

ALONG THE FUTURE

 vellsam

GREEN AREAS



Products
Catalog



Biotechnology at the service of people.

Vellsam was born from the effort of a family and today, after more than 25 years, we continue working hand in hand with our collaborators as if they were part of it.

We research, develop, manufacture and distribute biotechnological solutions, accompanying our customers in their development, thus empowering those sectors that truly have the power to transform the world.

For decades, our biostimulants and plant nutrients have been traveling to five continents with the aim of improving the way food is grown in many parts of the world.

Aware of the responsibility of accompanying sectors as essential as agriculture, our vision of the future is as important as that of the present. A commitment to total sustainability that leads us to offer solutions that are effective today, but also anticipate the needs of tomorrow.

We are pure innovation, research and development to bring value to our clients and also to the sector through scientific rigor, continuous improvement, exhaustive monitoring, and direct and constant contact with people.



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01

Products



Soil Amendments.





“*The importance of healthy soil in sports turf*”

When it comes to sports turf, the grass is a vital part of the equation. to achieve optimal performance and a high-quality playing surface, it is crucial that the soil is nutritionally well-balanced. soil with good structure and high fertility enhances the assimilation of nutrients and water needed for the healthy growth of the plant.

How to enhance the physical, chemical, and biological conditions of the soil?



**HUMIGREEN
26**

Increase porosity.
Enhance water retention in the soil.



**SALT
SOLUTIONS**

Reduce salt content.



SOILGREEN

Nutrient unlocking.



Products

SOIL STRUCTURE ENHANCEMENT

HUMIGREEN 26



Humigreen 26 is a liquid product composed of humic and fulvic acids derived from natural american leonardite.

Humic acids act as essential systems for ionic exchange and metal complexes (chelators).

Adding humic acid to your soil can help increase mineral availability for your turf.

Main functions of humic acid in soil:

- increases water retention capacity in the soil.
- Enhances nutrient retention capacity in the soil, ensuring more nutrients are available to your turf when needed, rather than leaching away.
- Boosts soil carbon, thereby increasing water retention capacity.
- Chelates nutrients, making them more easily available to the plant—unlocks nutrients.
- Stimulates soil microbiota, improving nutrient exchange between the plant and the soil.

Composition:

Total Humic Extract (THE)	26,00w/w
Humic Acid	10,00w/w
Fulvic Acid	16,00 % w/w
Potassium (K ₂ O) water soluble	8,00 % w/w
pH	11,5
Density	1,18 gr/cc

Containers

● 20L ● 200L ● 1000L

Recommended dosage: 20-40 L/Ha
Volume: 400-1000 L/Ha

NUTRIENT UNLOCKING

SOILGREEN



Soilgreen is a liquid organic fertilizer rich in n (nitrogen) and k (potassium) for fertigation application, with a high organic matter content that imparts the following properties:

- Facilitates improved soil structure by forming small, stable aggregates, providing porosity, simultaneous mineralization processes, and contributing to stable humus formation.
- Thanks to its chelating power, it improves the absorption of macro and microelements by the plant's rhizosphere, promoting a more efficient use of fertilizers supplied to the plants and reducing potential losses through leaching.
- With its potassium (k₂o) content, it promotes photosynthesis, respiration, protein synthesis, and enzyme activation.

Composition:

Total Nitrogen (N)	2,00w/w
Organic Nitrogen (N)	2,00w/w
Potassium (K ₂ O) water soluble	5,00 % w/w
Organic Carbon (C)	20,50 % w/w
C/N Ratio	10,25 % w/w
Organic Matter	35,00 % w/wc
pH	5,5
Density	1,25 gr/cc

Containers:

● 20L ● 200L ● 1000L

Recommended dosage: 40-60 L/Ha
Volume: 400-1000 L/Ha



SALT WASHER

SALT SOLUTIONS



Salt Solutions is a soluble product formulated with calcium complexed with organic acids (heptagluconic acids and lignosulfonic acids).

Formulated to correct calcium deficiencies in plants and address saline-sodic soils, it reduces problems associated with salt stress in plants. It displaces the content of salts from the wet bulb (sodium, chlorine, and boron), thereby minimizing

Composition:

Calcium oxide (CaO) water soluble	10,00w/w
Complexing agents	LS & AHG
Stable in the pH range	2-8
pH	3,5
Density	1,38 gr/cc

Containers:

● 5L ● 20L ● 200L ● 1000L

Recommended dosage: 5-10 L/Ha

Volume: 400-1000 L/Ha





Bioestimulants.





Benefits of amino acids:

- **Improve nutrition with lower energy expenditure.**
- **Enhance the state and properties of the cultivation soil.**
- **Provide nitrogen.**
- **Increase plant resistance and help overcome issues such as stress situations.**
- **Boost nutrient absorption.**

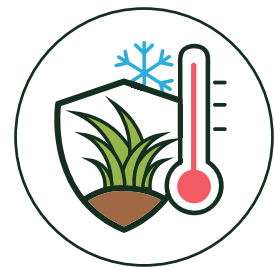
Improved nutrient acquisition and hormone balance



Effect on the growth and development of the root system.



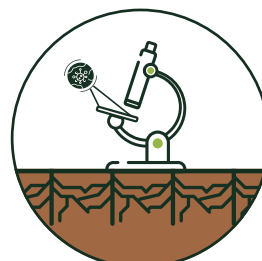
Increased stress tolerance



Promotion of germination and sedimentation vigor



Soil microbiomanatural stability and activity





Products

RAPID ACTION BIOESTIMULANT

AMINO GREEN



Aminogreen is a product with a high content of free amino acids (24%), in levogyre form (l-amino acids), making it an essential ally for turf care.

Aminogreen stimulates healthy growth, improves nutrient absorption, strengthens the turf's resistance to stress, and protects it from damage caused by adverse conditions such as trampling and adverse weather.

Its ability to directly provide essential amino acids that plants need makes it an effective solution in stressful situations and adverse weather conditions, resulting in higher-quality turf and a more efficient use of plant energy.

Composition:

Free Amino Acids	24,00 % w/w
Total Nitrogen (N)	4,30 % w/w
Organic Nitrogen (N)	3,90 % w/w
pH	9
Density	1,24 gr/cc

Containers:

● 5L ● 10L ● 20L ● 220L ● 1000L

Recommended dosage: 5-8 L/Ha

Volume: 400-1000 L/Ha





ANTISTRESS + RESERVES

EAGLEGREEN

LIQUID
FORMULATION

AMINO ACIDS

IMPROVED
ROOT ZONE

Eaglegreen is a fast-acting organic biostimulant composed of a high concentration of specific amino acids, nitrogen, fulvic acids, organic matter, and polysaccharides, offering a balanced combination of biostimulation and fertilization.

Specially recommended for:

- Critical moments of plant growth, such as root system development. the contribution of amino acids stimulates crop growth by promoting vegetative development, while fulvic acids enhance rapid soil recovery, maintaining the plant in an optimal nutritional state.
- Adverse situations (transplanting, hail, frost, etc.) where it provides a significant amount of organic matter, improving soil texture and structure, facilitating nutrient absorption. it promotes the vegetative activity of treated plants and can be used as a quick nitrogen supply source during periods of maximum requirements.
- High capacity to generate energy reserves due to its contribution of polysaccharides, 7.90%, such as starch or cellulose, during stressful situations or enhancing cellular formation in vegetative development.

