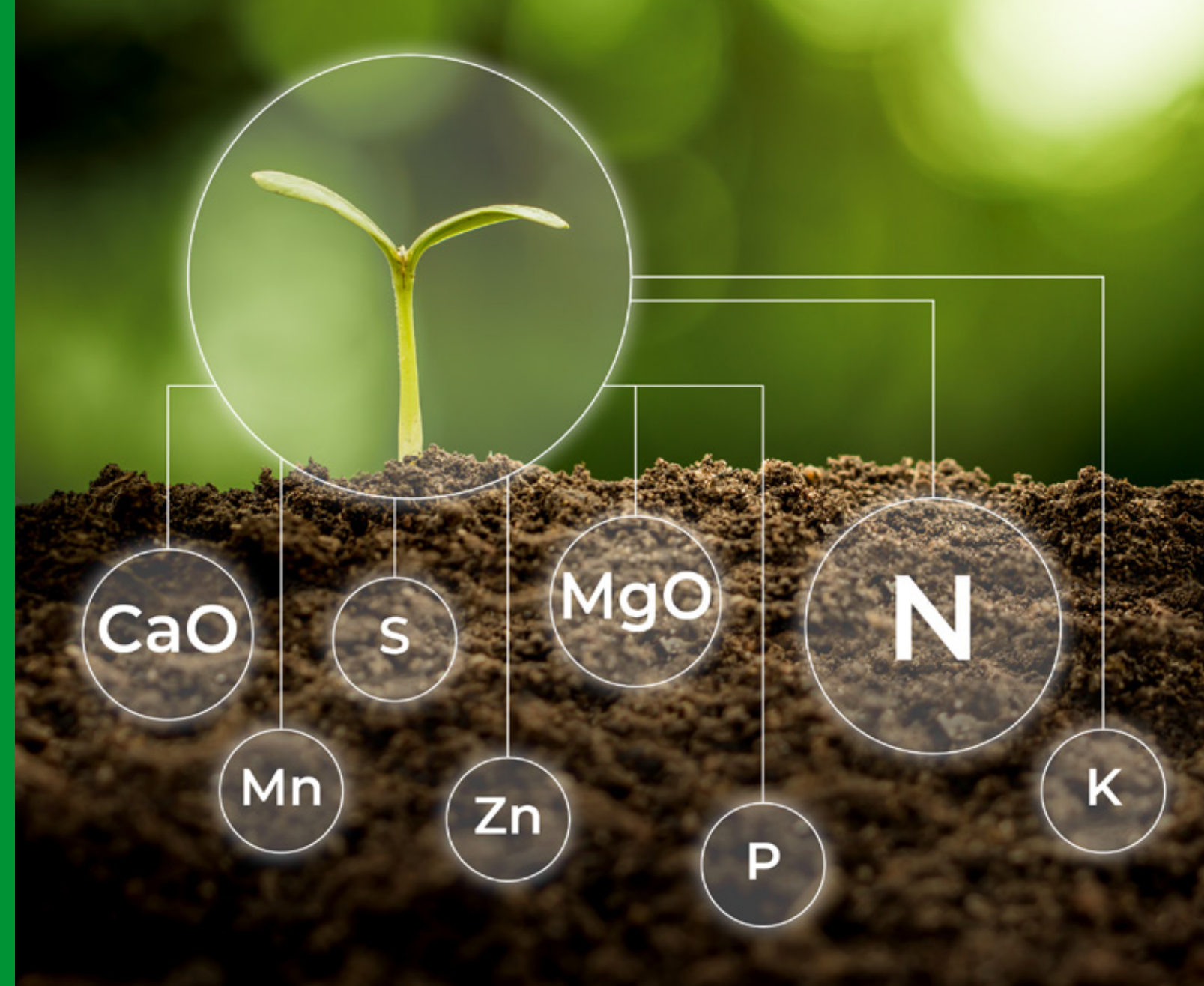


Contact details of Genezis Partner Network:

Arable land sales representatives:  
[www.genezispartner.com](http://www.genezispartner.com)



# GENEZIS

## Fertiliser

GENEZIS

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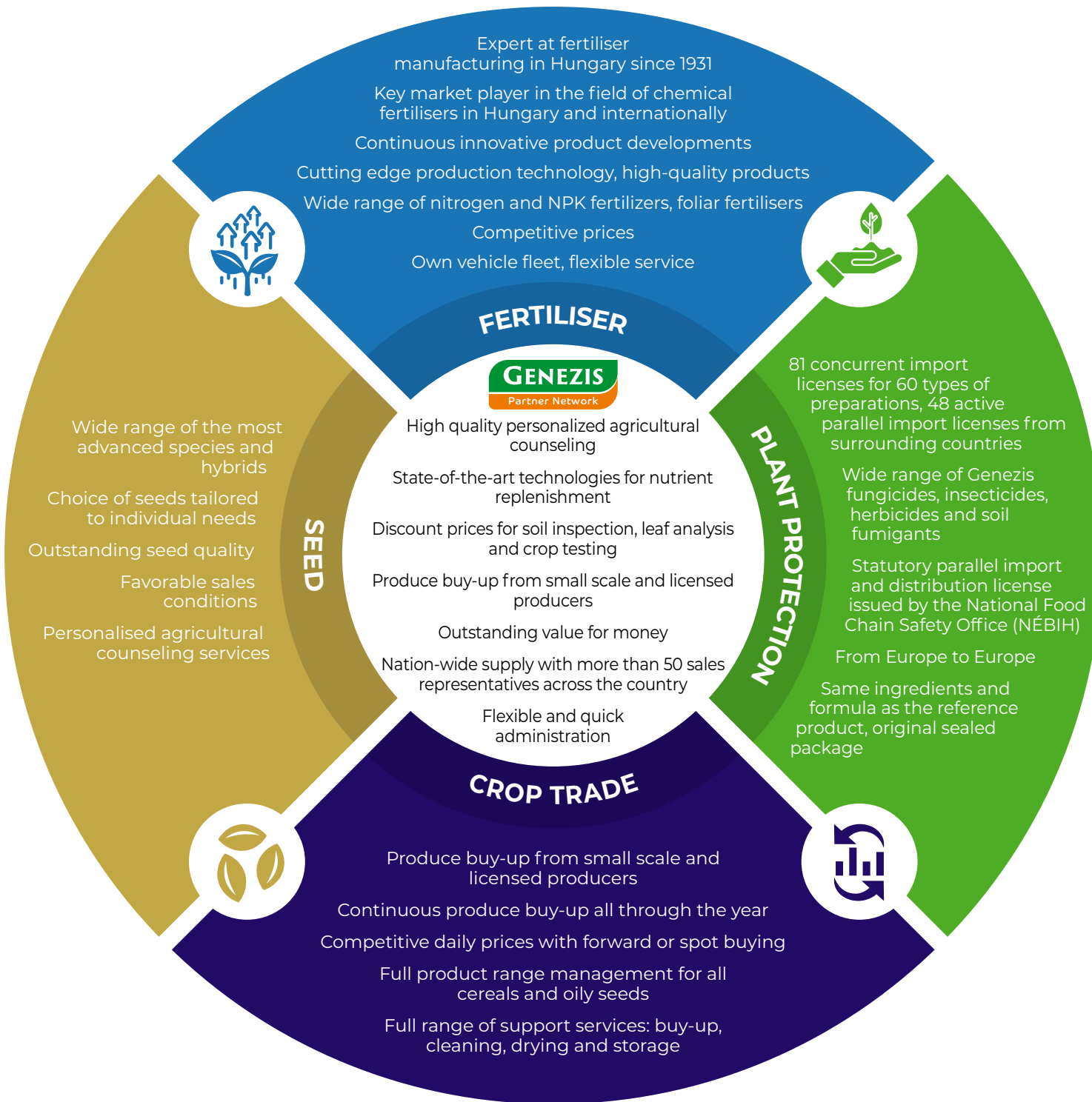
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# FULL RANGE OF AGRONOMIC SALES AND SERVICES

# HIGH QUALITY COUNSELING AND SALES



The Genezis Technology includes a wide range of Genezis fertilisers, seeds and pesticides. The special advisors of the Genezis Partner Network help you choose products that are tailored to your special needs.

### How can a Genezis Partner representative help you?

- High quality personalized agricultural counseling regarding the application of fertilisers, seeds and pesticides
- State-of-the-art technologies for nutrient replenishment
- Discount prices for soil inspection, leaf analysis and crop testing
- Produce buy-up from small scale and licensed producers at competitive daily prices with forward or spot buying
- Outstanding value for money
- Nation-wide supply with more than 50 sales representatives across the country
- Flexible and quick administration
- Own logistics fleet

**GENEZIS**

Technology

[www.genezispartner.com](http://www.genezispartner.com)



**GENEZIS**

Partner Network

For more information please contact the sales representatives of Genezis Partner Network!

## DEAR PARTNER



for almost a century, stands out from its competitors with a total active ingredient content of more than 39%, thanks to its high calcium oxide and magnesium oxide content from natural dolomite sources.

We strongly believe that only the most efficient production can weather the storm in an increasingly competitive environment. It is equally true to agricultural production and chemical production. Working together with farmers and sharing our experience of almost 100 years is a prerequisite of successful production and development.

Our company can produce a full range of nitrogen fertilisers at its site in Pétfürdő, which is located in an area of over 500 hectares. In addition to our flagship product, Péthisó, we also offer newly developed products such as the sulphurous 'Kénes Péthisó' and Green Max. In addition to these, standard ammonium nitrate, urea and nitrosol are also available to our partners. At the plant of Bige Holding Kft. in Szolnok, we offer a wide range of NPK complex fertilisers. With our high quality irrigation and foliar fertilisers for arable and horticultural crops produced at the plant of Péti Nitrokomplex Kft., we offer a complete portfolio of fertiliser input materials for all Hungarian farmers.

Through our nationwide Genezis Partner Network, we sell our products in Hungary with the help of excellent professionals. Our sales representatives also provide agricultural counselling, sell pesticides and seeds (cereals and hybrids) and buy crops. With the help of Genezis Trans, our Group can meet all logistical challenges in-house with a fleet of more than 190 semi-trailers.

We would like to thank all our Partners for their successful cooperation and loyalty to our Company over the past years.

We wish you success in your farming endeavors!

**Dávid Bige**  
Chief Business Officer

The events of the past four years have placed huge burden on Hungarian agriculture. No matter if it's the disruptions in supply chains caused by the coronavirus pandemic or the energy crisis resulting from the Russo-Ukrainian war – both have made life difficult for Hungarian producers. Today's high production costs combined with a lower income per tonne on the market of agricultural finished products always have the same result: those who cannot farm efficiently will not survive. We at Nitrogénművek Zrt., as the representatives of the only Hungarian-owned fertiliser producing plant, feel responsible for not only supplying Hungarian agriculture with input materials in excellent quality, but also for maintaining the competitiveness of Hungarian agriculture and providing correct and reliable information to Hungarian farmers.

For more than 93 years, our company has worked tirelessly for the Hungarian agricultural sector, constantly innovating and adapting to environmental challenges. Our factories produce the most efficient, environmentally friendly and highest quality products in the world. Our flagship product, 'Péthisó', which has been produced in our country



**Géza Poprády**  
Commercial and  
Network Development Director



**László Cséri**  
Sales Director  
West Hungary



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**András Vermes**  
Director of  
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**István Szabolcs Póser**  
Director of the  
Seed Trade Business Unit



**Lóránd Bánki**  
Export Business and  
Network Development Director



**Melinda Molnár**  
Manager  
Genezis Trans Kft.



# DO THE MATH! MORE FERTILISER, MORE PROFIT!

Demand for food has increased significantly over the last few decades and this trend is expected to continue. Given the limited availability of arable land, the growing demand can only be met by intensifying production.

This will require, in particular, the use of varieties/hybrids with higher yield potential, irrigation farming, more rational and harmonious fertilisation adapted to the needs of intensive hybrids/varieties, more modern and productive agrotechnology (cutting-edge machinery and modern plant protection, etc.), while maintaining and improving soil fertility (e.g. achieving a positive NPK-balance) and meeting the requirements of environmental protection. Otherwise, we will not be able to exploit the genetic potential of the biological base, i.e. even if we buy the more expensive, higher yielding variety, we will not achieve the desired average crop yield. **Intensive farming not only means higher costs, but also higher yields; in case of intensive farming, the agrotechnical elements (variety selection, sowing, fertilisation, irrigation, crop protection) have a greater influence on average crop yield, while the ecological conditions (which are only partially or not at all under our control) have a lesser influence than in extensive farming.** Let's keep in mind that the nutrient content of the soil determines the yield as much as the amount of nutrients applied in that year. Since the availability of organic fertilisers in our country is limited (in principle, 1 t for each hectare of arable land, which is equal to 10–15 kg/ha of NPK per year), applying fertilisers is almost the only cost-effective way of nutrient re-

plenishment. The events of 2022 and 2023 have led to significant increases not only in the prices of input materials, but also in crop prices.

We have thousands of results from experiments in the last 15 years, some of which are presented here, together with profitability calculations of course, to illustrate that **intensive farming (while also meeting the requirements of environmental protection) does pay off and can even be more economical and result in higher incomes.** In addition, achieving average crop yields that are almost the same every year (or at least above a certain level) (i.e. yield stability) seems to have gained importance recently, as it makes the following year's production much more predictable, and the distribution of income more reasonable, serving the aims of farming and its development. In one of our variety trials, we tested nine maize hybrids with FAO numbers between 360 and 420. In the area (Szentmártonkáta), all hybrids were grown applying two different NPK-doses (Plant and Genezis), side by side in the same field.

**In the case of the Plant technology, neither phosphorus nor potassium was applied at 150 kg of nitrogen active ingredient, because it was considered not justified for soils with higher than medium PK nutrient content. In the Genezis technology we recommended, 150/20/36 kg of NPK active ingredient was applied based on the principle that even with better than medium PK content of the soil, maize will respond well even to low doses of fresh PK fertilisation.**



Taking into account the current prices, we calculated at a production cost of 975 €/ha for the Plant technology and 1050 €/ha for the Genezis technology. We measured an average crop yield of 6.84–8.24 t/ha in the Plant field and 7.98–9.46 t/ha in the Genezis field, depending on the specific hybrid. At a farmgate price of 187,5 €/t, depending on the hybrid, this represented an additional sales revenue of 127,5–491,25 €/ha, 52,5–416,25 €/ha additional income in favour of the Genezis technology. At a farmgate price of 250 €/t, these were 170–655 €/ha and HUF 95–580 €/ha respectively. It means that even on a soil with a better than average PK-content, it is worth to apply even a low dose of PK fertiliser, as it leads to higher yield and, more importantly, additional income. Moreover, the break-even point (the crop price at which total revenues equal total production costs, meaning there is no gain or loss) was by 7,5–12,5 € lower for the Genezis technology than for the Plant technology.

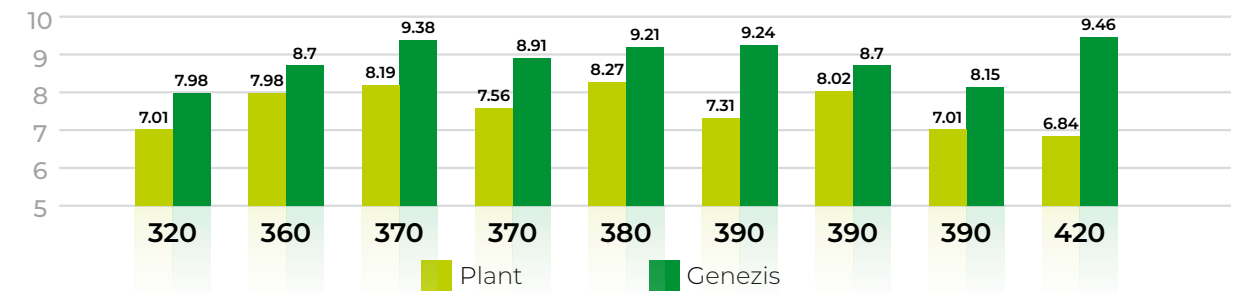


Figure 1 Yields of hybrids with different FAO numbers in the case of Plant and Genezis technology

In another Genezis experiment (Tiszanagyfalva), the Plant field received 96/20/10 and the Genezis field received 155/20/10 of NPK active ingredients. The average crop yield of maize was 11.03 t/ha and 13.05 t/ha, respectively. Calculated at current prices, the production cost of the Plant field was 850 €/ha, and 990 €/ha for the Genezis field.

Fertiliser	Plant technology	Genezis technology
Basic fertiliser	N/P/K = 15/20/10 kg/ha	N/P/K = 15/20/10 kg/ha
Top dressing	300 kg/ha Pétisó	520 kg/ha Pétisó
Foliar fertiliser	-	Genezis Maize 2 x 5 l/ha
Total NPK active ingredient kg/ha	96/20/10	155/20/10
Average crop yield t/ha	11.03	13.05

Table 1

At a farmgate price of 187,5 €/t, an additional sales revenue of 378,75 €/ha, so 238,75 €/ha additional income was realised with the Genezis technology. At a farmgate price of 250 €/t, these were 505 €/ha and 365 €/ha respectively. This means that the application of a higher, but not unrealistically high additional amount of nitrogen results in a significant additional income even at current farmgate prices and production costs. There was no significant difference in the break-even point, and it was also quite low (75,86 €/t and 30,344/tonne). Experience gained from our two experiments described above is that a **harmonious dosage of fertilisers, adapted to crop needs and soil conditions, and based on expert counselling, can lead to higher average crop yields and higher incomes, as higher fertiliser prices are associated with higher crop prices.**



# Pétisó. Everything that Hungarian soil needs.

**GENEZIS**  
Fertiliser

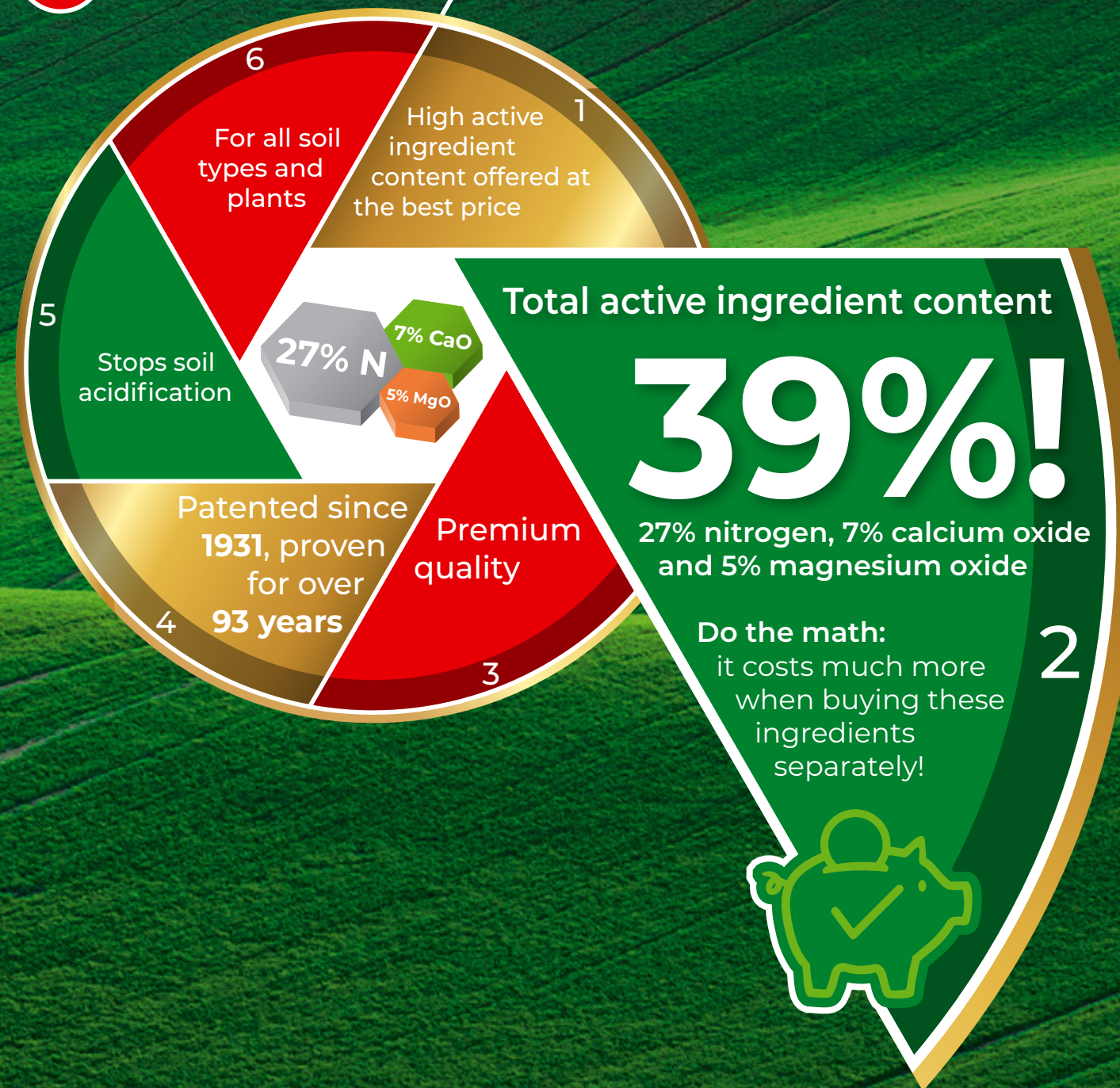
What we Hungarian farmers have in common is that we always make our decisions based on common sense and facts.

So when it comes to buying fertiliser, the choice is simple: Genezis Pétisó non-acidifying nitrogen fertiliser with uniquely high, 39% total active ingredient content, offering an outstanding value for money.

Thanks to its dolomite content, it stops soil acidification typical in our country; its excellent soil improving properties have been proven for over 93 years.



## 6 REASONS FOR USING PÉTISÓ:



Most of the successful farmers opt for Pétisó.  
**Choose the one that really gets your money's worth!**



## Pétisó, premium quality since 1931, with incredibly high total active ingredient content at 39%!

In the nitrogen fertiliser market, there are few flexible fertilisers that are both gentle on the soil ecosystem and offer an effective crop nutrition solution. **Genezis Pétisó** is backed by more than **93 years of manufacturing experience** and is an original Hungarian product. The brand name Pétisó has rightly become the synonym for fertiliser! The aim was to offer agriculture a nitrogen fertiliser that does not acidify the soil.

### Active ingredients of Pétisó

Pétisó provides effective supplementation of three macronutrients at the same time: nitrogen, calcium and magnesium. Its **nitrate component** is present in a form that can be taken up immediately, while its **ammonium content** can be stored in the soil for a short time and then either taken up by the plant in unchanged form or, after transformation (by micro-organisms), become available as nitrate ions.

**27% N**

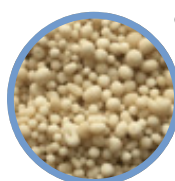
**7% CaO**

**5% MgO**

Its **calcium content** contributes not only to better plant resistance, but also to the formation of a better soil structure, allowing the soil to absorb and retain more water for the plants.

Its **magnesium content** is essential for chlorophyll formation, a well-developed root system, stress tolerance, better ability of being fertilised and fuller grain formation.

### Premium quality in nitrogen fertilisation



Originally, Pétisó was produced using a technology called prilling, which we still use today. **Prilled Pétisó** produced in this way contains premium quality grains with stable, porous structure. Its thermal stability is excellent, so there is less risk of recrystallisation, porosity and loss of active ingredients during storage. It has the same water solubility, i.e. water absorption rate, as ammonium nitrate and is equally soluble but does not acidify.

Thanks to its smaller particle size (0.8–4 mm), more particles are applied per 1 m<sup>2</sup>, resulting in a uniform dispersion, homogeneous distribution of active ingredients and evenly growing plant population. That's why prilled Pétisó is now a basic pillar of top dressing rapeseed, wheat and many other crops. Very little washing in precipitation is required for it to be utilised, due its small granules it has a high specific surface area, making it suitable for even delayed nitrogen top dressing. When uniform application with larger width fertiliser spreaders (36 m) is important, large-grain **granular Pétisó** with advanced granulation technology is the best choice. Granular Pétisó withstands physical impacts, its almost perfectly spherical granules make it easy to adjust the spreader, and it is less abrasive to metal parts. 98–99% of the grains of granular Pétisó fall into the main fraction and can therefore be evenly spread, resulting in uniform distribution of active ingredients and a uniformly developed plant stock. It is much less sensitive to storage than urea or ammonium nitrate.



### Pétisó is the basic pillar of soil-friendly nitrogen fertilisation

Soil acidity affects 2.2–2.3 million hectares of land in Hungary. 43% of our soils are slightly acidic and 13% are heavily acidic in Hungary, and the proportion of this latter one has been on the rise. A soil is said to be acidic when its pH is below 6.8. Soil acidity may be caused by climatic factors, soil-forming rock, topographic and hydrological conditions of the landscape, biological effects and last but not least, the unwise fertilisation practices of the past decades. It is time to put an end to such poor practices! The use of Genezis Pétisó is the basic pillar of soil-friendly fertilisation. Today, Genezis Pétisó still fulfils this function perfectly, thanks to its extremely high dolomite content of 228 kg/t. As a result, with every tonne of Pétisó applied, dolomite with excellent utilisation feature is also applied in the value of HUF 20,000.

