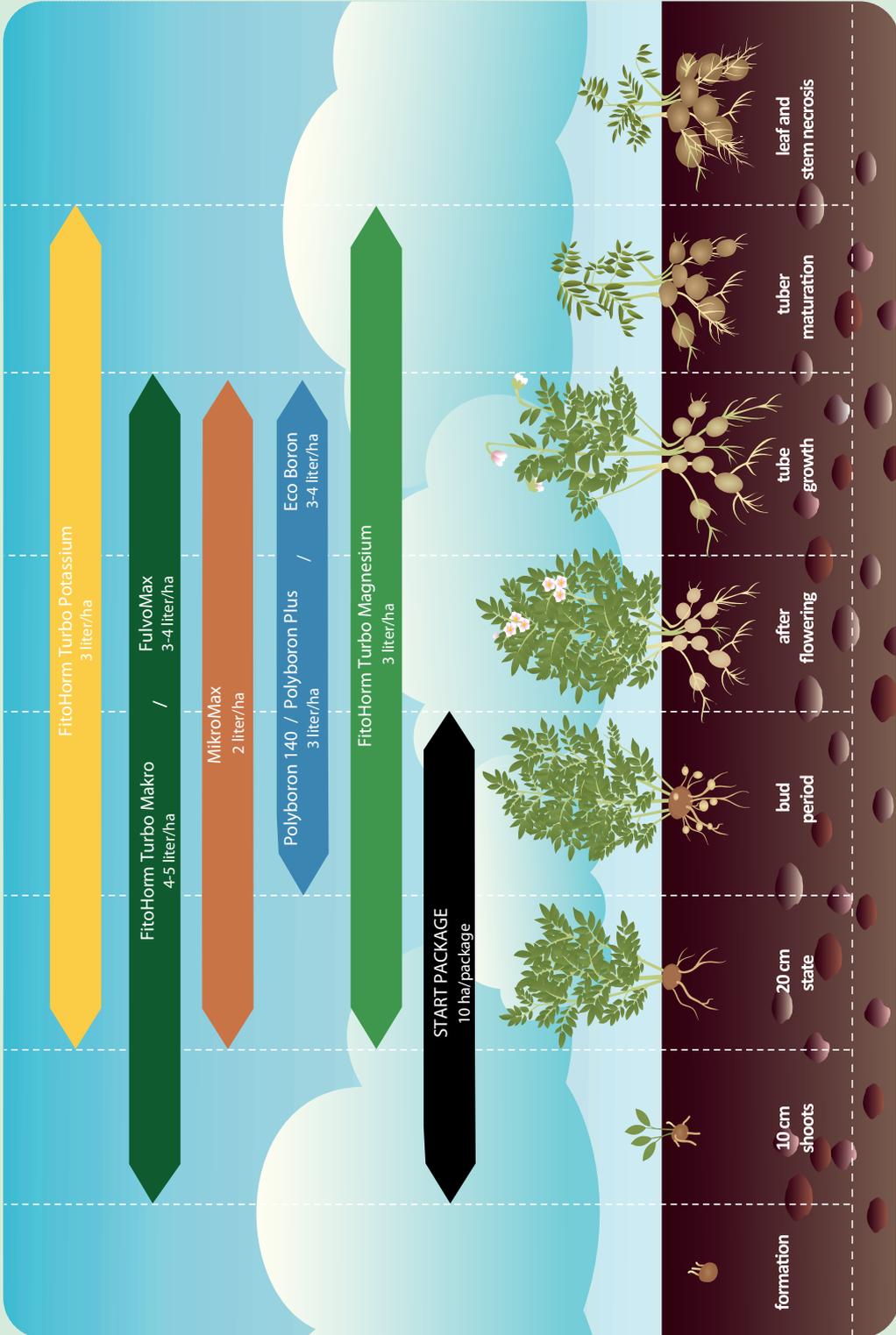
Mono Elemental Fertilizers (w/v %)		Composition(%)				Plantation dose	Horticultural dose
						%	l/ha
1	FitoHorm 10 B	Boron solution	B	2,5		0,5-1,5	4-6
2	FitoHorm 14 N	Nitrogen solution	N	32		0,5-1,5	10-15
3	FitoHorm 24 Mg	Magnesium solution	MgO	6,6	+ SO ₃ 10,6%	0,5-1,5	10-15
4	FitoHorm 30 P	Phosphorus solution	P ₂ O ₅	18	+ N 7%	0,5-1,5	10-15
5	FitoHorm 39 K	Potassium solution	K ₂ O	9	+ P ₂ O ₅ 6% + N 3%	0,5-1,5	8-10
6	FitoHorm 40 Ca	Calcium solution	CaO	21	+ N 12%	0,5-1,5	7-9
7	FitoHorm 40 Ca (nitrogen free)	Calcium solution	CaO	17		0,5-1,5	7-9
8	FitoHorm 54 Mn	Manganese solution	Mn	4		0,5-1,5	5-7
9	FitoHorm 55 Fe	Iron solution	Fe	4		0,5-1,5	5-7
10	FitoHorm 63 Cu	Copper solution	Cu	4		0,5-1,5	6
11	FitoHorm 65 Zn	Zinc solution	Zn	4		0,5-1,5	6-8

Solid, irrigating fertilizers (m/m %)		N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Horticultural dose
		%	%	%	%	%	%	%	%	%	%	%	%	tápoldatnak 100l vízbe
1	FitoHorm Complete Plus	14	7	21	-	22	-	0,165	0,032	0,017	0,02	0,01	0,002	0,5 kg

Iron chelates (w/v %)		Iron content	Plantation dose	Horticultural dose
1	FitoFerr T-3 for soil treatment	3	50-100 ml/vine	50-100 ml/vine

Plant conditioners		N	Fulvo acid	Amino acid	MgO	SO ₃	Fe	Mn	Cu	Zn	B	Mo	Field dose
		%	%	%	%	%	%	%	%	%	%	%	l/ha
1	FulvoMax	-	18	5	-	-	1,5	0,66	0,075	0,115	0,13	0,035	2-3
2	FulvoN	27,7	7	-	-	-	-	-	0,5	-	-	-	5-8
3	HERBAL	Multi-phase, biologically superior organic materials.										5-10	

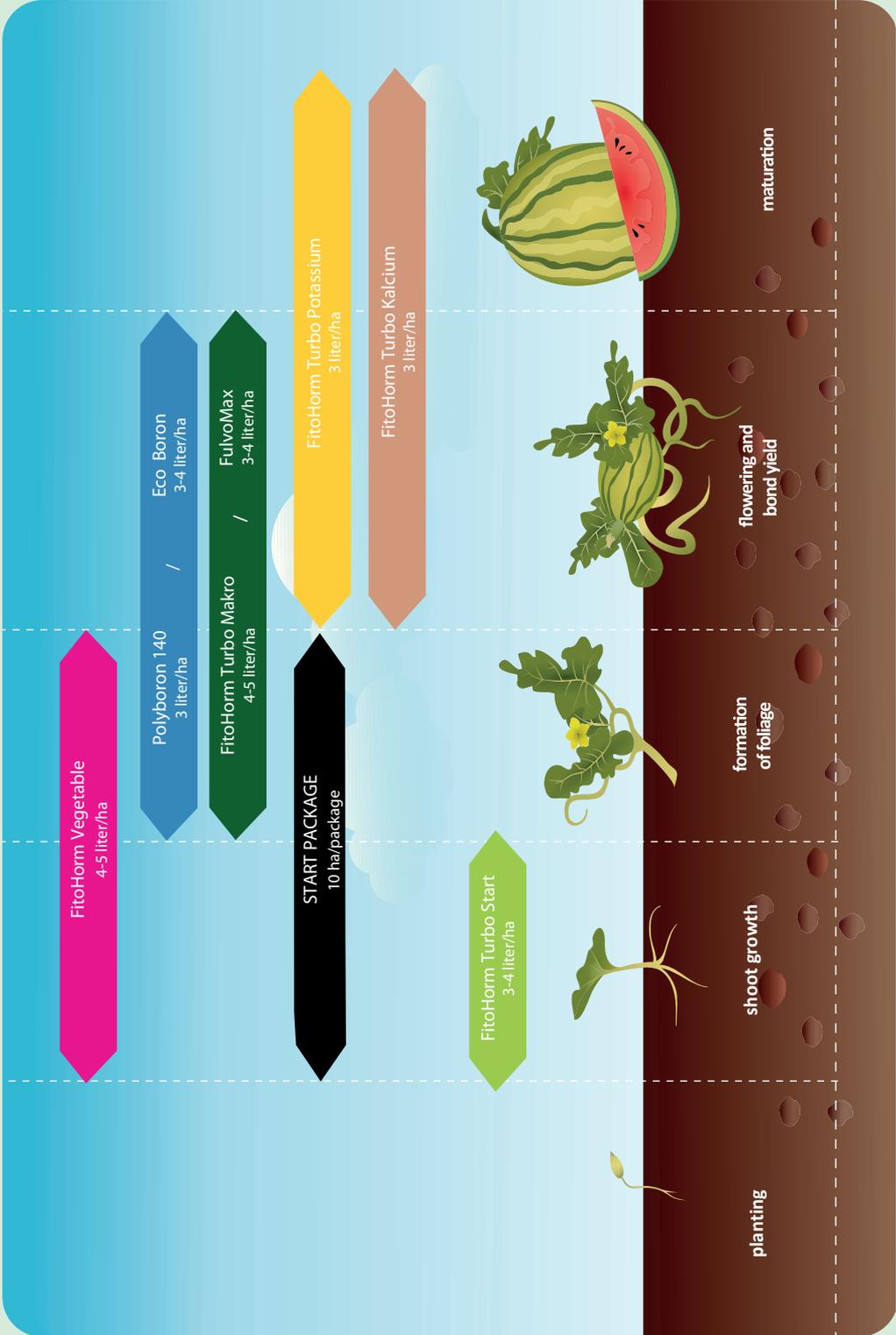
POTATO



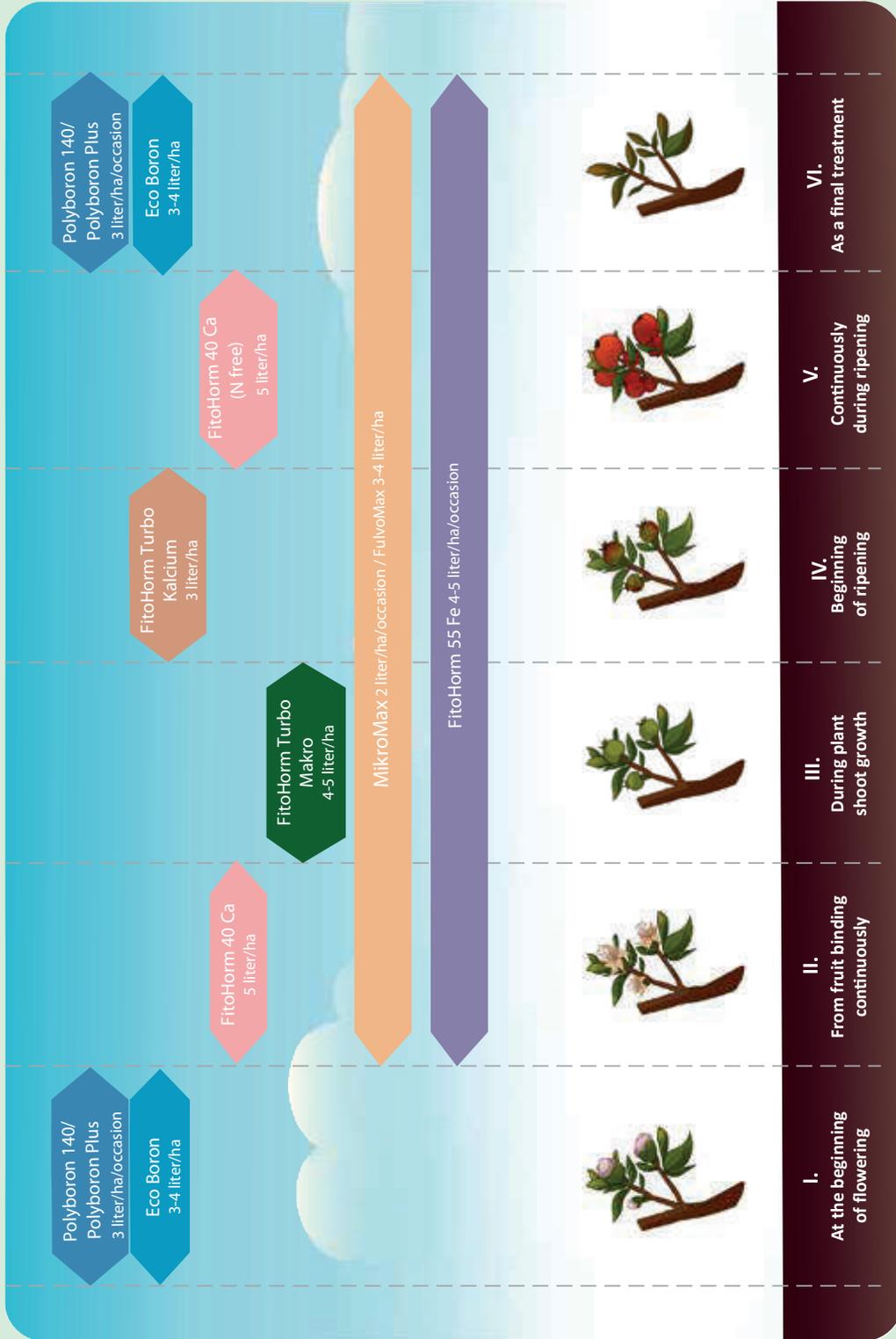
Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

CUCURBITS

Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!