Composition:

Free Amino Acids	24,00 w/w
Total Nitrogen (N)	4,00 w/w
Organic Nitrogen (N)	4,00 % w/w
Organic Matter	60,00 % w/w
Total Humic Extract	22,50 % w/w
Fulvic Acids	22,50 % w/w
Organic Carbon (C)	35,00 % w/w
Polysaccharides	10,00 % w/w
pH	9
Density	1,24 gr/cc

Containers:

- 5L
- 10L
- 20L
- 220L
- 1000L

Recommended dosage: 2-5 L/Ha

Volume: 400-1000 L/Ha





ANTISTRESS + CELLULAR ACTIVATOR

GREENSTAR



Greenstar is a 100% natural biostimulant with a unique formulation based on extract from the *ascophyllum nodosum* seaweed and amino acids from double enzymatic hydrolysis of plant origin. It combines the strength of the sea with the power of the best amino acid, assisting the plant in stress situations with its elicitor and bioactivator effect.

The application of greenstar significantly improves the plant's health, resulting in a stronger and denser turf for a more resilient playing surface.

It enhances the development of stronger and denser roots capable of better nutrient absorption. It promotes resistance to diseases and aids in plant recovery from stress situations.

Recommended dosage: 10 L/Ha
Volume: 400-1000 L/Ha

Composition:

Seaweed Extract (<i>Ascophyllum Nodosum</i>)	
Alginic Acid	1,50 w/w
Mannitol	0,50 % w/w
Total Nitrogen (N)	1,50 % w/w
Organic Nitrogen (N)	1,50 % w/w
Free Amino Acids	10,00 % w/w
Boron (B) water soluble	0,80 % w/w
pH	9
Density	1,21 gr/cc
Electrical conductivity	53 mS/cm

Containers:

- 1L
- 5L
- 10L
- 20L
- 220L
- 1000L



IRON CHELATED WITH AMINO ACIDS

AMINO GREEN FE FASTER



Aminogreen Fe Faster is a liquid iron fertilizer chelated at 6% developed to translocate systemically, it moves internally throughout the plant, allowing for rapid absorption and correction of deficiencies.

key features of aminogreen fe faster:

- Provides iron to the turf while simultaneously supplying amino acids to the plant.
- Improves chlorophyll formation.
- Assists in oxygen movement in plants.
- Quickly corrects pale green or yellowish color of leaves in

Composition:

Iron (Fe) water soluble	6,00 w/w
Free Amino Acids	10,00 w/w
Total Nitrogen (N)	1,30 % w/w
Organic Nitrogen (N)	1,30 % w/w
pH	2,5
Density	1,24 gr/cc

Containers:

● 1L ● 5L ● 20L ● 220L ● 1000L

Recommended dosage: 5-10 L/Ha

Volume: 400-1000 L/Ha



SEAWEED

ASCOPHYLLUM NODOSUM SEAWEED EXTRACT

ALGAGREEN



Algagreen is a soluble liquid plant fertilizer, whose active compound consists of marine algae *Ascophyllum Nodosum*, acting as activators of physiological processes in treated plants throughout the entire crop cycle.

It is a nutrient that promotes rooting and vegetative development. It can be used for both foliar and root application.

This bioactivator effect, primarily due to cytokinins, is mainly evident in cell division, increased production of carbohydrates and proteins, along with an accentuated synthesis of chlorophyll that leads to enhanced photosynthesis.

Cytokinins inhibit certain reactions of cellular catabolism that cause the destruction of chlorophyll and aging in general.

Recommended dosage: 2,5-4 L/Ha

Volume: 400-1000 L/Ha

Composition:

Seaweed Extract (<i>Ascophyllum Nodosum</i>)	
Alginic Acid	1,50 w/w
Mannitol	0,50 % w/w
Potassium (K ₂ O) water soluble	4,50 % w/w
Magnesium (MgO) water soluble	0,10 % w/w
Calcium (CaO) water soluble	0,20 % w/w
pH	10
Density	1,10 gr/cc
Electrical conductivity	44 mS/cm

Containers:

- 1L
- 5L
- 10L
- 20L
- 200L
- 1000L

SPIRULINA + CYTOKININ SEAWEED EXTRACT

GREENSPIRULL +C



Greenspirull +C is a soluble liquid plant fertilizer derived from enzymatic hydrolysis, whose active material is composed of microalgae from the sea, acting as activators of physiological processes in treated plants throughout the entire crop cycle.

It is a nutrient that promotes rooting and vegetative development. It can be used for both foliar and root application.

This bioactivator effect, primarily due to cytokinins, is mainly evident in cell division, increased production of carbohydrates and proteins, along with an accentuated synthesis of chlorophyll that leads to enhanced photosynthesis.

Cytokinins inhibit certain reactions of cellular catabolism that cause the destruction of chlorophyll and aging in general.

Composition:

Free Amino Acids	6,00 w/w
Total Nitrogen (N)	1,00 w/w
Organic Nitrogen (N)	1,00 % w/w
Amino acids from spirulina	9,00 % w/w
pH	10
Density	1,10 gr/cc

Containers:

- 1L
- 5L
- 20L
- 220L
- 1000L

Recommended dosage: 2-3 L/Ha

Volume: 400-1000 L/Ha



EKLONIA + SILICON

EKLOGREEN SI



Eklogreen Si is a fortified liquid mineral fertilizer NPK with silicon and ecklonia algae extract. It enhances the vitality and strength of plants against biotic and abiotic stress.

Silicon transforms into polymeric structures in cell walls, creating a natural barrier that protects the plant.

It increases resistance to drought and hinders the entry of pathogenic fungi.

The use of seaweed extract derived from ecklonia maxima results in improved water efficiency, increased fresh biomass, higher chlorophyll concentration, and enhanced nutritional efficiency.

Recommended dosage: 5-10 L/Ha

Volume: 400-1000 L/Ha

Containers:

● 1L ● 5L ● 20L

Composition:

Total Nitrogen (N)	5,00 w/w
Urea Nitrogen (N)	5,00 w/w
Phosphorus (P ₂ O ₅)	3,00 % w/w
Potassium (K ₂ O)	8,00 % w/w
Sodium Silicate (SiO ₃)	10,00 % w/w
Ecklonia maxima extract	3,00 % w/w
pH	12
Density	1,23 gr/cc





Fertilizers.





Deficiency correctors that help maintain an adequate concentration of micro and macronutrients required for the efficient development of the plant.

Incorporating the latest technology for the efficient use of chelating agents and organic complexes:

The chelates and organic complexes used in the range of correctors have been specifically selected to enhance the assimilation, especially of micronutrients.

The chelates used have the ability to bind to metal ions much more strongly and with a more stable pH.

The complexes facilitate the release of nutrients. being organic, the plant assimilates them more rapidly.

- **Amino acids**
- **EDTA**
- **HGA**
- **EDDHSA**
- **Lignosulfonic acids**
- **Organic solvents**



Products

NEUTRAL POTASSIUM DEFICIENCY CORRECTOR

GREENKECO



Greenkeco is a liquid potassium neutralized with high-concentration carboxylic acids, free of chlorides and nitrates. It serves as a potassium deficiency corrector, presented as a highly concentrated liquid solution.