Dolomite is a soil conditioner that is also an excellent source of calcium and magnesium, and is an ingredient of Genezis Pétisó in the form of uniquely fine grains. In contrast, most MAS-type fertilisers do not contain dolomite as a source of calcium, but other less utilisable by-products with little or no magnesium content. The dolomite in Pétisó is uniquely finely ground (<40 µm) and its high specific surface area allows the best and fastest utilisation. The acidifying effect of fertilisers is shown by the lime index, which shows how many kilograms of calcium carbonate can neutralize the acidifying effect of 100 kg of fertiliser. The lower the lime index, the less acidification is caused by the given fertiliser. It can be clearly seen that ammonium nitrate acidifies the soil six times more than Pétisó (Table 2).

Pétisó has a very low lime index (practically zero based on practical experience), so, with its regular use, sustainable nitrogen fertilisation may be achieved. If, instead of Pétisó, ammonium nitrate is used under the same growing conditions, twice as much nitrogen is lost, and if urea is used, eighteen times as much nitrogen is lost because of volatilisation (Figure 2).

Lime index of various nitrogen fertilisers	
Fertiliser:	Lime Index
Ammonium sulphate 20.5%	100
Urea 46%	80
Ammonium nitrate 34%	60
Nitrosol 30 %	40
Pétisó 27%	10
Green Max – previous name 'Pétimészó'	-30

Table 2



There is more to Pétisó than just a nitrogen fertiliser, it is a complex formulation that does not acidify the soil!

### Pétisó, the versatile nitrogen source

Pétisó is a universal product which can be used as a basal, starter and top dressing – without the germination inhibiting effect of urea. Pétisó can be used today, as in the past, in the nutrient replenishment of cereals, oilseed crops, protein crops and horticultural crops.

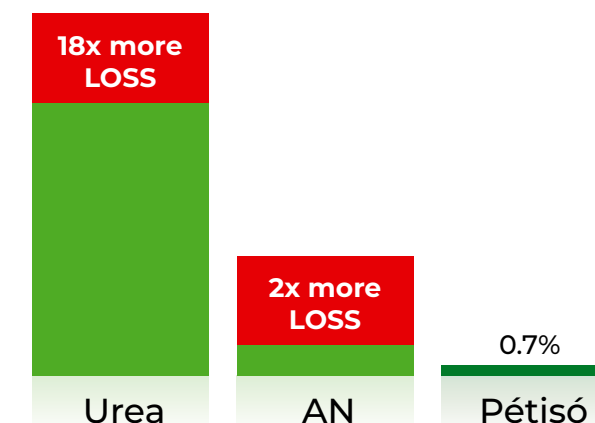


Figure 2: Nitrogen loss under the same growing conditions.

- ✓ State-of-the-art production technology
- ✓ Over 93 years of experience in production
- ✓ Hungarian product
- ✓ 100% guarantee

ACTIVE INGREDIENT  
**39%**  
CONTENT



## GENEZIS GRANULAR PÉTISÓ



**General features:** Granulated, well spreadable fertiliser with a uniform particle size distribution, containing nitrogen, calcium and magnesium.



**Recommended use:** As basal, starter and top dressing in a dose of 100–600 kg/ha, based on the plant needs, the nutrient content of the soil, according to expert advice. Nitrogen fertilisation with divided doses according to the growth rate of the plant not only increases yield quantity and quality, but also improves nitrogen utilisation.

**Advantages of the product:** As it does not acidify the soil, it is excellent for acidic soils, soils prone to acidification and soils with magnesium deficiency. It not only supplies nitrogen but also helps to meet the plant's calcium and magnesium needs in a single application. The especially finely ground dolomite (average size of about 40 µm) ensures rapid utilisation of calcium and magnesium. Due to its large particle size, it can be applied with excellent dispersion to even a distance of over 24 m. Its almost perfectly spherical grains cause minimal abrasion to the metal parts of machinery. The larger, spherical grain shape allows more precise adjustment of the seed rate in the seeder. The hard, solid grains withstand physical impacts well.

**Recommended crop:** All arable and horticultural crops, for basal, starter and top dressing.

### ACTIVE INGREDIENT CONTENT

N	CaO	MgO
27%	7%	5%



## GENEZIS PRILLED PÉTISÓ



**General features:** Prilled, well spreadable fertiliser with a uniform particle size distribution, containing nitrogen, calcium and magnesium.



**Recommended use:** As basal, starter and top dressing in a dose of 100–600 kg/ha, based on the plant needs, the nutrient content of the soil, according to expert advice. Nitrogen fertilisation with divided doses according to the growth rate of the plant not only increases yield quantity and quality, but also improves nitrogen utilisation.

**Advantages of the product:** As it does not acidify the soil, it is excellent for acidic soils, soils prone to acidification and soils with magnesium deficiency. It not only supplies nitrogen but also helps to meet the plant's calcium and magnesium needs in a single application. Due to its smaller particle size and higher hygroscopic feature, it dissolves easily even at lower soil moisture contents, and is therefore highly recommended for delayed top dressing or in low precipitation conditions, with excellent dispersion and high temperature tolerance. The especially finely ground dolomite (average size of about 40 µm) ensures rapid utilisation of calcium and magnesium.

**Recommended crop:** All arable and horticultural crops, for basal, starter and top dressing.

### ACTIVE INGREDIENT CONTENT

N	CaO	MgO
27%	7%	5%





Would you like higher yield and better nutrient utilisation?  
 Do you need to supplement nitrogen, calcium and magnesium at the same time?  
 Do you wish to improve soil structure and its water retaining capacity?  
 Would you like to improve the release of phosphorous by up to 20%?  
 Do you want to increase lime in the soil?

**If your answer is YES, use Green Max!**



Nitrogénművek has more than 93 years of experience in the production of nitrogen fertilisers. We have developed a special fertiliser for acidic soils, for soils with calcium and magnesium deficiency, and for crops with high calcium and magnesium demand. This product is our Green Max.

Why was it so urgent to develop our Green Max product?

More than half of the arable land in Hungary is acidic (pH <6). It can no longer go on like this! Nutrient release and utilisation is limited even at pH 6 and below. At this value, only up to half of phosphorus is utilised. Is it worth stopping soil acidification? There is no doubt about that! Soil acidification is a precursor to desertification. In our country, it is one of the most significant soil degradation factor potentially affecting the largest areas. Not only is nutrient uptake from acidic soils limited, but deteriorating soil structure causes cultivation and rooting difficulties, inland waters and waterlogging are formed, causing airless soil, root suffocation, inhibited root growth, reduced life in the soil, unhealthy soil, calcium deficiency, and yield loss. Acidic soil can absorb and retain less water, intensifying the adverse effects of an already increasingly extreme climate. **Over the last 30 years we have gradually acidified our soils.**

**What caused us to end up here?**

The main reason is the ill-considered fertilisation concept of recent decades that we can and must change now.

It takes only a decade or two (not centuries) to destroy a good productive soil with acidifying fertilisers. In view of sustainable agricultural production, we must take actions to curb the soil acidification process caused by the use of acidifying fertilisers and a failure to introduce the necessary amount of calcium. **The real culprits are urea and ammonium nitrate fertilisers.** Continued use will further deteriorate, acidify the soil, the ingredients are poorly utilised as they are not fit for our climate! Their use in times of drought is dangerous. **A significant part of them evaporates, is blown away by the wind, so nitrogen is simply lost.**

**The solution is a unique combination of nitrogen and soil conditioners: Green Max!**

It amounts to 159 kg/ha nitrogen (N), 161 kg/ha calcium (CaO) and 116 kg/ha magnesium (MgO) per tonne! **Finely ground dolomite powder with huge reactive surface due to its 40 µm particle size.**

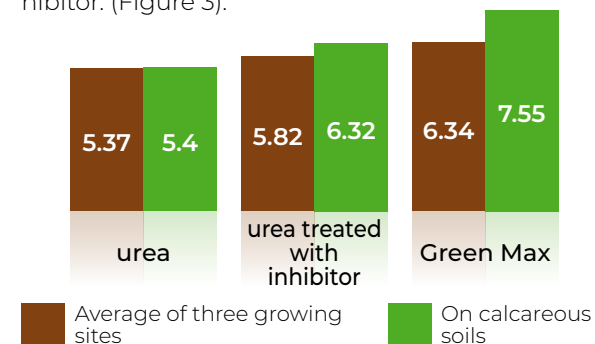
Acidifying fertilisers are often characterised by their lime index. **The lime index of ammonium nitrate is 60, that of urea is 80–100.** In other words, the soil acidifying effect of 100 kg ammonium nitrate or urea can be compensated by the application of 60 or 80–100 kg of CaCO<sub>3</sub> at the same time.

ACTIVE INGREDIENT CONTENT			
	N	CaO	MgO
	15.9%	16.1%	11.6%

**The lime Index of Green Max is -30! On acidic soils it is equivalent to a lime fertilisation with 300 kg/ha active ingredient.**

Green Max has been tested in both winter wheat and maize, comparing its efficiency with urea and urea treated with inhibitor.

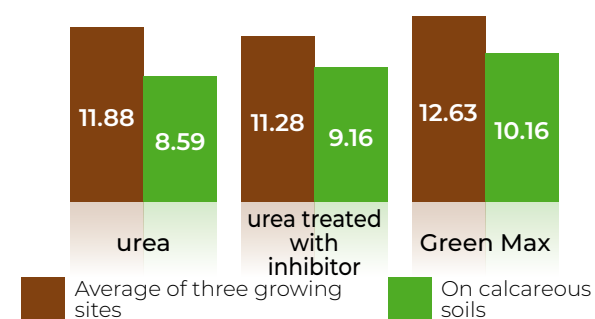
The results showed that in winter wheat **Green Max increased yields by 970 kg/ha compared to urea and 520 kg/ha compared to urea treated with inhibitor.** Even on calcareous soils, Green Max gave better results. In this case, Green Max produced a yield of 2,150 kg/ha higher than urea, and 1,230 kg/ha higher than urea treated with inhibitor. (Figure 3).



**Figure 3**  
Yield advantage of Green Max over urea in wheat (t/ha)

Our experiments in maize have shown similar results. In this case, Green Max yielded 750 kg/ha more compared to urea and 1,350 kg/ha more compared to urea treated with inhibitor.

**On chalky soils, Green Max produced a yield of 1,570 kg/ha higher than urea and exactly 1,000 kg/ha higher than urea treated with inhibitor** (Figure 4).



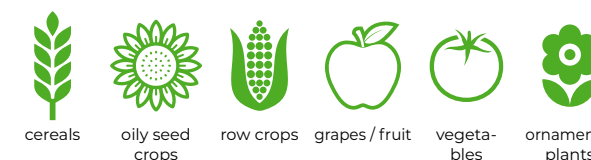
**Figure 4**  
Yield advantage of Green Max over urea in maize (t/ha)



All of this proves that in the case of acidic soils, achieving that the pH-value is close to neutral, while in the case of calcareous soils, achieving a better supply of calcium and magnesium resulted in higher yields, which provided additional revenue per hectare: 78–322,54 €/ha for wheat and HUF 95,6–200,2 €/ha for maize, depending on the growing site.

**Quick utilisation. Granulated fertiliser in perfect spherical shape. Unique quality. Its calcium and magnesium content covers the needs of any crop even in high yields. Immediate action and long lasting effect.**

**Its soil improver content are from mines in Hungary.** It is not industrial waste or manufacturing by-product. **Original Pannonian sediment.** The soil improver active ingredient in Green Max is alkaline. **It works very well for acidic soils in increasing soil pH, with the effects already showing in the first year of application.** Other materials containing calcium, which are pH-neutral (gypsum, anhydrite, anhydrite), do not improve the pH value of soil.



**Do not jeopardise the Earth borrowed from our grandchildren! Use our Green Max product!**





# Replenishment of macronutrients and soil improvement at the same time!

Covers the nitrogen, calcium and magnesium needs of the plant and improves soil pH.

Green Max is a granular, mineral-based nitrogen fertiliser with soil improving properties, for supplementing nitrogen, calcium and magnesium at the same time. Whether arable or horticultural crops, vegetable or fruit crops, it will maximise the yield of your crops.

#### Advantages of our Green Max product:


- The soil improving active ingredient in Green Max is alkaline, so it is very **effective in increasing the pH of acidic soils.**
- It **raises soil pH** in acidic soils and helps the uptake of calcium and magnesium in calcareous soils.
- **Its calcium content contributes** to the formation of a favourable soil structure, the formation of water-resistant soil crumbs, and thus to the **better water uptake of plants.**
- When used in the right dosage, it even **covers the calcium and magnesium requirements of high yielding crops.**
- **Magnesium is also essential** for the health of

plant populations, **stress tolerance and photosynthesis.**

- It can **increase the soil's phosphorus uptake by up to 20%**, resulting in higher yields and improved crop quality.
- The **finely ground dolomite ensures rapid utilisation of calcium and magnesium.**
- Thanks to its large particle size, it can be **applied with excellent dispersion to even a distance of over 24 m.**
- Its almost perfectly **spherical grains cause less abrasion to the metal parts of machinery**; easy to adjust the spreading equipment to it.
- **It does not fall within the scope of the precursor regulation.**

#### Recommended use:

As a basal, starter and top dressing in all horticultural and arable crops.

ACTIVE INGREDIENT CONTENT			
	N	CaO	MgO
	15.9%	16.1%	11.6%



cereals



oily seed crops



row crops



grapes / fruit

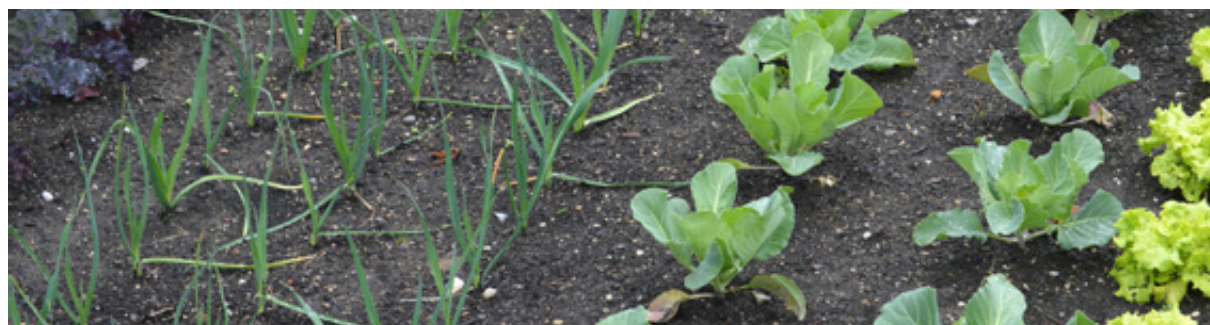


vegetables



ornamental plants





## Green Max nutrients serving the hobby garden

**Genezis Green Max is a unique soil conditioner, an essential element of sustainable and environmentally friendly crop nutrition.**

It is a new generation of nitrogen fertilisers where the focus is on protecting and maintaining soil structure and fertility. The active ingredient of soil improvement is dolomite, an ancient rock of unique composition and quality, dating back some 400 million years, which originates from the shores of Lake Balaton. With its nutrients, Green Max provides the nitrogen, calcium and magnesium needed for the dynamic growth and development of our plants, and improves their resistance. The soil improver used in its production has a very small particle size (20–40 µm), which allows it to be quickly absorbed into the soil thanks to its high specific surface area.

It improves soil structure, increases its nitrogen and phosphorus supplying capacity and stimulates life in the soil. This leads to higher yields and better crop quality.

Green Max nitrogen is the engine of growth. It needs to be replenished during the period of rapid growth following the early development period, and later during the fruit formation period. Leaf vegetables that develop large green mass have particularly high nitrogen demand – lettuce, spinach, radish, Chinese cabbage, kohlrabi, leeks, parsley –, but tomatoes, cucumbers, peppers, melons and potatoes also need significant amounts during growth (Table 3). Some fruit trees, such as peach, plum, sour cherry, apple trees and berries also have high nitrogen demand (Table 4).

	Bell peppers/ tomatoes	Peas/beans	Root vegetables	Cabbages	Onions
<b>Immediately before or at the same time as sowing, planting</b>	25–30 g/m <sup>2</sup>	30–45 g/m <sup>2</sup>	30–45 g/m <sup>2</sup>	40–45 g/m <sup>2</sup>	45–55 g/m <sup>2</sup>
<b>Top dressing</b>	50–65 g/m <sup>2</sup> at least 2 doses after the binding of the first clusters	-	30–40 g/m <sup>2</sup>	40–45 g/m <sup>2</sup> must be completed 1 month before harvest, in at least 2 parts	20–25 g/m <sup>2</sup> at bulb development

**Table 3:** Recommended use in vegetables

	Pome fruits	Stone fruits	Berries
<b>Before fruit setting</b>	25–30 g/m <sup>2</sup>	25–30 g/m <sup>2</sup>	-
<b>I fruit-bearing plants</b>	50–60 g/m <sup>2</sup>	40–55 g/m <sup>2</sup>	30–35 g/m <sup>2</sup>

**Table 4.:** Recommended use in fruits

Nitrogen is mostly stored in the leaves and fruits. Its uptake is highest during the period of intensive annual growth and fruit development. The nitrogen content of Green Max is gradually absorbed by the plants through transformation processes in the soil, minimising the nitrate load on the environment and supplying nitrogen to plants for longer than other products.



The calcium and magnesium content of Green Max makes it an excellent choice, especially for crops with high lime and magnesium demand, such as apples, pears, plums, peaches, potatoes, peas, other horticultural crops, herbs and ornamental plants. The calcium content of Green Max prevents apples from bitter pitting and improves their shelf life. Increased attention should be paid to replenishment in the first half of the growing season. In addition, our vegetable plants need calcium supply from the seedling stage to ensure good root development. The magnesium content in Green Max, together with nitrogen, provides the beautiful green colour of our plants, as this element is the core atom of the green pigments (chlorophyll). Green Max is easy to work with; it is an almost perfectly spherical granulate that can be precisely dosed and is easy to spread.

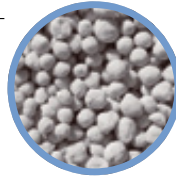




## GENEZIS GREEN MAX



**General features:** Granular, easy to spread fertiliser containing nitrogen, high levels of calcium and magnesium, produced in almost perfectly spherical, hard grains.



**Recommended use:** As basal, starter and top dressing in a dose of 200–1,200 kg/ha, based on the plant needs, the nutrient content of the soil, according to expert advice. Nitrogen fertilisation with divided doses according to the growth rate of the plant not only increases yield quantity and quality, but also improves nitrogen utilisation.

**Advantages of the product:** As it reduces soil acidity and increases soil pH, it is an excellent choice for acidic soils, soils prone to acidification and soils with magnesium deficiency. It not only supplies nitrogen but also helps to meet the plant's calcium and magnesium needs. It is suitable for nourishing the plant and improve the pH of acidic soil in a single application. Where applied in the right dose, in addition to the nitrogen demand it covers the magnesium and calcium needs for 10 t/ha of maize or 4 t/ha of sunflower or 4 t/ha of rapeseed or 9 t/ha of wheat. Its grains are easy to spread, and can be evenly distributed.

**Recommended crop:** All arable and horticultural crops, for basal, starter and top dressing.

### ACTIVE INGREDIENT CONTENT

N	CaO	MgO
15.9%	16.1%	11.6%



cereals



oily seed crops



row crops



grapes / fruit



vegetables

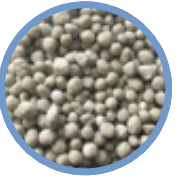


ornamental plants

## GENEZIS PÉTISÓ+S



**General features:** Granular, easy to spread fertiliser containing nitrogen, sulphur and calcium, with high grain stability.



**Recommended use:** As basal, starter and top dressing in a dose of 100–600 kg/ha, based on the plant needs, the nutrient content of the soil, according to expert advice. Nitrogen fertilisation with divided doses according to the growth rate of the plant not only increases yield quantity and quality, but also improves nitrogen utilisation.

**Advantages of the product:** Due to its sulphur content, it is excellent for eliminating sulphur deficiency and for fertilising crops with high sulphur demand (e.g. oilseed crops). It is suitable for replenishing nitrogen and sulphur at the same time. Sulphur increases oil content, helps nitrogen integration, improves overall plant health, stress tolerance, stem strength, nutritional values (baking quality, protein content, digestibility, gluten content). It has a uniform particle size distribution, hard grains, which are easily spread over long distances.

**Recommended crop:** All arable and horticultural crops.

### ACTIVE INGREDIENT CONTENT

N	SO <sub>3</sub>	CaO
24%	12%	9%



cereals



oily seed crops



row crops



grapes / fruit



vegetables



ornamental plants







## Where is the place for ammonium nitrate?

Although nitrogen is present in Pétisó also as ammonium nitrate, there is a not so insignificant difference.

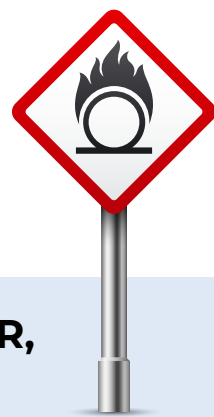
During the production of Pétisó, dolomite is added to the ammonium nitrate melt, which is first ground very finely in a special "dolomite mill". The average particle size of the finely ground material produced from chipping is <math><40 \mu\text{m}</math>. This is extremely high specific surface area, which serves as a high quality pH buffer.

Unlike Pétisó, ammonium nitrate has a very high lime index (expressing its acidifying effect) and 60 kg of additional lime (calcium carbonate equivalent) must be also applied to compensate for the acidifying effect. Buying a granulated liming material of a quality that can be used in a fertiliser spreader, and applying it in a separate operation is a very expensive solution. The cost of fertilising with lime is nowadays equivalent to the cost of fertilising with Pétisó.

Ammonium nitrate is a fertiliser with one active ingredient.

Although the nitrogen content of Pétisó is 27%, it increases to 39% thanks to the dolomite it contains, and provides the supply of 3 macronutrients (nitrogen, calcium, magnesium) at the same time. Calcium and magnesium are essential nutrients for plants, in addition to their soil-improving properties. These benefits are not available when ammonium nitrate is used.

In addition to its aggressive acidifying action, there is a greater risk of leaching or volatilisation of the nitrogen content. This means not only significant loss for the farmers, but also serious environmental load on groundwater and the atmosphere (nitrate leaching, ammonia volatilisation).



**ALSO, Ammonium nitrate is subject to ADR, as it is an explosive product!**

## Ever since we have Pétisó, practically nowhere!

In this case, the cheaper solution actually costs us a lot!

**Don't let the precious active ingredient, nitrogen, go to waste!**

**Replenish three main nutrients at the same time! Use Pétisó!**



- ✓ State-of-the-art production technology
- ✓ Over 93 years of experience in production
- ✓ Hungarian product
- ✓ 100% guarantee

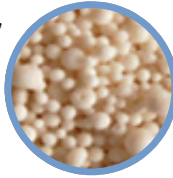
ACTIVE INGREDIENT  
**39%**  
CONTENT



## GENEZIS AMMONIUM NITRATE



**General features:** Prilled product, recommended for calcium-rich, neutral or slightly alkaline soils. Suitable for basal and starter fertilisation, and top dressing. Quickly dissolves in water and excellent for late top dressing due to its particulate matter formation.



**Recommended use:** To be applied in a dose of 100 to 500 kgs/hectare as basal, starter and top dressing as per crop requirements and professional advice.

**Advantages of the product:** Contains nitrogen in the form of ammonium and nitrate for easy uptake by plants.

**Recommended crop:** Recommended for all arable and horticultural crops.

### ACTIVE INGREDIENT CONTENT

N	NH <sub>4</sub>	NO <sub>3</sub>
34%	16.8%	17.2%



cereals



oily seed crops



row crops



grapes / fruit



vegetables



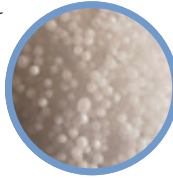
ornamental plants



## GENEZIS UREA



**General features:** An excellent prilled basal and top dressing, ideal for mainly airy soils rich in calcium and with an intense microbiology. Its amide-nitrogen provides a longer effect, so it is also suitable for early top dressing.



**Recommended use:** 100 to 400 kgs/hectare as basal and top dressing as per crop requirements and professional advice. Due to the inhibitory effect on germination, application should be made 10–12 days before sowing, and it must be worked into the soil.

**Advantages of the product:** Nitrogen fertiliser with the highest concentration. The amide-bound nitrogen slows down its release making it capable of supplying nitrogen for longer periods of time. It dissolves perfectly in water.