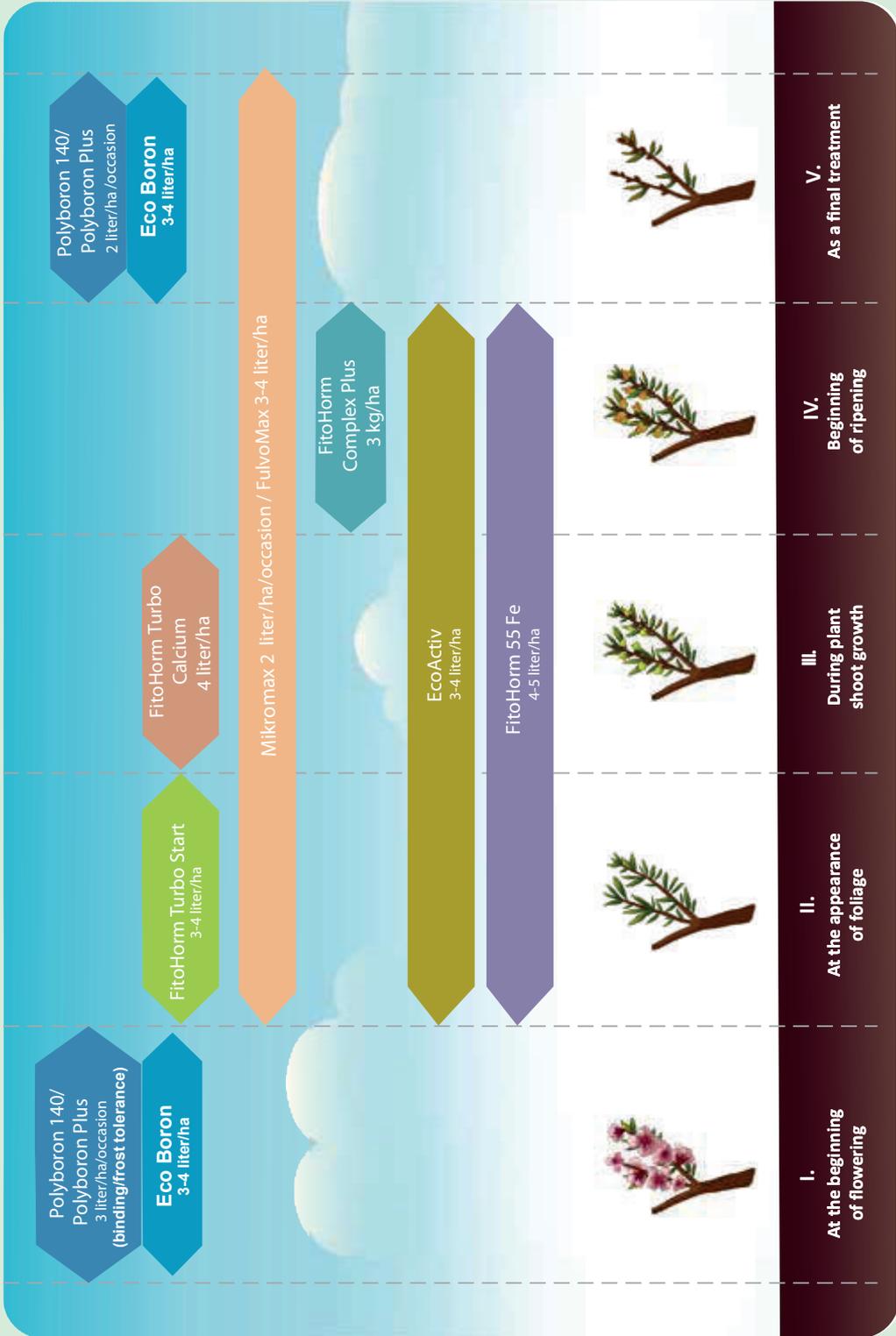
APPLE



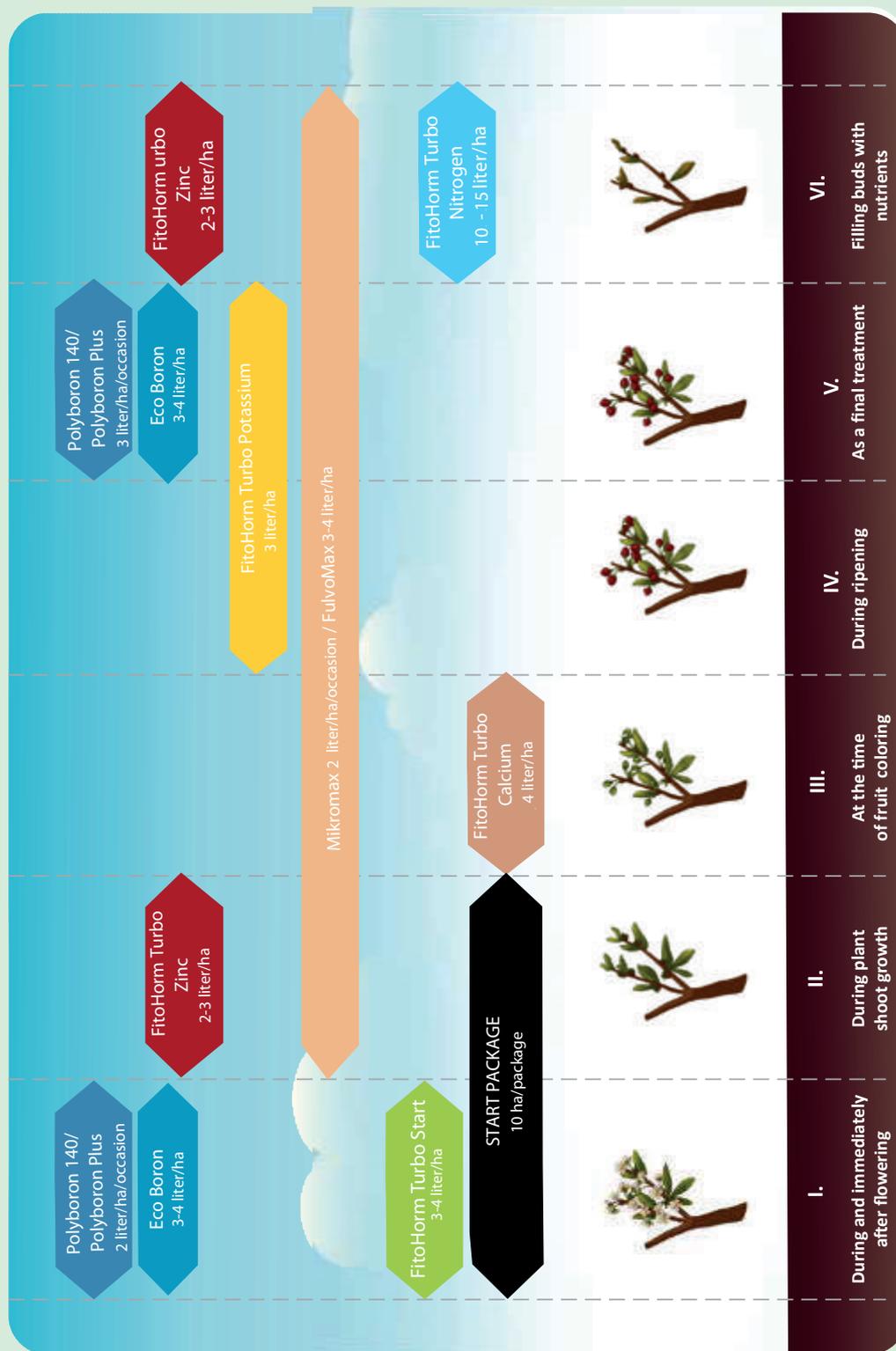
Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

PEACH, APRICOT AND PLUM

Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!



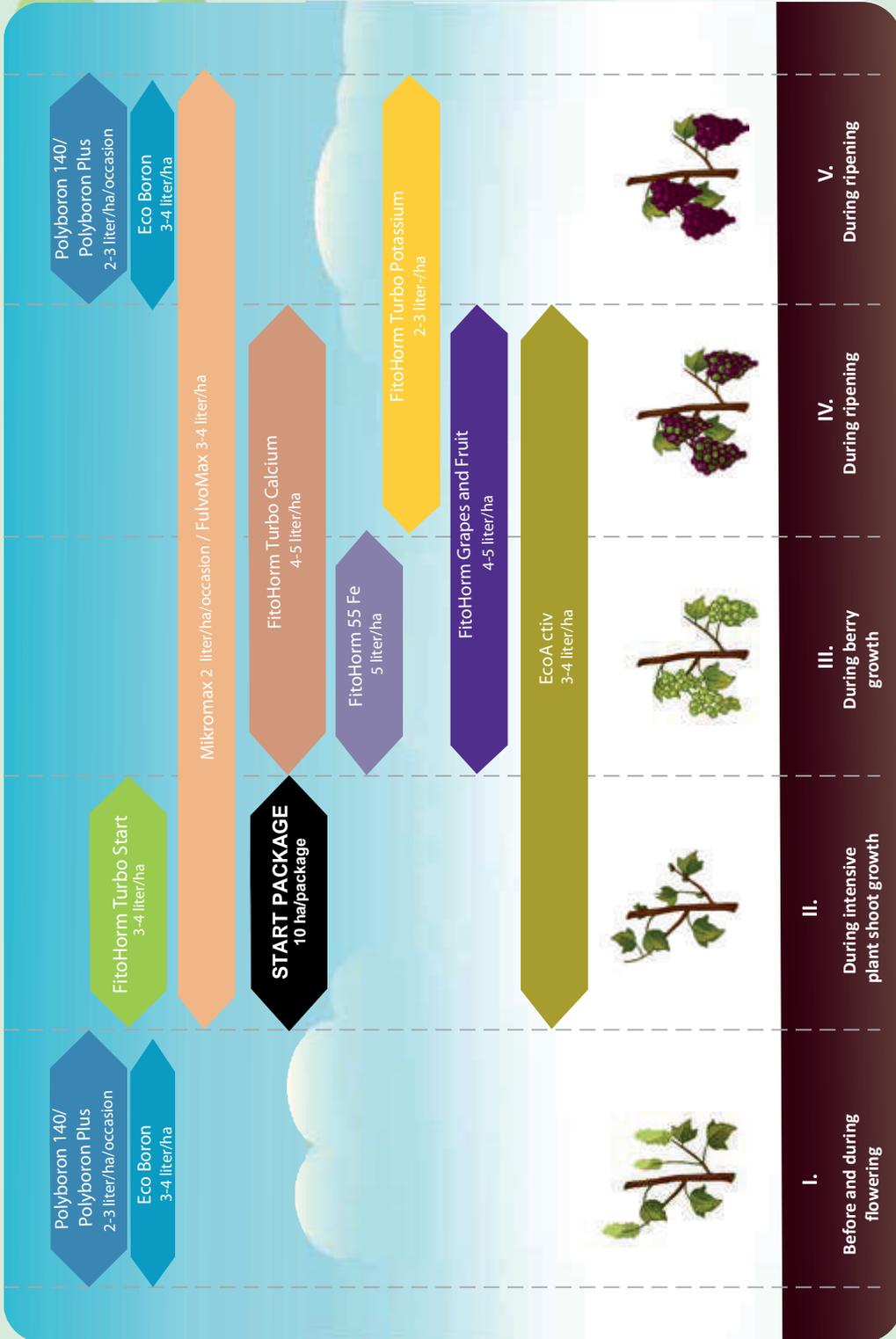
CHERRY AND SOUR CHERRY



Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!

GRAPE

Regarding the combined use of the different products recommended for each phenological state, always make a mixing test or contact our competent consultants!