Its use prevents and corrects potassium deficiency states. It is indicated during periods when the plant rapidly consumes this element (formation of organ reserves, bulbs, roots, etc.) and when it is necessary to correct deficiency states due to defects or imbalances in potassium assimilation.

Main functions of greenkeco:

- Involves in plant water regulation mechanisms and protein formation, also responsible for the synthesis of carbohydrates such as starch and cellulose.
- Acts as an activator in cellular respiration processes and enables the active conformation of many enzymes involved in metabolic processes.
- Regulates the transport of products resulting from photosynthesis through the phloem and their distribution to organs, enhances resistance to drought, frost, and fungal diseases, and strengthens the root system.
- Its neutral pH significantly enhances the product's efficacy.

BORON DEFICIENCY CORRECTOR

BOROGREEN



Borogreen is a boron deficiency corrector, complexed with ethanolamine and presented as a highly concentrated liquid solution.

It is specially formulated for preventive application, and its use

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha

Composition:

Chloride free	
Potassium (K ₂ O) water soluble	20,00 w/w
pH	7,5
Density	1,22 gr/cc

Containers:

● 1L ● 5L ● 20L ● 220L ● 1000L

Recommended dosage: 3-5 L/Ha

Volume: 400-1000 L/Ha

Composition:

Boron (B)	10,00 % w/w
pH	7,5
Density	1,30 gr/cc

Containers:

● 1L ● 5L ● 20L



IRON-EDDHSA DEFICIENCY CORRECTOR

GREENIRON



Greeniron is a chelated iron complex, especially recommended for both foliar and root application to prevent and correct iron deficiencies.

The iron in greeniron is chelated by eddhsa. the product is presented in a water-soluble liquid form, ideal for application in both fertigation and foliar spraying.

Key functions of greeniron:

- EDDHSA-chelated iron for highly effective greening.
- Can be used at any time of the year, especially effective during fall and winter.
- The chelating agent ensures optimal coverage and penetration of the iron component.
- Lawn greening without stimulating excessive growth.
- Helps harden the turf, making it less susceptible to diseases.

Composition:

Iron (Fe) water soluble	6,00 w/w
Chelating agents	EDDHSA
Stable in the pH range	2-8
pH	2,5
Density	1,25 gr/cc

Containers:

● 1L ● 5L ● 20L ● 200L ● 1000L

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha





MICRO ELEMENTS

MICRONUTRIENT DEFICIENCY CORRECTOR

MICROGREEN 3



Microgreen 3 is a liquid blend of micronutrients complexed with gluconic acid, effective in grasses and all types of soil when diluted in irrigation water and also through foliar applications.

It is highly effective in treating deficiencies of these micronutrients, as it is a product rapidly absorbed by grasses.

It should be applied whenever the need is recognized throughout the plant's vegetative cycle.

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha

Composition:

Iron (Fe) water soluble	4,00 % w/w
Manganese (Mn) water soluble	2,00 w/w
Zinc (Zn) water soluble	2,00 % w/w
Chelating agents	Gluconic Acid
Stable in the pH range	2-8
pH	2,5
Density	1,35 gr/cc

Containers:

● 1L ● 5L ● 20L ● 200L ● 1000L

MICRONUTRIENT DEFICIENCY CORRECTOR

MICROGREEN PLUS



Microgreen Plus is a liquid mixture of micronutrients complexed with heptagluconic acid (ahg) and in salt form, highly effective in grasses.

It is a corrector for multiple deficiencies of fe, mn, zn, cu, b, and mo that can be applied directly to the soil when diluted in irrigation water.

Microgreen plus is very effective in treating deficiencies of these micronutrients, especially fe and mn, as it is a product rapidly absorbed.

Containers:

● 1L ● 5L ● 20L ● 200L ● 1000L

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha

Composition:

Iron (Fe) water soluble	4,00 % w/w
Manganese (Mn) water soluble	2,00 w/w
Copper (Cu) water soluble	0,30 % w/w
Zinc (Zn) water soluble	0,60 % w/w
Boron (B) water soluble	0,30 % w/w
Molybdenum (Mo) water soluble	0,05 % w/w
Complexing agent	AHG
Stable in the pH range	2-8
pH	2,5
Density	1,25 gr/cc





MAGNESIUM DEFICIENCY CORRECTOR

MAGNIGREEN



Magnigreen is complexed with gluconic acids, using oxide as a magnesium source, ensuring total safety in foliar application.

Due to its high magnesium content, it acts as a highly effective corrector that efficiently corrects or prevents deficiency states of this element, being assimilated by the plant.

Magnesium becomes part of respiration (glycolysis), the tricarboxylic acid cycle, and nucleic acids. Magnesium is a component of chlorophyll, making it essential for the photosynthesis process.

Composition:

Magnesium (MgO) water soluble	10,00 % w/w
Complexing agent	AG
pH	6
Density	1,25 gr/cc

Containers:

● 1L ● 5L ● 20L ● 200L ● 1000L

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha





MANGANESE AND ZINC DEFICIENCY CORRECTOR

MANGAZINC SUPREM



Mangazinc Suprem is a corrector for manganese and zinc deficiencies complexed with heptagluconic acids, providing greater stability for both, favoring better assimilation and more effective distribution throughout the plant.

Both nutrients are involved in chlorophyll synthesis, photosynthesis, and growth formation, such as auxins.

It is the suitable fertilizer to prevent or treat manganese or zinc deficiencies, especially in plants highly sensitive to their lack. its special composition and chelation ensure perfect foliar and root assimilation.

Recommended dosage: 2-5 L/Ha

Volume: 400-1000 L/Ha

Composition:

Manganese (Mn) water soluble	8,00 % w/w
Zinc (Zn) water soluble	6,00 % w/w
Complexing agent	AHG
Stable in the pH range	2-8
pH	5
Density	1,50 gr/cc

Containers:

● 1L ● 5L ● 20L ● 220L ● 1000L





COMPLEXED MANGANESE DEFICIENCY CORRECTOR

MANGAGREEN



Mangagreen is an exceptional liquid manganese corrector complexed with heptagluconic acid, used as a magnesium source when deficiency states of this element are observed due to deficiencies and imbalances in manganese assimilation. It is also used preventively in crops that are large consumers or sensitive to its deficiency. Maximum effectiveness in nutrient solutions.

Mangagreen presents manganese fully complexed and stable, ensuring it does not react with salts commonly used in fertigation. In this case, manganese remains stable and free from interactions with other cations that could interfere with plant assimilation.

Composition:

Manganese (Mn) water soluble	8,00 % w/w
Chelating agent	HGA
Stable in the pH range	2-8
pH	3
Density	1,40 gr/cc

Containers:

● 1L ● 5L ● 20L ● 200L ● 1000L

Recommended dosage: 2-5 L/Ha

Volume: 400-1000 L/Ha



COMPLEX COPPER DEFICIENCY CORRECTOR

CUPROGREEN



Cuprogreen is a nutritional supplement based on copper gluconate designed to ensure high levels of plant performance and improvement.

Main functions of Cuprogreen:

- Induces plant defense response against abiotic and biotic stress.
- Rapid nutritional correction.
- Aids in the development of lignin necessary for strengthening the cell wall.