**Recommended crop:** Recommended for all arable and horticultural crops.

### ACTIVE INGREDIENT CONTENT

N
46%



cereals



oily seed crops



row crops



grapes / fruit



vegetables

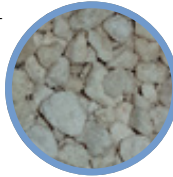


ornamental plants

## GENEZIS NS 21: 24



**General features:** Excellent compacted basal and top dressing. Popular composition. A fertiliser with high sulphur content to meet special needs. Hygroscopic fertiliser that dissolves in water quickly and easily.



**Recommended use:** Particularly beneficial for crops with a high sulphur demand (e.g. brassicales, oily plants) in sulphur-deficient areas. 100 to 400 kgs/hectare as basal and top dressing as per crop requirements and professional advice. Can be used for top dressing of winter wheat and winter swede rape in early spring.

**Advantages of the product:** Contains nitrogen as well as sulphur, therefore, it is excellent to increase protein, gluten and oil content and improve baking quality and digestibility. Its sulphur content increases crop resilience and builds stem strength.

**Recommended crop:** Recommended for all arable and horticultural crops.

### ACTIVE INGREDIENT CONTENT

N	S
21%	24%



cereals



oily seed crops



row crops



grapes / fruit



vegetables



ornamental plants





## Deciding on whether to use urea is a challenge facing our today.

Urea is a widely used fertiliser all over the world, with 46% nitrogen content, it has the highest concentration of all solid fertilisers. Is it really the most obvious solution for nitrogen replacement? **Is it as cheap and effective as we thought before? Unfortunately not.** Farmers using urea face a number of challenges, both from an efficiency and economic and from an environmental point of view.

Urea is a slow-acting nitrogen fertiliser that is actually impossible for the plant to take up directly through the root. First it must first be converted – and it takes time: 2 weeks in warm soil and 6 weeks in cold soil. This is why the rate of nitrogen release is unpredictable, as it is highly dependent on the current weather conditions, making the scheduling of application hard to plan, and therefore adjusting to the nutrient uptake dynamics of plants becomes almost impossible. **It is unsuitable as starter fertiliser because the ammonia formed from urea in the first step has a germination-inhibiting effect. It is unsuitable for top dressing and additional fertilisation because urea is a slow-acting**

### What to know about losses of urea.

**nitrogen fertiliser and can only be taken up by the plant after transformation.** Ammonia is generated during the process, it escapes on contact with air causing a loss of nitrogen, which is then not available to the plant, and also pollutes the environment. Even under normal conditions, 13.1% of the 46% nitrogen content of urea evaporates.

**During prolonged periods of sunshine, drought or when urea is not worked into the soil for extended periods, nitrogen evaporation in the form of ammonia increases significantly. This loss can be as high as 70%, which means that only 13.8% of the 46% nitrogen active ingredient remains. In waterlogged soils, nitrogen gas evaporation due to denitrification is increased, which also causes losses.**

Due to the lost nitrogen amount, the plant will not be able to build up the nitrogen compounds in its organism. According to literature, the overall yield will be reduced by 10–20%, which is supported by our experiments.

The loss could be as much as 70–85% of inputs, which is worth taking into account. In addition, its lime index, which is a measure of its acidifying effect, is high. In the case of urea, the application of 100 kg of liming agent (calcium carbonate equivalent) is necessary to counteract the acidifying effect of 100 kg of urea.

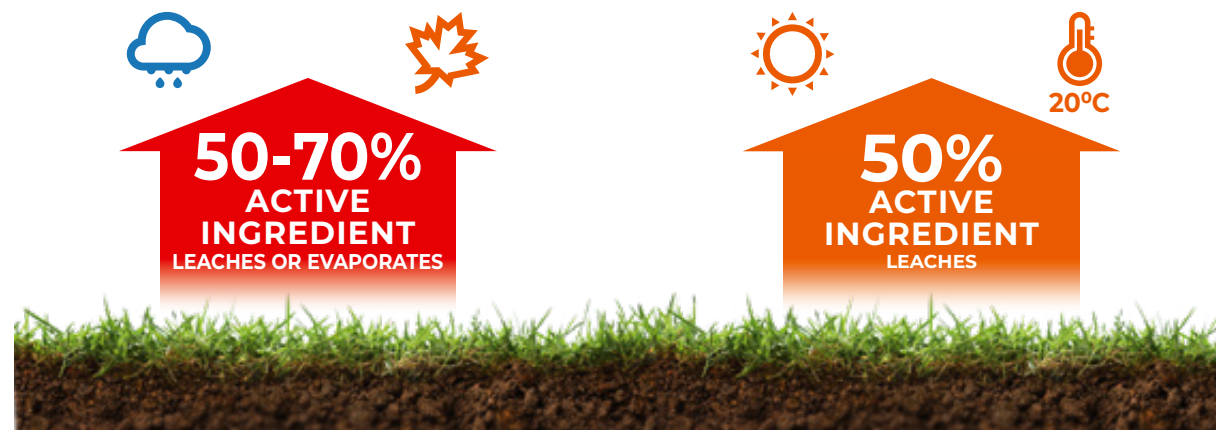
The question is: what are the benefits of using Pétisó, a MAS-type fertiliser, instead of urea? The answer is obvious. Due to its dolomite content, Pétisó does not further acidify the soil, and it supplies not one but three macroelements at the same time: nitrogen, calcium and magnesium. The nitrate-nitrogen content of Pétisó can be utilised by plants almost immediately.



Its ammonium nitrogen content, although directly available for the plants to uptake, can be stored in the soil for a short time, and then absorbed by the plant after it is transformed to nitrate.

This means a much better nitrogen utilisation than that of urea, which clearly serves as the economic solution.

**In this case, the cheaper solution with a lower unit price of the active ingredient actually costs us a lot! Don't let the precious active ingredient, nitrogen, go to waste! Use Pétisó!**



- ✓ State-of-the-art production technology
- ✓ Over 93 years of experience in production
- ✓ Hungarian product
- ✓ 100% guarantee

ACTIVE INGREDIENT  
**39%**  
CONTENT



# WHAT YOU NEED TO KNOW ABOUT

# THE USE OF UREA



We produce it for the industrial sector as an adhesive base, but we do not recommend it for use in agriculture.



When urea is used in the autumn, depending on precipitation and temperature, 50-70% of the active ingredient leaches or evaporates from the soil.



When used in spring, at 20 degrees Celsius 50% of the active ingredient evaporates from the soil in seven days. So your money is gone with the

So you have thrown your money out of the window and polluted your environment!



Urea becomes suitable for taking up by plants slowly, and it also acidifies the soil, reducing its productivity.



Urea is not the fertiliser to be used by your children and grandchildren.



Urea seems to be the cheapest active ingredient, but that's simply not true. Urea is the most polluting of all nitrogen fertilisers!



Our suggestion is to use Pétisó with 39% active ingredient, of which every kilogram is utilised.



**GENEZIS**

Fertiliser

So, if you still want to use urea, Nitrogénművek will be glad to supply you with this product.

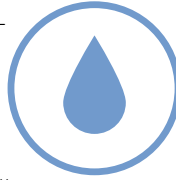


## GENEZIS NITROSOL PRODUCT LINE

**General features:** Nitrosol is a factory-produced urea ammonium nitrate solution (UAN) with a density of 1.3 g/cm<sup>3</sup> (NITROSOL 30% N). All members of the product line also contain nitrogen in the form of amide, nitrate and ammonium, which are also effective through the leaves. Our sulphurous NITROSOL is also available to add nitrogen and sulphur at the same time. Suitable for basal and starter fertilisation, and top dressing. It does not drain out. It is also excellent as an irrigation fertiliser. Also available with zinc, copper, boron and magnesium supplementation!

**Recommended use:** A field spreader with a nitrosol nozzle is required. Do not apply in the early morning or during the midday heat. Its use is recommended after 6 pm, in cloudy and calm weather. The addition of a wetting agent is prohibited. It can be mixed with most herbicides and stem hardeners, but a mixing test is always

required. Sulphur-containing NITROSOL is mainly recommended for fertilising oilseed crops or for sulphur-deficient crops. For cereals and rapeseed, a dose of 300–400 kg/ha can be applied without dilution until the end of tillering (late winter, early spring). At the start of stalk growth (cereals and rapeseed), the recommended dose is 100–150 kg/ha with 1:1 dilution. In mid-April, 80–150 kg/ha may be applied with a dilution of 2–3:1, depending on heat and light conditions. Temporary scorching of 2–3 mm. may occur in cereals, however, this is outgrown by the crop in approx. one week, after which the crop becomes greener and more developed. For maize and sunflower, it may only be applied as a basal dressing fertiliser or with a nutrient cultivator at a dose that meets the current nitrogen requirements of the crop. The operating pressure of the spreader must be reduced to 1.5–2.0 bar.



## GENEZIS NITROSOL PRODUCT LINE

**Advantages of the product:** Uniform dispersion, homogeneous active ingredient distribution, evenly growing crops. It requires less thorough irrigation to take effect. It also exerts its effect via leaves and soil. Its use as a foliar fertiliser in wheat improves quality.

**Recommended crop:** Oily plants (rapeseed, sunflower), cereals, maize.

### ACTIVE INGREDIENT CONTENT

<b>Nitrosol 30% N</b>	30 kg N/100 kg
<b>Nitrosol 30+Zn+Cu</b>	30 kg N + Cu+Zn/100 kg
<b>Nitrosol 20+4S</b>	20 kg N + 4 kg S/100 kg
<b>Nitrosol 16+6S</b>	16 kg N + 6 kg S/100 kg





# NITROGEN FERTILISERS

RECOMMENDATION FOR FERTILISER APPLICATION

Fertiliser quantities in the table are for information purposes only! Exact recommended composition and quantities are determined on the basis of expert advice and soil test results!

APPLICATION OF NITROGEN FERTILISERS ON MAJOR ARABLE CROPS							
Plant	Active ingredients required for the crop			Autumn nitrogen basal dressing fertiliser, if the use of a complex fertiliser is not recommended	Spring nitrogen basal and top dressing	Fertiliser need (kg/ha) Depending on the nutrient supply of the soil	
	crop (t/ha)	N	P <sub>2</sub> O <sub>5</sub>				K <sub>2</sub> O
Rapeseed	4-5	170	60	80	In autumn, a maximum of 35-40 kg/ha of nitrogen may be applied as a basal dressing fertiliser to avoid over-development.	Genezis Pétságó 27N+7CaO+5MgO	450-600
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	800-1000
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	500-700
						Genezis NS 21: 24	350-500
						Genezis Ammonium nitrate 34N	450-550
						Genezis Nitrosol 30N	650-850
						Genezis Nitrosol 20N +4S	450-800
Winter wheat	8-9	170	70	40	Maximum one third of the total nitrogen demand	Genezis Pétságó 27N+7CaO+5MgO	400-500
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	700-850
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	450-550
						Genezis Ammonium nitrate 34N	350-400
						Genezis Karbamid 46N	250-300
						Genezis NS 21: 24	550-650
						Genezis Nitrosol 30N	350-450
Genezis Nitrosol 20N +4S	600-700						
Winter barley	7-8	120	60	60	Maximum one third of the total nitrogen demand	Genezis Pétságó 27N+7CaO+5MgO	300-400
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	650-750
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	400-500
						Genezis Ammonium nitrate 34N	250-350
						Genezis Karbamid 46N	200-250
						Genezis Nitrosol 30N	300-400
Triticale	7-9	150	70	40	One third of total nitrogen demand	Genezis Pétságó 27N+7CaO+5MgO	400-550
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	750-900
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	500-600
						Genezis Ammonium nitrate 34N	350-400
						Genezis Nitrosol 30N	400-500

Table 5

# NITROGEN FERTILISERS

RECOMMENDATION FOR FERTILISER APPLICATION

APPLICATION OF NITROGEN FERTILISERS ON MAJOR ARABLE CROPS							
Plant	Active ingredients required for the crop			Autumn nitrogen basal dressing fertiliser, if the use of a complex fertiliser is not recommended	Spring nitrogen basal and top dressing	Fertiliser need (kg/ha)	
	crop (t/ha)	N	P <sub>2</sub> O <sub>5</sub>			K <sub>2</sub> O	Depending on the nutrient supply of the soil
Maize and sweet corn	10-12/20-24	170	60	70	Only in spring	Genezis Pétságó 27N+7CaO+5MgO	450-600
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	800-1000
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	550-700
						Genezis Ammonium nitrate 34N	400-500
						Genezis Karbamid 46N	300-350
Sunflower	4-5	85	50	70	Only in spring	Genezis Nitrosol 30N	400-550
						Genezis Pétságó 27N+7CaO+5MgO	200-300
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	350-500
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	250-350
						Genezis Ammonium nitrate 34N	150-250
						Genezis Karbamid 46N	100-180
						Genezis Nitrosol 30N	150-280
Spring barley	6-7	100	60	60	Only in spring	Genezis Pétságó 27N+7CaO+5MgO	250-370
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	450-600
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	300-400
						Genezis Ammonium nitrate 34N	200-290
						Genezis Karbamid 46N	150-210
						Genezis Nitrosol 30N	200-300
Sugar beet	40-60	100	90	160	Only in spring	Genezis Pétságó 27N+7CaO+5MgO	250-370
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	450-600
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	300-400
						Genezis Ammonium nitrate 34N	200-290
Potato	40-60	140	60	150	Only in spring	Genezis Pétságó 27N+7CaO+5MgO	400-500
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	750-875
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	500-580
Soy	3.5-4	80	60	80	Only in spring	Genezis Ammonium nitrate 34N	350-400
						Genezis Pétságó 27N+7CaO+5MgO	250-290
						Genezis Green Max 15.9N+16.1CaO+11.6MgO	400-500
						Genezis Pétságó+S 24N+12SO <sub>3</sub>	250-330
						Genezis Ammonium nitrate 34N	180-235

\* subject to medium or higher supply of nutrients



# NITROGEN FERTILISERS

RECOMMENDATION FOR FERTILISER APPLICATION

Fertiliser quantities in the table are for information purposes only! Exact recommended composition and quantities are determined on the basis of expert advice and soil test results!

SETTING PARAMETERS FOR SULKY FERTILISERS SPREADER FOR THE APPLICATION OF GENEZIS PÉTISÓ FERTILISERS							
Name of Genezis fertiliser	Progress speed	Sulky DPX24/PRIMA/70ANS/605/805/1155			Sulky DPX28 /DX30/DX30+		
		Spraying blade 18-24	Spreading width 18 m			Spraying blade 12-28 /18-28	Set value of spraying width
			Set value of spraying quantity				
			300 kg/ha	350 kg/ha	400 kg/ha		
Prilled Pétisó	8 km/h	117	20	21	23	115	
	10 km/h		22	24	26		
	12 km/h		25	27	30		
Granulated Pétisó/ Green Max/ Pétisó+S	8 km/h	121	21	23	25	119	
	10 km/h		24	26	28		
	12 km/h		27	29	32		

Table 6

# NITROGEN FERTILISERS

RECOMMENDATION FOR FERTILISER APPLICATION

SETTING PARAMETERS FOR AMAZONE FERTILISERS SPREADER FOR GENEZIS NITROGEN FERTILISERS									
Name of Genezis fertiliser	Progress speed	Work width 18 m			Work width 24 m				
		Spade position	Bolt position for setting the quantity			Spade position	Bolt position for setting the quantity		
			300 kg/ha	350 kg/ha	400 kg/ha		300 kg/ha	350 kg/ha	400 kg/ha
			Spraying disk OM 18-24				Spraying disk OM 18-24		
Granulated Pétisó/ Green Max/ Pétisó+S	10 km/h	24/47	35	37.5	39	24/48	39.5	42.5	45
	12 km/h		38	40.5	43		43	46.5	49.5
	14 km/h		40.5	43.5	46.5		46.5	50	54
Prilled Pétisó	10 km/h	17/46	31.5	33.5	35.5	18/49	35.5	37.5	40
	12 km/h		34	36	38		38	41	43.5
	14 km/h		36	39.5	41		41	43.5	46.5
Ammonium nitrate	10 km/h	23/43	31.5	33.5	35.5	27/43	35.5	37.5	40
	12 km/h		34	36	38		38	41	43.5
	14 km/h		36	38.5	41		41	43.5	46.5
Urea	Spraying disk OM 18-24			Spraying disk OM 18-24					
	10 km/h	16/45	35.5	38	40	15/48	40	43	46
	12 km/h		38.5	41	43.5		43.5	47	50.5
14 km/h	41		44	47	47		51	55	

Table 7







## Seeds from Genezis

## YOUR PROFESSIONAL PARTNER IN CROP TRADING!

Genezis Partner Network offers its customers a unique range of cereal and hybrid seeds. Our nationwide network with more than 50 sales representatives-counsellors helps our partners manage their farming effectively.

### Why choose us?

- Seeds of the most competitive varieties and hybrids in all arable crops
- Seeds of outstanding utilisation and quality
- Counselling on varieties and agrotechnics
- Favorable sales conditions
- Fast and accurate solutions in logistics



RAPESEED



SUNFLOWER



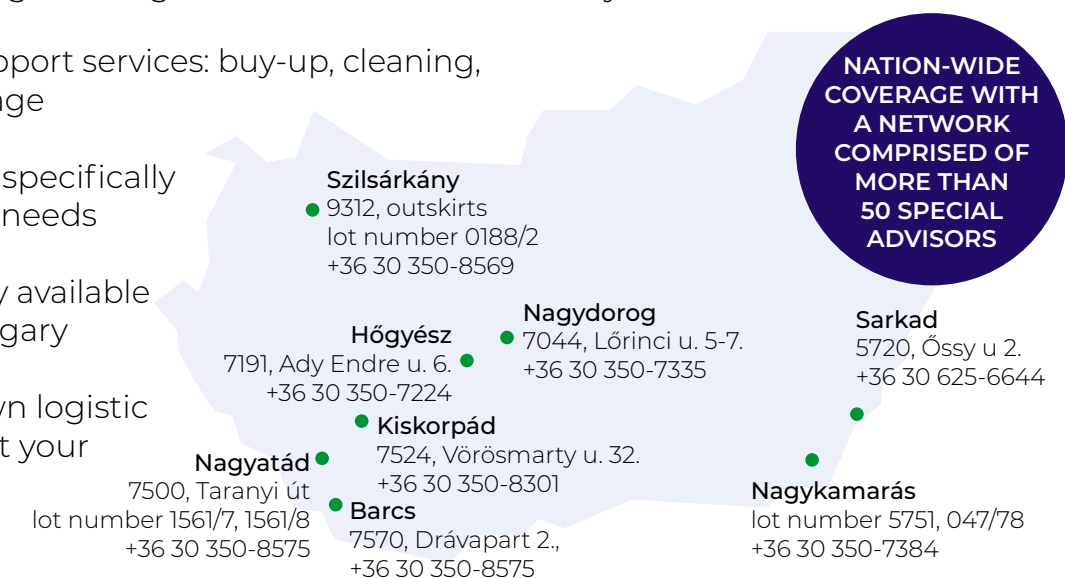
MAIZE



CEREALS

### How can we help you?

- Produce buy-up from small scale and licensed producers
- Continuous produce buy-up all through the year during, before and after harvest
- Competitive daily prices with forward or spot buying
- Full product range management for all cereals and oily seeds
- Full range of support services: buy-up, cleaning, drying and storage
- Flexible pricing specifically tailored to your needs
- Storage capacity available at 8 sites in Hungary
- We have our own logistic services to meet your specific needs



**GENEZIS**

Seed

[www.genezispartner.hu](http://www.genezispartner.hu)



**GENEZIS**

Crop Trade

Genezis sales representatives have the best offers on seeds.

For more information, please contact the special advisors of the Genezis Partner Network or call our branch offices!



## MOST EFFICIENT FERTILISER APPLICATION WITH THE NPK FROM SZOLNOK

The predecessor of Bige Holding Kft., Tiszamenti Vegyiművek, started its operations in 1951, and soon became the dominant chemical industry centre of Hungary's Great Plain region. The factory underwent an extensive transformation in 2004. Following the green-field investment, a new fertiliser plant began operation. Hungary's state-of-the-art NPK fertiliser factory has been producing compacted NPK products from the Genezis fertiliser product line since March 2004, thanks to the new, environmentally-friendly technology widely used in Western Europe, allowing the factory to reliably produce high-quality Genezis NPK, NP and PK fertilisers at a capacity of 140,000 tonnes per year. The fertiliser factory can produce virtually any composition for any order over 100 tonnes, which shows a unique flexibility in the market.

Fertilisers made with compaction technology are popular for their advantageous properties. Currently, this technology is spreading in Western Europe as well, as compacted NPK fertilisers are more modern and effective preparations compared to traditional granular fertilisers! The essence of the compaction technology is that after the homogenisation and milling of the

various NPK active ingredients, the mixture is pressed at high pressure, i.e. without a chemical reaction or drying process. The press cake produced in an environmentally friendly manner is then shredded, graded and made into a product with a particle size of 2–5 mm, which is surface treated to prevent sticking. As a result of the process, all the granules of the compacted Genezis NPK fertiliser from Szolnok are homogeneous, have the same active ingredient composition, and the physical properties of the granules are the same.

**Benefits of using Genezis NPK:**  
**High quality raw production materials!**  
**Excellent solubility!**

Due to the manufacturing technology, Genezis NPK fertilisers are much more soluble than conventional granular NPK preparations, even with lower levels of soil moisture. A major advantage of Genezis compacted fertilisers over conventional granular NPK fertilisers is that the technology produces very finely granulated materials smaller than 100 micrometers. As a result, a physical change takes place, due to which the specific surface area of the raw materials will be significantly larger and the fertiliser particles containing them will dissolve much faster.



The necessary active ingredients can be absorbed by the plants completely and at the right time, increasing their effectiveness. 95% water-soluble phosphorus, 100% watersoluble nitrogen and potassium content. The speed of the dissolution of

the compacted Genezis NPK fertilisers into water compared to hot granular fertilisers is clearly visible even when sprinkled into a glass of water! Excellent solubility even with less soil moisture, making it also ideal for spring use.

**NPK 4: 24: 24**  
**Before dissolution**



**NPK 4: 24: 24**  
**Dissolution after 30 minutes**





### Precise applicability!

Uniform transverse dispersion ensuring that plants receive the same ratio and amount of active ingredient per square meter of arable land. Based on our own measurements, the transverse spread unevenness (CV%) of the physically mixed fertilisers was in all cases worse than the transverse spread unevenness of analogue Genezis NPK complex fertilisers, and also differed significantly from the dose originally set by calibration. The accepted EU standard is maximum 15%. Spread unevenness (CV%) greater than this results in a measurable reduction in crop yield.

### No fractionation!

Use Genezis compact NPK fertiliser with confidence, as this fertiliser rules out the possibility of the extremely detrimental phenomenon whereby one granule contains only one active ingredient and another granule contains only the other active ingredient. All particles are guaranteed to have the same composition, making nutrient distribution even and homogeneous!

In the case of physically mixed NPK fertilisers, separation of the particles during transport, storage and use is common, i.e. particles of larger size and density travel to the bottom of the bag and the fertiliser mass in the fertiliser spreader tank. Therefore, the uniform application of the active ingredients is not feasible.

With a centrifugal spreader, the fertiliser application distance depends on the particle size and weight, therefore, even nutrient distribution is excluded based on the above. (Figure 5)

Figure 6 illustrates well the general defects of physically mixed fertilisers. According to the inscription on the bag of the product purchased, it was PK 10-30 fertiliser. According to the active ingredient amounts actually measured, it was PK 7.8-36.9. The buyer purchased a 3: 1 P: K ratio fertiliser and received a 4.7: 1 P: K ratio fertiliser. When the product is spread, these ratios vary transversely, from one meter to the next, as shown in the figure, from 3.5: 1 to 7.6: 1.

Physically mixed fertilisers undergo objectively measurable significant segregation during fertiliser application and the original active ingredient compositions may show significant differences at different points of the plot, with a significant divergences in the ratios of the original active ingredient. The transverse dispersion clearly deteriorates and the adjusted doses need serious correction despite careful calibration.

### Flexibly variable compositions with excellent physical properties.

The advantage of compacted fertilisers is that their grain size and solidity meet current European quality standards, while their environmental impact and dust content are minimal. When spread, any dust that may be present comes from a very fine, powdery surface treatment material on the granules.

### Maximum flexibility in compositions.

In Genezis NPK fertilisers, the NPK active ingredient content can be varied according to the individual needs of farmers, and it can even be enriched with meso- and micronutrients. Due to all this, the NPK product range is extremely broad. Currently the Szolnok fertiliser factory offers 24 readymade products but, due to the rapid transition between the compositions, almost any combination of active ingredients can be produced in addition to these products.

It is often the case that, depending on the crop and the nutrient supply of the soil, farmers require a unique composition, which may mean different nutrient ratios or the addition of different micronutrients to products with an existing composition.