PEPPER, TOMATOES HOUSEHOLD AND BACKYARD TECHNOLOGICAL PROPOSAL

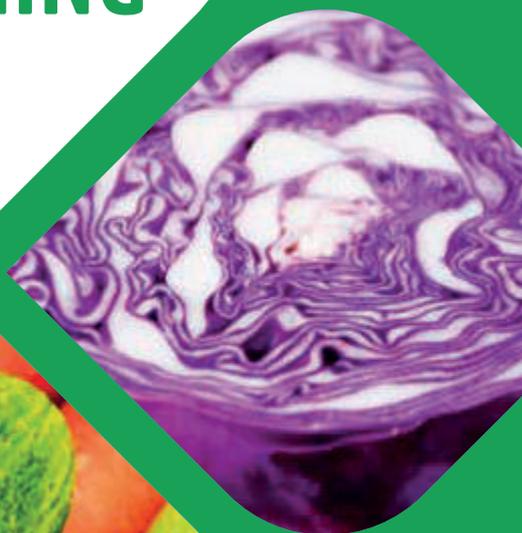
Nowadays, with the change in consumer habits, the production of good-tasting, uniform-shaped, attractive, "large" fruit has come to the fore. This is true for peppers and tomatoes, regardless of the type of crop they produce. Growing high-quality, healthy plants is essential for the production of high-quality peppers and tomatoes. The foliar fertilization and nutrient solution technology developed by FitoHorm Kft. can help with this. The proposal is primarily designed for small garden and backyard growing conditions. The proposed technology helps ensure that the internal value indicators, color, spices and aromas of the fruits can develop properly. Through this, anyone who applies our proposal below has the opportunity to produce valuable fruits. In the case of larger-scale production and more professional needs, we are of course also at the disposal of our producers within the framework of personal consultation. The particularly high meso- and microelement content of the materials present in the technology, due to their appropriate timing, allows for the production of high-quality fruit even under average growing conditions. In all cases, perform a mixing test with the combination partners before plant protection treatments, and observe all relevant rules when applying. The solution mixed with the nutrient solution must be applied within 6-8 hours.

Sowing seeds, raising seedlings, planting		
I. After sowing	II. When growing seedlings, apply to the pricked plants	III. For plants planted in their permanent location
Application		
For irrigation 1x time.	1-2 times.	For the first time.
Recommended foliar fertilizer:		
Fitohorm Turbo Start 1 liter / 100 liters, or 1% solution for irrigation, as a nutrient solution	Fitohorm Turbo Makro 1-2 liters / 100 liters, or as a 1-2% nutrient solution +Fitohorm MikroMax 0.5% spray solution applied as foliar fertilizer.	Fitohorm Turbo Makro 1-2 liters / 100 liters, or 1-2% nutrient solution

Shoot growth, flowering, fruit growt		
I. Shoot growth	II. During the period of flower bud development (immediately before flowering at the beginning of flowering) New flowering in a wave (for semi determinate and continuous growth genetics)	III. During the growing season of fruits and crops Fruit growth at the end, ripening, closing treatment
Application		
2-3 times in the initial period.	1-2 times	1-2 times
Recommended foliar fertilizer:		
Fitohorm Komplett Plusz -0.2-0.5 kg/100 liters into irrigation water, as a nutrient solution, every 10-14 days		
Fitohorm Turbo Calcium 1% spray concentration as foliar fertilizer + Fitohorm MikroMax 0.5% spray concentration as foliar fertilizer	Fitohorm Polybor Plus 0.5% spray solution concentration, as foliar fertilizer	Fitohorm Turbo Calcium 1% spray concentration as foliar fertilizer+ Fitohorm MikroMax 0.5% spray concentration as foliar fertilizer

- + treatment of special micronutrient needs or deficiency symptoms:
 - with **Fitohorm MikroMax** solution
 - Applied in nutrient solution at a concentration of 0.1%
 - Applied as a foliar fertilizer at a concentration of 0.5% in spray solution

ORGANIC FARMING



ORGANIC FARMING AND FITOHORM

Organic farming or ecological farming, as the farmers call it, is a carefully planned cultivation system where the use of synthetically produced chemicals and fertilizers is prohibited, while the use of natural active ingredients and minerals is necessary and recommended, as well as physical clearance, and the careful individual plant care. The basic principle of ecological farming is to continue the production of economic plants and animals in such a way as to make the best possible use of the ecological properties of the place of production, while at the same time making the least possible intervention in the local ecosystem and in no way harming or polluting it. **FitoHorm chelates are completely natural.** The characteristics of the growing area, the soil properties, the climate, the available water sources, the natural plant cover (remains) must first be accurately known in order to be able to use and protect our plants. Animals in the area can help a lot in plant protection and maintaining soil strength.

During cultivation, synthetic materials must not be used for any purpose and not even under "force". Efforts must be made to reduce energy consumption, use different organic wastes and renewable sources, giving priority to locally available sources. Pay attention to the effect these have on our plants, e.g. pentosan effect, zinc deficiency, since these can be prevented, there is no need to be afraid of them, because we can counter them with FitoHorm products. The cultivated plants must be selected taking into account the characteristics of the area, sometimes it is difficult to ensure the balanced development of the plants. In this situation, FitoHorm products can be used with great efficiency and it is possible to avoid that plant protection in degraded stands becomes intractable.

FitoHorm's organic products help plant protection and ensure quality goods at the same time.



FOR ORGANIC FIELD AND HORTICULTURAL CULTURES

COMPOSITIONS OF PRODUCTS

Multi-fertilizer solution fertilizers (w/v %)	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Arable dose l/ha	Horticultural dose (ml/10 l water)				
	%	%	%	%	%	%	%	%	%	%	%	%		foliage treatment	Irrigation			
1 FitoHorm Bio Grain	-	-	-	-	-	-	0.5	1	1.8	0.3	0.3	0.03	4-5	-	-			
2 FitoHorm Soy	-	-	-	-	-	-	0.4	0.5	0.5	1.5	0.5	0.3	2-3	-	-			
3 FitoHorm Grape Fruit	-	-	-	2	5	-	2	-	-	-	0.5	-	4-5	100-160	20			
4 MicroMax	-	-	-	-	-	-	3	1.32	0.15	0.23	0.26	0.07	2-3	60-80	10			
Solution fertilizers with a high active ingredient content (m/v %)	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo	Arable dose l/ha	Horticultural dose (ml/10 l water)				
	%	%	%	%	%	%	%	%	%	%	%	%		foliage treatment	Irrigation			
1 Polyboron 140	-	-	-	-	-	-	-	-	-	-	14	-	2-3	40-60	10			
2 Polyboron Plus	-	-	-	-	-	-	-	-	0.15	0.15	12.5	0.03	2-3	40-60	10			
3 FitoHorm Turbo Zinc	-	-	-	-	-	-	-	-	-	10	-	-	2-3	80-160	20			
Monoelement solution fertilizers (w/v %)	Composition																	
	Arable dose l/ha	Horticultural dose (ml/10 l water)																
1 FitoHorm 10 B	Boron solution					B	2.5									3-5	100-200	10-50
2 FitoHorm 40 Ca (nitrogen free)	Calcium solution					CaO	17									5-7	100-200	10-50
3 FitoHorm 54 Mn	Manganese solution					Mn	4									3-5	100-200	10-50
4 FitoHorm 55 Fe	Iron solution					Fe	4									3-5	100-200	10-20
5 FitoHorm 63 Cu	Copper solution					Cu	4									4	100-200	10-50
6 FitoHorm 65 Zn	Zinc Solution					Zn	4									3-6	100-200	10-20
Iron chelates (w/v %)	Iron content																	
	Arable dose l/ha	Horticultural dose (ml/10 l water)																
1 FitoFerr T-3 for soil treatment																		
Plant conditioners	N	Fulvic acids	Amino acids	MgO	SO ₃	Fe	Mn	Cu	Zn	B	Mo	Arable dose l/ha						
	%	%	%	%	%	%	%	%	%	%	%							
2 HERBAL	Multi-phase, biologically outstanding organic materials.																	
												50-100 ml/vine	5-10					

Fito Horm®

...PLANT NATURALLY DESERVES IT

ECO PRODUCTS



Eco Boron



Eco Copper



Eco Aktiv

THREE REASONS TO USE IT:

An effective solution

Reasonable price

Economical packaging
(600, 1000 liters)

FIND OUR CONSULTANTS FOR FREE PERSONAL ADVICE!

www.fitohorm.hu

Tel.: +36 30 708 1461



PRODUCTS

> GRAIN

It is one of the most popular products of Hungarian foliar fertilization, which maintains its leading role in the nutrition of ear plants to this day. It is a multi-active, complex preparation that can ensure the nutritional supply of grains when used in any phenological phase. When compiling the content of meso- and microelements, we focused on those nutrients (S, Cu, Mn, N, Zn), which are needed in larger quantities by the ear plants during their development.

In addition to the microelements, the FitoHorm Grain solution fertilizer contains a modern chelating agent that ensures the stability of the solution, excellent mixability, and the rapid and efficient uptake of microelements through the leaves. We recommend using the product in any phenology, depending on the soil cover, until the beginning of flowering.

Its use improves the condition and resistance of plants, as well as the quality and quantity of the crop!

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	15	-	-	-	4	-	-	0,2	1,25	0,2	-	0,0016
m/v%	18	-	-	-	5	-	-	0,25	1,5	0,25	-	0,002
g/l	180	-	-	-	50	-	-	2,5	15	2,5	-	0,02

Chelating agent: EDDHSA

Advantages of use:

- » Plant-specific, appropriate microelement composition in an ideal ratio,
- » provides a harmonious supply of nutrients,
- » liquid, immediately absorbable form (nutrients in real solution)

Directions for use

Area of use	Dose
Arable land	4-5 liters/ha when bushing and/or flowering.

The product is also available in the form of a cereal package.



Applied independently or in one pass with plant protection works.



Suitable for drone use

It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.



To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> ORGANIC GRAIN

The product contains only chelated microelements, however, in a larger quantity than FitoHorm Grain, so we recommend it not only to organic farmers, but also to those who are specifically thinking about microelement supplementation, and want to implement it in a complex way.

Organic Grain can be mixed well with UAN solutions: since it contains the microelements in chelated form, there is no need to worry about them binding to soil colloids, and it is also excellently utilized as a nutrient solution! We recommend using it in the spring, but due to its higher copper content, even autumn application may be justified in a well-developed grain.

Its use improves the condition and resistance of plants, as well as the quality and quantity of the crop!

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	0,46	0,83	1,5	0,25	0,25	0,025
m/v%	-	-	-	-	-	-	0,5	1	1,8	0,3	0,3	0,03
g/l	-	-	-	-	-	-	5	10	18	3	3	0,3

Chelating agent: EDDHSA

Advantages of application:

- » Applied in autumn/early spring, the number of fertile ears increases
- » the water balance improves and the root system's ability to extract nutrients increases,
- » even organic farmers can get the most out of their grain
- » It can also be perfectly mixed and applied with UAN solutions.

Directions for use

Area of use	Dose
Arable land	4-5 liters/ha when bushing and/or flowering. The product is also available in the form of a cereal package.



Applied independently or in one pass with plant protection works.



Suitable for drone use



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.

In the case of foliar fertilization, the basic rules of spraying must also be observed.

To be used only in justified cases. Do not exceed the recommended dosage.



> CORN PLUS

According to research, the lack of meso- and microelements in plants can cause a 5-15% reduction in yield. In many cases, the deficit of these elements manifests itself in a latent way. This means that the parts of the plant that can be examined with the naked eye do not show the classic signs of deficiency, only the quality or quantity of the crop is affected. This type of deficiency of microelements is particularly common on carbonate soils, where the uptake of potassium, magnesium, manganese, boron, as well as zinc and copper is also inhibited.

These problems can be detected by soil and leaf tests. Detected deficiencies can usually be easily remedied with foliar fertilizers. However, without analysis, it is worth focusing on prevention and incorporating a general foliar fertilizer with a high zinc and nitrogen content into the applied agrotechnology, aiming to replenish several elements.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	15	-	-	-	5	-	0,125	0,05	0,005	1,5	0,01	0,0025
m/v%	19	-	-	-	6	-	0,15	0,06	0,006	1,9	0,013	0,003
g/l	190	-	-	-	60	-	1,5	0,6	0,06	19	0,13	0,03

Chelating agent: EDDHSA

Advantages of application:

- » It contains all the essential elements that corn needs
- » improves water balance, pollen production and keeping the pistils moist,
- » helps perfect tube differentiation,
- » ensures good fruit set.

Directions for use

Area of use	Dose
In corn and sweet corn	4-5 litres/ha at the stage of 4-8 leaves and/or at the beginning of crown rot.



Applied independently or in one pass with plant protection works.



Suitable for drone use.

It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.



To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> OIL PLANT

It is the key to the vitality and good condition of our oil plants, which, thanks to its complex composition, can be used in all phases of plant development. Its use significantly improves the effect and efficiency of applied plant protection products. Among the members of the FITOHORM product family, FitoHorm Oil Plant is specially designed to meet the nutritional needs of oil plants (rapeseed, sunflower)..