Composition:

Copper (Cu) water soluble	7,00 % w/w
Chelating agent	HGA
Stable in the pH range	2-8
pH	3
Density	1,25 gr/cc

Containers:

- 1L
- 5L
- 20L
- 220L
- 1000L

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha



COMPLEXED CALCIUM DEFICIENCY CORRECTOR

GREENCA



Greenca is formulated based on calcium gluconate, serving as an invigorating and preventive corrector for calcium deficiencies. It is suitable for periods of increased growth and development, quickly absorbed by plant organs with higher activity and nutrient demand, strengthening plant tissues by directly affecting the formation and compaction of the plant cell membrane. Calcium is also considered an essential element in soil fertility.

Purposes for application:

- Preventive and curative control of calcium deficiencies.
- Improve plant quality, can be used as a nutritional source of calcium with grasses.

Composition:

Calcium (CaO) water soluble	14,00 % w/w
Chelating agent	AG
pH	5,5
Density	1,35 gr/cc

Containers:

- 1L
- 5L
- 20L
- 220L
- 1000L

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha



PHOSPHORUS AND POTASIUUM DEFICIENCY CORRECTOR

FITOFORCE K



Fitoforce K is a highly concentrated inorganic solution rich in phosphorus and potassium, completely miscible with water, providing the plant with phosphorus and potassium both through foliar and root application.

Key functions of Fitoforce K in the soil:

- Easily available source of phosphorus and potassium.
- Non-foaming liquid.
- Particularly useful during plant stress periods.
- Suitable for all types of established turf and seedlings.
- Powerful fungicidal effect preventively and correctively.
- Enhances plant defenses.
- Metabolic activator in post-stress states.

Objective:

- Protection of the plant against biotic and abiotic stress situations in order to stimulate plant growth and development.

Composition:

Phosphorus (P ₂ O ₅) water soluble	30,00 % w/w
Potassium (K ₂ O) water soluble	20,00 % w/w
pH	7
Density	1,40 gr/cc

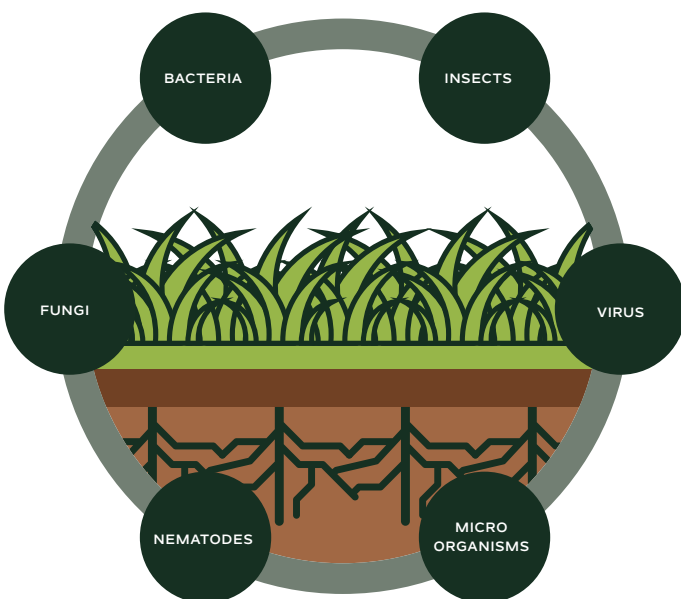
Containers:

- 1L
- 5L
- 20L
- 200L
- 1000L

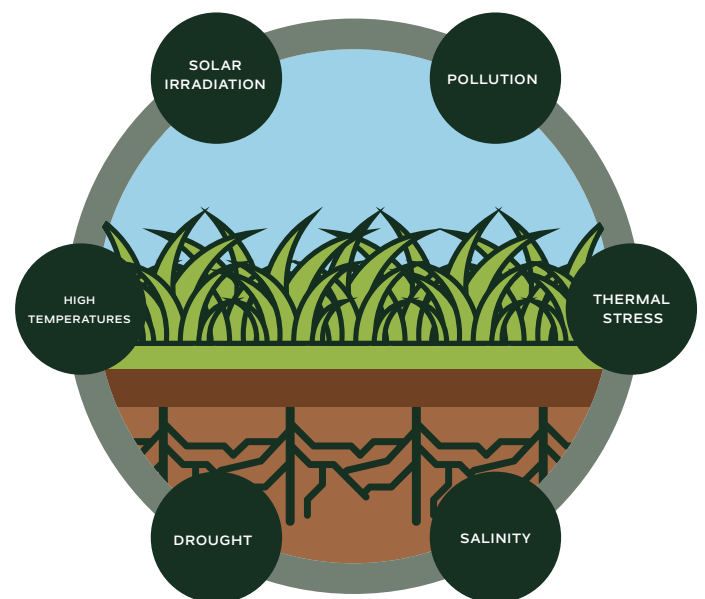
Recommended dosage: 6-10 L/Ha

Volume: 400-1000 L/Ha

BIOTIC STRESS



ABIOTIC STRESS





Pro Gel Technology

Pro Gel provides crops with a high concentration of macronutrients and micronutrients, of high purity, highly assimilable, 100% soluble, achieving short-term agronomic results even in adverse weather conditions.

It contains vitamins that act as metabolic activators for the plant, participating in nutrient nutrition and assimilation, cellular respiration, and playing a role in root system growth and hormonal regulation.

With coadjuvants that improve nutrient assimilation by the plant and its homogeneous dispersion in the foliar and root zone. excellent performance in tank mixing, pro gel takes soluble macro and micronutrients to a higher level of efficiency by combining the advantages of different technologies in one product.

In this way, pro gel achieves synergy between lawn nutrition and plant health. it consists of various formulations designed to complement nutritional programs.