Dispersion of compacted complex and physically mixed fertilisers  
Comparison of dispersions

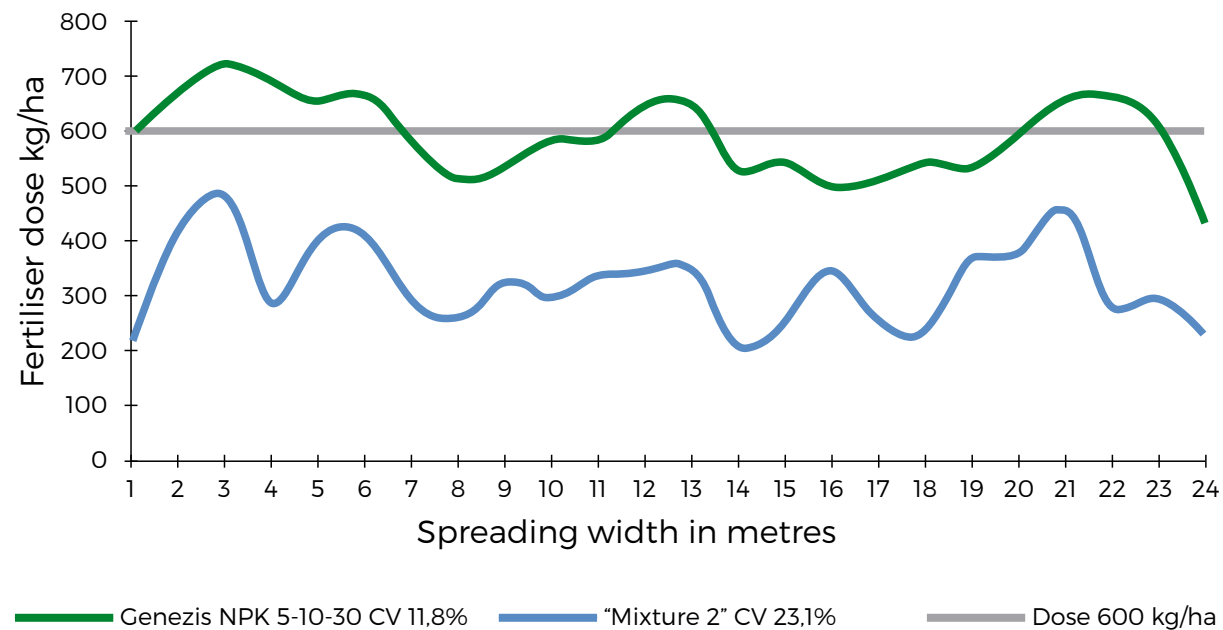


Figure 5

Active ingredient fractionation of a physically mixed fertiliser

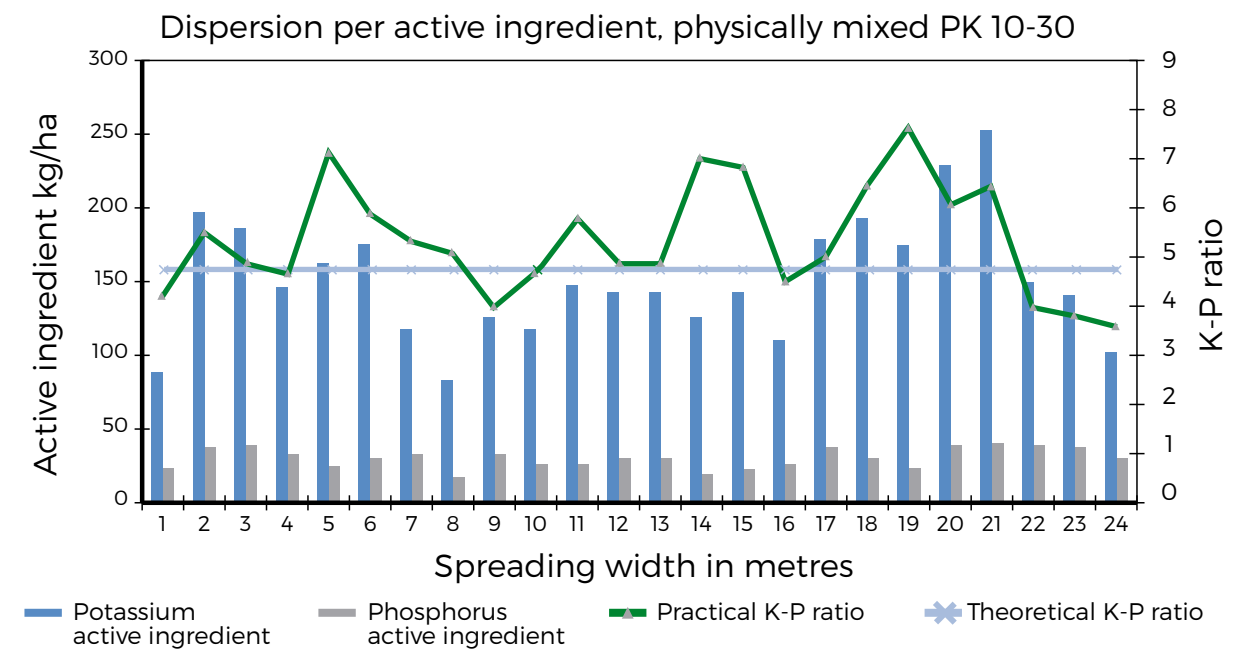


Figure 6



## GENEZIS NP GOLD STARTER MICROGRANULATE



### Accelerate initial development!

This product can be used to accelerate the initial development of germinating plants. When applied, the nutrient is placed directly alongside the seed, i.e. in the root zone of the germinating plant! With targeted fertiliser, you feed the plants directly, not the weeds between the rows.

### Effective root formation!

Nitrogen and phosphorus absorbed after sprouting promote efficient root formation, which is also promoted by the micronutrient content of the fertiliser (B, Zn, Fe).

### Improved water and nutrient uptake!

With stronger and more developed roots, the water and nutrient uptake of plants will be improved, improving and intensifying their growth.

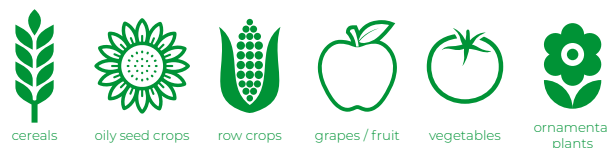
### Increased stress tolerance!

With a stronger root system, plants are more resistant to environmental stress, temperature fluctuations and lack of precipitation. The nutrient needs of modern, intensive, high-yield maize and sunflower hybrids significantly exceed those of the semi-intensive hybrids and varieties that were gen-

erally grown in the past. For these hybrids, the main breeding goal is early sowing and rapid early development vigour. Due to cool spring weather and low soil temperature, the nutrient supply capacity of the soil is limited (requiring a large amount of nitrogen and phosphorus that can be easily absorbed from the soil), resulting in delayed germination and slower initial development. In this case, the phosphorus supply capacity of the soil is low (there is already little phosphorus in the soil solution and at low temperatures, only a little phosphorus can be taken up from the soil by the plants), which is also indicated by maize plants showing anthocyanin discoloration on their leaves. Due to the relative lack of phosphorus, the plant cannot take advantage of its initial rapid developmental vigour, and even the more sensitive, initial developmental stages are prolonged, causing stress to the plant and a significant decrease in yield. Therefore, it is important to protect sunflowers and maize from variations in weather conditions, such as sudden cooling or rapid warming. The solution is microgranular starter fertilisation, which seeks to ensure strong root growth as well as rapid and even sprouting for the germinating plant, without adding clays that inhibit root formation in the immediate vicinity of the root. The Genezis Gold Starter NP microgranulate contains nutrients with excellent water solubility that plants can easily absorb. The recommended dose of Genezis Gold Starter NP microgranulate for application during sowing is 15–25 kg/ha. This product can be used to accelerate the initial development of plants. The nutrient is then placed directly alongside the seed, i.e. in the root zone of the germinating plant! With the targeted fertiliser, you feed the plants directly, not the weeds between the rows. Nitrogen and phosphorus absorbed after germination promote efficient root formation, which results in improved nutrient and water uptake by plants! We recommend its use on cold soils, in the case of early sowing or of cool weather after sowing.



ACTIVE INGREDIENT CONTENT				
N	P <sub>2</sub> O <sub>5</sub>	B	Fe	Zn
10%	48%	0.1%	0.3%	1%



## GENEZIS NP 10: 48 + 0.1 B + 0.3 Fe + 1.0 Zn

### Macroelement concentration in the soil solution:

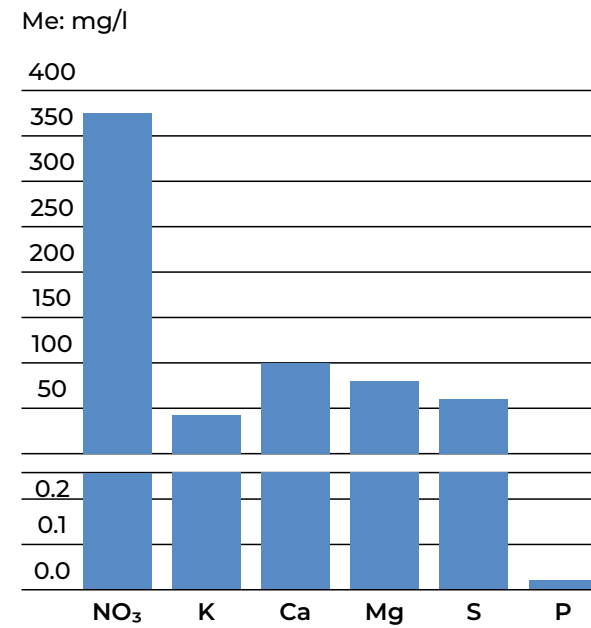


Figure 7

### Phosphorus uptake at different soil temperatures:

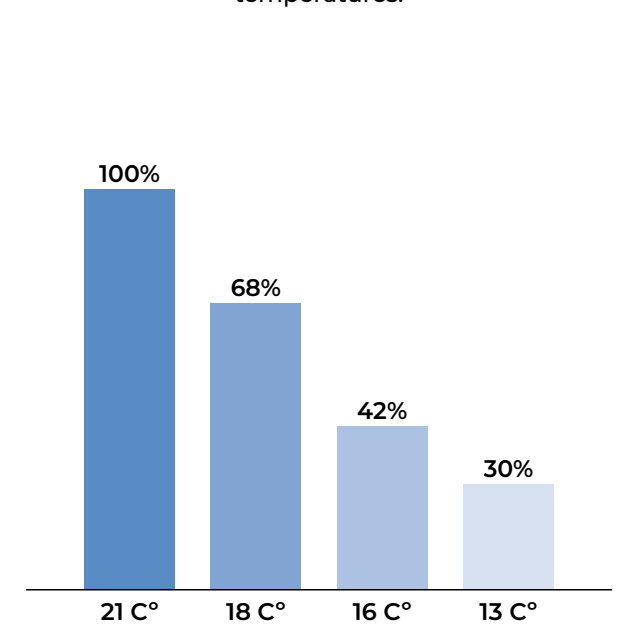


Figure 8

## GENEZIS NP 15: 25 + 2.1 CaO + 10.8 S + 0.1 B + 0.02 Cu + 0.02 Fe

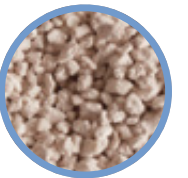


**General features:** Rich in sulphur, this basal and top dressing of excellent water solubility can be applied across the entire surface before or together with sowing at one go for winter and spring crops. The composition is suited to the nutrient requirements at the early stage of development.

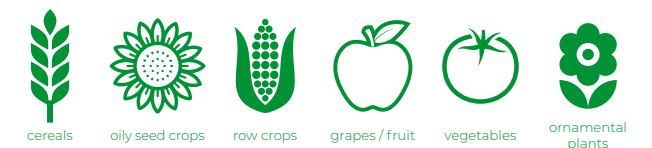
**Recommended use:** It can be applied as basal dressing fertiliser before sowing and side dressing distributed with a seed drill using 100–150 kgs/hectare as per crop requirements.

**Advantages of the product:** In addition to phosphorus, nitrogen and sulphur, it also contains microelements that promote initial rapid development. Its sulphur and boron content promotes the rapid initial development and winter hardiness of oily plants and winter wheat. Its phosphorus content promotes dynamic tillering and crop growth. The micronutrient supplemented version helps prevent deficiency symptoms. Its active ingredients dissolve well in water, ensuring excellent utilisation. It is used for crops with a high sulphur need as a basal dressing for wheat and rapeseed in autumn and as a starter for sunflowers and maize in spring.

**Recommended crop:** Recommended for all arable and horticultural crops with a high sulphur need as autumn and spring basal and starter dressing.



ACTIVE INGREDIENT CONTENT						
N	P <sub>2</sub> O <sub>5</sub>	CaO	S	B	Cu	Fe
15%	25%	2.1%	10.8%	0.1%	0.02%	0.02%





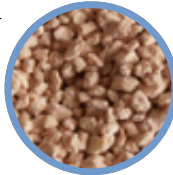
# NP AND NPK FERTILISERS

1:1 PHOSPHORUS : POTASSIUM RATIO NPK FERTILISERS

## GENEZIS NPK 8: 15: 15 + 11.9 CaO + 2.6 MgO + 6.7 S + 0.05 B



**General features:** Starter dressing with a balanced amount of phosphorus and potassium for winter and spring crops and it contains all the six macronutrients that your plants need during vegetation. It has excellent solubility in water and contains nitrogen that helps accelerate the decomposition of autumn stalk residues.



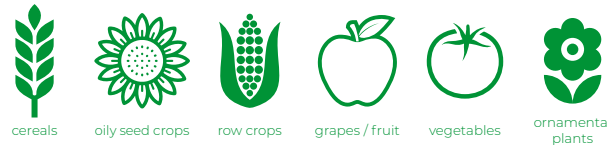
**Recommended use:** For autumn and early spring basal dressing: 300–400 kgs/hectare as per crop requirements and professional advice. Its phosphorus content promotes dynamic tillering and crop growth, its potassium content increases winter hardiness, drought tolerance and stem strength of the plants.

**Advantages of the product:** High phosphorus content for the efficient basal dressing of crops with a high phosphorus demand. Its active ingredients dissolve well in water, ensuring excellent utilisation. Soil pH buffering effect on hardily acidic areas. Its sulphur and boron content promotes the rapid initial development and winter hardiness of oily plants and winter wheat, while its calcium content helps stabilize cell walls and promotes a more efficient nutrient uptake and dynamic growth.

**Recommended crop:** Recommended for all arable and horticultural crops as autumn and early spring basal dressing fertiliser.

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	S	B
8%	15%	15%	11.9%	2.6%	6.7%	0.05%



# NP AND NPK FERTILISERS

HIGH PHOSPHORUS NPK FERTILISERS

## GENEZIS NPK 10: 20: 5 + 14.3 CaO + 2.4 MgO + 8.1 S



**General features:** A basal dressing fertiliser with high phosphorus, calcium and sulphur content and excellent water solubility developed for acidic soils with good potassium but low phosphorus supply, for nutrient replenishment of crops with a high phosphorus demand.



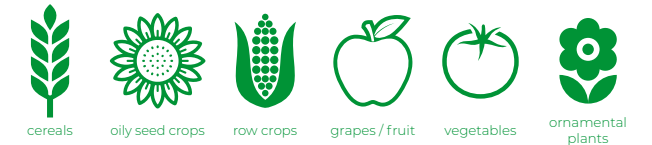
**Recommended use:** For basal dressing in autumn and early spring, 300–400 kgs/hectare as per crop requirements and professional advice. Its phosphorus content promotes dynamic tillering and crop growth.

**Advantages of the product:** High phosphorus content for fertilising crops with a high phosphorus demand. A basal dressing fertiliser for acidic soils due to its high calcium content. Its phosphorus content promotes dynamic tillering and crop growth. Its nitrogen content allows basal fertilisation under autumn grains in one pass and its sulphur content promotes the rapid initial development and winter hardiness of oily plants and winter wheat.

**Recommended crop:** Winter cereals and rapeseed, arable and horticultural crops with a high phosphorus demand.

### ACTIVE INGREDIENT CONTENT

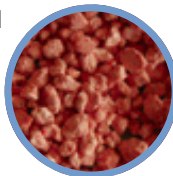
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	S
10%	20%	5%	14.3%	2.4%	8.1%



## GENEZIS NPK 4: 24: 24 + 13 CaO



**General features:** A basal dressing fertiliser rich in phosphorus and potassium, with excellent water solubility, recommended for winter and spring crops with a high phosphorus and potassium demand to be applied on soils with average or less than average phosphorus and potassium content.



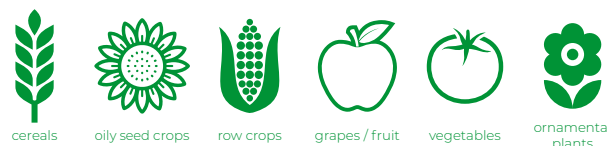
**Recommended use:** For autumn and early spring basal dressing: 300–400 kgs/hectare for cereals and rapeseed, 250–350 kgs/hectare around the base of spring crops as per crop requirements and professional advice. Its phosphorus content helps dynamic root development and crop growth, its potassium content contributes to increased stem strength, winter hardiness and higher drought tolerance.

**Advantages of the product:** Balanced ratio of phosphorus and potassium. Excellent water solubility! Applied in autumn, its nitrogen content increases the efficiency of stalk residue breakdown and accelerates nutrient release. Basal dressing for crops with a high phosphorus demand.

**Recommended crop:** Rapeseed, winter and spring cereals, spring crops, maize, sweet corn, soya, peas, sunflower and horticultural crops with a high phosphorus and potassium demand.

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO
4%	24%	24%	13%



## GENEZIS NPK 10: 20: 10 + 11.8 CaO + 8.1 S



**General features:** Compacted basal dressing fertiliser with calcium and sulphur, excellent water solubility, primarily developed for cereals on soils with less than average phosphorus and at least more than average potassium content.



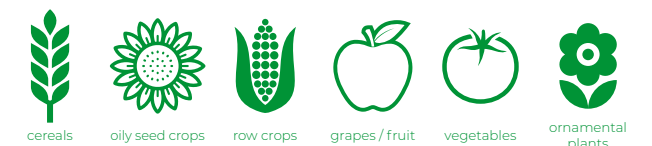
**Recommended use:** For basal dressing in autumn and early spring, 300–400 kgs/hectare as per crop requirements and professional advice. Primarily developed for basal dressing of cereals.

**Advantages of the product:** Basal dressing fertiliser with excellent water solubility and high phosphorus and sulphur content. Composition is designed to suit the requirements of cereals. Its phosphorus content promotes dynamic root development and crop growth at a later stage. Its potassium content contributes to stem strength and winter hardiness and higher drought tolerance, while its concentrated sulphur content increases the amount of gluten and results in higher quality.

**Recommended crop:** Cereals, rapeseed and any other arable and horticultural crops with a high phosphorus demand.

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	S
10%	20%	10%	11.8%	8.1%





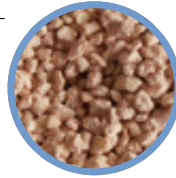
# NP AND NPK FERTILISERS

HIGH POTASSIUM NPK FERTILISERS

## GENEZIS NPK 8: 16: 24 + 9.3 CaO + 4.7 S



**General features:** A basal dressing fertiliser with excellent water solubility for row crops – a compacted fertiliser with increased phosphorus and high potassium content and sulphur to support early development on neutral and calcareous soils. An excellent choice for winter wheat on soils lacking potassium and for sunflower on soils with less than average phosphorus supply and for other crops with a high potassium demand.



**Recommended use:** For basal dressing of crops with a high potassium demand in autumn and early spring: 250–400 kgs/hectare for crops, 400–600 kgs/hectare for potatoes and sugar beet, as per crop requirements and professional advice.

**Advantages of the product:** A harmonious composition of nutrients to meet the nutrient requirements of row crops. Excellent water solubility! Its high potassium content contributes to increased stem strength, winter hardiness and higher drought tolerance. Its elevated phosphorus content promotes rapid early development and crop growth at a later stage.

**Recommended crop:** Maize, sunflower, potato, sugar beet and any other arable and horticultural crop with a high potassium demand.

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	S
8%	16%	24%	9.3%	4.7%



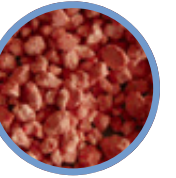
# NP AND NPK FERTILISERS

HIGH POTASSIUM NPK FERTILISERS

## GENEZIS NPK 4: 17: 30 + 10.3 CaO



**General features:** A complex preparation with a unique composition and high calcium content specifically developed for basal dressing of maize. A complex fertiliser with excellent water solubility, which is the perfect choice for maize, sunflower or other crops with a high potassium demand especially on soils with average to good phosphorus and poor potassium supply.



**Recommended use:** For basal dressing in autumn and early spring, 300–400 kgs/hectare for maize, 200–350 kgs/hectare for other crops (cereals, sunflower, soya), 400–600 kgs/hectare for potatoes and sugar beet as per crop requirements and professional advice.

**Advantages of the product:** Excellent water solubility! A harmonious composition of nutrients to meet the nutritional needs of maize and sunflower. Its phosphorus content helps dynamic root development and crop growth, its potassium content contributes to increased stem strength and higher drought tolerance, while its calcium content helps stabilize cell walls and promotes a more efficient nutrient uptake and dynamic growth.

**Recommended crop:** Maize, sunflower and any other arable and horticultural crop with a high potassium demand.

### ACTIVE INGREDIENT CONTENT

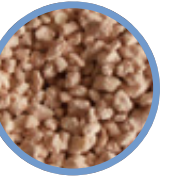
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO
4%	17%	30%	10.3%



## Genezis NPK 5: 10: 30 + +9.4 CaO + 2.8 MgO + +2.9 S



**General features:** A universal, potassium rich basal dressing fertiliser for row crops, a compacted fertiliser containing all the macronutrients to help meet calcium, magnesium and sulphur demand in autumn and early spring. A complex fertiliser with excellent water solubility, which is an ideal choice for sunflower and other crops with a high potassium demand and for soils rich in phosphorus and lacking potassium.



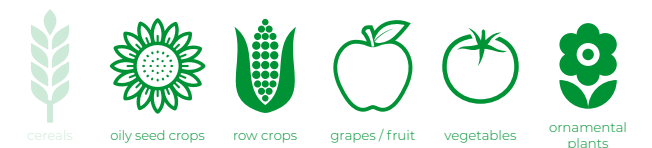
**Recommended use:** For basal dressing of crops with a high potassium demand in autumn and early spring: 300–400 kgs/hectare for maize, 250–350 kgs/hectare for sunflower and soya, 400–600 kgs/hectare for potatoes and sugar beet, as per crop requirements and professional advice.

**Advantages of the product:** Excellent water solubility! A harmonious composition of nutrients to meet the nutrient requirements of row crops, however, it is also effective for the basal dressing of cereals and rapeseed in areas with potassium deficiency. Its high potassium content contributes to stem strength, winter hardiness, natural resistance and better drought tolerance, while its calcium content helps stabilize cell walls and promotes a more efficient nutrient uptake and dynamic growth.

**Recommended crop:** Maize, sunflower, rapeseed, potato, sugar beet and any other arable and horticultural crop with a high potassium demand.

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	S
5%	10%	30%	9.4%	2.8%	2.9%





# NP AND NPK FERTILISERS

PK FERTILISERS

## GENEZIS PK 10: 20 + 18.3 CaO + 9.0 MgO



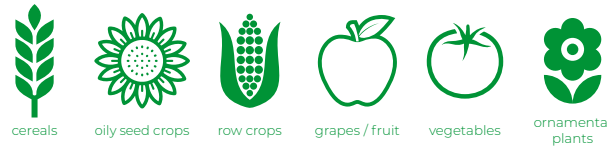
**General features:** A complex fertiliser with excellent water solubility and high calcium and magnesium content. The product has been developed for the autumn basal dressing of spring crops in an eco-friendly way especially for soils with less than average potassium supply.

**Recommended use:** For basal dressing in autumn and early spring, 300–500 kgs/hectare as per crop requirements and professional advice.

**Advantages of the product:** Excellent water solubility! Its high amount of lime and dolomite (calcium, magnesium carbonate) improves soil quality. If applied under spring crops in autumn, it avoids overloading soils with nitrate. It improves soil quality by reducing acidity so it is highly recommended on acidic soils.

**Recommended crop:** Any arable and horticultural autumn or spring crop.

ACTIVE INGREDIENT CONTENT			
P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO
10%	20%	18.3%	9.0%



## GENEZIS PK 10: 28 + 14.3 CaO + 6.2 MgO



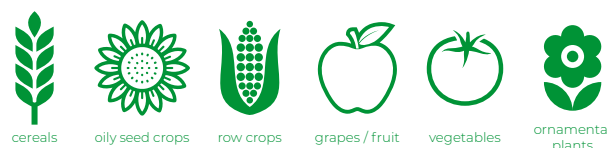
**General features:** A complex fertiliser with excellent water solubility and high calcium and magnesium content developed for the autumn basal dressing of spring crops in an eco-friendly way for acidic soils with less than average potassium supply. It does not cause soil acidification.