Its high boron and sulfur content ensures proper bonding, enhances oil synthesis and oil extractability. Boron has the most significant effect on flower and fruit formation, and sulfur has the most significant effect on the quantity and quality of the fruit. Applied independently or in one pass with plant protection works.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	15	-	-	-	5	-	-	-	-	-	3	0,03
m/v%	18	-	-	-	6	-	-	-	-	-	4	0,04
g/l	180	-	-	-	60	-	-	-	-	-	40	0,4

Chelating agent: EDDHSA

Advantages of use:

- » Plant-specific composition,
- » the nutrients in the product increase oil synthesis and oil extractability,
- » its high magnesium content plays an important role in the regulation of carbohydrate metabolism,
- » can be applied in one pass with plant protection works.

Direction for use

Area of use	Dose
Sunflower	4-5 l/ha in the stage of 4-6 leaves and/or in the stage of star buds 3 liters at flowering
Rape	4-5 l/ha 5 l/ha from shoot formation to flowering virágzásig
Other oil plants	4-5 liters/ha at the beginning of flowering



Applied independently or in one pass with plant protection works.



Suitable for drone use.

It can usually be used together with plant protection products, but we recommend checking the compatibility beforehand.



To be used only in justified cases. Do not exceed the recommended dosage.



> GRAPES-FRUITS

The renewed composition of FitoHorm Grape-Fruit has an exceptional and marked greening effect on grapes and fruit species, when applied in any phenological phase. This is fully due to the chelated iron and magnesium content.

Thanks to this, photosynthesis can operate at full efficiency in the treated plants, which results in the formation of a large quantity and good quality crop. Another effect of well-functioning photosynthesis is the ideal energy production and flow, storage of the plant.

COMPOSITION

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	1,6	4	-	1,6	-	-	-	0,4	-
m/v%	-	-	-	2	5	-	2	-	-	-	0,5	-
g/l	-	-	-	20	50	-	20	-	-	-	5	-

Chelating agent: EDDHSA

Advantages of use:

- » It has all the important microelements necessary for healthy fruit, which are needed in the plantation,
- » has an effective iron content, which can be picked up the fastest way,
- » thanks to its high boron content, it improves the fertilization and binding of flowers, as well as reduces the frequency of flower drop,
- » It can also be perfectly mixed with UAN solutions and their utilization can be increased,
- » It can also be used in organic farming.

Suggested Use

Area of use	Dose
Grapes and other fruits	For foliar treatment: 4-5 l/ha/occasion. During the period of intensive shoot growth, spray the foliage at a concentration of 1-2%, repeating every 2-3 weeks in conjunction with plant protection work.
Apple	For foliar application: 4-5 l/ha/time. For nutrient solution: 0.1-0.5% concentration (1-5 l / 1000 l water)



Applied independently or in one pass with plant protection works..



Suitable for drone use..

It can be used together with plant protection products, but we recommend checking the compatibility beforehand



In the case of foliar fertilization, the basic rules of spraying must also be observed.

To be used only in justified cases. Do not exceed the recommended dosage.



> VEGETABLE

The special composition of the product conditions our vegetable plants. Its microelement content stimulates strong hair-root growth, and in the case of tuberous plants, it stimulates the formation of tubers. When used together with plant protection products with an absorbable effect, it helps them enter the plant and transport them within the plant. It is suitable for quickly and effectively eliminating microelement deficiencies and establishing optimal microelement levels in developing leaves and fruits.

The plant becomes more vigorous, greener, and higher yields can be achieved.

By using FitoHorm Vegetables, we can ensure balanced development and high quality for vegetables through foliar fertilization. After application, it strengthens the plant's photosynthesis and the transport of assimilates, which also strengthens their root system. The nutrients it contains help vegetable plants absorb other nutrients in the soil and contribute to their incorporation.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	14,4	-	-	4	10,8	-	-	0,16	-	-	0,16	0,003
m/v%	18	-	-	5	13,5	-	-	0,2	-	-	0,2	0,004
g/l	180	-	-	50	135	-	-	2	-	-	2	0,04

Chelating agent: EDDHSA

BENEFITS OF ITS APPLICATION:

- » After application, it strengthens the plant's photosynthesis and the transport of assimilates, as a result of which the root system is also strengthened,
- » the microelements found in the product contribute to the incorporation of large amounts of nutrients taken from the soil,
- » Can be mixed with UAN solutions.

Directions for use

Area of use	Dose
Arable land	for leaf treatment: 4 - 5 l/ha/occasion
Home garden	for leaf treatment: in a concentration of 1-2% (0.05 liters/100 m ²), 2-5 times together with the current sprays. for soil treatment: apply 0.1 liter/100 m ² to the soil before sowing or planting



Applied independently or in one pass with plant protection works.



Suitable for drone use.



It can be mixed with plant protection agents, but it is recommended to make a mixing test beforehand!

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> MAKROSOL

Fitoform MAKROSOL is a foliar fertilizer containing Nitrogen, Phosphorus and Potassium, the main goal of which was to create a harmonious composition. It can be a basic component of all plant protection treatments, so we can replace the essential macroelements in one application.

We know that both phosphorus and potassium are nutrients that move slowly in the soil.

Due to their property of easily binding to the surface of soil colloids, these two nutrients are the ones that plants have little or no access to. This is especially true on carbonate or other soils with extreme pH. In addition, during the cultivation of commercial crops, a significant amount of nutrients, especially phosphorus, is removed from the land and is removed from the nutrient cycle. Therefore, we must ensure their continuous replenishment.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	6,6	3,3	4,16	-	-	-	-	-	-	-	-	-
m/v%	8	4	5	-	-	-	-	-	-	-	-	-
g/l	80	40	50	-	-	-	-	-	-	-	-	-

Chelating agent: EDDHSA

Advantages of application:

- » The phosphorus found in the product is an essential constituent of plant cells,
- » strengthens rooting and the formation of flower organs,
- » Potassium, as an activator of numerous enzymes, increases crop yield, frost tolerance, and disease resistance.

Directions of use

Area of use	Dose
Arable land	for leaf treatment: 5 liters / ha / occasion
Home garden	for foliar treatment: 1-2% concentration (0.05 liters/100 m ²), 2-5 times together with current spraying, for soil treatment: before sowing or planting, apply 0.1 liter/100 m ² to the soil



Applied independently or in one pass with plant protection works.



Suitable for drone use.



It can usually be used together with plant protection products, but we recommend checking the compatibility beforehand.

To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> MIKROMAX

FitoHorm MikroMax is a real immune system-strengthening "microelement bomb".

In our product line, we have eliminated macronutrients (N, P, K) and focused exclusively on the harmonious supply of microelements (B, Cu, Fe, Mn, Mo, Zn).

As its name suggests, it contains the microelements in the largest possible quantity, in the appropriate ratio for the plants, in chelated form.

It can be applied through the leaves in arable land, both in grape and fruit crops.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	2,4	1,0	0,12	0,18	0,2	0,05
m/v%	-	-	-	-	-	-	3	1,32	0,15	0,23	0,26	0,07
g/l	-	-	-	-	-	-	30	13,2	1,5	2,3	2,6	0,7

Chelating agent: EDDHSA

Advantages of use:

- » For horticultural crops and ornamental plants, it can be used for soil treatment, nutrient solution and foliage fertilization,
- » can also be used before or after seeding and planting,
- » also allowed in organic cultivation,
- » can be used in field crops throughout the growing season,
- » suitable for application by drone

Directions for use

Plant Culture	Dosage	Usage method
Grapes, olives, citrus fruits	2 - 3 l/ha 50 ml/plant in 10-30 liters of water - for soil treatment, nutrient solution,	
Fruit, berries, kiwi	2 - 3 l/ha 3 - 4 treatments from fruit set to harvest + 1 treatment after harvest	
Autumn, spring cereals, rice	2 - 3 l/ha 1 treatment in the phenological stage between the end of bushing and earing	
Vegetables, ornamental plants	3 - 5 ml/m ² , or for ornamental trees and shrubs 50 ml/plant in ornamental trees, ornamental shrubs nutrient solution.	



Applied independently or in one pass with plant protection works.



Suitable for drone use.

It can usually be used together with plant protection products, but we recommend checking the compatibility beforehand.



To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> SOY

A complex preparation with a high active ingredient content, primarily for the prevention and treatment of deficiency diseases in leguminous plants.

Legumes have a significant need for meso- and microelements. In the case of soy and peas, attention should be paid to the supplementation of P, K, Mg, S, and of the microelements manganese, copper, zinc, iron, boron and molybdenum. The product contains the microelements necessary for development in the appropriate proportions for soy, peas and beans.

It is important to supplement Nitrogen in the initial period until the symbiotic relationship is established. However, excessive levels of supply can reduce the formation of root nodules by the symbiotic bacteria.

Insufficient N fixation by root nodule bacteria and the resulting N deficiency symptoms in legumes can be attributed to molybdenum deficiency. Molybdenum deficiency can be responsible for poor growth, early flowering and the resulting reduced seed yield. The leaves show a pale green color typical of nitrogen deficiency.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	0,3	0,4	0,4	1,25	0,4	0,25
m/v%	-	-	-	-	-	-	0,4	0,5	0,5	1,5	0,5	0,3
g/l	-	-	-	-	-	-	4	5	5	15	5	3

Chelating agent: EDDHSA

Advantages of use:

- » Contains essential elements for the establishment of a symbiosis between legume and root nodule bacteria,
- » has a particularly good efficiency when applied together with UAN solutions,
- » can also be used in organic farming.

Direction for use

Area of use	Dose
Soy	2-3 liters/ha 2-3 times during the growing season.



Applied independently or in one pass with plant protection works..



Suitable for drone use.

It can usually be used together with plant protection products, but we recommend checking the compatibility beforehand.



In the case of foliar fertilization, the basic rules of spraying must also be observed.

Do not exceed the recommended dosage.



> POLYBORON 140



More about the theme

It is one of the symbols of leaf fertilization in Hungary, which has maintained its defining role for many years thanks to its reliable and safe operation. The polyborate complex found in Polyboron 140 stimulates the generative processes, the growth and development of the pollen tube, increases the stability of the cell wall, and is therefore absolutely necessary for the life of plants.

Being an essential microelement, its presence is vital for all crops, especially oil crops, grape and fruit crops, and some vegetables.

BORON DEMANDING CULTURES: rape, sunflower, sugar beet, apple, cherry, sour cherry, peaches, cabbages.

Composition

	B
m/m%	10,8
m/v%	14
g/l	140

Advantages of use:

- » Its intake is most intensive at the beginning of vegetation
- » greatly improves winter resistance,
- » in its absence, fertilization is reduced and binding is hindered

Directions for use

Plant culture	Dose	Directions for use
Autumn coleseed	2 – 3 l/ha	In autumn and from stem initiation to the beginning of flowering Btvebben a témáról
Sunflower	2 – 3 l/ha	From the stage of 4-6 leaves, in the stage of star buds until the beginning of flowering
Sugar beet	2 – 3 l/ha	4-6 leveles állapottól, gyökérnövekedéskor is koronaerősödéskor
Leguminous	2 – 3 l/ha	From the 3-leaf stage to the beginning of flowering
Poppy	2 – 3 l/ha	From the "hook stick" state to the beginning of flowering
Grape	1 – 2 l/ha	1 week before flowering and at maturity
Fruit	1 – 2 l/ha	Repeated 2-3 times every 2-3 weeks
Melon,Cucumber	1 – 2 l/ha	Repeated 3 times every 2-3 weeks
Paprika, Tomato	1 – 2 l/ha	For the treatment of plant stock
Tobacco	2 – 3 l/ha	For the treatment of plant stock



Applied independently or in one pass with plant protection works.



Suitable for drone use.



In the case of foliar fertilization, the basic rules of spraying must also be observed. The foliar fertilizer Polyboron 140 can be mixed perfectly with plant protection agents, it is a highly soluble solution fertilizer, it is recommended to make a mixing test before application.



> POLYBORON PLUS

High Boron content preparation with microelements for better efficiency.

The foliar fertilizer contains a special complex of boron in high amounts and all the microelements (molybdenum, zinc and copper) necessary for rapid incorporation.

It is important to note that boron is mostly utilized by plants in organic binding through the leaves. The effect of Polybor Plus on flowering is enhanced and complex, when applied during the period of development of the floral organs.

COMPOSITION			
	Cu	B	Mo
m/m%	0,1	9,6	0,02
m/v%	0,15	12,5	0,03
g/l	1,5	125	0,3

Copper and zinc significantly influence the formation and development of generative organs through enzymatic processes. With the molybdenum in the product, we can prevent or inhibit the breakdown of chlorophyll, thereby ensuring the energy necessary for fertilization.