High concentration
MACRO NUTRIENTS

NPK BALANCE

MICRO ELEMENTS
Chelated with EDTA

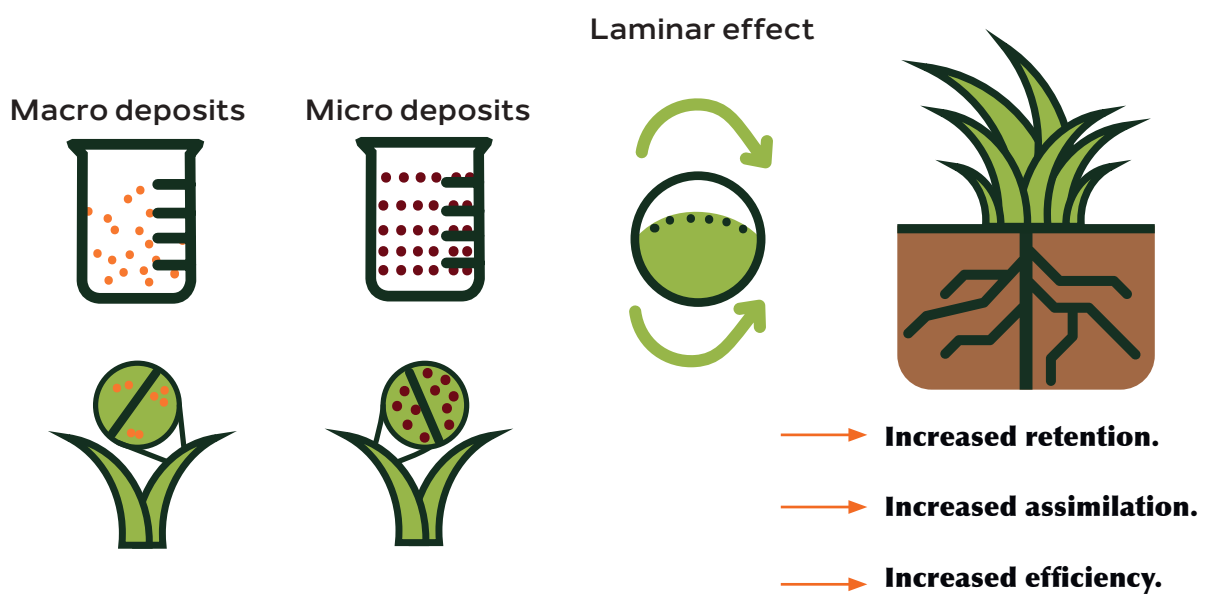
HIGH SOLUBILITY
And assimilation

**LATEST GENERATION
ADJUVANTS**

HIGH COMPATIBILITY
with other fertilizers in common use



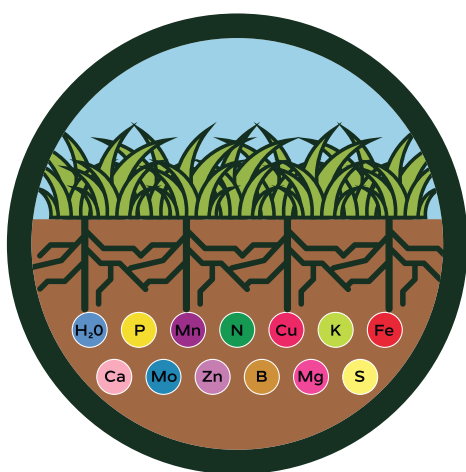
Pro Gel technology increases the product's retention time in the foliar zone, reduces the surface tension of the droplet formed on the leaves, promoting stomatal opening and cuticular absorption, thereby increasing the amount of absorbed nutrients.



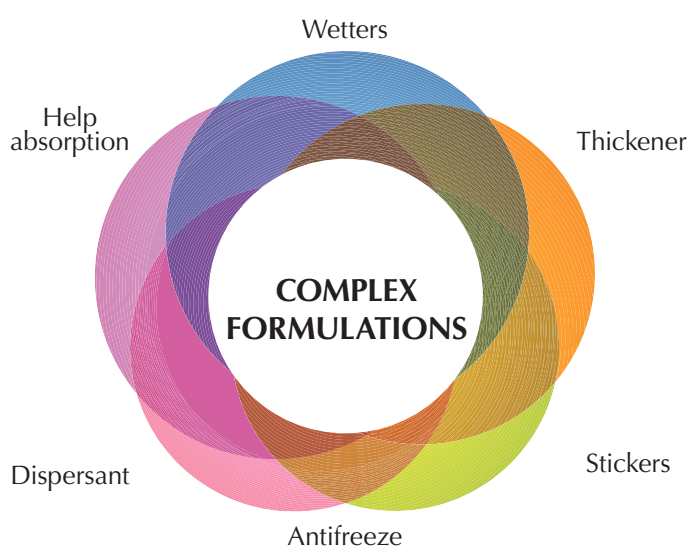


Why Pro Gel?

- Homogeneous dispersion in substrate or soil.
- Acid pH, depending on the formulation. It acts by correcting the pH of the nutrient solution, reducing blockages and acidifying the root bulb, achieving a better nutrient absorption.
- High persistence in the soil with gradual absorption of nutrients of high purity and assimilation.
- In saline soils it favors the washing of salts, does not block elements such as Ca and Mg.
- It can be diluted with a fertilizer/water ratio of 1:1, reducing water consumption.
- Allows application in low doses (saving more than 30%) and its rapid dilution.
- It favors the reduction of leaching, especially in sandy and very permeable soils.
- Blocks sodium. Very low electrical conductivity. The plant absorbs it with less effort.
- Free of insoluble components so it does not clog irrigation systems and sprinkler equipment.
- The best solution in terms of speed and ease of use.



Improves the dynamic interaction between soil-root system-available nutrients, favoring the retention of nutrients in the soil, increasing their availability for a longer period of time and avoiding leaching.



HIGH CONCENTRATION

HIGH EFFICIENCY

SHORT-TERM AGRONOMIC RESULTS

Adjuvants that enhance the efficacy of raw materials.



BALANCE PRO GEL

PRO GEL 33-5-5

With high content of Nitrogen + Phosphorus + Potassium + micro elements.

Composition:

Total nitrogen (N)	33,00% w/v
Nitric Nitrogen (N)	8,25% w/v
Ammoniacal Nitrogen (N)	8,25% w/v
Urea Nitrogen (N)	16,50 % w/v
Phosphorus (P ₂ O ₅) water soluble	5,00% w/v
Potassium (K ₂ O) water soluble	5,00% w/v
Iron (Fe) water soluble and chelated by EDTA	0,14% w/v
Manganese (Mn) water soluble and chelated by EDTA	0,14% w/v
Zinc (Zn) water soluble and chelated by EDTA	0,14% w/v
pH	5,50
Density	1,34 gr/cc

Poor in Biuret

Containers:

● 20 L ● 200 L ● 1000 L

Recommended dosage: 20-40 L/ha

PRO GEL 17-17-17

With high content of Nitrogen + Phosphorus + Potassium + micro elements.

Composition:

Total nitrogen (N)	17,00% w/v
Ammoniacal Nitrogen (N)	1,80% w/v
Urea Nitrogen (N)	15,20% w/v
Phosphorus (P ₂ O ₅) water soluble	17,00 % w/v
Potassium (K ₂ O) water soluble	17,00% w/v
Iron (Fe) water soluble and chelated by EDTA	0,14% w/v
Manganese (Mn) water soluble and chelated by EDTA	0,14% w/v
Zinc (Zn) water soluble and chelated by EDTA	0,14% w/v
pH	8,5
Density	1,36 gr/cc

Poor in Biuret

Envases:

● 20 L ● 200 L ● 1000 L

Recommended dosage: 20-40 L/ha

PRO GEL 7-20-7

With high content of Nitrogen + Phosphorus + Potassium.

Composition:

Total nitrogen (N)	7,00% w/v
Ammoniacal Nitrogen (N)	2,70% w/v
Urea Nitrogen (N)	4,30% w/v
Phosphorus (P ₂ O ₅) water soluble	20,00 % w/v
Potassium (K ₂ O) water soluble	7,00% w/v
Iron (Fe) water soluble and chelated by EDTA	0,14% w/v
Manganese (Mn) water soluble and chelated by EDTA	0,14% w/v
Zinc (Zn) water soluble and chelated by EDTA	0,14% w/v
pH	5
Density	1,23 gr/cc

Poor in Biuret

Containers:

● 20 L ● 200 L ● 1000 L

Recommended dosage: 20-40 L/ha

PRO GEL 0-16-28

With high content of Phosphorus + Potassium + micro elements.