**Recommended use:** For basal dressing in autumn and early spring, 300–500 kgs/hectare as per crop requirements and professional advice.

**Advantages of the product:** Excellent water solubility! Rich in calcium and magnesium for soils which are prone to acidification. If applied under spring crops in autumn, it avoids overloading soils with nitrate. Soil pH buffering effect on hardly acidic and acidic areas. A basal dressing fertiliser for areas involved in the AE target programme and nitrate sensitive areas.

**Recommended crop:** Any arable and horticultural autumn or spring crop.

ACTIVE INGREDIENT CONTENT			
P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO
10%	28%	14.3%	6.2%



# NP AND NPK FERTILISERS

CHLORID-FREE NPK FERTILISERS

## GENEZIS NPK 11: 11: 18 + 16.2 S + 0.05 B + 0.05 Fe + 0.1 Mn + 0.02 Zn



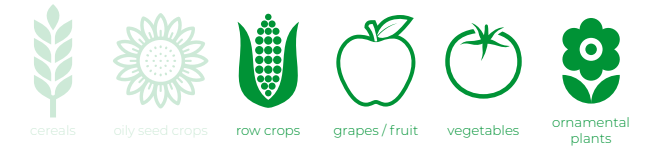
**Packaging:** 25 kg bag, 700 kg Big Bag.

**General features:** It was developed with chloride-sensitive horticultural crops (including, but not limited to: apples, pears, plums, courgettes, peppers, beans, onions, tobacco, cherries, beet, strawberries, redcurrants, gooseberries, raspberries) in mind, with the use of potassium sulphate instead of potassium chloride.

**Advantages of the product:** Can be used immediately before sowing or planting, as its chloride-free composition eliminates the negative effects of chlorine on germination.

**Recommended use:** Suitable both for basal dressing and top dressing. In horticultural crops: Application of 250–500 kg/ha (25–50 dkg/10 m<sup>2</sup>) is recommended.

ACTIVE INGREDIENT CONTENT							
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	S	B	Mn	Zn	Fe
11%	11%	18%	16.2%	0.05%	0.1%	0.02%	0.05%





# NP AND NPK FERTILISERS

POLYSULPHATE HIGH SULPHUR AND LOW CHLORIDE NPK FERTILISERS

## GENEZIS Kali+S Green



**General features:** It is not a simple potassium fertiliser as it not only contains 24% of sulphur trioxide but also calcium, and what is more, in a perfectly water-soluble form. It is recommended for supplying potassium and sulphur and adding calcium at the same time.



**Recommended use:** Autumn or spring KS basal dressing. Areas deficient in sulphur and crops with a high sulphur demand. 100–500 kgs/hectare depending on the nutritional requirement of the plant species, the nutritional properties and nutrient supply capacity of the soil. Fall fertiliser application is recommended for crops susceptible to chloride!

**Advantages of the product:** Excellent water solubility! It also contains calcium. The potassium and sulphur it contains are released gradually and washed out slowly allowing plants to make a better use of them and the way they are being leached is more consistent with the plant's dynamics of nutrient uptake than other traditional preparations. One macronutrient plus three secondary nutrients are included in a single product.

**Recommended crop:** Cereals, rapeseed, maize, sunflower, soya, oil pumpkin, sorghum, sweet corn, horticultural crops.

### ACTIVE INGREDIENT CONTENT

K <sub>2</sub> O	SO <sub>3</sub>	CaO
37%	24%	8.5%



cereals



oily seed crops



row crops



grapes / fruit



vegetables



ornamental plants

# GENEZIS NPK SUSPENSION FERTILISERS

**Genezis suspension fertilisers are typically made by floating solid substances with a particle size of between 500 nm and 2 mm, which are applied during liquid fertilisation or by injection onto or into the soil.**

They are manufactured in a closed system with computer control. The sedimentation of the ingredients is slowed by frequent stirring and adding bentonite gel to the Genezis suspension.

Genezis suspension fertilisers are prepared in a number of compositions. We are able to flexibly change the composition to suit individual needs.

Safe application is important while using suspension fertilisers, i.e. use it as soon as possible after delivery! The great advantage of the liquid formula is that no moisture is needed to dissolve the fertiliser particles, resulting in better utilisation in drier weather conditions.

Another great advantage is that with proper calibration of the application equipment (spraying, injection) an even dispersion can be achieved, which is a great advantage in dense row cultures with a small growing area per plant.

The best types of application equipment are those equipped with a piston or gear pump and 40 stop plate nozzles.

Application can be combined with ground work and it is advisable to work the suspension into the soil immediately after application.

When application immediately after delivery is not possible, it can be stored for 3 to 5 days, but then it must be stirred every day.






## Genezis NPK 18-7-7

**General features:** Due to its high nitrogen content, it is a basal dressing for soils with good phosphorus and potassium content. It is recommended for all field crops, primarily as an autumn basal dressing fertiliser for autumn cereals and rapeseed. In drier weather conditions, spring application is also worth considering.

**Recommended crop:** Autumn cereals, rapeseed and maize.

ACTIVE INGREDIENT CONTENT		
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
18%	7%	7%




## Genezis NPK 7-21-7

**General features:** A liquid fertiliser with high phosphorus content, at least 95% of which is absorbed by the soil. It is an excellent basal dressing for soils with a lower than average phosphorus content and for wheat and other autumn cereals. Due to the suspension formula, it is also suitable for spring application (spring cereals) on soils well supplied with potassium.

**Recommended crop:** Primarily for cereals, but for any other crops as well.

ACTIVE INGREDIENT CONTENT		
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
7%	21%	7%




## Genezis NPK 4-12-20

**General features:** A potassium-dominant suspension fertiliser high in active ingredients which, due to its composition, is an excellent basal dressing for maize, sunflower and rapeseed. Its active ingredient content is very effective even when applied in drier springs.

**Recommended crop:** Maize, sunflower and rapeseed.

ACTIVE INGREDIENT CONTENT		
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
4%	12%	20%




## Genezis NPK 10-10-12

**General features:** A preparation with a balanced content of active ingredients. Recommended for all field crops, as a general basal dressing fertiliser. In spring application, it is a basal dressing for sunflower and spring cereals.

**Recommended crop:** Primarily for row crops, but for any other plants as well. Sunflower, maize and spring cereals.

ACTIVE INGREDIENT CONTENT		
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
10%	10%	12%




## Genezis NPK 14-13-5 + 2 S

**General features:** A high quality liquid NP preparation with sulphur supplementation. It is a good choice for both basal and starter fertilisation, especially on soils with good or very good potassium supply. It can also be applied to the seed bed with suitable equipment.

**Recommended crop:** Winter cereals.

ACTIVE INGREDIENT CONTENT			
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	S
14%	13%	5%	2%




## Genezis NPK 6-10-15

**General features:** A suspension high in potassium, it is an excellent basal dressing for soy, maize and sunflower. We recommend it mainly for spring application, but you can also use it under rapeseed in autumn.

**Recommended crop:** Primarily soya, maize and sunflower, but for any other crops as well.

ACTIVE INGREDIENT CONTENT		
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
6%	10%	15%




## Genezis NPK 5.5-11-16.5 + 3 S

**General features:** A potassium-dominant suspension with significant amounts of phosphorus and sulphur. An excellent basal dressing for soybean, maize and sunflowers. We recommend it mainly for spring application, but you can also use it under rapeseed in autumn.

**Recommended crop:** Soya, maize, sunflower and rapeseed.

ACTIVE INGREDIENT CONTENT			
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	S
5.5%	11%	16.5%	3%




## Genezis NPK 14-7-14

**General features:** An autumn basal dressing for soils with good or very good phosphorus content. Recommended for spring application under maize and sunflower. Its high nitrogen content transferred into the aqueous phase makes excellent use of it, even in drier weather conditions.

**Recommended crop:** Maize and sunflower.

ACTIVE INGREDIENT CONTENT		
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O
14%	7%	14%





APPLICATION OF NPK FERTILISERS ON MAJOR ARABLE CROPS									
Plant	Active ingredients required for the crop				Autumn NPK basal dressing fertiliser	Fertiliser need (kg/ha) Depending on the nutrient supply of the soil	Spring NPK basal dressing fertiliser	Starter fertiliser	As a starter recommended dose (kg/ha)
	crop (t/ha)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O					
Rapeseed	4-5	170	60	80	GENEZIS Kali+S Green	300-400		Genezis Gold NP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					Genezis NPK 4: 24: 24	800-1000			
					Genezis NPK 4: 17: 30 +10 CaO	500-700			
					Genezis NPK 5: 10: 30 + 9.4 CaO + 2.8 MgO + 2.8 S	350-500			
					Genezis NPK 8: 15: 15 + 13.4 CaO+ 3.7 MgO+ 2.8 S	450-550			
					Genezis suspension NPK 4: 12: 20	650-850			
Winter wheat	8-9	170	70	40	Genezis NPK 10: 20: 10 + 13.8 CaO + 2.1 MgO + 5.7 S	300-400		Genezis Gold NP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					GENEZIS Kali+S Green	100-400			
					Genezis NP 15: 25 + 2.0 CaO + 10.8 S	250-350			
					Genezis NPK 4: 24: 24	250-350			
					Genezis NPK 8: 15: 15 + 13.4 CaO+ 3.7 MgO+ 2.8 S	350-400			
					Genezis suspension NPK 9: 18: 9	350-400			
Winter barley	7-8	120	60	60	Genezis suspension NPK 7-21-7	350-400		Genezis Gold NP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					Genezis NPK 10: 20: 10 + 13.8 CaO + 2.1 MgO + 5.7 S	300-400			
					GENEZIS Kali+S Green	100-400			
					Genezis NP 15: 25 + 2.0 CaO + 10.8 S	400-500			
					Genezis NPK 4: 24: 24	250-350			
					Genezis NPK 8: 15: 15 + 13.4 CaO+ 3.7 MgO+ 2.8 S	300-400			
Triticale	7-9	150	70	40	Genezis suspension NPK 9: 18: 9	550-650			
					Genezis suspension NPK 7-21-7	350-450			
					Genezis NPK 10: 20: 10 + 13.8 CaO + 2.1 MgO + 5.7 S	400-550			
					GENEZIS Kali+S Green	100-400			
					Genezis NPK 4: 24: 24	500-600			
					Genezis NP 15: 25 + 2.0 CaO + 10.8 S	350-400			
Maize and sweet corn	10-12/ 20-24	170	60	70	Genezis NPK 8: 15: 15 + 13.4 CaO+ 3.7 MgO+ 2.8 S	550-700	If no NPK fertiliser was applied in autumn , NPK compositions and doses recommended for fall may be used in the spring!	Genezis Gold NP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					Genezis NPK 4: 17: 30 +10 CaO	400-500		Genezis NP 15: 25 + 2.0 CaO + 10.8 S	100-150
					GENEZIS PK 10: 20 + 14.20 CaO + 9.90 MgO	300-350			
					Genezis suspension NPK 4-12-20	400-550			

Table 8

\* subject to medium or higher supply of nutrients



APPLICATION OF NPK FERTILISERS ON MAJOR ARABLE CROPS									
Plant	Active ingredients required for the crop				Autumn NPK basal dressing fertiliser	Fertiliser need (kg/ha) Depending on the nutrient supply of the soil	Spring NPK basal dressing fertiliser	Starter fertiliser	As a starter recommended dose (kg/ha)
	crop (t/ha)	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O					
Sunflower	4-5	85	50	70	GENEZIS Kali+S Green	250-500	If no NPK fertiliser was applied in autumn, NPK compositions and doses recommended for fall may be used in the spring!	Genezis Gold NP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					Genezis NPK 4: 24: 24	200-350			
					Genezis NPK 8: 15: 15 + 13.4 CaO+ 3.7 MgO+ 2.8 S	200-350			
					Genezis NPK 4: 17: 30 +10 CaO	200-350			
					GENEZIS PK 10: 20 + 14.20 CaO + 9.90 MgO	250-350			
					Genezis suspension NPK 4-12-20	200-350			
Spring barley	6-7	100	60	60	Genezis NPK 10: 20: 10 + 13.8 CaO + 2.1 MgO + 5.7 S	250-370	If no NPK fertiliser was applied in autumn, NPK compositions and doses recommended for fall may be used in the spring!	Genezis Gold NP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					GENEZIS Kali+S Green	100-300			
					Genezis NP 15: 25 + 2.0 CaO + 10.8 S	300-400			
					Genezis suspension NPK 7-21-7	200-290			
					Genezis NPK 4: 24: 24	150-210			
					Genezis NPK 8: 15: 15 + 13.4 CaO+ 3.7 MgO+ 2.8 S	200-330			
Sugar beet	40-60	100	90	160	GENEZIS Kali+S Green	300-600		Genezis Gold MP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					Genezis NPK 5: 10: 30 + 5.4 CaO + 3.76 MgO + 3.1 S	450-600			
					Genezis NPK 4: 17: 30 +5.2 CaO + 3.6 MgO	300-400			
					GENEZIS PK 10: 20 + 14.20 CaO + 9.90 MgO	200-290			
Potato	40-60	140	60	150	GENEZIS Kali+S Green	400-700			
					Genezis NPK 4: 24: 24	750-875			
					Genezis NPK 5: 10: 30 + 9.4 CaO + 2.8 MgO + 2.8 S	500-580			
					Genezis NPK 4: 17: 30 +10 CaO	350-400			
					GENEZIS PK 10: 20 + 14.20 CaO + 9.90 MgO	500-700			
Soy	3.5-4	80	60	80	GENEZIS Kali+S Green	200-500		Genezis Gold MP Starter Microgranulate NP 10: 48 + 1Zn+0.1B+0.3Fe	15-25
					Genezis NPK 8: 12: 25 +5 CaO + 5.7	400-500			
					Genezis NPK 4: 17: 30 +10 CaO	250-330			
					Genezis NPK 4: 24: 24	180-235			
					GENEZIS PK 10: 20 + 14.20 CaO + 9.90 MgO	400-500			

Table 8

\* subject to medium or higher supply of nutrients



SETTING PARAMETERS FOR SULKY FERTILISERS SPREADER FOR THE APPLICATION OF GENEZIS NPK FERTILISERS						
Name of Genezis fertiliser	Progress speed	Sulky DPX24/PRIMA/70ANS/605/805/1155			Sulky DPX28 /DX30/DX30+	
		Spraying blade 18-24	Spreading width 18 m			Spraying blade 12-28 /18-28
			Set value of spraying width	Set value of spraying quantity		
			300 kg/ha	350 kg/ha	400 kg/ha	
NPK 4-24-24	8 km/h	107	23	25	27	106
	10 km/h		26	29	31	
	12 km/h		29	32	36	
NPK 0-10-20	8 km/h	106	22	24	26	104
	10 km/h		25	28	30	
	12 km/h		28	31	34	
NPK 8-15-15	8 km/h	105	23	25	27	104
	10 km/h		26	29	32	
	12 km/h		30	33	36	
NPK 5-10-30	8 km/h	101	23	26	28	100
	10 km/h		27	30	33	
	12 km/h		30	34	37	

Table 9



SETTING PARAMETERS FOR AMAZONE FERTILISERS SPREADER FOR THE APPLICATION OF GENEZIS NPK FERTILISERS									
Name of Genezis fertiliser	Progress speed	Spade position	Work width 18 m			Spade position	Work width 24 m		
			Bolt position for setting the quantity				Bolt position for setting the quantity		
			300 kg/ha	350 kg/ha	400 kg/ha		300 kg/ha	350 kg/ha	400 kg/ha
		Spraying disk OM 18-24			Spraying disk OM 18-24				
NPK 10-20-10	12 km/h	15/41	38.5	41	43.5	18/42	43.5	47	50
	13 km/h		39.5	42.5	45		45	48.5	52.5
	14 km/h		41	44	47		47	50.5	54.5
NPK 0-10-20	10 km/h	12/38	35	37	39	16/45	39	42	44.5
	12 km/h		37.5	40	42.5		42.5	45.5	48.5
	14 km/h		40	43	45.5		45.5	49	53
NPK 8-15-15	12 km/h	15/41	38	40.5	43	18/42	43	46.5	49.5
	13 km/h		39	42	44.5		44.5	48	51.5
	14 km/h		40.5	43.5	46.5		46.5	50	54
NS 21-24	10 km/h	15/42	35	37	39	16/48	39	42	44.5
	12 km/h		37.5	40	42.5		42.5	45.5	48.5
	14 km/h		40	43	45.5		45.5	49	53

Table 10



### FUNGICID



PROSARO



FOLICUR SOLO, NATIVO\*\*\*, PRIAXOR, PROSARO, REVYCARE



FOLICUR SOLO, TOPREX

\*\*\*Nativo reference product: Green star

### HERBICID



BELKAR, BUTISAN COMPLETE, BUTISAN STAR, COMMAD 48 EC, GALERA SUPER\*\*, GALERA, RUNWAY, SULTAN TOP

AGIL, FUSILADE FORTE, LEOPARD, TARGA SUPER



DUAL GOLD 960 EC és TENDER, EXPRESS 50 SX, GARDOPRIM PLUS GOLD, PULSAR és LISTEGO, PULSAR PLUS, STOMP AQUA, RACER, WING-P



GRANSTAR SUPER 50SX, PUMA EXTRA, SEKATOR OD, TRINITY\*

DICOPUR TOP 464 SL



ADENGO, DUAL GOLD 960 EC és TENDER, LAUDIS, PRINCIPAL PLUS + SUCCESSOR TX, LUMAX, STOMP AQUA, WING-P



DUAL GOLD 960 EC és TENDER, FUSILADE FORTE, RACER

AGIL, COMMAND 48 EC, DUAL GOLD 960 EC és TENDER, SENCOR, STOMP AQUA



LEOPARD, PULSAR, TARGA SUPER WING-P

\*Trinity reference product: Legato trio \*\*Galera super reference product: Ikarus

### INSZEKTICID



CYPERKILL MAX, DECIS MEGA, INAZUMA, KARATE ZEON 5CS, MOSPILAN 20 SG, SUMI ALFA 5 EC



CYPERKILL MAX, DECIS MEGA, KARATE ZEON 5CS, MAVRIK 24 EW, RAPID CS, SUMI ALFA 5 EC



DECIS MEGA, KARATE ZEON 5CS, MAVRIK 24 EW, MOSPILAN 20 SG, RAPID CS



CYPERKILL MAX, DECIS MEGA, INAZUMA, KARATE ZEON 5CS, MAVRIK 24 EW, MOSPILAN 20 SG, RAPID CS, SUMI ALFA 5 EC



CYPERKILL MAX



FORCE 1,5G

NEMATHORIN 10





# Quality in plant nutrition: premium Genezis foliar fertilisers



**Genezis**  
Oilseed crops BS



**Genezis**  
Cereals BS



**Genezis**  
Nitrospeed



**Genezis**  
PÉTIBÓR EXTRA



**Genezis**  
Mikromix-A Copper



**Genezis**  
CEREALS

**One of the most important tools for quality plant nutrition today is foliar fertilisation.**

**No crop can be produced without the use of plant-specific foliar fertilisers that are dynamically adapted to the needs.**

**Genezis premium foliar fertilisers provide exactly what our plants need:**

- **Plant-specific composition.** Macro and microelement content adapted to the needs of the crop.
- **Commitment to the use of chelating agents.** Using a chelated formula to promote efficient micronutrient uptake.

- **High quality plant nutrition and excellent stress relief** with our biostimulant "BS" products, which are eligible for the AÖP (Agro-ecological) programme.
- **They are chloride-free.** With rapid absorption they often **provide an immediate effect, visible to the eye.**
- **They can be applied at the same time with pesticides.**
- **They fit with the plant-specific plant nutrition technologies of Genezis.**

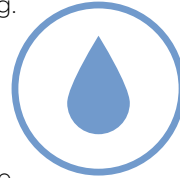
**A wide range of products, complete solutions containing macro and micronutrients, mono and polymetal chelates, biostimulant foliar fertilisers – all serving plant nutrition by Genezis.**



## GENEZIS CEREALS BS



**General features:** Plant conditioner product. A composite preparation with high active ingredient content for foliar fertilisation of arable crops and cereals, from tillering to earing. It improves the stress resistance of plants. It has a positive effect on the natural life processes of the plant. Its application has a positive effect on the quantity and quality of the crop. It is a chloride-free, instant effect foliar fertiliser. When applied in the autumn, it enhances winter hardiness, helping to regenerate weakened crops in early spring. Improves drought tolerance.



**Recommended use:** Can be applied 2–3 times during the growing season at a concentration of 0.5–2% (applied at a dose of 4–6 l/ha).

ACTIVE INGREDIENT CONTENT					
Amino acid content	N	SO <sub>3</sub>	Cu	Zn	Mn
13.4%	10.7%	3.5%	1.1%	0.1%	0.1%



## WHEAT FOLIAR FERTILISER EXPERIMENT, HEVES 2019

Stress caused by water shortage, with adequate nutrient supply (in our case: NPK = 135/36/36), the use of foliar fertilisers and especially biostimulators pays off, allowing economical production. In our experiment, used alongside amounts of 1.71 and 1.87 of foliar fertiliser, the bio stimulator result-

ed in an additional yield of 2.23 t/ha compared to the control treatment without foliar fertilisation. Rational product selection that adapts to the place of production and technology, in this case the bio stimulator, is the most profitable investment even in dry years.

### Treatments (5 April and 12 May) and results:

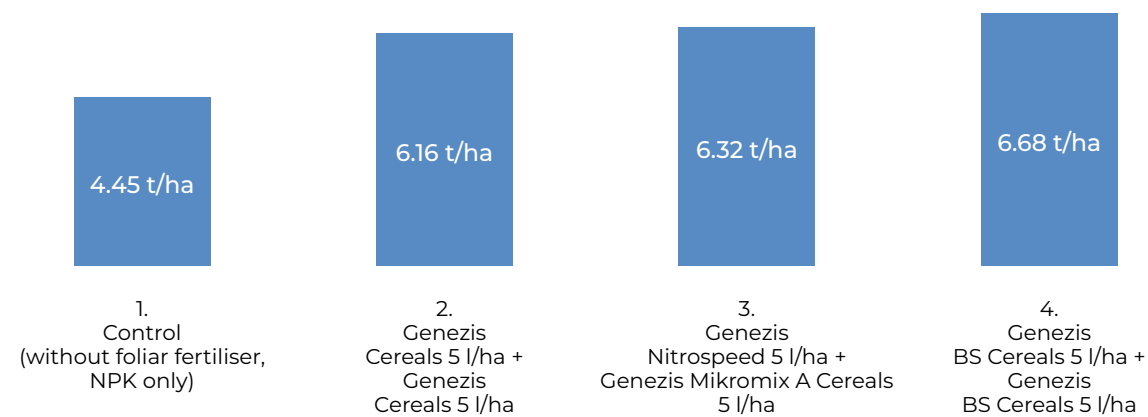


Figure 9

## GENEZIS MIKROMIX BS



**General features:** A high active ingredient preparation for foliar fertilisation of maize and other zinc-intensive plants. These amino acid products replenish the amino acid reserves of plant cells, making protein synthesis faster and more efficient. It improves the stress resistance of plants. It has a positive effect on the natural life processes of the plant. Its application has a positive effect on the quantity and quality of the crop. It is a chloride-free, instant effect foliar fertiliser.



**Recommended use:** Can be applied 2–3 times during the growing season at a concentration of 0.5–2% (applied at a dose of 3–6 l/ha). It improves nitrogen uptake efficiency, and promotes protein and oil formation. By applying it, the nutrient uptake from the soil can be increased.