PLANTS THAT REQUIRE BORON: rapeseed, sunflower, sugar beet, soy, peas, apples, stone fruits, brassicas.

BENEFITS OF ITS USE:

- » Application before flowering improves fruit setting,
- » the molybdenum contained in it keeps the nipple moist for a long time, even in adverse conditions,
- » improves winter hardiness and has a regenerating effect.

Directions for use

Plant culture	Dose	Directions for use
Autumn coleseed	2 - 3 l/ha	In autumn and from stem initiation to the beginning of flowering
Sunflower	2 - 3 l/ha	from the stage of 4-6 leaves, in the stage of star buds until the beginning of flowering
Sugar beet	2 - 3 l/ha	from the 4-6 leaf stage, also during root growth and crown strengthenin
Leguminous	2 - 3 l/ha	from the stage of 3 leaves until the beginning of flowering
Grape	1 - 2 l/ha	from the "Hookstick" stage until the beginning of flowering
Fruit	1 - 2 l/ha	1 week before flowering and at maturity
Paprika, Tomato	1 - 2 l/ha	Repeated 2-3 times every 2-3 weeks



Applied independently or in one pass with plant protection works..



Suitable for drone use.



In the case of foliar fertilization, the basic rules of spraying must also be observed. The foliar fertilizer PolyboronPlus can be mixed perfectly with plant protection agents, it is a highly soluble solution fertilizer, it is recommended to make a mixing test before application.



> TURBO NITROGEN

Periods that are outstanding in terms of nitrogen uptake are often characterized by dry weather conditions, in which solid or liquid nitrogen forms applied to the soil – in the absence of adequate leaching precipitation or soil solution – are simply ineffective,

unavailable to cultivated plants.

In this situation, a reasonable solution is foliar nitrogen supplementation, the only effective chemical form of which is the use of urea derivatives. It is good to know that all other forms of nitrogen are almost unavailable to the leaves, and can even scorch them!

The solution is our product called Turbo Nitrogen, in which, thanks to the formaldehyde urea formulation, the urea does not evaporate from the treated leaf surface, but rather provides nitrogen to our plants for

Its use is recommended to eliminate nitrogen deficiency conditions in all arable and horticultural crops!

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	24	-	-	2,3	5,3	-	-	-	0,008	-	-	-
m/v%	30	-	-	3	6,5	-	-	-	0,01	-	-	-
g/l	300	-	-	30	65	-	-	-	0,1	-	-	-

Chelating agent : EDDHSA

BENEFITS OF ITS USE:

- » Ensuring nitrogen supply even in dry conditions,
- » Continuously nourishes the plant during its emergence,
- » no risk of burning,
- » excellent regenerating, greening effect is achieved.

SUGGESTED USE

Area of use	Dosage
Arable land	for foliar fertilization: 10-15 l/ha/occasion,
Grape - Fruit	for foliar fertilization: 5-10 l/ha/occasion (with 300-750 l water/ha)



In addition, the treatments can be repeated 2-6 times according to the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.

To be used only in justified cases. Do not exceed the recommended dosage

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> TURBO SULFUR

FitoHorm Turbo Sulfur increases the resistance, physiological performance and development of plants and increases the yield.

It helps the development of excellent food industry parameters and forage quality. Stimulates the amount of vegetable oils formed in the aroma channels and their species-specific content.

The proper means of real sulfur supplementation is through leaves.

In case of sulfur deficiency, protein synthesis is disturbed (protein content decreases), in addition to weak growth, the widening of the leaf blades remains inhibited (assimilation, growth inhibition), nitrogen utilization also decreases.

CULTURES DEMANDING SULFUR: rape, sugar beet, sunflower, peas, onion.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	15	-	-	-	46	-	-	-	-	-	-	-
m/v%	20	-	-	-	60	-	-	-	-	-	-	-
g/l	200	-	-	-	600	-	-	-	-	-	-	-

Chelating agent : EDDHSA

Advantages of use:

- » It has an extra high absorbable sulfur content,
- » in addition to the quality of the crop, it also has a positive effect on the quantity,
- » increases the dry matter content of plants and moderates drought damage,,
- » increases protein and oil production.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 2-3 l/ha/occasion
Horticultural, Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand. In the case of foliar fertilization, the basic rules of spraying must also be observed.



> TURBO POTASSIUM

Our preparation with the highest active ingredient content (total: 97%), is the "oasis" of plants, which contains 4% nitrogen, 36% potassium and 57% sulfur.

This special nutrient ratio results extraordinary efficiency. The FitoHorm Turbo Potassium liquid solution fertilizer is used quickly and efficiently through the foliage. Potassium is the guarantee of the quantity and quality of the crop.

Potassium regulates protein synthesis, the functioning of carbohydrates and enzymes, and also plays an important role in breathing and regulating water balance. It enhances the quality, coloring and sugar content of the fruits, and improves the plants' resistance to disease, cold and drought. It is an easily mobilized element, its absence appears on the lower **POTASSIUM DEMANDING CULTURES**: corny plants, corn, potatoes, sugar beets, sunflowers, grapes, melons, berries, legumes, celery, beets.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	3	-	26	-	41	-	-	-	-	-	-	-
m/v%	4	-	36	-	57	-	-	-	-	-	-	-
g/l	40	-	360	-	570	-	-	-	-	-	-	-

Chelating agent: EDDHSA

Advantages of use:

- » Increases metabolic processes,
- » helps seed filling, the accumulation of carbohydrates in the seeds
- » it improves the thousand grain weight, and the yield increases with it
- » increases the quality, coloring and sugar content of the crops
- » strongly improves the resistance to cold and drought.

Direction

Area of use:

Arable land

for foliar fertilization: 2-3 l/ha/occasion,
Also available in a technology package with Polybór 140

Horticultural, Home garden

for foliar fertilization: in a concentration of
1-2% (1-2 dl/10 l of water)
for nutrient solution:
0.5-1.0% (5-10 l/1000 l of water)



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand. In the case of foliar fertilization, the basic rules of spraying must also be observed.



> TURBO CALCIUM

The nutrients in the product (N, K, Mg, Ca) result in special absorbability and efficiency. It is a kind of "isotonic" nutrient solution for plants, which can be recommended in all phenological phases. It has special efficiency, in the case of autumn rapeseed, to prevent longitudinal stem cracks experienced during the "explosion" of stem growth, 2 treatments provide complete protection.

The product is very effective in the case of apple and pear standing crops for preventing calcium deficiency "stippling", as well as for greatly reducing storage diseases and increasing "counter resistance."

In the case of peppers, tomatoes and zucchini, it is highly effective in preventing and avoiding fruit deformations, fruit softening and fruit rot resulting from calcium deficiency, and the settlement of saprophytic pathogens.

Mixing with partners that cause extremely acidic pH spray solution (e.g. water softeners, spray solution water hardness reducing products, spray solution acidifying products) in tank mixtures is not recommended!

PLANTS THAT REQUIRE CALCIUM: apples, grapes, tomatoes, cucumbers, melons, brassicas, winter rapeseed.

COMPOSITION

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	8,5	-	5,7	1,9	-	9,6	-	-				
m/v%	12	-	8	2,7	-	13,5	-	-				
g/l	120	-	80	27	-	135	-	-				

Chelating agent: EDDHSA

BENEFITS OF ITS USE:

- » Increased resistance to diseases and stress, effective tonic effect
- » Calcium In demanding crops, the stem parts, fruit flesh and fruit peel become harder,
- » In the case of fruits and squashes, shelf life and winter storage capacity deteriorate significantly,
- » In the case of pepper and tomato crops, the vulnerability of the fruit surface is reduced,
- » Those crops that "go through" a sorting machine line will be less vulnerable.

Directions for use

Plant culture	Dose		Directions for use
	ml/10l	l/ha	
Vegetables	300-500	3-5	before flowering, after flowering every 9 - 10 days during the entire growing season
Grapes, Fruits	300-500	3-5	from the end of flowering to coloring every 11 days



Applied independently or in one pass with plant protection works.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.

To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.





More about the theme

> TURBO COPPER

Both Hungarian and international research has proven that copper plays a key role in nitrogen and carbohydrate metabolism, protein synthesis, plant respiration, and various enzymatic processes.

The product can be used on any plant species, except cereals. Its application as a foliar fertilizer thickens the epidermis, which increases the mechanical protection of plants against pathogens and pests.

COPPER BEQUIRING PANTS: ccereals, rapeseed, grapes, apples, stone fruits, citrus fruits

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	15	-	-	-	8,6	-	-	-	6	-	-	-
m/v%	20	-	-	-	11,5	-	-	-	8	-	-	-
g/l	200	-	-	-	115	-	-	-	80	-	-	-

Chelating agent : EDDHSA

Advantages of use:

- » Its use improves the plant's drought tolerance,
- » helps the formation of the bushy knot, stimulates the differentiation of the ear
- » it protects chlorophyll from premature breakdown, so it grows assimilation performance,
- » photosynthesis and metabolic processes improve.
- » Can be mixed with UAN solutions.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 2-3 l/ha/occasion
Horticulture Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.05-0.25% (0.5-2.5 l/1000 l of water)



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.
To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> TURBO ZINC

With its outstanding chelated active ingredient content, the product ensures the appropriate zinc supply in the treated crops with high efficiency and without binding.

Its use strengthens root formation, green mass growth, improves fruit setting, and increases yield by supporting tube and ear differentiation.

In orchards and vineyards, it contributes to the normal development of shoots and leaves, improves lignification, reduces frost sensitivity and "winter branch death". In other words, it can reduce or eliminate the dropping of flowers and older leaves due to zinc deficiency in beans.

ZINC REQUIRED CROPS: corn, cereals, soy, winter rapeseed, sorghum, grapes, apples, pears, stone fruits

Composition

	Zn
m/m%	8
m/v%	10
g/l	100

Benefits use:

- » Helps corn tube differentiation and rooting,
- » in orchards, vineyards, contributes to the normal development of shoots, leaves,
- » improves lignification, reduces frost sensitivity and "winter branch death",
- » zinc regulates nitrogen metabolism,

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 2-3 l/ha/occasion
Horticultural, home garden	for foliar fertilization: in a concentration of 1-2 % (1 - 2 dl/10 l water) for nutrient solution: in a concentration of 0.05-0.2 % (0.5 - 2 l /1000 l water)



Applied independently or in one pass with plant protection works.



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use.

It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.



To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> TURBO MANGANESE

Manganese is essential as an activator of many enzymes, important in photosynthesis and nitrate reduction. Due to its role in photosynthesis, its deficiency reduces the level of soluble carbohydrates in the plant, especially in the roots. Besides Potassium, Manganese reduces drought stress to the greatest extent. Our leaf analyses conducted in Hungary confirm an increasing manganese deficiency in recent years, therefore manganese supplementation must be ensured. This can be done most effectively through the leaves.

It is not mobile, so its deficiency occurs in younger tissues. Its signs are clearly visible graying in the vascular spaces, reduced growth and yield. In addition to the high manganese content in the preparation, there is also a significant amount of highly absorbable molybdenum, which has a positive effect on nitrogen metabolism.

MANGANESE REQUIRING PLANTS: cereals, rapeseed, soybeans, sugar beets, peas, grapes, fruit crops.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	6,6	-	-	-	0,4
m/v%	-	-	-	-	-	-	-	8	-	-	-	0,5
g/l	-	-	-	-	-	-	-	80	-	-	-	50

Chelating agent : EDDHSA

Advantages of use:

- » Strengthens plant photosynthesis and the transport of assimilates
- » The microelements found in the product contribute to the incorporation of large amounts of nutrients taken up from the soil,
- » Its use improves flower and fruit formation,
- » Can be mixed with UAN solutions.

Direction for use

Area of use:	Dose
Arable land	for foliar fertilization: 2-3 l/ha/occasion (250-350 l/ha) with water.
Horticultural, Home Garden	for foliar fertilization: 1-2 dl/10l water) for nutrient solution: 0.1-0.5% concentration (1-5 l /1000 l)



Treatments can be repeated every 2-3 weeks during the breeding season



.Suitable for drone use



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.
To be used only in justified cases. Do not exceed the recommended dosage

In the case of foliar fertilization, the basic rules of spraying must also be observed.





More about the theme

>TURBO MOLYBDENUM

Molybdenum is one of the seven microelements that are considered essential for plants. Its importance in plant physiology lies primarily in the fact that it is an essential metal component of enzymes involved in nitrogen metabolism, but it also helps the accumulation of phosphorus, zinc, manganese and boron in plants. We recommend its use especially on acidic soils and in cultures demanding molybdenum.

It is important to note that our plants require the least amount of molybdenum among the microelements. It can easily be replenished through the leaves, but its movement within the plants is small, so we recommend continuous dosing when applying!