Composition:

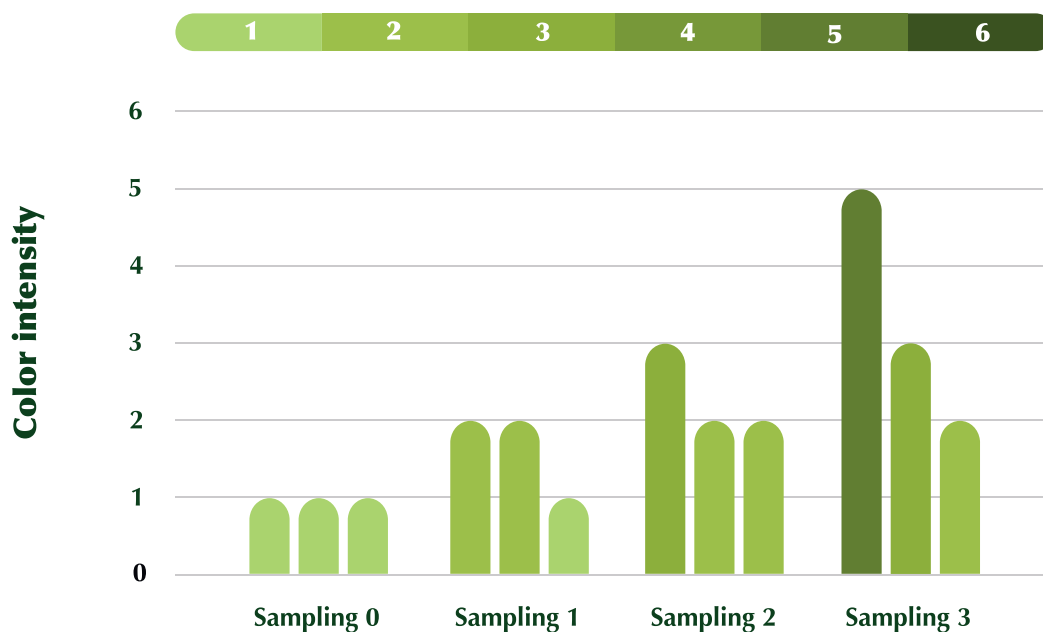
Urea Nitrogen (N)	3,20% w/v
Ammoniacal Nitrogen (N)	0,80% w/v
Phosphorus (P ₂ O ₅) water soluble	16,00% w/v
Potassium (K ₂ O) water soluble	28,00 % w/v
Iron (Fe) water soluble and chelated by EDTA	0,14% w/v
Manganese (Mn) water soluble and chelated by EDTA	0,14% w/v
Zinc (Zn) water soluble and chelated by EDTA	0,14% w/v
pH	7
Density	1,35 gr/cc

Poor in Biuret

Containers:

● 20 L ● 200 L ● 1000 L

Recommended dosage: 20-40 L/ha



PRO GEL 7-0-21

With high Nitrogen + Potassium content.

Composition:

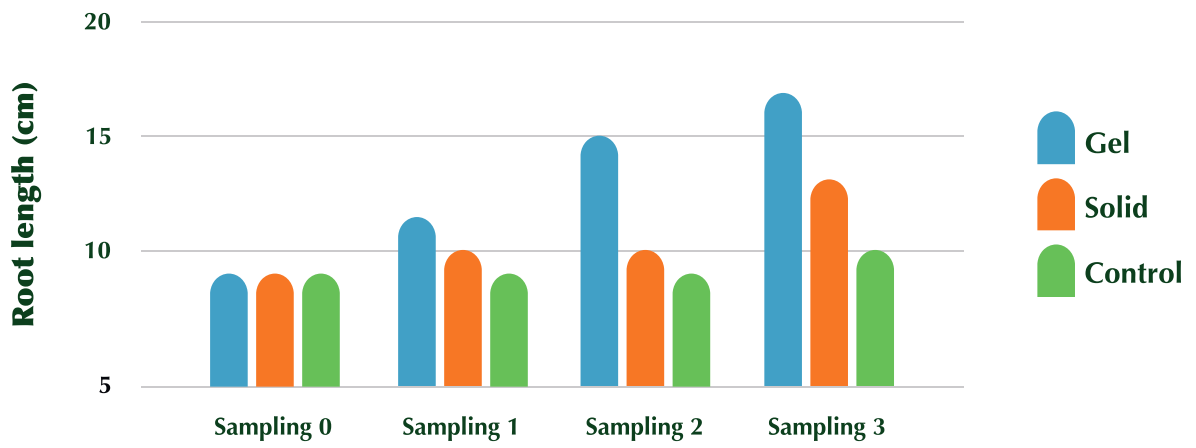
Total nitrogen (N)	7,00% w/v
Urea Nitrogen (N)	7,00% w/v
Potassium (K ₂ O) water soluble	21,00% w/v
Iron (Fe) water soluble and chelated by EDTA	0,14 % w/v
Manganese (Mn) water soluble and chelated by EDTA	0,14% w/v
Zinc (Zn) water soluble and chelated by EDTA	0,14% w/v
pH	11
Density	1,28 gr/cc

Poor in Biuret

Containers:

● 20 L ● 200 L ● 1000 L

Recommended dosage: 20-40 L/ha







Anti-stress.





Composed of several formulations designed to complement nutritional programs or used as a stand-alone nutrient package.

This range helps the plant to maintain and improve its health and to resist biotic and abiotic stresses on all turf surfaces.

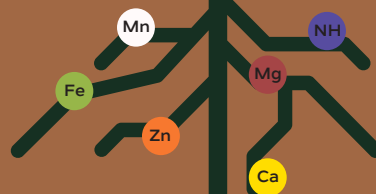
Benefits of the Antistress range:

- Improved root mass and depth.
- Improved disease tolerance.
- Improved cell wall structure.
- Rapid recovery from wear and mechanical damage.
- Defense inoculator.

- TEMPERATURE CHANGES
- EXCESSIVE USE OF AGROCHEMICALS
- PLANT STRESS

↑ HEALTHIER PLANTS WITH FEWER PROBLEMS

↓ REDUCTION OF THE USE OF PHYTOSANITARY PLANTS





Products

STRESS CORRECTOR

GREENFORCE SI



Greenforce Si It is a product for foliar and root application, formulated with silicon and has very important biostimulant, reinforcing and protective properties.

Main functions of Greenforce Si:

- Stimulates vertical growth for a cleaner and more uniform cut.
- Increases green speed and improves ball rolling.
- Strengthens the leaf lamina by increasing cell wall turgor, which strengthens the plant structure making it more resistant to abiotic stresses such as drought, heat and soil salinity. Reduces water loss (transpiration) during dry periods.
- Disease and pest resistance, improves turfgrass resistance to fungal diseases and pest attack.
- By strengthening cell walls, silicon hinders the penetration of pathogens and reduces their ability to cause damage.

Composición:

Silicon (SiO ₂) water soluble	23,00% w/w
Potassium (K ₂ O)	10,00% w/w
pH	8
Density	1,30 gr/cc

Containers:

● 5L ● 20L ● 200L

Recommended dosage: 2-4 L/Ha

Volume: 400-1000 L/Ha

What role does Silicon play?



How to use Greenforce Si?

To begin, it is important to make sure that the fertilization tank is clean and free of residues of previous fertilizers.