ACTIVE INGREDIENT CONTENT			
Amino acid content	N	SO <sub>3</sub>	Zn
14%	1.3%	4.2%	3.5%



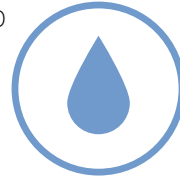


# GENEZIS PLANT CONDITIONER PRODUCTS

## GENEZIS OILSEED CROPS BS

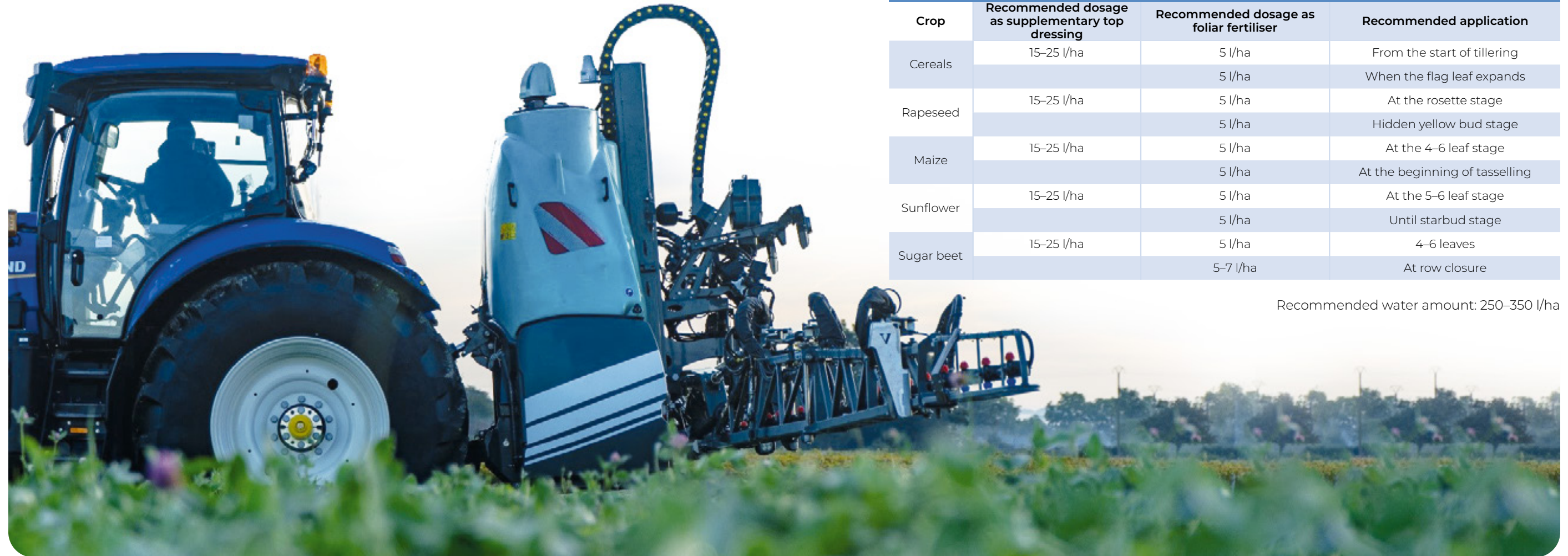


**Recommended use:** Crops with a high boron need, recommended for the treatment of, e.g., rapeseed and sunflower. As a foliar fertiliser in a dose of 4–6 litres/ ha, mixed with 250–300 litres of water.



**General features:** A high active ingredient preparation for foliar fertilisation of oilseeds and other boronintensive plants. These amino acid products replenish the amino acid reserves of plant cells, making protein synthesis faster and more efficient. It improves the stress resistance of plants. It has a positive effect on the natural life processes of the plant.

ACTIVE INGREDIENT CONTENT			
Amino acid content	N	MgO	B
13.5%	10.4%	4%	1.2%

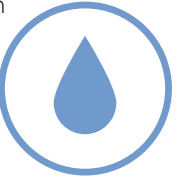


# GENEZIS PLANT CONDITIONER PRODUCTS

## GENEZIS NITROSPEED BS



**General features:** A liquid fertiliser solution with a high nitrogen content, including sulphur, magnesium and amino acids. Most of the nitrogen content can be taken up immediately through the leaf, with a smaller portion thereof being a slower-acting form of nitrogen.



ACTIVE INGREDIENT CONTENT			
Amino acid content	N	SO <sub>3</sub>	MgO
5.7%	18%	4.1%	2.1%



RECOMMENDED USE OF GENEZIS NITROSPEED BS			
Crop	Recommended dosage as supplementary top dressing	Recommended dosage as foliar fertiliser	Recommended application
Cereals	15–25 l/ha	5 l/ha	From the start of tillering
		5 l/ha	When the flag leaf expands
Rapeseed	15–25 l/ha	5 l/ha	At the rosette stage
		5 l/ha	Hidden yellow bud stage
Maize	15–25 l/ha	5 l/ha	At the 4–6 leaf stage
		5 l/ha	At the beginning of tasselling
Sunflower	15–25 l/ha	5 l/ha	At the 5–6 leaf stage
		5 l/ha	Until starbud stage
Sugar beet	15–25 l/ha	5 l/ha	4–6 leaves
		5–7 l/ha	At row closure

Recommended water amount: 250–350 l/ha



# GENEZIS FOLIAR FERTILISERS

Intensive arable crop production, increasing yields, declining organic fertilisation, unilateral and high-dose NPK fertilisation of soils, have also drawn attention to the need for foliar fertilisation on arable land. In our experience, in large maize-growing areas of the country, zinc has simply become depleted in a significant proportion of soils, but sulphur is also depleting in intensively grown oilseed crops, especially rapeseed and, in general, magnesium and manganese are also decreasing almost everywhere. Recent years have been brought significant development in this area. Today, the use of plant-specific foliar fertilisers has also become part of intensive field technologies. The choice is

extremely broad. Even for micronutrient-containing materials, there is a wide choice of products containing simple saline solutions, suspension solutions and products containing mono- and polymetallic chelates. Our company is committed to using chelating agents. Our experiments prove that we are on the right track. The micronutrient uptake-promoting formula, the EDTA chelating agent, presents the microelements in the form that is most easily absorbed by plants. Our foliar fertilisers harmonise perfectly with the plant and landscape-specific Genezis plant feeding technologies. They are chloride-free, take effect instantly and can be applied together with pesticides.

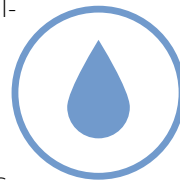


## GENEZIS CEREALS FOLIAR FERTILISER



**General features:** A preparation with a high active ingredient content and micronutrients specially developed for cereals. Recommended for the foliar fertilisation of arable crops, especially cereals, from tillering to earing. Its application ensures greater crop safety. Its nitrogen content is easily absorbed and results in immediate utilisation. Its micronutrient content improves quality and promotes the natural resilience of plants. Through its application, nutrient uptake from the soil can be increased. With its application, nutrient-deficiency diseases of plants can easily be prevented and cured. It increases plant resistance to pathogens. It provides a rapid supply of nutrients during the growing season.

**Recommended use:** Can be applied 2-3 times during the growing season at a concentration of 0.5-2% (applied at a dose of 4-6 l/ha).



ACTIVE INGREDIENT CONTENT				
N	SO <sub>3</sub>	Cu	Zn	Mn
15%	5%	1.5%	0.2%	0.2%



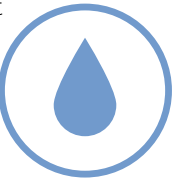
# GENEZIS FOLIAR FERTILISERS

## GENEZIS MAIZE FOLIAR FERTILISER



**General features:** A compound solution fertiliser containing nitrogen, zinc chelate and manganese chelate as active ingredients. For foliar fertilisation of arable crops and mainly maize. It can be used for both fodder and sweet corn foliar fertilisation. The nitrogen and zinc content can be easily absorbed and utilised by maize. Zinc is an important micronutrient for maize, as its absence causes poor growth and decreased yields. Because most of our soils are virtually depleted of zinc. Its use can lead to higher yield. Zinc supplementation must be an integral part of intensive maize cultivation technology!

**Recommended use:** Can be applied 2-3 times during the growing season at a concentration of 0.5-2% (applied at a dose of 4-6 l/ha).



ACTIVE INGREDIENT CONTENT		
N	Zn	Mn
15%	1.7%	0.3%

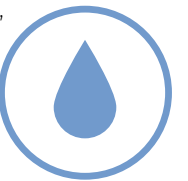


## GENEZIS OILSEED CROPS FOLIAR FERTILISER



**General features:** It is a composite preparation with high active ingredient content. It is recommended for the foliar fertilisation of oilseed crops, especially sunflower and rapeseed, as well as for nutrient replenishment of nitrogen and boron-intensive crops and brassicas. Its nitrogen content is easy to absorb and results in immediate utilisation, its boron content ensures proper binding and oil content. Its use can lead to higher yield and higher oil content. It improves quality and promotes the natural resilience of plants. By using it, nutrient deficiency diseases can easily be prevented and cured. It increases plant resistance to pathogens.

**Recommended use:** Can be applied 2-3 times during the growing season at a concentration of 0.5-2% (applied at a dose of 4-6 l/ha).



ACTIVE INGREDIENT CONTENT		
N	SO <sub>3</sub>	B
15%	5%	2%





## GENEZIS NITROKEN FOLIAR FERTILISER

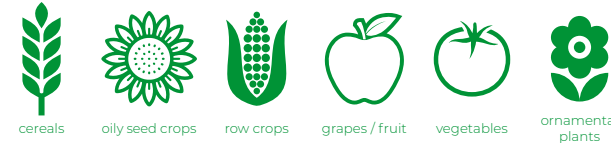


**General features:** Genezis Nitroken is an effective solution for the foliar fertilisation of sulphur and nitrogen-intensive arable and horticultural crops. Foliar fertilisers generally have high nitrogen and sulphur content. It improves plant condition and resistance to diseases. It boosts yield and improves quality. Its sulphur content improves nitrogen uptake efficiency, and promotes protein and oil formation. By applying it, the nutrient uptake from the soil can be increased.



**Recommended use:** Can be applied 2–3 times during the growing season at a concentration of 0.5–2% (applied at a dose of 4–6 l/ha).

ACTIVE INGREDIENT CONTENT	
N	SO <sub>3</sub>
15%	53%



## GENEZIS MIKRAMID



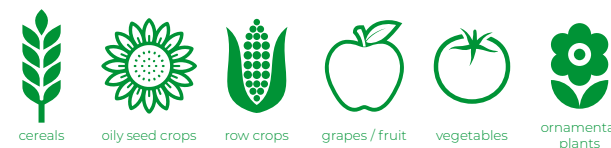
**application of** nitrogen fertiliser. Suggested strength of the solution as foliar fertiliser (3 to 6 times during the growing season):

- Vegetables, ornamental plants: 0.3–0.6 m/V%
- Cabbage, celery: 0.8–1.0 m/V%
- Maize: 0.4–0.6 m/V%
- Potato: 0.8–1.6 m/V%
- Sugar beet: 2.0–4.0 m/V%
- Grapes / fruit: 0.6–1.0 m/V%
- Meadow-pasture: 1.0–1.5 m/V%



**Advantages of the product:** The amide-bound nitrogen absorbed via the roots and foliage directly integrates in the amino acids that play an important role in growth. The trace elements accelerate chlorophyll formation and crops will turn green. Rapid immediate effect in case of nitrogen deficiency symptoms. May be applied on all soil types. It dissolves perfectly in water. It can be spread together with plant protection treatments, in a single application. It promotes the rapid initial development and winter hardiness of oily plants and winter wheat. The micronutrient supplemented version helps prevent deficiency symptoms. Its active ingredients dissolve well in water, ensuring excellent utilisation.

**Recommended crop:** Recommended for all arable and horticultural crops.



**General features:** The active ingredients it contains are easily absorbed through the leaves of the plants, therefore, it can be used in the form of a soil, top and foliar fertiliser as a source of nitrogen and micronutrient supply. It dissolves quickly in water without any residues. It can be mixed with almost any herbicide and fertiliser without any damage to it. A mixing test is always recommended.

**Recommended use:** 100–200 kgs/hectare as soil and top dressing applied as usual concurrently with the

ACTIVE INGREDIENT CONTENT	
Nitrogen	Micronutrient
45%	0.3%

## GENEZIS NITROSPEED AND NITROSPEED PLUS

**General features:** A nitrogen-dominant liquid fertiliser solution. Multiple nitrogen formulations (amide nitrate ammonia) promote even, rapid plant growth. No washing in precipitation is required. It provides nitrogen supply even during dry periods. Its meso-nutrient content helps maintain nutrient harmony, resulting in better utilisation of the nitrogen form. It is excellent for promoting the favourable development of plant growth processes. It helps to overcome environmental stress and to increase plant resilience. It can also be used as an additional top dressing and, to a lesser extent, as a foliar fertiliser. Its quickly absorbable nitrogen and meso- nutrient content improves plant condition

and resistance to diseases. It boosts yield and improves quality. Its sulphur content improves nitrogen uptake efficiency, and promotes protein and oil formation. Magnesium is a component of chlorophyll. It also affects plant hormones and enzymes. It can be applied alone or mixed with pesticides simultaneously. It has an excellent adjuvant effect and enhances the absorption and effectiveness of plant protection products. It is recommended to always carry out a mixing test. In addition to the above state of development, it is recommended to apply as a foliar fertiliser in all crops at a dose of 4–5 l/ha with a volume of 250–300 litres of water.

ACTIVE INGREDIENT CONTENT GENEZIS NITROSPEED	
Nitrogen (N):	23%
Of which ammonia-nitrogen:	1%
Amide-nitrogen:	20%
Nitrate-nitrogen:	2%
Sulphur trioxide (SO <sub>3</sub> ):	5.3%
Magnesium (MgO):	3%

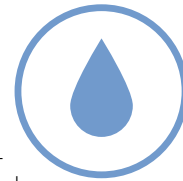
ACTIVE INGREDIENT CONTENT GENEZIS NITROSPEED PLUS	
Nitrogen (N):	23%
of which ammonia-nitrogen:	1%
amide-nitrogen:	20%
Nitrate-nitrogen:	2%
Sulphur trioxide (SO <sub>3</sub> ):	5.3%
Magnesium oxide (MgO):	3%
Zinc (Zn)	0.2%
Manganese (Mn):	0.1%
Molybdenum (Mo):	0.01%



RECOMMENDED USE OF GENEZIS NITROSPEED AND NITROSPEED PLUS			
Crop	Recommended dosage as supplementary top dressing	Recommended dosage as foliar fertiliser	Recommended application
Cereals	20–25 l/ha	5 l/ha	From the start of tillering
		5 l/ha	When the flag leaf expands
Rapeseed	20–25 l/ha	5 l/ha	At the rosette stage
		5 l/ha	Hidden yellow bud stage
Maize	20–25 l/ha	5 l/ha	At the 4–6 leaf stage
		5 l/ha	At the beginning of tasselling
Sunflower	20–25 l/ha	5 l/ha	At the 5–6 leaf stage
		5 l/ha	Until starbud stage
Sugar beet	20–25 l/ha	5 l/ha	4–6 leaves
		5–7 l/ha	At row closure



### Recommended also for arable and horticultural crops



**General features:** MIKROMIX preparations can prevent and cure plant diseases caused by micro-nutrient deficiency. The MIKROMIX micronutrient concentrate contains the nutrients in a chelated form, as a result of which the plants can utilise the applied micronutrients almost immediately and completely. The chelating molecule is included to ensure maximum supply to plants.

**Recommended use:** With foliar fertilisation, it can be applied 2–3 times during the growing season at a dose of 2–6 l/ha.

**Advantages of the product:** Micro-nutrient deficiency diseases are eliminated quickly and effectively because the ingredients are chelated in the form that is most easily absorbed by the plants. The nutrient ratio of the plant-specific forms is tailored to the micronutrient requirements of each plant species. They increase yield volume and improve its quality. Their use increases the resistance of plants to diseases and improves their condition. Its application also allows for more efficient water utilisation and increased drought tolerance.



MIKROMIX A - copper



MIKROMIX A - zinc



MIKROMIX A - manganese



MIKROMIX A - cereals



MIKROMIX A - maize



MIKROMIX A - oilseed crops

ACTIVE INGREDIENT CONTENT								
Active ingredient content %		B	Cu	Fe	Zn	Mn	Mo	SO <sub>3</sub>
MIKROMIX	A - copper		5%					
MIKROMIX	A - zinc				5%			
MIKROMIX	A - manganese					5%		
MIKROMIX	A - grapes / fruit	0.6%	0.1%	3%	0.4%	0.5%	0.05%	
MIKROMIX	A - vegetables / ornamental plants	0.6%	0.1%	1.5%	0.6%	0.5%	0.05%	
MIKROMIX	A - potatoes	0.4%	0.2%	0.3%	0.4%	0.9%		
MIKROMIX	A - cereals	0.4%	2%	0.5%	0.3%	0.2%		
MIKROMIX	A - maize	0.2%	0.3%		2.2%	0.2%		
MIKROMIX	MIKROMIX A - oilseed crops	1.2%	0.4%	1%	0.6%	0.2%		
MIKROMIX	A - sugar beets	1.5%	0.4%	0.8%	0.4%	0.4%		
MIKROMIX	A - leguminous crops	0.5%	0.5%		1%	1%		



MIKROMIX A - grapes / fruit



MIKROMIX A - vegetables / ornamental plants



MIKROMIX A - potatoes



MIKROMIX A - sugar beets



MIKROMIX A - leguminous crops



## PÉTIBÓR EXTRA



elemental boron, corresponding to a 135 g/l it re boron, i.e. 772 g boron acid/litre concentration. Frost resistance is guaranteed to -10 °C. Any extraction of the active ingredient at a lower temperature is automatically resolved by re-heating. This feature increases storage security, even in a poorly insulated space. A clear, slightly yellowish, odourless liquid, possibly with an odour bearing a slight resemblance to ammonia. The pH of the concentrated solution is 8–8.5 which varies slightly depending on the dilution in the spray liquid. It promotes the fertilisation of flowers and increases binding. It increases sugar beet yield, sugar content and sugar extractability. It adheres well to the foliage and does not dry out for a long time, thus improving its efficiency. The boron is in the form that is most easily absorbed by plants.



**General features:** Boron is one of the most important micronutrients. Without it, the growth of shoots stops, and the growing tips die. Boron deficiency in plants causes poor binding, it often prevents flowering and results in distorted leaves. Pétibór Extra is a modern boron fertiliser, produced on the basis of the latest research, which contains the boron nutrient in the form of a solution, as an organic compound. It is an agent that increases biochemical efficiency and meets environmental requirements. It can also be used safely in ecological and organic farming. Agricultural trials performed by using this preparation demonstrate its efficiency, even in small doses, due to its high efficiency. It contains at least 10%

Its use is effective even in small doses. To improve cost-effectiveness, it can be applied at the same time as crop protection. Symptoms of boron deficiency can be quickly eliminated during the growing season.

**Nutrient content:** 10% (135 g/l) Boron, active ingredient: boron-ethanolamine

### SUGGESTED USE AS A FOLIAR FERTILISER:

	Dose	Application
<b>Sugar beet</b>	3–5 l/ha	From 4 to 6 leaves until the end of August
<b>Sunflower</b>	3–5 l/ha	From 3- to 4-leaf stage until one week before flowering, and after flowering
<b>Winter swede rape</b>	3–5 l/ha	In autumn to increase winter hardiness, in spring from staking to flowering
<b>Wheat</b>	2–4 l/ha	From the emergence of the flag leaf until the end of earing
<b>Maize</b>	2–4 l/ha	At the 3-leaf stage, then for one week before flowering
<b>Soy</b>	3–5 l/ha	Before pod bonding

### ACTIVE INGREDIENT CONTENT

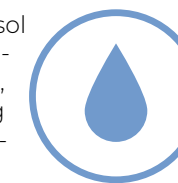
B
10%



## PÉTISOL PRODUCT FAMILY



**General features:** The Genezis Pétisol product line is a chloride-free, liquid foliar and soil fertiliser containing nitrogen, phosphorus and potassium, including micronutrients (iron, copper, zinc, manganese, boron, molybdenum).



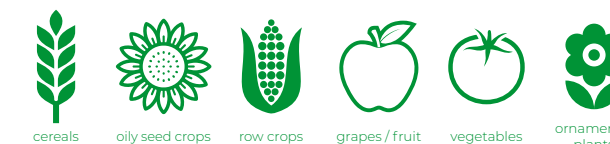
The Genezis Pétisol product family is recommended for use on arable lands to prevent or rapidly eliminate temporary phosphorus and potassium deficiencies. It provides a harmonious supply of nutrients due to its high active ingredient content. It can be used during the growing season to establish an adequate nutrient supply.

It is especially suitable for eliminating temporary phosphorus deficiency during cool periods. Boron supplementation can be used effectively to 'cure' poorly wintered, poorly developed rapeseed and cereals in early spring.

**Recommended use:** Can be applied 2–3 times during the growing season at a dose of 5–10 l/ha through the leaves. Small-scale farmers are recommended to use it in a dilution of 1–2 dl of preparation/10 litres of water/100 m<sup>2</sup>. For nutrient irrigation a dilution of 0.05–0.1% (0.5–1 dl of preparation per 100 litres of water) is recommended and should be repeated according to the needs of the plant.

### ACTIVE INGREDIENT CONTENT

	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	ME	B
Nitrogen rich Genezis Pétisol	14%	7%	9%	0.1%	-
Phosphorus and potassium rich Genezis Pétisol	6%	10%	13%	0.1%	-
Genezis Pétisol Tobacco	5%	7.5%	10%	0.1%	-
Genezis Pétisol Phosphorus and Boron	8%	20%	-	-	1%





## GENEZIS KALCINOL PRODUCT LINE

**General features:** Chloride-free, quick effect foliar fertilisers. Ensure rapid and effective elimination of lime deficiency diseases and the development of the optimal calcium level of the developing leaves and fruits. This is of particular importance in the case of plants that are continuously producing their crops. The uptake, transport and incorporation of calcium within the plant is a very complex process, which makes it difficult for the appropriate amount to reach the fruit in the growing season. During the growing season, it is essential to replenish calcium via the foliage on a continuous basis.

**Recommended use:**

**Vegetables For foliar fertilisation:**

Recommended to use 3 to 5 times during the time of crop and berry development in a 0.1-1.0 V/V% solution (add 1-10 dl of Kalcinol or Kalcidol to 100 litres of water). Feed solution application: Recommended to use a 0.05-0.1 V/V% solution (add 0.5-1.0 dl of Kalcinol or Kalcidol to 100 litres of water). Quickly eliminates calcium and magnesium deficiency in a 0.5-1.0 V/V% solution, repeat application every 10 to 14 days and continue foliar fertilisation until the deficiency is eliminated.

**Cereals, potato, sunflower As foliar fertiliser:**

Recommended to use a 0.5-1.0 V/V% solution (add 5-10 dl of Kalcinol or Kalcidol to 100 litres of water) during the foliar growth stage, then after flowering.

**Grapes, fruits As foliar fertiliser:**

Recommended to use a 0.5-1.0 V/V% solution (add 5-10 dl of Kalcinol or Kalcidol to 100 litres of water) after flowering, then during the growth stage for 4 to 5 times.



**Advantages of the product:** It enhances root activities by supplying plants with nutrients which they can quickly absorb when the root system of the plant has limited capability of taking up nutrients due to low soil temperature.

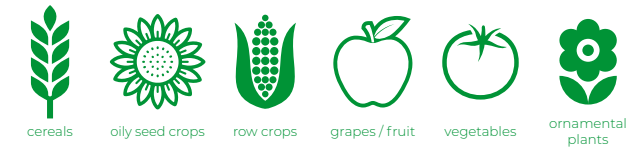
The calcium it contains has a beneficial effect on the carbohydrate and nitrogen metabolism of the plants and on the development of proper cell walls and enhances the plant's resistance to diseases. The magnesium it contains enhances plant chlorophyll formation and promotes photosynthesis. It eliminates relative magnesium deficiency arising from the overuse of NPK (nitrogen-phosphorus-potassium). It increases the storage life of apples and pears and prevents bitter pits and cork spots from developing. Recommended to use to prevent cracks on the ripening sweet cherry fruit and to extend the storage life of vegetables and onions. It prevents the blossom-end rot of paprika, tomatoes and eggplants arising from calcium deficiency and the internal tipburn of cabbages.



## GENEZIS KALCINOL

### ACTIVE INGREDIENT CONTENT

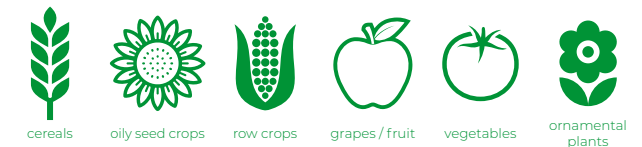
N	Ca
8%	12%



## GENEZIS KALCIDOL

### ACTIVE INGREDIENT CONTENT

N	CaO	MgO
8%	9.4%	2%

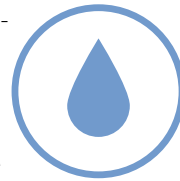




## GENEZIS MAGNEMIX+S



**General features:** It is a composite preparation with high active ingredient content. Chelated foliar fertiliser developed for the rapid replenishment of magnesium and sulphur, containing all essential microelements. Complex solution for the production of oilseeds, cereals, vegetables, fruit crops and ornamental plants. Its use can effectively increase crop safety. Its micronutrient content improves quality and promotes the natural resilience of plants. The magnesium it contains enhances plant chlorophyll formation and promotes photosynthesis. Its sulphur content improves nitrogen uptake efficiency, and promotes protein and fatty acid (oil) formation. By applying it, the nutrient uptake from the soil can be increased.



**Packaging:** 10 litre carboy

### ACTIVE INGREDIENT CONTENT

Magnesium oxide	5% MgO
Sulphur trioxide	10.0% SO <sub>3</sub>
Boron, water soluble	0.10% B
Copper, water soluble	0.05% Cu
Manganese, water soluble	0.05% Mn
Iron, water soluble	0.05% Fe
Zink, water soluble	0.05% Zn
Molybdenum	0.01% Mo

**Recommended use:** 2–4 times during the growing season at a concentration of 0.5–2%. Recommended for use as foliar fertiliser at a dosage of 10–15 litres/ha, in the hobby garden at a concentration of 1–2% (1–2 dl/10 l water), for feed solution application: the use of a 0.1–0.05% solution is recommended.