CULTURES THAT REQUIRE MOLYBDENUM:

cruciferous, rye, oats, butterfly plants, sugar beet, tomatoes, potatoes

Composition												
	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	-	-	-	0,9	0,9
m/v%	-	-	-	-	-	-	-	-	-	-	1	1
g/l	-	-	-	-	-	-	-	-	-	-	10	10

Chelating agent: EDDHSA

Advantages of its application:

- » Outstanding active ingredient content,
- » the basic element of nitrogen uptake and incorporation,
- » Can be mixed with UAN solutions.

Directions for use	
Area of use	Dose
Arable land,	for foliar fertilization: 1-2 l/ha/occasion,
Horticultural,	for foliar fertilization: 0.1 dl/10 l water)
home garden	for nutrient solution: in a concentration of 0.1-0.2% (1-2 l /1000 l of water)



Treatments can be repeated 1-2 times depending on the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.

To be used only in justified cases. Do not exceed the recommended dosage.



> ECO BORON

It is recommended to apply in the period before the full flowering of oil plants. With its help, we can stimulate cell division, strengthen flower organs and increase the number of fertilized flowers, and reduce the amount of leech seeds.

By using it in unfavorable conditions, we can strengthen the photosynthetic activity of plants. Nitrogen strengthens the stem and stimulates the development of (side) shoots. Boron plays a very important role primarily in flowering biology and fertility processes.

Boron is involved in shoot tip development, seed setting and carbohydrate metabolism. In the case of a low supply of molybdenum, the chlorophyll content of plants decreases, their photosynthesis becomes inhibited, and disturbances occur in the generative development phase.

In the case of butterflies, its deficiency is associated with symptoms typical of nitrogen deficiency, which is based on the significant molybdenum demand of the tuber bacteria living in symbiosis with them.

Composition									
	N	P ₂ O ₅	K ₂ O	Fe	Mn	Cu	Zn	B	Mo
m/m%	14,4	-	-	-	-	-	0,2	4,8	0,004
m/v%	18	-	-	-	-	-	0,25	6	0,005
g/l	180	-	-	-	-	-	2,5	60	0,05

Chelating agent: EDDHSA

Advantages of its application:

- » Economical boron fertilizer in excellent quality,
- » with its use we strengthen the flower organs and increase the number of fertilized flowers, reduce the quantity of leech seeds,
- » using it under adverse conditions we can strengthen the photosynthetic activity of plants,
- » spectacular effect when mixed with UAN solutions.

Directions for use	
Area of use	Dose
Arable land Horticultural,	for foliar fertilization: 2-3 l/ha/occasion
home garden	1-2% concentration (1-2 dl/10 l water)



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.



> ECO ACTIV

EcoAktiv foliar fertilizer is a modern magnesium sulfate solution supplemented with a series of microelements, which is a very competitive solution for farmers who use bitter salt in terms of its usability, efficiency and price-value ratio! The EDDHSA chelating agent used during its production improves the absorbability of the magnesium and other microelements in it, as well as the physical and chemical properties and mixability of the solution.

Its regular use increases the photosynthesis activity of the leaves, increases nitrogen absorption and incorporation, and improves the condition and content values of the treated cultures. It effectively treats the symptoms of sulfur and magnesium deficiency and has an excellent greening effect. Given that EcoAktiv is already in a dissolved state, it is significantly easier to use than crystalline bitter salt, which does not contain chelated other microelements!

It can be used in all cultures from the appearance of the green plant parts to the beginning of autumn leaf yellowing at a dose of 5-10 L/ha.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	2,5	5,4	-	0,16	0,3	0,6	0,1	0,1	0,01
m/v%	-	-	-	3	6,5	-	0,2	0,4	0,72	0,12	0,12	0,012
g/l	-	-	-	30	65	-	2	4	7,2	1,2	1,2	0,12

Chelating agent: EDDHSA

Advantages of its application:

- » Thanks to its solution formula, it is easy to mix and easy to use
- » It is more than a bitter salt, as it also contains chelated microelements, without the typical sediment formation
- » It can also be mixed with UAN solutions.

Directions for use

Area of use	Dose
Arable land Horticultural,	for foliar fertilization: 3-5 l/ha/occasion
home garden	2-3% concentration (2-3 dl/10 l water)



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.



FitoHorm

> ECO COPPER

EcoCopper, the younger brother of our Turbo Copper product, is a copper fertilizer with a new composition, in which nitrogen and molybdenum have been added to copper. We recommend it mostly to producers who love the excellent mixability, sediment-free, stable quality, and spectacular effect of Turbo Copper, but consider it more important to replace molybdenum instead of sulfur in their copper fertilization. This may be justified, for example, on acidic soils, where molybdenum is easily bound and uptake is also hindered.

Like our other copper fertilizers, Eco Copper can be mixed with UAN solutions, and thanks to its chelation, it does not bind in the soil, and can be taken up from there by the plant culture you want to feed.

Composition

	N	P ₂ O ₅	K ₂ O	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	10	-	-	4,1	-	-	-	3,3	-	-	0,04
m/v%	12	-	-	5	-	-	-	4	-	-	0,05
g/l	120	-	-	50	-	-	-	40	-	-	0,5

Chelating agent: EDDHSA

Advantages of its application:

- » Economical copper fertilizer in excellent quality.
- » Spectacular effect when mixed with UAN solutions.
- » It supports the incorporation of nitrogen.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 2-3 l/ha/occasion
Horticultural, home garden	1-2% concentration (1-2 dl/10 l water)



Treatments can be repeated 2-6 times during the growing season, depending on the degree of nutrient deficiency.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.



> TURBO MAGNESIUM

FitoHorm Turbo Magnesium is a product with a special effect and excellent uptake by our cultivated plants. All this is thanks to its exceptionally pure raw material and careful formulation. Magnesium, which is among its active ingredients, can be absorbed by plants with unique efficiency. The phosphorus content of FitoHorm Turbo Magnesium strengthens rooting and the formation of flower organs, thus the development of generative organs.

FitoHorm Turbo Magnesium makes plant metabolism and transport processes more efficient and faster. In grapes, it is a remedy for cluster peduncle paralysis. In the case of fruit and vegetable plants, it is important to apply before the full load period, thus avoiding periodic weakening of the plants.

Its miscibility is more limited compared to our other products; it is recommended to add it as the first component when preparing the spray solution.

CULTURES DEMANDING MAGNESIUM: rape, sunflower, potato, melon, tobacco, grapes, paprika, tomato, cucumber, cabbages.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	3	26	-	7,5	-	-	-	-	-	-	-	-
m/v%	4	35	-	10	-	-	-	-	-	-	-	-
g/l	40	350	-	100	-	-	-	-	-	-	-	-
Chelating agent : EDDHSA												

Advantages of use:

- » It increases the metabolism of the plant, thereby helping its optimal growth
- » the greening force (responsible for the deep green color in the flora),
- » strengthens rooting and the formation of flower organs, as well as the healthy development of the germ within the seed
- » The tank mixture has a concentration of 0.1-0.5% can also be used for water softening.

Direction for use

Area of use:	Dose
Arable land	or foliar fertilization: 2-3 l/ha/occasion, for soil fertilization: 5-10 l/ha/occasion.
Horticultural, Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for soil fertilization: 5-10 l/ha/occasion for nutrient solution: in a concentration of 0.1-0.5% (1-5 l /1000 l of water)



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand..

In the case of foliar fertilization, the basic rules of spraying must also be observed.

It is important that FitoHorm Turbo Magnesium is the first component when putting together the tank mixture, and then add the other components after mixing it!



> TURBO START



More about the theme

FitoHorm has set itself the goal of developing a foliar fertilizer that can be used not only through the leaves. For plants with a smaller green surface, it can be perfectly mixed with UAN solution, it can also be used through the soil, and it helps the plants to have an explosive initial development. We recommend it primarily in situations where rapid initial growth and root mass formation decisively influence the later success of cultivation.

This situation applies to almost all of our cultivated plants, but it can be especially true for newly sprouted grains and rapeseed, which are deficient in soil solution and therefore nutrients, for sunflowers trying to grow out of the rabbit's "mouth", or for "purple" corn, which is deficient in phosphorus. Turbo Start is also successfully tested in crops regenerating after high stress situations, such as in frost-damaged corn or in frost-damaged orchards.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	9	19	-	-	-	-	0,02	-	0,0025	0,25	0,014	0,001
m/v%	11	23	-	-	-	-	0,025	-	0,003	0,3	0,017	0,0014
g/l	110	230	-	-	-	-	0,25	-	0,03	3	0,17	0,014

Chelating agent : EDDHSA

Advantages of use:

- » It enhances the plant's metabolism, helping it to grow optimally,
- » effective management of stress situations affecting plants,
- » increases the activity of photosynthesis,
- » strengthens rooting and the formation of flower organs.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 3-5 l/ha/occasion
Home garden	for foliar fertilization: 1-2 dl/10 l of water) for soil fertilization: 4 l/ha/occasion for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)



Treatments can be repeated every 2-3 weeks during the breeding season.



Suitable for drone use.



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.

To be used only in justified cases. Do not exceed the recommended dosage.

In the case of foliar fertilization, the basic rules of spraying must also be observed.



> TURBO MAKRO

FitoHorm Turbo Makro is a liquid complex foliar fertilizer that is recommended for remedying development problems caused by extreme weather conditions and other stress. The macroelement composition (10-10-10 NPK) found in the leaf fertilizer restarts the slowed down or stopped metabolic processes by adding the special form of phosphorus, and starts the defense mechanism of the plants.

It helps the development of plants at every stage of development, improves the content and color of the crops, and helps the development of better-quality, tastier, juicier, easy-to-transport and long-lasting, well-storable crops.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	8	8	8	-	-	-	-	-	-	-	-	-
m/v%	10	10	10	-	-	-	-	-	-	-	-	-
g/l	100	100	100	-	-	-	-	-	-	-	-	-

Chelating agent : EDDHSA

Advantages of use:

- » Thanks to the harmonic composition improves the quality and quantity parameters of the crop
- » initiates rooting,
- » fast absorption through foliage is guaranteed
- » increases the utilization of most plant protection agents.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: . - 5 l/ha/occasion
Horticultural, Home garden	for foliar fertilization: 1-2 dl/10 l of water) for soil fertilization: 4 l/ha/occasion for nutrient solution: in a concentration of 0.1-0.5% (1-5 l /1000 l of water)



Treatments can be repeated every 2-3 weeks during the breeding season.



Suitable for drone use



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand

To be used only in justified cases.
Do not exceed the recommended dosage.
In the case of foliar fertilization, the basic rules of spraying must also be observed.



> FITOHORM 10 B

FitoHorm 10 B is a boron-containing fertilizer solution, with a chelating agent, which can be used as a foliar fertilizer and nutrient solution in all plant cultures to supply nutrients or to prevent and cure deficiency diseases.

Boron stimulates the generative processes, the growth and development of the pollen tube, increases the stability of the cell wall, and is therefore absolutely necessary for the life of plants. In its absence, fertilization is reduced and binding is hindered. Being an essential microelement, its presence is vital for all plant cultures, especially for grape and fruit, oil plants and some vegetables.

Directions for use

Area of use	Dose
Arable land	Dose for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) or nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	-	-	-	2,2	-
m/v%	-	-	-	-	-	-	-	-	-	-	2,5	-
g/l	-	-	-	-	-	-	-	-	-	-	25	-
Chelating agent : EDDHSA												

> FITOHORM 14 N

In its absence, the leaves are pale, turn yellow, and remain small. The yellowing of the leaves starts from the top of the leaves, the shoots become stiff and close to the stem.

Photosynthesis is inhibited, growth is retarded, the taste intervals are shortened, the development of the flower parts is delayed, and early fruit drop occurs. Frost tolerance of plants decreases. Since root formation is also inhibited, nutrient uptake is also hindered.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5-10 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	27	-	-	-	-	-	-	-	-	-	-	-
m/v%	32	-	-	-	-	-	-	-	-	-	-	-
g/l	320	-	-	-	-	-	-	-	-	-	-	-
Chelating agent : EDDHSA												

> FITOHORM 30 P

It is a mobile element that is well mobilized in the plant and is directed to the fruit after fertilization following flowering. In its absence, the development of the root system is limited (reduced nutrient uptake), less branched, weak shoots develop, and in severe cases the plant may become bald.

The undersides of the leaves are dark green, blue-green, and later red. Flowering is weak, binding is poor, and the fruit can often be kicked out.... **FitoHorm 30 P**, which is a solution fertilizer that can be applied through the foliage together with plant protection, provides a suitable solution for ensuring the phosphorus supply of plants.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	6,4	16,4	-	-	-	-	-	-	-	-	-	-
m/v%	7	18	-	-	-	-	-	-	-	-	-	-
g/l	70	180	-	-	-	-	-	-	-	-	-	-
Chelating agent : EDDHSA												

> FITOHORM 24 Mg

The magnesium content of our soils is generally satisfactory, but its deficiency still occurs. This is mostly due to the preponderance of so-called antagonistic nutrients (potassium, copper, manganese, ammonium ions) in the soil.