Add the necessary fertilizers according to the fertilization recipe to be made and fill the tank with water. Adjust the pH of the water in the tank using PHgreen, until a pH of 6 is reached.

Once adjusted, silicon can be added to the fertilizer tank.

Finally, after adding the silicon, it is necessary to recheck and, if necessary, adjust the pH of the water in the tank again to ensure that it remains at the desired level of 6. Once these steps have been followed, the fertilizer solution in the tank is ready for application.



RESISTANCE INDUCTOR

GREENFORCE ONE



Greenforce One is an elicitor with fungicidal and bactericidal effects via stimulation of the plant's natural defense mechanism. Designed to enhance the vigor and resistance of the plant against various biotic stress factors.

The issue is that sometimes the plant's own defenses arrive too late to reduce the aggression. The use of elicitors included in Greenforce One is a new and powerful tool for plant protection against both biotic and abiotic stress situations preventively, activating the plant's defense mechanisms before they happen and mitigating their negative effects.

Key functions of Greenforce One:

- Stimulates plant defense mechanisms.
- Fungicidal and bactericidal effects.
- Enhances plant vigor and resistance against biotic and abiotic stress factors.
- Activates different biochemical signaling pathways for defense response.
- Local and systemic response.
- Direct effect on pathogens: antimicrobial activity (oomycetes, fungi, bacteria, and nematodes).
- Indirect effect on pathogens: induction of resistance in plants.
- Improves plant quality when adverse conditions negatively impact it.
- Applied preventively and systematically, it has a positive effect on the plant.
- Reduces the application of chemical phytosanitary products, serving as an alternative and building a more sustainable and healthier model.
- Product without risk to the plant, health, or the environment.

Usage recommendations:

- In initial phases to promote rooting in crops exposed to extreme environmental conditions and winter transplants.
- For diseases of the neck/root, whether applied only preventively to combat phythium, rhizoctonia, or fusarium in a curative manner.
- To strengthen, harden, and invigorate the plant in the winter period, promoting root development and protection against seasonal diseases.

Composition:

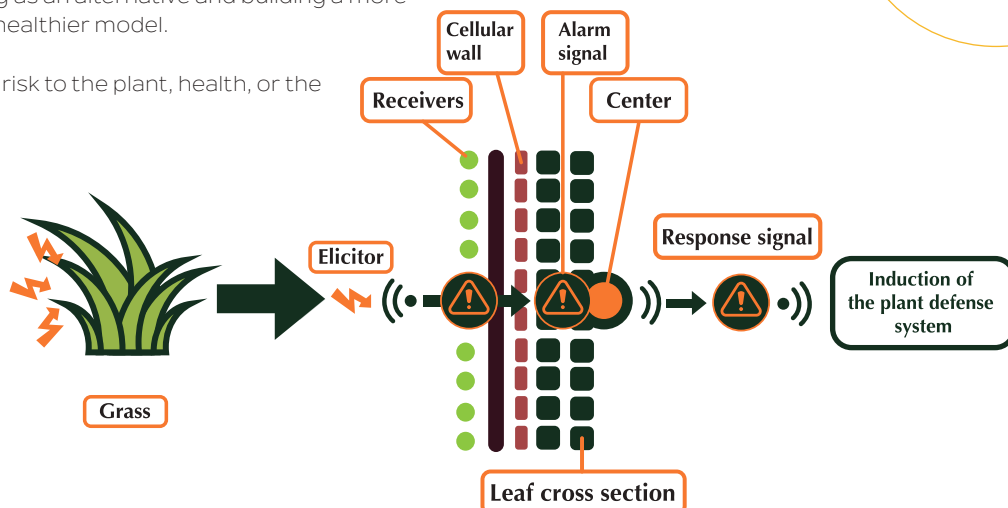
Chitosan	4,00%w/w
pH	3,5
Density	1,02 gr/cc

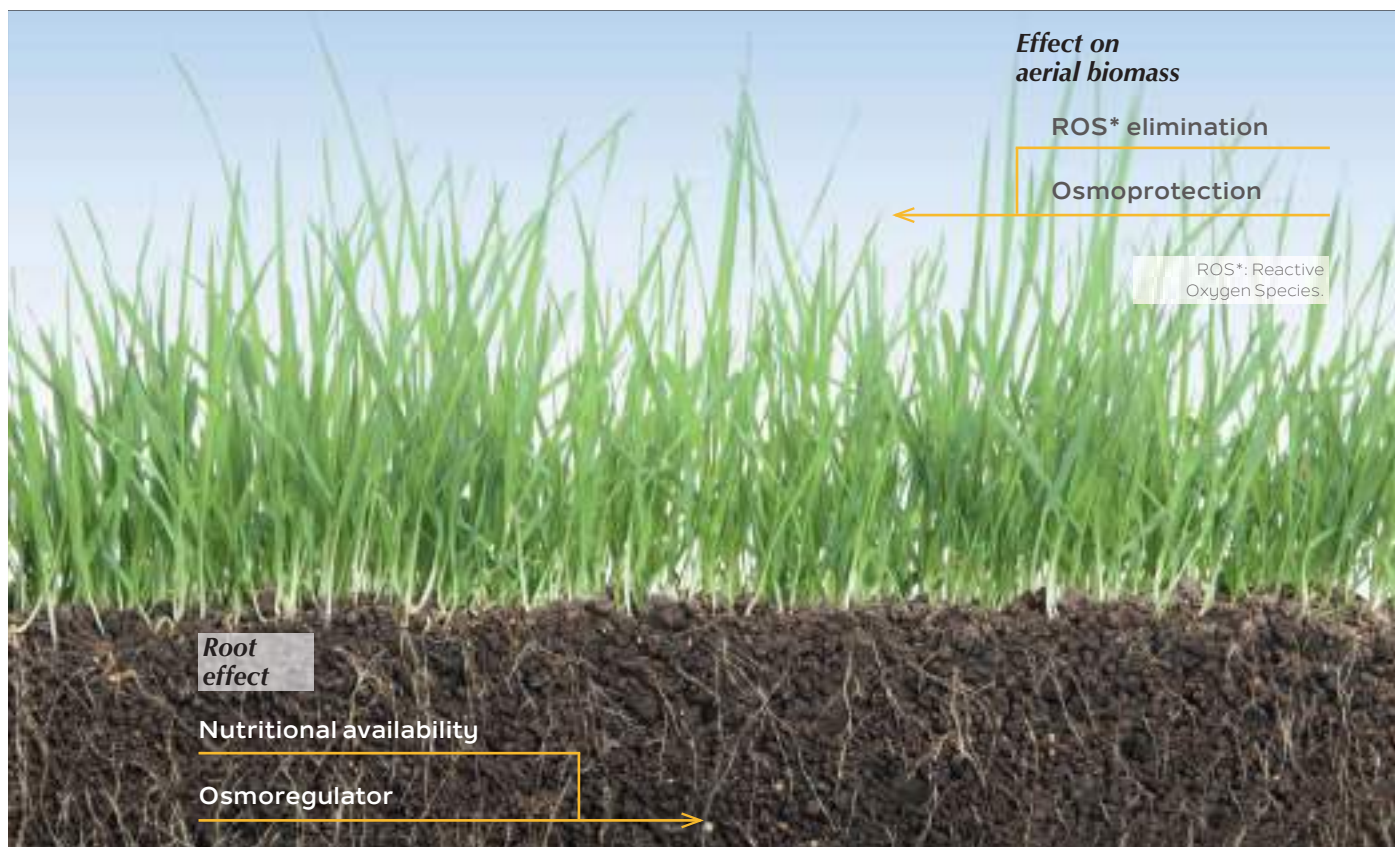
Containers:

- 5L
- 20L

Recommended dosage: 3-4 L/Ha

Volume: 400-1000 L/Ha





OSMOTIC REGULATOR

OSMOGREEN PLUS



Osmogreen Plus it is a product composed mainly of glycine betaine, adding proline for more extreme stress situations.