**Recommended crop:** Use in oilseeds, cereals, vegetables, fruit crops and ornamental plants.



## GENEZIS MAGNESOL+S



It contains enhances plant chlorophyll formation and promotes photosynthesis. Its use can correct relative magnesium deficiencies resulting from high potassium content. Its sulphur content improves nitrogen uptake efficiency, and promotes protein (gluten) and fatty acid (oil) formation. By applying it, the nutrient uptake from the soil can be increased.



**Packaging:** 10 litre carboy

**General features:** Foliar fertiliser with high active ingredient content, specially developed for the targeted supplementation of two macroelements: magnesium and sulphur. The magnesium it con-

**Recommended use:** 2–4 times during the growing season at a concentration of 0.5–2%. Recommended for use as foliar fertiliser at a dosage of 10–15 litres/ha, in the hobby garden at a concentration of 1–2% (1–2 dl/10 l water), for feed solution application: the use of a 0.1–0.05% solution is recommended.

**Recommended crop:** Use in oilseeds, cereals, vegetables, fruit crops and ornamental plants.

### ACTIVE INGREDIENT CONTENT

Magnesium oxide	7% MgO	4.2% Mg
Sulphur trioxide	14.0% SO <sub>3</sub>	5.6% S





## GENEZIS SAVASTRENE FE (GRANULAR IRON CHELATE)

## GENEZIS SAVASTRENE FE (SOLUTION)



**Packaging:** 0.6 kg, 3 kg and 10 kg buckets

**General features:** The chelating agent - EDTA - makes the iron more usable for the plant. Apply to prevent iron deficiency diseases and cure already present deficiency diseases in crops. The micro-granule format preparation should be dissolved in water while stirring constantly, then spread on the plant or area to be treated. It can be

continuously fed via an irrigation system, e.g., by drip irrigation. It can be mixed with other fertilisers in a fertiliser solution.

**Recommended use:** Foliar fertilisation: a 0.5–1% (0.5–1 g/litre) solution.

Feed solution application: Average dose: 0.005–0.05 % (0.05–0.5 g/litre). For formulating the nutrient solution with the required concentration.

For soil fertilisation: Cut flowers, vegetables: For prevention: 2–10 g/m<sup>2</sup>. To remedy iron deficiency: 5–15 g/m<sup>2</sup> dissolved in 4–6 litres/m<sup>2</sup> of irrigation water. For drip irrigation in a concentration of 0.005–0.02 % (0.05–0.2 g/litre) or as per professional advice. Roses: 5–15 g/plant, dissolved in 5 to 10 litres of water per plant and irrigated in. Grape: 10–30 g/vine, depending on the age of the vine and the extent of the iron deficiency, dissolved in 8 to 10 litres of water, irrigated in around the vine. Fruit trees: 20–50 g/tree, dissolved in 10 to 50 litres of water and irrigated in the dripline area of the tree.

### ACTIVE INGREDIENT CONTENT

Fe

13%



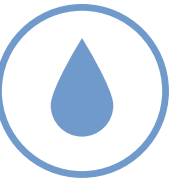
**Packaging:** 10 litre carboy

**General features:** A fertiliser solution with organically bound iron chelate. Contains stable iron chelate.

It is particularly suitable for the prevention of iron deficiency diseases and for the elimination of already established deficiency diseases. Iron as a structural component is important in photosynthesis, respiration, oxidation and reduction processes.

**Recommended use:** The preparation is suitable for both foliar or soil application. Due to its special chelating form, it remains stable and effective for a long time even in extreme pH ranges, thus providing long-range protection from iron deficiency. Savastrene Fe provides good shoot growth and healthy, fresh foliage.

By applying it, a 10–30% yield surplus can be achieved.



### ACTIVE INGREDIENT CONTENT

Fe

3.0%





## GENEZIS PÉTI KOMPLEX PRODUCT LINE

## GENEZIS PÉTI KOMPLEX PRODUCT LINE

**General features:** Chloride-free, solid, 100% water-soluble, sediment-free fertiliser line. Contains all nutrients necessary for the balanced development of plants. All their components can be absorbed quickly by the plant. Their micronutrient content is chelated, so they do not bind to the soil particles, they are utilised without loss. They can also be used in irrigation fertilisation technologies.

**Recommended crop:** Mainly for feed solution application and foliar fertilisation, for ornamental plants and vegetables grown in a polytunnel. Can also be used for open field ornamental plants and vegetables, for cereals, potatoes, vineyards and orchards.

**Recommended use:** For feed solution application and foliar fertilisation of vegetables and ornamental plants. Recommended amount in a concentration of 0.05–0.1% according to the needs of the plant. It can also be used as a foliar fertiliser in a concentration of 0.5–1%.



ACTIVE INGREDIENT CONTENT						
	Total Nitrogen	NH <sub>4</sub> -N	NH <sub>2</sub> -N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	ME
Péti Mix Starter	15%	6%	9%	30%	15%	0.2%
Péti Complex I	14%	7.5%	6.5%	7%	21%	-
Péti Complex II	10%	6%	4%	-	25%	-
Péti Complex III	15%	1.2%	13.8%	5%	30%	-







### ACTIVE INGREDIENT CONTENT

Genezis Pétisol	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	ME
General	5%	5%	5%	0.1%
Geranium	5.5%	5.5%	5.5%	0.1%
Lawn	9%	3%	4%	0.1%
Evergreens	8%	3%	4%	0.1%
House plant	7%	4%	5%	0.1%
Vegetables	6%	4.5%	6%	0.1%
Citrus	5%	3.5%	7%	0.1%
Flower Garden	5%	3.5%	7%	0.1%
Orchid and Bromelia	3.5%	5%	7%	0.1%

**General features:** Modern foliar fertilisers developed for special crops. Their composition is adapted to the nutrient needs of the given plant. Quick effect, chloride-free foliar fertilisers. Can be used to cure deficiency diseases quickly and effectively and to establish the optimum nutrient levels in the developing leaves and crop.

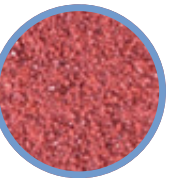
**Recommended use:** In a home garden, 1–2 dl of the preparation dissolved in 10 litres of water is enough for 100 m<sup>2</sup>. For nutrient irrigation a dilution of 0.05–0.1% (0.5–1 dl of preparation per 100 litres of water) is recommended and should be repeated according to the needs of the plant. Spreading should be followed by further thorough irrigation.

**Packaging:** 1 litre bottle



**Packaging:** 100 gram pack

**Recommended use:** Foliar fertilisation: dissolve 0.5–1 tablespoons (5–10 g) of granules in 10 l of water, stirring constantly, and apply to the foliage of the plant with a handheld or backpack sprayer.



**Feed solution application:** Dissolve 0.5 tablespoon (5 g) of salt in 10 litres of water and apply at the base of plants. Never fertilise foliage in sunny weather, choose the morning and early evening hours instead.

**Recommended crop:** For ornamental crops, since most ornamentals are very sensitive to micronutrient deficiency, which reduces their ornamental value. For vegetable crops, it ensures adequate iron supply. Use in vineyards and orchards, for growing and maintaining a healthy, abundant crop.

### ACTIVE INGREDIENT CONTENT

Fe

13%





## GENEZIS GREEN MAX



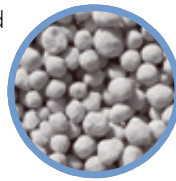
**Packaging:** 5 kg bag, 10 kg bag

**General features:** Genezis Green Max is a granulated nitrogen fertiliser with a high liming material content. It can be applied as both basal and top dressing to supply nitrogen, calcium and magnesium.

Grain size between 2.5 and 6.3 mm. Its grain solidity is high, its grain size is uniform; its grains are almost completely spherical.

**Advantages of the product:** Green Max is a type of fertiliser with an outstanding amount of nitrogen with liming material, which contains 159 kgs of

nitrogen, 116 kgs of magnesium oxide and 576 kgs of liming material (calcium oxide) per tonne. The high amount of calcium it contains increases pH value! The liming material improves soil structure and pH levels (reduces and eliminates soil acidity and adds magnesium). It increases soil productivity and nutrient deposition/utilisation and the stress resistance of the plants (higher resistance to drought and diseases). Therefore, it is highly recommended for acidic soils and crops requiring calcium and magnesium in high amounts. By applying this fertiliser, the amount of phosphorus that can be absorbed from the soil can be increased by up to 20%! There is no limit on selling it in farm shops and to urban residents as its nitrogen content remains below 16%.

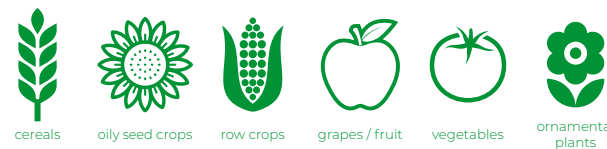


**Recommended use:** Recommended for all arable and horticultural crops and vineyards. For basal dressing: 200–600 kgs/ha (20–60 dkg/10 m<sup>2</sup>) applied and worked in prior to sowing. As a starter fertiliser: 200–350 kgs/ha 20–35 dkg/10 m<sup>2</sup> applied simultaneously with sowing. For top dressing: 300–900 kgs/ha (30–90 dkg/10 m<sup>2</sup>) applied in 2–3 portions.

**Recommended crop:** All arable and horticultural crops (primarily plants with a high magnesium and calcium demand: potato, sugar beet, perennial legumes, maize, rapeseed, cereals such as oats), ornamental plants, lawn-turf, grassland.

### ACTIVE INGREDIENT CONTENT

Nitrogen (N):	15.9%
CaO:	16.1%
MgO:	11.6%



## GENEZIS SPECIAL LAWN NPK FERTILISER



**Packaging:** 5 kg bag, 5 kg bucket

**General features:** Due to its balanced composition and micronutrient content, Genezis Special NPK Lawn Fertiliser ensures an excellent, healthy green lawn throughout the growing season. The appropriate micro-, meso- and macronutrients stimulate the growth and development of the plant. It provides a healthy and fresh-looking green surface.

**Advantages of the product:** Its main active ingredients are nitrogen, potassium, phosphorus, in addition to iron, calcium and magnesium, which nourish the grass, make it more resistant to environmental influences and render its green colour more vivid. Its nitrogen content makes the grass grow and regenerate quicker.



**Recommended use:** It is excellent for ensuring a healthy greencover in lawns, grasses, football pitches and golf courses. As the most intensive growth period of grass is in the spring, the best effect can be achieved when using this preparation 2 or 3 times in this period and during the growing season. The preparation should be scattered evenly on the lawn after dry and dead plants have been removed. This preparation can be used from early spring until the end of summer, both for nutrient refill before planting and for nutrient replenishment during the growing season. To achieve the optimal effect, we recommend the even application of 5 kg of fertiliser on 150–200 m<sup>2</sup>. After application, it is advisable to water the lawn surface (with a min. water amount of 10 l/m<sup>2</sup>).

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	SO <sub>3</sub>	Fe
10%	5%	10%	9.48%	6.64%	25.26%	1%





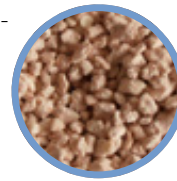
## GENEZIS SPECIAL GARDEN VEGETABLE NPK FERTILISER



**Packaging:** 10 kg bag

**General features:** With its balanced composition and micronutrient content, the Genezis Special Garden Vegetable NPK fertiliser provides an excellent, harmonious supply of nutrients to plants throughout the vegetation period. It increases yield volume and the period of durability and improves quality and nutritional values. The special composition of micro-, meso- and macronutrients stimulates the growth and development of the plant. This preparation can be used from early spring

until the end of summer, both for nutrient refill before planting and for nutrient replenishment during the growing season. Its main active ingredients are nitrogen, potassium, phosphorus, and it also contains iron, calcium and magnesium, which nourish the plants, make them more resistant to environmental influences and make them grow stronger, bloom and provide a more plentiful crop. Our plants can take up nutrients as they need, without excessive nitrate storage in the plant. Due to its calcium and magnesium content, it increases cell solidity, the occurrence of physiological disturbances become less frequent, and thus the produce stores better.



**Recommended use:** As the most intensive growth period is in the spring, the best effect can be achieved when we use this preparation 2 or 3 times in this period and during the growing season. The preparation is applied to the roots of the plants, evenly distributed. To achieve the optimal effect, we recommend evenly spreading 5 kg of fertiliser on 150–200 m<sup>2</sup> and 10 kg of fertiliser on 300–400 m<sup>2</sup>. After using this fertiliser, mixing or watering in is necessary (with a min. of 10 l/m<sup>2</sup>).

ACTIVE INGREDIENT CONTENT						
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	SO <sub>3</sub>	Fe
10%	5%	10%	9.48%	6.64%	25.26%	1%



## GENEZIS SPECIAL FLOWER GARDEN NPK



**Packaging:** 5 kg bag

**General features:** Due to its balanced composition and micronutrient content, Genezis Special Flower Garden NPK fertiliser provides excellent and balanced nutrition to plants during the entire growing season. It increases yield volume and the period of durability and improves quality and nutritional values. The appropriate micro-, meso- and macronutrients stimulate the growth and development of the plant. This preparation can be used from early

spring until the end of summer, both for nutrient refill before planting and for nutrient replenishment during the growing season.



**Advantages of the product:** Its main active ingredients are nitrogen, potassium, phosphorus, and it also contains iron, calcium and magnesium, which nourish the plants, make them more resistant to environmental influences and make them grow stronger, bloom and provide a more plentiful crop. Our plants can take up nutrients as they need, without excessive nitrate storage in the plant. Due to its calcium and magnesium content, it increases cell solidity, the occurrence of physiological disturbances become less frequent, and thus the produce stores better.

**Recommended use:** As the most intensive growth period is in the spring, the best effect can be achieved when we use this preparation 2 or 3 times in this period and during the growing season. The preparation is applied to the roots of the plants, evenly distributed. To achieve the optimal effect, we recommend evenly spreading 5 kg of fertiliser on 150–200 m<sup>2</sup> and 10 kg of fertiliser on 300–400 m<sup>2</sup>. After using this fertiliser, mixing or watering in is necessary (with a min. of 10 l/m<sup>2</sup>).

ACTIVE INGREDIENT CONTENT						
N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	SO <sub>3</sub>	Fe
10%	5%	10%	9.48%	6.64%	25.26%	1%





## PETI LAWN FERTILISER FOR MOSSY LAWNS



**Packaging:** 3 kg bag

**General features:** The preparation contains ferrous sulphate, which kills moss species quickly and effectively. We also recommend ventilating the lawn.  
**Recommended use:** Can be used in the amount

of 150–250 g/m<sup>2</sup> (20 m<sup>2</sup>/bag) for nutrient replenishment of mossy lawns and greens. As the most intensive growth period of grass is in the spring, the best effect can be achieved when using this preparation 2 or 3 times in this period and during the growing season.



The treatment should be carried out post-emergence, in the intensive growth state of the moss species, after mowing the lawn.

The preparation should be scattered evenly on the lawn after dry and dead plants have been removed. Thorough watering of the treated surface is recommended 2–3 days after application (with a min. water amount of 10 l/m<sup>2</sup>). The effect of the preparation is visible immediately after watering (10 mm.), in the reddish-brown and black discolouration of the moss. The soil conditioning agent takes effect very quickly.

Experiments have shown that the moss-killing effect of the preparation is very effective.

ACTIVE INGREDIENT CONTENT			
N	Cu	SO <sub>3</sub>	Fe
7%	0.25%	8.5%	1%



## SPECIAL AUTUMN LAWN FERTILISER



**Packaging:** 5 kg bucket

**General features:** Fertiliser for general use on lawns, turfs and other horticultural crops. A balanced fertiliser with phosphorus and potassium content, recommended for autumn and early spring basal dressing.

ACTIVE INGREDIENT CONTENT			
P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO
10%	20%	14.2%	9.9%



**Recommended use:** To achieve the optimal effect, we recommend evenly spreading 5 kg of fertiliser on 150–200 m<sup>2</sup>. After spreading, it is advisable to water the lawn surface. The preparation should be scattered evenly on the lawn after dry and dead plants have been removed. Thorough watering of the treated surface is recommended after application (with a min. water amount of 10 l/m<sup>2</sup>). To replenish all types of lawns with nutrients in the autumn, to prepare them for winter weather.



- strengthens cell walls,
- the plant will be more resistant to winter weather
- a well overwintered, strengthened lawn is less prone to weeds and moss in the spring
- ensures a bright, fresh lawn surface.

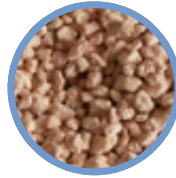




## GENEZIS NPK 8: 15: 15



**Packaging:** 5 kg bag, 10 kg bag



**General features:** A complex fertiliser that can be used as a general spring and autumn basal dressing for all horticultural crops (for chloride-sensitive crops, it must be applied no later than 2 weeks before planting). The active ingredients dissolve well in water. It is primarily recommended for crops with high potassium demand and for soils with low potassium content.

**Advantages of the product:** Its active ingredients disperse well in water, therefore it can be spread both in the autumn and in springtime. Fertiliser with a medium amount of nitrogen and a high amount of phosphorus and potassium.

**Recommended use:** Suitable for fertilising horticultural crops, vegetables, fruits and ornamental plants in smaller gardens. For basal dressing of any arable and horticultural autumn or spring crop in autumn and early spring in a dose of 300–500 kg/ha. To achieve the optimal effect, we recommend evenly spreading 10 kg of fertiliser on 300–400 m<sup>2</sup>.

### ACTIVE INGREDIENT CONTENT

N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO	SO <sub>3</sub>	B
8%	15%	15%	11.87%	2.62%	16.74%	0.05%



cereals



oily seed crops



row crops



grapes / fruit



vegetables

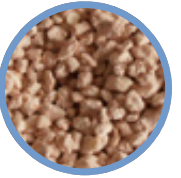


ornamental plants

## GENEZIS NPK 0: 10: 20 (PK)



**Packaging:** 5 kg bag, 10 kg bag



**General features:** Can be used as a general spring and autumn basal dressing fertiliser for all horticultural crops.

**Advantages of the product:** Its active ingredients disperse well in water, therefore it can be spread both in the autumn and in springtime.

**Recommended use:** Primarily for crops with a high potassium demand where N application is not justified, or is recommended for soils with low potassium content. For any arable and horticultural autumn or spring crop. Suitable for fertilising horticultural crops, vegetables, fruits and ornamental plants in smaller gardens. For basal dressing in autumn and early spring, 300–500 kg/ha as per crop. To achieve the optimal effect, we recommend evenly spreading 10 kg of fertiliser on 300–400 m<sup>2</sup>.

### ACTIVE INGREDIENT CONTENT

P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	CaO	MgO
10%	20%	18.33%	9.03%



cereals



oily seed crops



row crops



grapes / fruit



vegetables

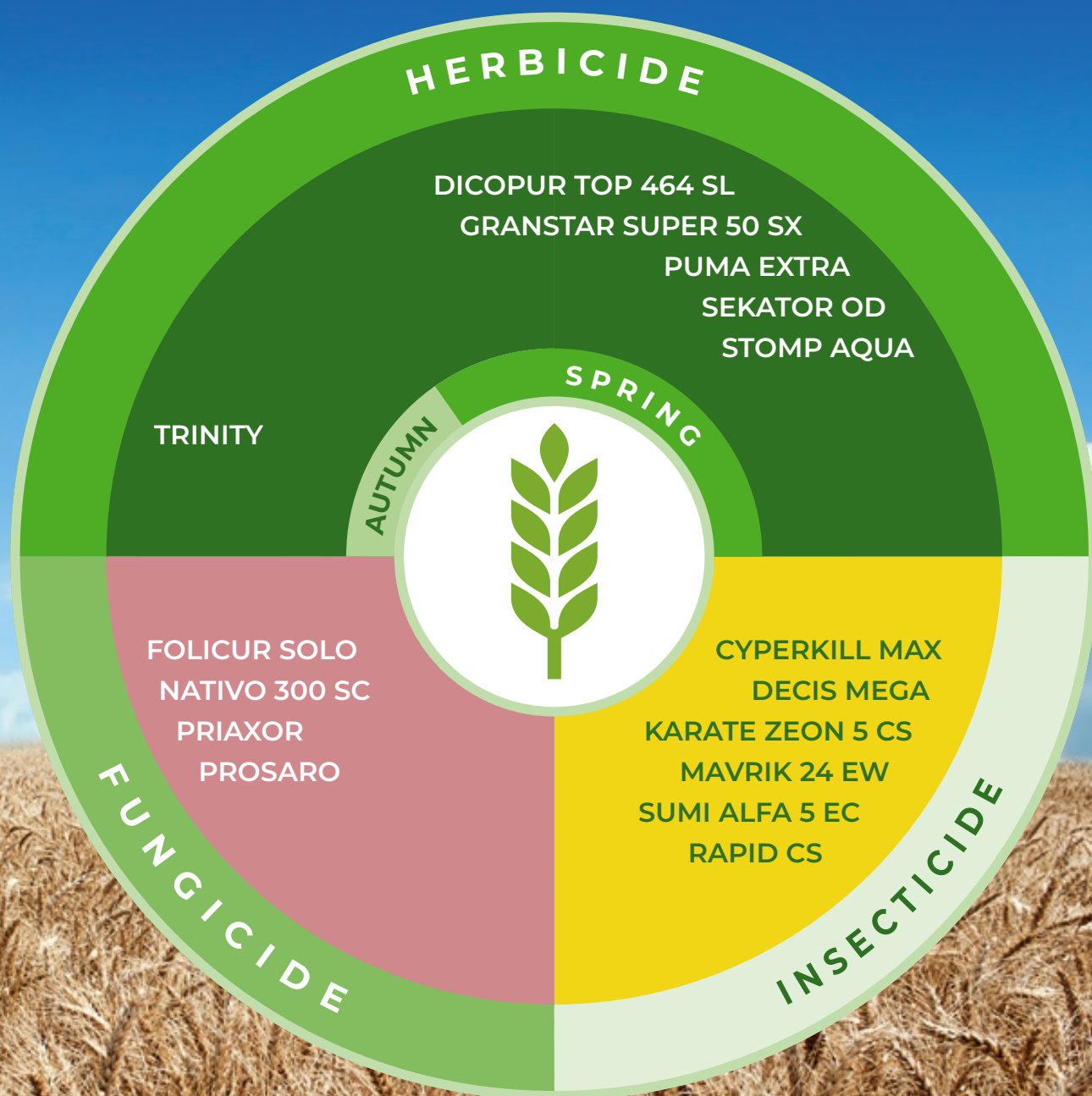


ornamental plants





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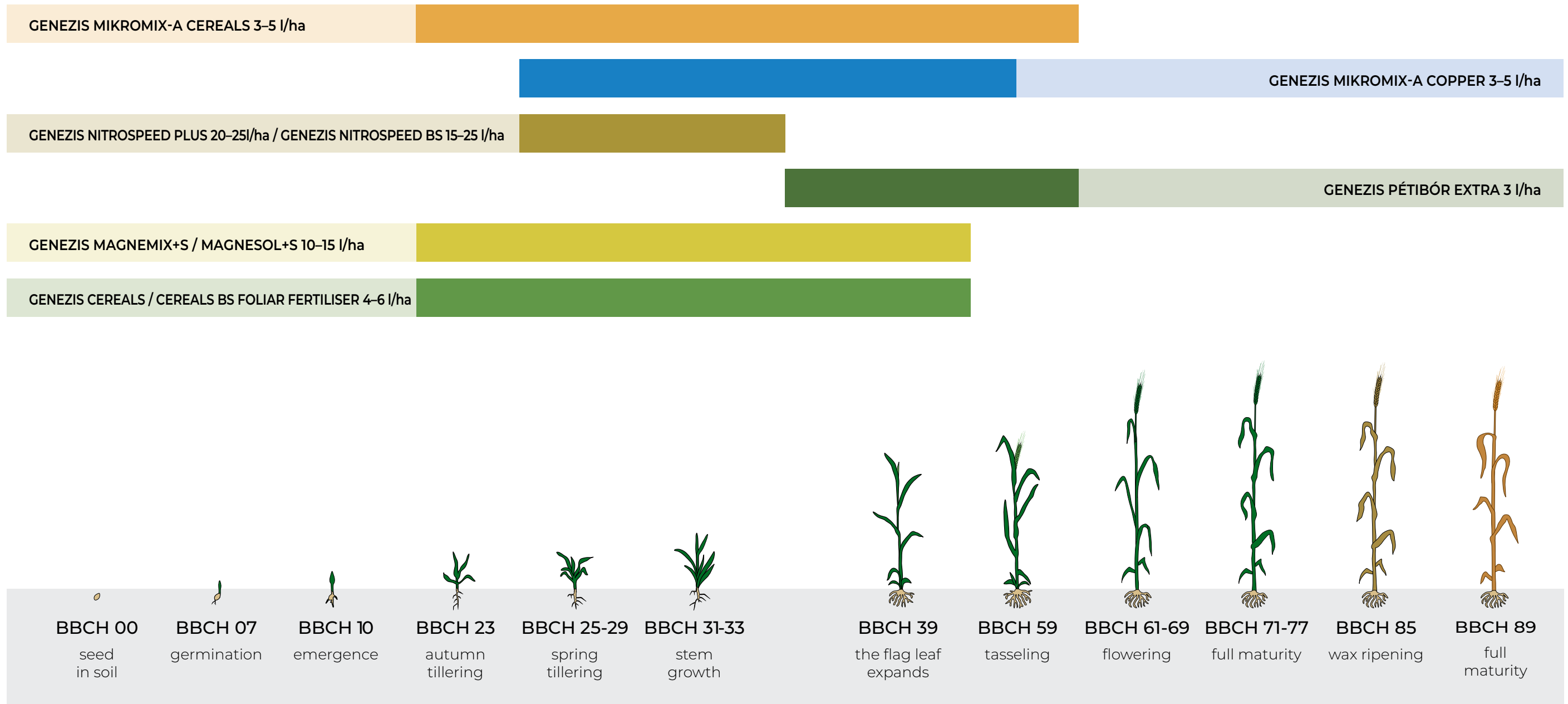
Plant Protection