Its deficiency first appears on the older leaves, the leaves lighten and then turn yellow, and chlorophyll remains only in the leaf veins. Damaged leaves drop early, causing fruit trees to go bald.

Directions for use

Area of use	Dózis
Arable land	Dose for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	5,28	9	-	-	-	-	-	-	-
m/v%	-	-	-	6,6	10,6	-	-	-	-	-	-	-
g/l	-	-	-	66	106	-	-	-	-	-	-	-
Chelating agent : EDDHSA												

> FITOHORM 39 K

NPK 3-6-9 chlorine-free fertilizer solution with chelating agent, which can be used as a foliar fertilizer and nutrient solution in all plant cultures to supply nutrients or to prevent and cure deficiency diseases. It enhances the quality, coloring and sugar content of the crops, and improves the plants' resistance to disease, cold and drought.

It is an easily mobilized element, its absence appears on the lower leaves. The most common deficiency symptom is that there is a disturbance in the turgor regulation of the plant. The growth of the plant is inhibited (rosette plant), and stunted foliage develops. Necrosis spreading inwards from the edge of the leaf, light brown coloration along the leaf tip and edge is common.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	2,5	5	7,5	-	-	-	-	-	-	-	-	-
m/v%	3	6	9	-	-	-	-	-	-	-	-	-
g/l	30	60	90	-	-	-	-	-	-	-	-	-
Chelating agent : EDDHSA												

> FITOHORM 40 Ca

Among the nutrients that determine fruit quality, one of the most important is calcium, which has a known, general effect of slowing down and delaying fruit ripening processes. Fruits with a good supply of calcium have a lower respiration intensity, usually have a harder flesh, so they can be stored better and are less susceptible to diseases of physiological origin.

The ability to absorb, transport and integrate calcium within the plant is very special, which makes it difficult for the fruit to reach the appropriate amount during the growing season. Continuous calcium supply through the foliage is essential.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	8,57	-	-	-	-	15	-	-	-	-	-	-
m/v%	12	-	-	-	-	21	-	-	-	-	-	-
g/l	120	-	-	-	-	210	-	-	-	-	-	-
Chelating agent: EDDHSA												

> FITOHORM 40 Ca NITROGEN FREE

Among the nutrients that determine fruit quality, one of the most important is calcium, which has a known, general effect of slowing down and delaying fruit ripening processes. Fruits with a good supply of calcium have a lower respiration intensity, usually have a harder flesh, so they can be stored better and are less susceptible to diseases of physiological origin.

The ability to absorb, transport and integrate calcium within the plant is very special, which makes it difficult for the fruit to reach the appropriate amount during the growing season. The danger of low calcium content cannot therefore be explained only by the low level of absorbable calcium content in the soil. Continuous calcium supply through the foliage is indispensable. Using it before the fruit ripens helps to achieve perfect coloring and has a positive effect on the shelf life.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	8,57	-	-	-	-	15	-	-	-	-	-	-
m/v%	12	-	-	-	-	21	-	-	-	-	-	-
g/l	120	-	-	-	-	210	-	-	-	-	-	-
Chelating agent : EDDHSA												

> FITOHORM 54 Mn

Manganese uptake by plants is inhibited on alkaline soil. In most cases, long-lasting, persistent drought, soil compaction, flooding and the period after liming also cause manganese deficiency.

Maize plants are particularly sensitive to the stability of manganese supply. In their case, an important criterion is that the culture suffering from manganese deficiency becomes particularly sensitive to the cold.

Its deficiency can be detected mainly in wheat, barley and oats. The most obvious deficiency symptom is the marbling of the leaves (lightening between the leaf veins), dry spots. Manganese is also a yield-determining factor for root and tuberous plants (sugar beets, potatoes, root vegetables) and legumes (peas, beans, soys, lentils), so manganese fertilization brings positive quality results for these crops.

Directions for use

Area of use	Dózis
Arable land	for foliar fertilization: 3-5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	3,2	-	-	-	-
m/v%	-	-	-	-	-	-	-	4	-	-	-	-
g/l	-	-	-	-	-	-	-	40	-	-	-	-
Chelating agent : EDDHSA												

> FITOHORM 55 Fe

A particularly effective formula for the treatment and prevention of iron deficiency. Iron plays an important role in the synthesis of chlorophyll and protein, it is an enzyme creator, it mainly regulates respiration and metabolism. It is difficult to move in the plant, it is difficult to mobilize. Its deficiency occurs most often in grape and fruit cultures.

A relative lack of iron can occur on compacted, airless, alkaline or cool soil, first the veins, later the veins are white, the leaves turn bright yellow (yellowing of the leaves). The symptom is more pronounced in cool, wet weather. Its uptake is inhibited by calcium ions

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	3,2	-	-	-	-
m/v%	-	-	-	-	-	-	-	4	-	-	-	-
g/l	-	-	-	-	-	-	-	40	-	-	-	-

Chelating agent : EDDHSA

> FITOHORM 63 Cu

A **FitoHorm 63 Cu** copper solution is a liquid, easy-to-handle preparation. Its chelated copper content ensures the effective absorption of copper through the leaves and its incorporation into the plant, enabling the prevention of nutrient deficiency and its quick and effective remedy.

A lack of copper causes the so-called "whiteness of the ears" of the ears (oats, barley, wheat), when the leaves and, in more severe cases, the ears also turn white and dry up. All of this can be attributed to obstructed water transport caused by insufficient copper supply. In the absence of copper, plant tissues weaken, which increases the risk of tipping over. Its absorption from limed and nitrogen-rich soils is particularly difficult.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	-	3,2	-	-	-
m/v%	-	-	-	-	-	-	-	-	4	-	-	-
g/l	-	-	-	-	-	-	-	-	40	-	-	-

Chelating agent : EDDHSA

> FITOHORM 65 Zn

Today, the soils of our country are increasingly deficient in zinc. The following crops are most sensitive to its deficiency: corn, wheat, apples, cherries, sour cherries, peaches, plums, roses, berries, peppers. In case of zinc deficiency, it is parallel to the vein of the leaf chlorotic striations appear, the growth of the plant is retarded, the

taste spaces are shortened (dwarfism in fruit crops), the development of the flower parts becomes delayed, the grains (corn) and fruits are deformed. The growth and development of the root system is also retarded, as a result, the plant is less anchored in the soil and the absorption of nutrients through the roots is also hindered.

Directions for use

Area of use	Dose
Arable land	for foliar fertilization: 3-5 l/ha/occasion
Horticultural Home garden	for foliar fertilization: in a concentration of 1-2% (1-2 dl/10 l of water) for nutrient solution: in a concentration of 0.1-0.5% (1-5 l/1000 l of water)

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	-	-	3,2	-	-
m/v%	-	-	-	-	-	-	-	-	-	4	-	-
g/l	-	-	-	-	-	-	-	-	-	40	-	-
Chelating agent : EDDHSA												

> FITOFERR T3

Iron-containing fertilizer solution with chelating agent, which can be used to prevent and cure

iron deficiency in arable and horticultural crops, on alkaline, calcareous soils, primarily in the form of soil treatment.

Directions for use

Area of use	Dose
Grapes, Fruits	at installation 10-15 ml / vine in growing grapes: 50-120 ml / vine
Berries	25-100 ml / vine
Ornamentals	ornamental shrubs: 5-25 ml / stem ornamental trees: 120-250 ml / stem rose: 10-25 ml / stem
Foil cultivation	for nutrient solution: 0.5-1 l / m ³ of water

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	2,4	-	-	-	-	-
m/v%	-	-	-	-	-	-	3	-	-	-	-	-
g/l	-	-	-	-	-	-	30	-	-	-	-	-
Chelating agent : EDDHSA												

> HERBAL

Plant conditioner with the power of herbs, which promotes plant homeostasis. Its special feature lies in the fact that it combines the components of plant conditioner product types that have appeared in the past two decades. The herbs, humic acids, and essential oils contained in the product together support the immune system of cultivated plants, which, by strengthening the root system, promotes the utilization of nutrients, mineral salts, and trace elements in the soil.

which, by strengthening the root system, promotes the utilization of nutrients, mineral salts, and trace elements in the soil.

It accelerates the absorption of nutrients, stimulates growth, thereby making the plant stronger and increasing its nutrient exchange. By improving its water balance, the plant makes good use of the uneven amount of precipitation, HERBAL helps the vegetation through the temporary drier period.

Composition

	organic matter content	N	P ₂ O ₅	K ₂ O	Ca
m/v%	3,0	0,02	0,05	0,6	0,1
herbal extract, organic earthworm humus extract					

Advantages of application:

- » Stimulates plant growth, chlorophyll formation and respiration activity (more intensive photosynthesis) activation of special, so-called secondary defense functions (phytoalexins),
- » strengthening the resistance of plants,
- » increases the plant strengthening function,
- » increases the biological activity of the soil, thereby ensuring the strong growth of the root system.

Directions of use

Area of use	Dose
Arable land	In the amount of 5-10 l/ha, in a maximum concentration of 4%, applied 2 times during the growing season.

It can be used in the Agricultural Ecology Program, After using it, you get 1 point!

Way of use	Arable
Optional good jó practice	Application of soil conditioners, plant conditioners or N-fixing products on at least 50% of the arable land
Contribution to the inveroamental objective	The practice promotes the recovery of the soil's organic matter stock and the improvement of soil potential and soil biodiversity, thereby contributing to the reduction of nutrient loss and the improvement of the soil's water retention capacity. And healthier soil contributes to reducing the use of fertilizers and pesticides.



> FULVO MAX

FulvoMax is a plant conditioner containing free plant amino acids, fulvic acids and microelements, so it can be said that it is a real energy bomb for our cultivated plants. When applied as a foliar fertilizer, it strengthens the cells and helps to maintain a healthy stock, and it also ensures that the plants' nutrient needs are met. The microelements have been prepared in the right ratio for the plants and are all chelated with our own EDDHSA chelating agent, thus ensuring better utilization, more uniform application and easier absorption.

The biostimulant effect of the preparation is enhanced by the presence of free amino acids of plant origin, which have been carefully selected to help the integration of micro and macro nutrients into the plants. During product development, we looked for amino acids that were produced by enzymatic hydrolysis, because this way optically active amino acids are produced, which are immediately incorporated into the plants, thus saving energy, which can be used for other life processes.

Composition

	B	Cu	Fe	Mn	Mo	Zn	Fulvo acid	Amino acid
m/m%	0,1	0,06	1,25	0,5	0,03	0,1	15	4
m/v%	0,13	0,075	1,5	0,66	0,035	0,115	18	5
g/l	1,3	0,75	15	6,6	0,35	1,15	180	50

Chelating agent: EDDHSA

Advantages of its application:

- » By using it, the plant saves energy,
- » accelerates and stimulates physiological processes, such as root growth
- » increases the stress and drought tolerance of the plant, thereby making it more resistant to extreme weather conditions (frost, drought, heat stress, water pressure, wind).

Directions for use

Area of use

Arable land

Dose

for foliar fertilization: 2-3 l/ha/occasion

It can be used in the agroecological program, and you will receive 1 point after applying it!



In order to protect bees and other pollinating insects, the product cannot be used during the flowering period! It cannot be used in the presence of flowering weeds!



Suitable for drone use..



It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand. To be used only in justified cases. Do not exceed the recommended dosage.



> FULVO N

FulvoN is a plant conditioning preparation supplemented with a microelement that provides efficient nitrogen supply through the leaves. The preparation is an excellent supplement to nitrogen top dressing, and the added fulvic acid has a positive effect on protein synthesis and photosynthesis intensity.

Fulvic acids help plants breathe, promote chlorophyll synthesis and root growth.

Experiments have shown that the use of the product makes plants more resistant to weather stress and improves their drought tolerance. Its effect is due to two main components: on the one hand, the absorption of organic nitrogen forms costs the plant less energy, and on the other hand, fulvic acids effectively reduce the effects of various abiotic stresses.

COMPOSITION

	N total nitrogen, water soluble	Nitrogen present as urea nitrogen	Nitrogen present as nitrate nitrogen	Nitrogen present as ammonia nitrogen	Cu copper, water soluble	Fulvic acid
m/m%	22	11	5,5	5,5	0,4	5,6
m/v%	27,7	13,85	6,925	6,925	0,5	7
g/l	277	138,5	69,25	6,925	5	70

SUGGESTED USE

Area of use

Arable land

Dosage

for conditioning, 5-8l/ha, according to expert advice

IT CAN BE USED IN THE AGRICULTURAL-ECOLOGICAL PROGRAM, IT GIVES 1 POINT



To protect bees and other pollinating insects, the product should not be used during the flowering period!