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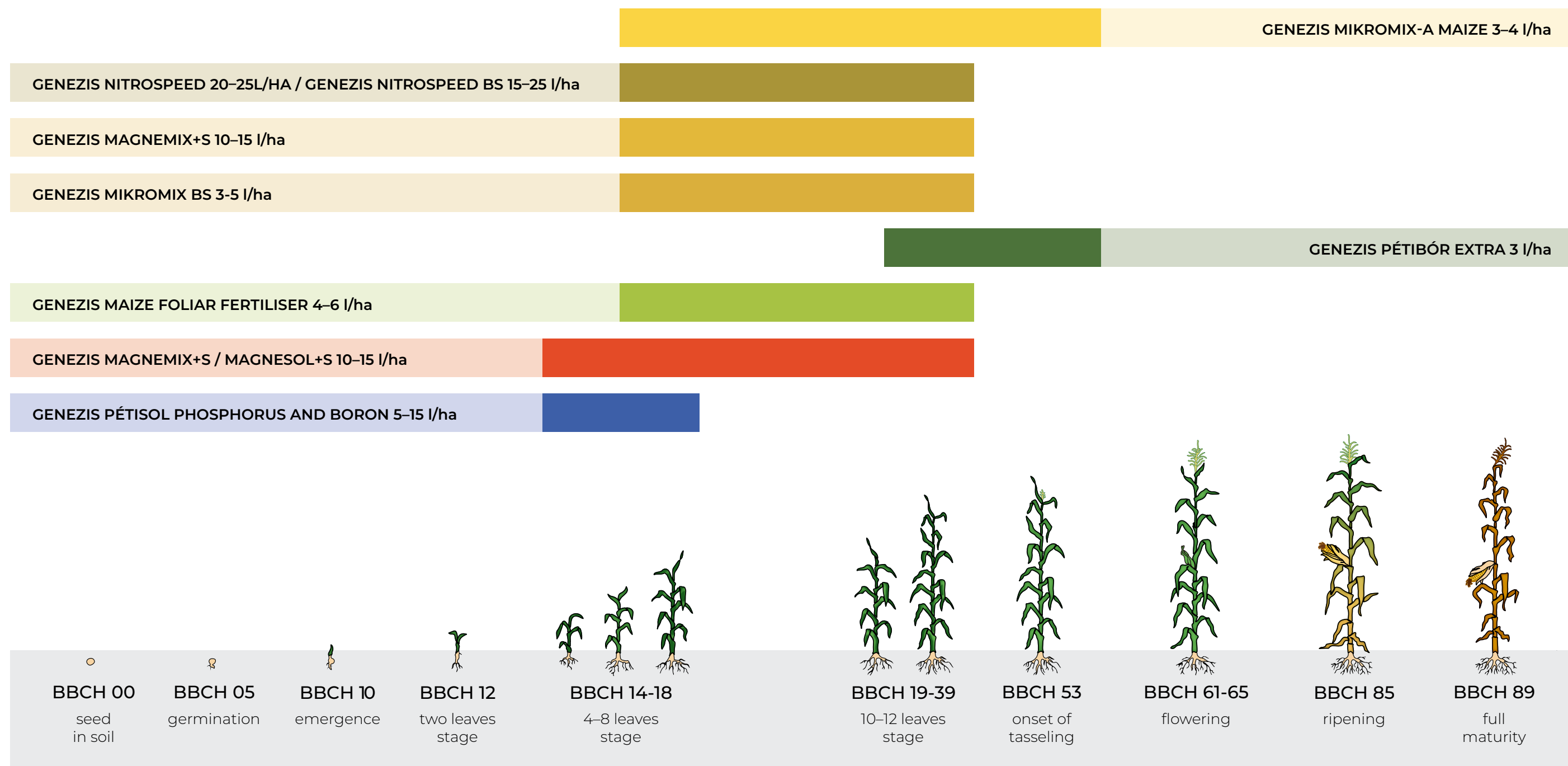


For more information please contact the sales representatives of Genezis Partner Network!

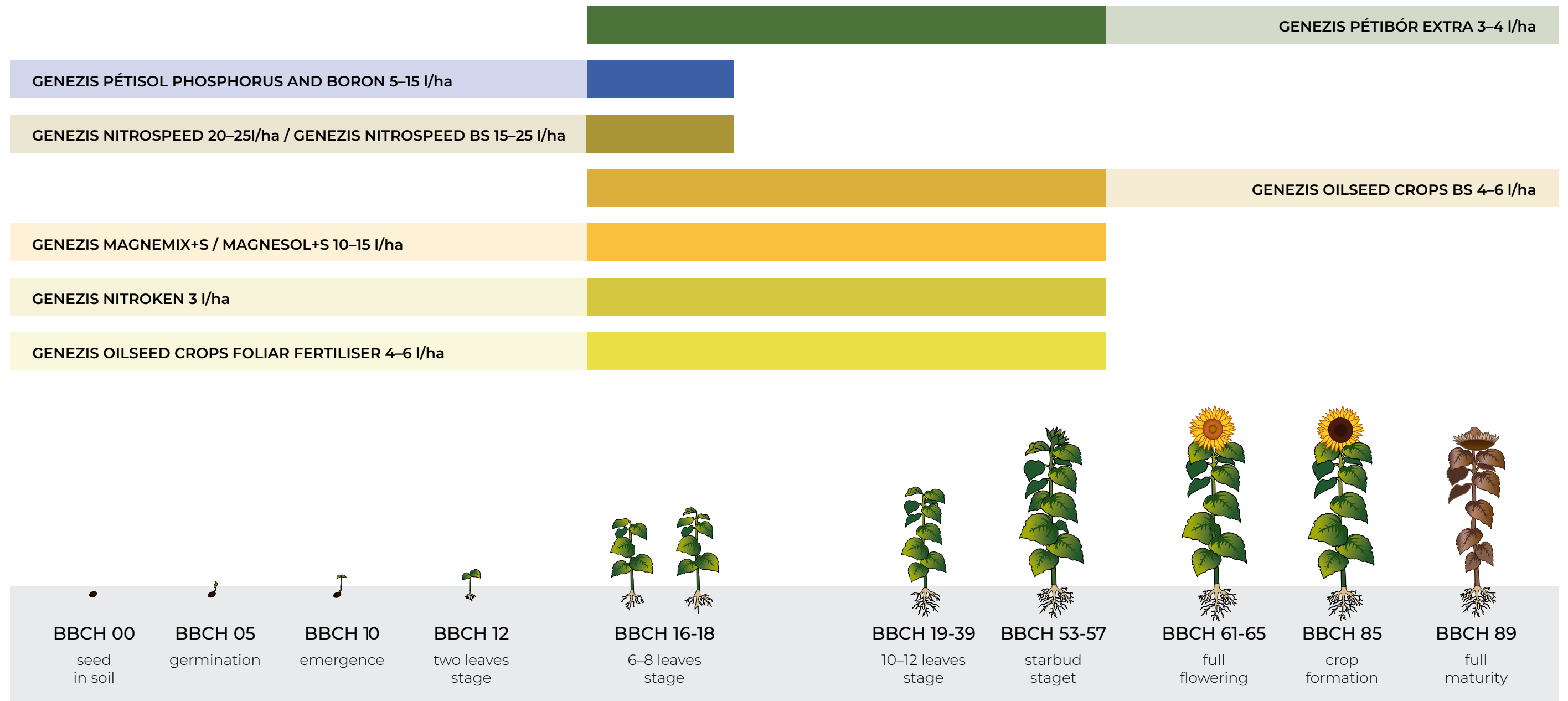




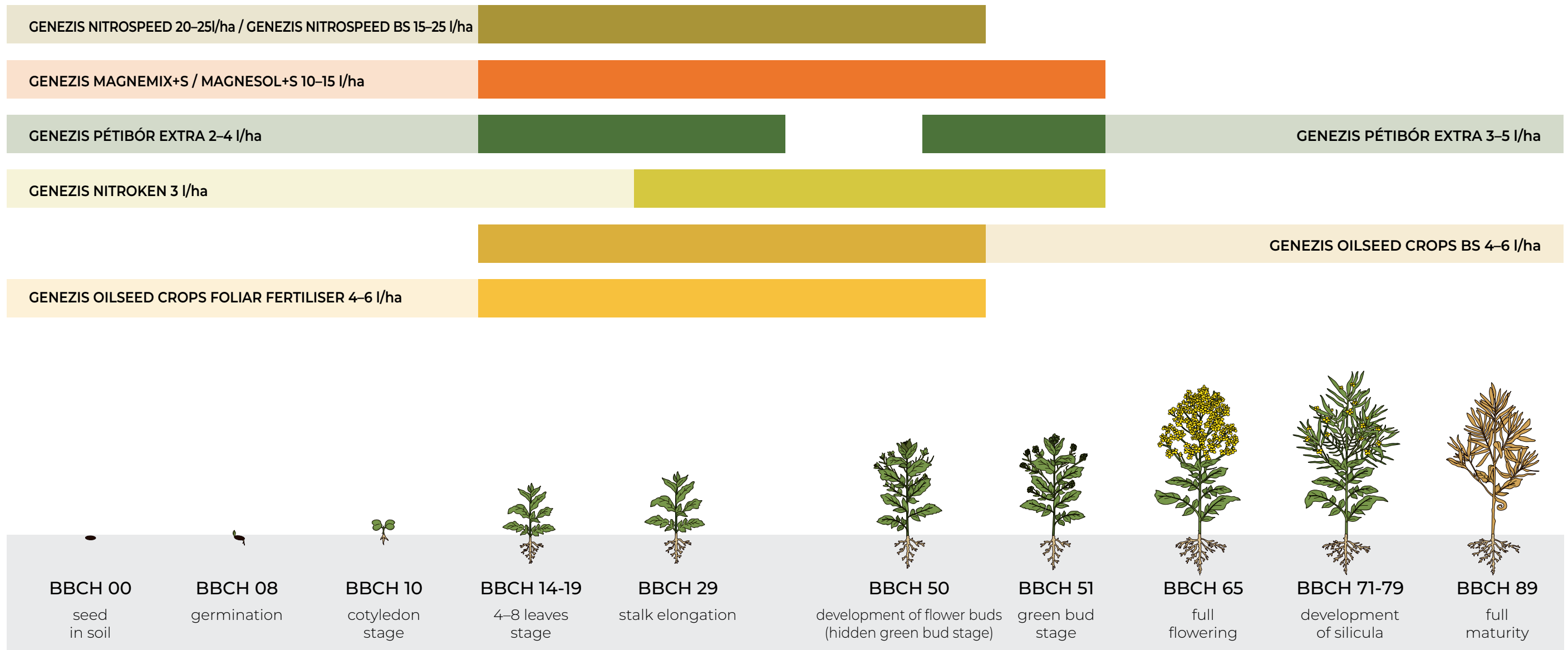










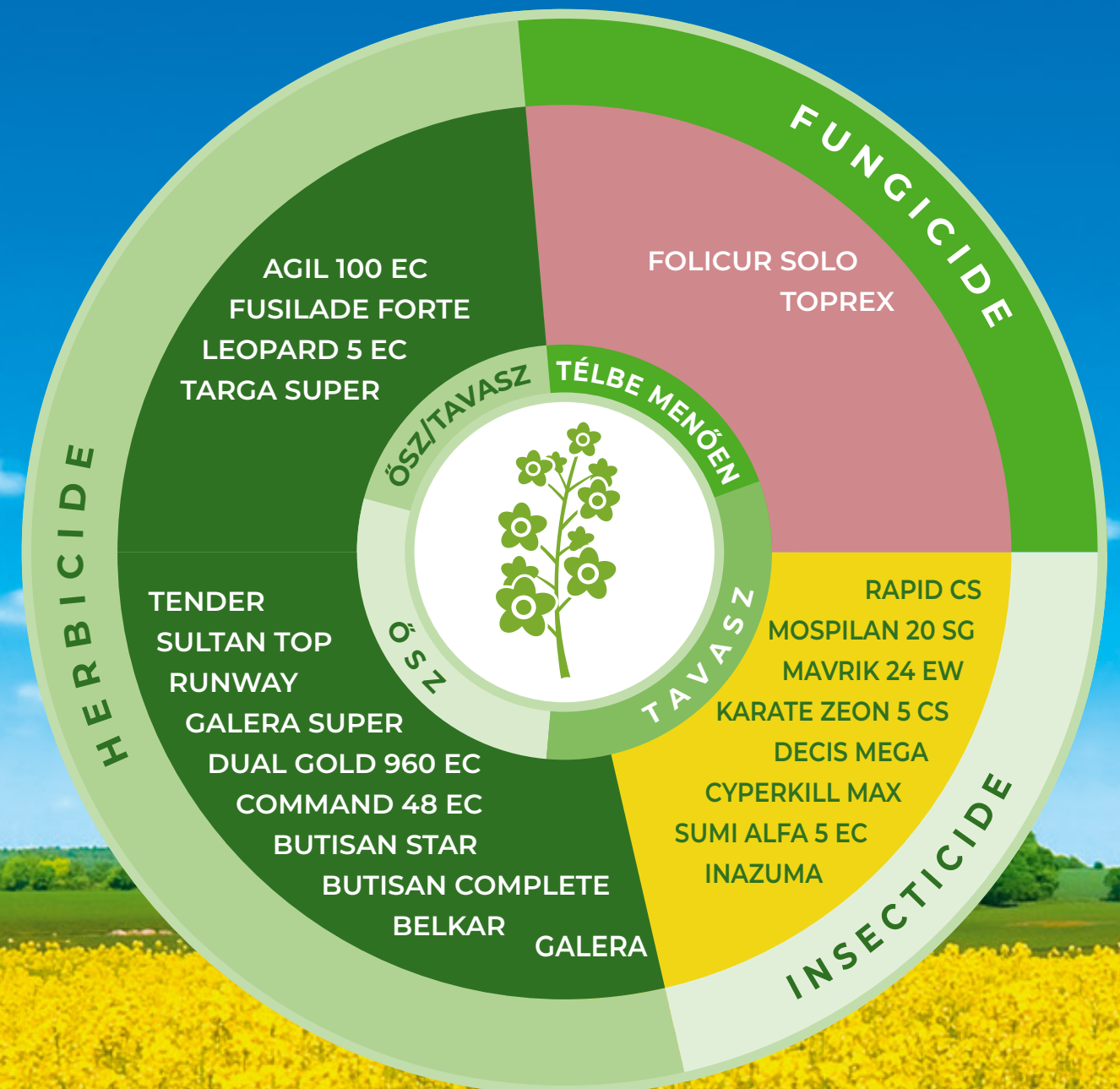
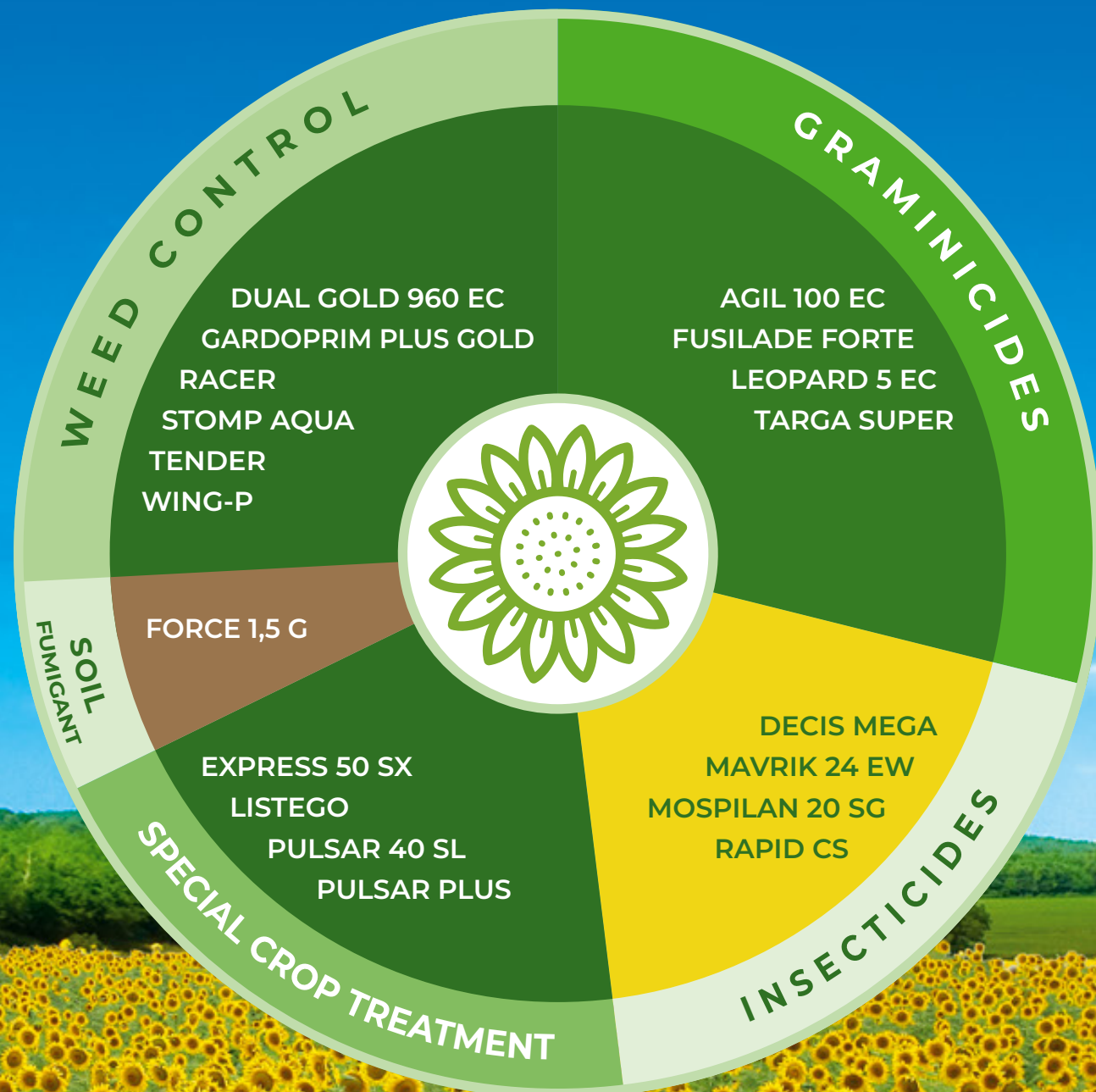




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WIDE RANGE OF HERBICIDES, FUNGICIDES, INSECTICIDES



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The following storage conditions generally apply to all Genezis fertilisers.



**Never store ammonium nitrate fertiliser (AN 34%) in bulk!**

**Do not store fertiliser in bulk outdoors!**

## Recommendations for indoor storage:

The storage facility should be a closed and secure building made of non-combustible material (concrete, brick); weatherproof, with an indoor temperature between 5–30 °C; dry, free of dust and dirt, its substrate should be a dry and smooth surface; the surfaces in contact with the fertiliser should be well insulated; the building should be well ventilated.

**The fertiliser storage area must be protected from unauthorised access!**

**Never allow smoking or the use of open flame within the fertiliser storage area!**



## Recommendations for outdoor storage:



Avoid storing fertiliser outdoors.

Protect the fertiliser from direct sunlight, hot objects and surfaces, do not allow the temperature within the storage area to rise above 32 °C.

The following storage conditions apply to all Genezis fertilisers. To prevent the infiltration of moisture and other contaminants, the fertiliser bags should be covered with a properly secured, clear, waterproof cover.

## STACKING OF PACKAGED GOODS:

### Pallet product:



The stack should be no more than 2 rows high.

The middle foot of the pallets in the top row should not be placed between two pallets of the row beneath;

it should always be fully supported by the row below it.

### Big-Bag products:



The bags may be stacked in a maximum of 3 rows. Big-Bags placed on pallets should not be stacked higher than 2 rows.

For the lifting of Big-Bags, use only the tools designed for that purpose.

Never move the bags with a forklift or other lifting devices.



## Environmental regulations:

### Handling products with damaged packaging:

Clean up spilled fertiliser as soon as possible and place it in a clean, labelled, closed bag/container.

Store separately on a separate pallet. Contaminated fertiliser must be disposed of in accordance with the regulations for hazardous waste.

## Regulations regarding fertiliser products

Decree No. 36/2006. (V.18.) of the Ministry of Agriculture and Rural Development concerning the authorization, storage, marketing and utilization of yield increasing materials.

Decree No. 37/2006. (V.18.) of the Ministry of Agriculture and Rural Development on the placing on the market and control of fertilisers marked "EC fertiliser".

\*Regulation (EU) 2019/1009 (05.06.2019) laying down rules on the making available on the market of EU fertilising products.

The storage instructions should be easily accessible.

Government Decree 219/2011 (20 October) on Protection Against Major Accidents Related to Dangerous Substances.

Decree of the Minister of Interior 54/2014 (5 December)  
BM on the National Fire Safety Code (NFSC) Act CEXXXV of 2012 on Wastes.

Always keep the warehouse clean and tidy. Keep traffic routes (Section 193 of the NFSC) and the preparation area for fire fighters (Section 66 of the NFSC) clear and accessible. Fertilisers containing ammonium nitrate (AN 34% and Pétisó) may only be stored in places where the water pressure

## Safety regulations:

specified in Table 1 of Annex 8 to the NFSC for extinguishing fire is always available.

Ammonium nitrate-based fertilisers (AN 34% and Pétisó) belong to the 'moderately flammable' fire hazard class. Urea is 'non-flammable'. Only water should be used to extinguish a fire caused by the decomposition of fertilisers. Foam, carbon dioxide or powder extinguishers are therefore ineffective during firefighting and can only be used to extinguish other fires in the vicinity of the fertiliser.

### Disaster management rules -

#### For the storage of AN fertiliser (AN 34% N)

(According to Government Decree No. 219/2011. (X.20.))

- Storage quantity  $\geq 1,250$  tonnes (lower limit) - A safety analysis must be prepared.

- Storage quantity  $\geq 5,000$  tonnes (upper limit) - A safety report must be prepared. (If the ammonium-nitrate fertiliser held in the store fails to meet the quality requirements, then the limit quantities described above are 10 and 50 tonnes, respectively.)

Storage quantity  $\geq 312.5$  tonnes (operation below threshold) the activity is subject to a permit issued by the disaster management authorities in the same way as described above.\*

\*To obtain the disaster management permit, the plant identification datasheets required by the decree must be completed and sent to the disaster management authorities.

Based on the submitted documents and an on-site inspection, the authorities will decide whether it requires that a Serious Disaster Recovery Plan (SDRP) be prepared and submitted. Following the submission of data or the inspection of the SDRP (if required), the authorities will decide on issuing the disaster management permit.

### Click on the link below for more information:

<https://genezispartner.hu/dokumentumok-nyomtatvanyok/?n=t%C3%A1rol%C3%A1si&c=utmutato>

















## Genezis plant protection products to tackle the plant protection issues of all major arable crops!

The Genezis plant protection product range offers a competitive solution to the plant protection issues of arable crops:

- 81 concurrent import licenses for 60 types of preparations, 48 active parallel import licenses from surrounding countries
- Wide range of Genezis fungicides, insecticides, herbicides and soil fumigants
- Statutory parallel import and distribution license issued by the National Food Chain Safety Office (NÉBIH)
- From Europe to Europe
- Same ingredients and formula as the reference product, original sealed package
- Mandatory re-labelling in Hungarian



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### Why choose us?

- Wide range of forwarding services: parcel goods, liquid and bulk goods and hazardous goods
- National and international forwarding
- Own fleet consists of 420 vehicles, of which 190 are trucks and 230 are trailers
- Qualified truck drivers
- Short delivery time
- More than 10 years of experience
- Professional and reliable services
- Price and performance guarantee
- Quick, accurate and flexible customer service



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For more information please contact the sales representatives of Genezis Partner Network!

For further information, contact us at: tel.: +36 30 610 4116,  
e-mail: [csomagolt@genezistrans.hu](mailto:csomagolt@genezistrans.hu)