Do not use in the presence of flowering weeds!

Suitable for drone use..



It can also be used together with plant protection products, but we recommend checking the compatibility beforehand. Use only when justified. Do not exceed the recommended dosage.





More about the theme

> MAGMAX

During germination, plants use nutrients and energy reserves stored in the seed. However, due to the rapid growth of the plant, there is a need for an external source of nutrients and energy. FitoHorm MagMAX contains micro- and macronutrients in the right ratio for germinating seeds. This is also supported by laboratory tests. The nutrients applied to the surface of the seeds during germination are used by the plant during germination, which helps in the initial development.

When creating the composition of the soil, we used microelements such as Zinc (Zn), which helps primary rooting, Boron (B) and Manganese (Mn), which play a key role in carbohydrate metabolism, and Molybdenum (Mo), which helps the uptake and integration of Nitrogen and Boron. . The dose used accelerates the seedling's clay metabolism, promotes the incorporation of nutrients that can be absorbed from the seed and the soil. Thanks to this, the root mass and stress tolerance increase.

Composition												
	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	-	-	-	-	-	-	-	1	-	2	0,2	0,08
m/v%	-	-	-	-	-	-	-	1,3	-	2,5	0,24	0,1
g/l	-	-	-	-	-	-	-	13	-	25	2,4	1

Chelating agent: EDDHSA

Advantages of application:

- » It can be perfectly mixed with other seed dressing, increases their adhesion and efficiency,
- » extremely high coloring effect of the product,
- » provides a continuous supply of nutrients a in initial development, even on compacted, airless, alkaline soils, thereby increasing the homogeneity of the sprouted plant stock.

Directions for use	
Area of use	Dose
Seeding	1-3 liters per ton of seed, evenly applied to the surface of the seed with the required amount of water.

1

It can be applied to the surface of the seed alone or with weeding agents in one pass.

!

It can also be used together with plant protection agents, but we recommend checking the compatibility beforehand.

To be used only in justified cases. Do not exceed the recommended dosage.



> UREAFIN

Urea fertilizer is difficult for plants to absorb. Before it can be used as a nitrogen source, it must first be converted into ammonium (NH₄⁺) and nitrate (NO₃⁻). High ammonia losses tend to occur in light soils and tillage zones. An average of 24% (20% ammonia-N) ammonia losses are assumed to occur through volatilization (EEA, 2013).

To reduce these losses, we have launched our product UREAFIN! UREAFIN is a liquid urease inhibitor that slows down the conversion of urea to ammonia by one to two weeks, allowing the applied urea more time to penetrate deeper into the soil after rain. It should be mixed primarily with concentrated UAN solutions immediately before foliar application.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	FULVIC ACID
m/m%	22,16	-	-	2,1	4,8	-	-	-	0,007	5,6
m/v%	27,7	-	-	2,7	6	-	-	-	0,009	7
g/l	277	-	-	27	60	-	-	-	0,09	70

Chelating agent: EDDHSA

Advantages of its application:

- » Can be mixed with UAN solutions
- » Favorable cost per hectare
- » The plant's nitrogen utilization increases by 10-15%.

Suggested usage

Area of use	Dose
Arable land	1 dl UREAFIN mixed with 100 l UAN solution

Pour the measured amount of UREAFIN into the sprayer filled to 1/3 of its volume. In the case of pump tanks, the UREAFIN preparation must be filled first.

For greatest efficiency, appropriate nozzles should be provided for maximum coverage.



> COMPLETE PLUS

We recommend it for nutrient supplementation of garden, balcony and pot ornamental plants, as well as vegetable plants. FitoHorm Complete Plus, as its name suggests, is a complete, solid irrigation fertilizer that contains large quantities of the most important macro- and microelements. Due to its composition, it can be used for any houseplant, garden or flowering ornamental plant, both through foliage and soil.

It dissolves extremely quickly, and thanks to its high nutrient content, it is a very effective and economical preparation, which, in addition to preventing and curing nutrient deficiencies, also has a positive effect on flowering and improving the quality of the crop.

Composition

	N	P ₂ O ₅	K ₂ O	MgO	SO ₃	CaO	Fe	Mn	Cu	Zn	B	Mo
m/m%	14	7	21	-	22	-	0,165	0,032	0,017	0,02	0,01	0,002
Chelating agent : EDDHSA												

Directions for use

Area of use	Dose
Ornamental plants	As a foliar fertilizer: sprayed on leaves in a concentration of 0.2-0.5%. Applied to the soil as a nutrient solution: 10 g / 10 l of water (1 measuring spoon)
Geranium	As a foliar fertilizer: sprayed on leaves in a concentration of 0.2-0.5%. Applied to the soil as a nutrient solution: 20 g / 10 l of water (2 measuring spoons)
Vegetables	As a foliar fertilizer: sprayed on leaves in a concentration of 0.2-0.5%. Applied to the soil as a nutrient solution: 10-20 g / 10 l of water (1-2 measuring spoons)



1 kg of FitoHorm Complete Plus is enough for 1000 liters of water!



The nutrient solution is carried out weekly and followed by wash-in irrigation.
To be used only in justified cases. Do not exceed the recommended dosage.



> FITOPROTEKT WILDLIFE REPELLENT

FitoProtekt wildlife repellent is a preparation containing additional bittering and fragrance ingredients as well as adhesion-enhancing components, in contrast to simple products containing only potassium soap. The product has a license issued by NÉB-IH for sunflower cultivation.

The wildlife repellent effect is twofold: the wild population is primarily kept away by synthetic butyric acid derivatives that mimic human sweat, while the bitter taste prevents pests that are already present from feeding. We recommend preventive use of the product, at a concentration of 1%, by spraying the plant, from the appearance of cotyledons until the beginning of flowering. Since sunflower plants are usually treated when there are already a few leaves, the active ingredient of the potassium soap also provides protection against arthropod pests that appear at this time and cause damage.

Since its resistance to rain is limited, repeated treatment may be necessary to maintain effectiveness.



Suggested use

Area of use	Dosage
Sunflower	1% concentration

IT CAN BE USED IN THE AGRICULTURAL-ECOLOGICAL PROGRAM, IT GIVES 1 POINT



To protect bees and other pollinating insects, the product should not be used during the flowering period!
Do not use in the presence of flowering weeds!



Suitable for drone use.



It can also be used together with plant protection products, but we recommend checking the compatibility beforehand. Use only when justified. Do not exceed the recommended dosage.



BASIC RULES OF MIXING SPRAY JUICE, PRACTICAL ADVICE!

Nowadays, in both arable and horticultural cultivation, the application of 4-6 chemical products in one tank mixture during a plant protection treatment has become more prominent! This is justified by the reduction and rationalization of the number of trips during peak periods.

The chemicals used have different physical, chemical, and formulation properties. Each formulation has its own characteristics regarding mixing and blending in the spray liquid. Most manufacturers do not provide detailed information regarding the miscibility with other products for individual formulations and specific chemicals, due to the almost infinite number of available formulations and mixing variations.



It is therefore important to be aware of the basic rules of spray-air mixing in order to avoid inconveniences. One good way to learn about the miscibility of chemicals is to carry out a preliminary mixing test using a smaller amount of water. In many cases, those performing "plant protection" work believe that this is not necessary because they are well aware of the characteristics of the products used. In many cases, this is an unreasonably bold statement that is not justified by practice!

The primary consequences of improper spray solution mixing can be:

- excessive foam production coming out of the tank
- "curd formation",
- sticking and smearing to the tank walls and inside the pipe system,
- sedimentation, blockages
- phytotoxicity, scorching - etc...



If any of the above occurs, after the primary inconvenience, there is the financial loss of chemicals put into the "ruined spray solution", as well as the loss caused by partially or completely ineffective treatment, in worse cases, financial damage caused by scorching, and finally the issue of liability.

Knowing the above, it can be stated that there is no certain "scientific" scheme or method for mixing spray liquid. It is therefore important to carry out a mixing test and apply the experiences built on it during "live" spray liquid mixing. During the mixing test, changes are clearly visible, and problematic, non-mixable substances can be effectively filtered out!

HOW TO PERFORM THE MIXING TEST CORRECTLY?

1. Take at least 10l of water into a calibrated container intended for this purpose, from the water from which we want to prepare the tank mixture after the successful test. Identity is important, as ion concentration, pH, temperature, etc., can individually affect the outcome of a successful test!
2. Let us state that the proportion of the spray liquid intended to be applied per 1 ha is the amount of the mixing test, as the proportions of the ingredients in the mixing test must match the proportions in the tank!
3. If it is necessary to use a water softener or pH-influencing agent, first add this to the sample in the appropriate proportion, then mix thoroughly!
4. Pour the foliar fertilizer type product into the test and mix thoroughly!



5. After that, pour in the proportional amount of EC (Emulsion-Forming Concentrate) formulated materials (if have any), which should also be mixed well!
6. Next, add WP, WG, DC, DF, DG, SG solid formulation materials (if have any) in the correct ratio, then mix well!
7. After that, add the plant conditioning and biostimulator type substances to the test in the relevant ratio, then mix well! (if using such a product)
8. Next, the appropriate proportions of the SC, FL, FW, WSC formulated materials follow, which should also be mixed!
9. Finally, the proportional amounts of the SE, OD, EW, CS formulations can follow! Since these formulations can be "delicate" in terms of mixing for the components listed so far, wait 2-3 minutes after mixing these ingredients, observing the changes!
10. Add the proportional amount of the urea-formaldehyde active ingredients last, then wait a few minutes after mixing these ingredients, observing the changes!

If the mixture produced during the mixing test remains of a suitable, spreadable consistency, then we can mix the combination into the spray liquid tank according to the above sequence, paying attention to the experienced ratios, and apply it to the area!

GENERAL "PREVENTIVE" RULES:

- When using post-emergent herbicides, it is generally not recommended to use biostimulator-type substances together, as in such cases the risk of phytotoxicity and yield reduction increases.
- Use oil-based pesticides, herbicides, or their effect/adhesion enhancers in addition to foliar fertilizers containing copper microelements only after a successful mixing test,
- In addition to pesticides containing copper, only use oil-based pesticides, herbicides, or their effect/adhesion enhancers after a successful mixing test,
- When using any of the pH adjusting and water softening substances, special attention must be paid to the compatibility of the other partners.
- When using foliar fertilizers containing calcium and boron, avoid using water softening substances that cause acidic spray solutions,
- It is a general experience that water softening and water conditioning products cannot be mixed with zinc-containing products, so we only mix them after a successful mixing test.
- The combined use of phosphorus-containing and zinc-containing foliar fertilizers can cause blockages, so a preliminary mixing test is of particular importance (factory mixtures, however, are generally stable and effective).
- The use of UAN and other improper urea solutions in spray solutions has a high chance of causing scorching and phytotoxicity!
- When using bitter salt, copper gallic acid, boric acid, citric acid, sulfuric acid, phosphoric acid, AdBlue, etc. in spray solutions, we must be aware of the consequences of the loss of effectiveness of other chemicals, damage to the formulation, and sediment formation!
Here, a mixing test is mandatory.





OUR CONSULTANTS



NORTH-DUNÁNTÚL

Győr-Moson-Sopron, Komárom-Esztergom,
Pest megye dunántúli része

Kristóf Milán

+36 30/525-1434
milan.kristof@fitohorm.hu

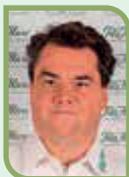


WEST-DUNÁNTÚL

Vas, Veszprém, Zala megye

Csicsely Róbert

+36 30/656-2166
robert.csicsely@fitohorm.hu



SOUTH-DUNÁNTÚL

Somogy, Baranya, Tolna, Fejér megye

Keresztes Zoltán

+36 30/635-3275
zoltan.keresztes@fitohorm.hu



SOUTH-HUNGARY

Bács-Kiskun, Csongrád, Békés megye

Gyói Gábor

+36 30/565-0479
gabor.gyoi@fitohorm.hu



NORTH-HUNGARY

Pest Dunától keletre fekvő része, Nógrád
Heves, Borsod-Abaúj-Zemplén megye

Téglás-Kovács Zoltán

+36 30/338-4835
zoltan.k.teglas@fitohorm.hu



EAST-HUNGARY

Jász-Nagykun-Szolnok, Hajdú-Bihar megye

Sipos Dávid

+36 30/647-8923
david.sipos@fitohorm.hu



EAST-HUNGARY

Szabolcs-Szatmár-Bereg megye

Tóth Tamás

+36 30/944-9157
tamas.toth@fitohorm.hu



FitoHorm Kft.

H-6500 Baja, Iparos u. 12
Tel.: +36 79/321-244
E-mail: iroda@fitohorm.hu

FitoHorm[®]

www.facebook.com/fitohorm 