Its function is to balance cellular to extracellular solute concentration by preventing water from leaving the cell, rapid induction of proline synthesis and inhibition of the enzymes that degrade it (AA plays a fundamental role in the water balance of the plant and maintains photosynthesis in adverse conditions).

Key functions of Osmogreen Plus:

- Better behavior of the plant against lack of water and salinity.
- Increased plant resistance to low temperatures.
- The plant does not have to use extra energy to compensate for imbalances: it allocates all its energy resources to its basic vital functions.
- Photosynthetic activity is maintained and improved as it protects chloroplasts from premature aging.
- Greater tissue integrity and increased resistance to certain pathogens.

Composition:

Free Amino Acids	10,00% w/w
Total Nitrogen (N)	12,00% w/w
Organic Nitrogen (N)	11,50% w/w
pH	7,7
Dissolution	1:10
Aminogram	Prolina 10%

Containers:

- 1Kg
- 5Kg

Recommended dosage: 4-6 Kg/Ha

Volume: 400-1000 L/Ha



ROOT INDUCER

ROOT PLUS GREEN



Root Plus Green it is a powerful rooting agent that includes an optimal blend of amino acids, especially enriched with glutamic acid and tryptophan, which enhances the rooting effect, thereby improving nutrient and water absorption and translocation.

it promotes the synthesis of auxins (iaa) naturally, improving rooting, especially in times of root loss.

tryptophan undergoes several transformations in this product (l-tryptophan > indolpyruvic acid > indolacetaldehyde > indoleacetic acid (iaa)), with its final transformation being the auxin that plants use to develop the root system, among other plant organs.

it also contains a significant concentration of l-glutamic acid, an amino acid considered the fundamental unit for the formation of various plant proteins. the importance of this amino acid lies in the fact that, from it, the plant can synthesize the proteins or substances involved in the metabolic pathways that the plant needs at each phenological stage.

Composition:

Free Amino Acids	85,00% w/w
Total Nitrogen (N)	8,50% w/w
Organic Nitrogen (N)	8,50% w/w
pH	7,7
Dissolution	1:10
Aminogram	Triptófano 10%

Containers:

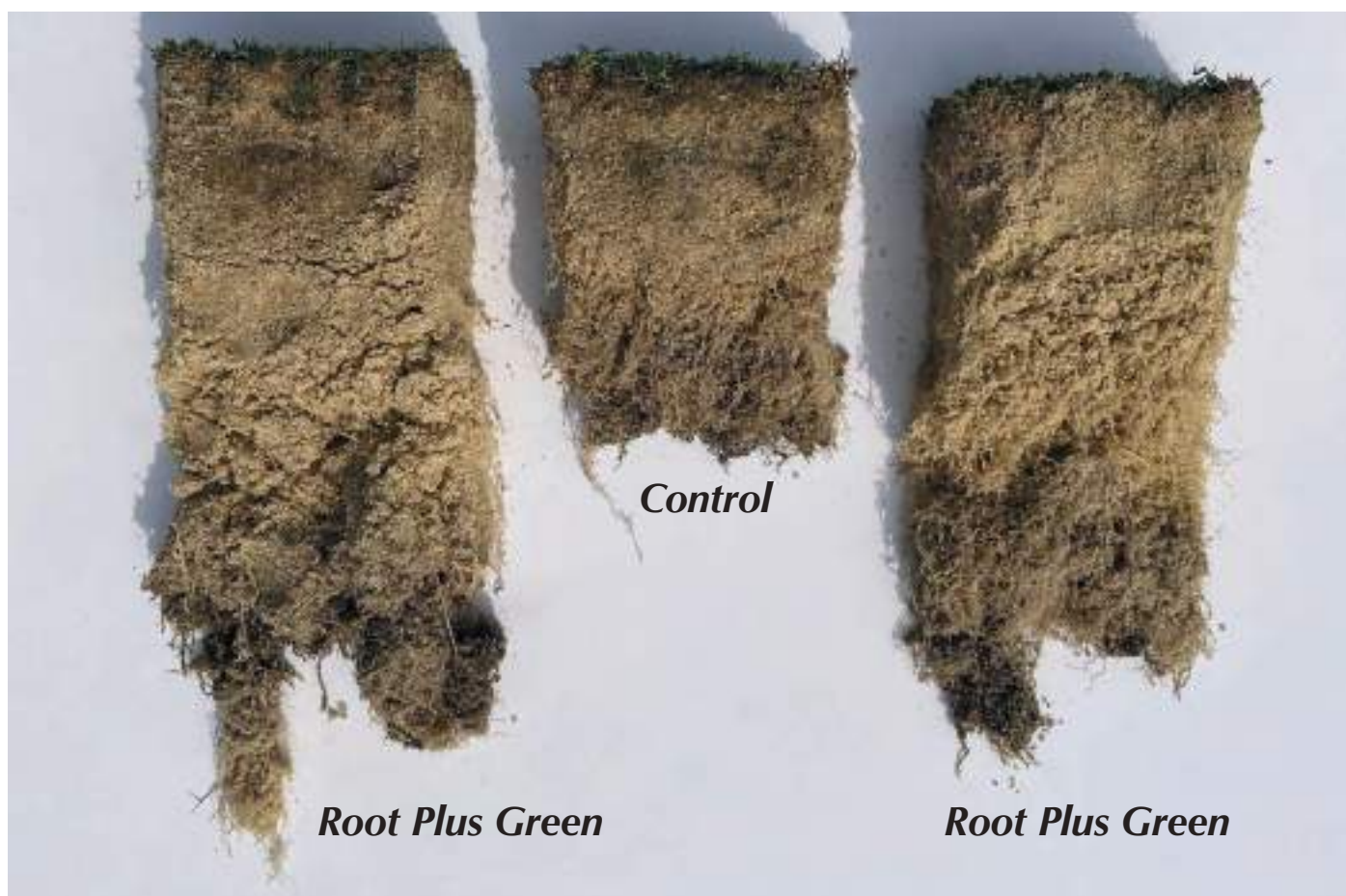
- 300Gr
- 1Kg
- 5Kg

Recommended dosage: 300-600 Gr/Ha

Volume: 400-1000 L/Ha

Main functions of Root Plus Green:

- Promotes root development providing vigor to the plant by improving the absorption and translocation of nutrients and water.
- Strengthens root growth.



➔ Improves nutrient availability and absorption

➔ Increases nutrient use efficiency

➔ Promotes improved root growth and development

➔ Reduces stress on lawns and ornamentals

➔ Minimizes runoff and nutrient leaching

➔ Improves plant performance



Microbiological.



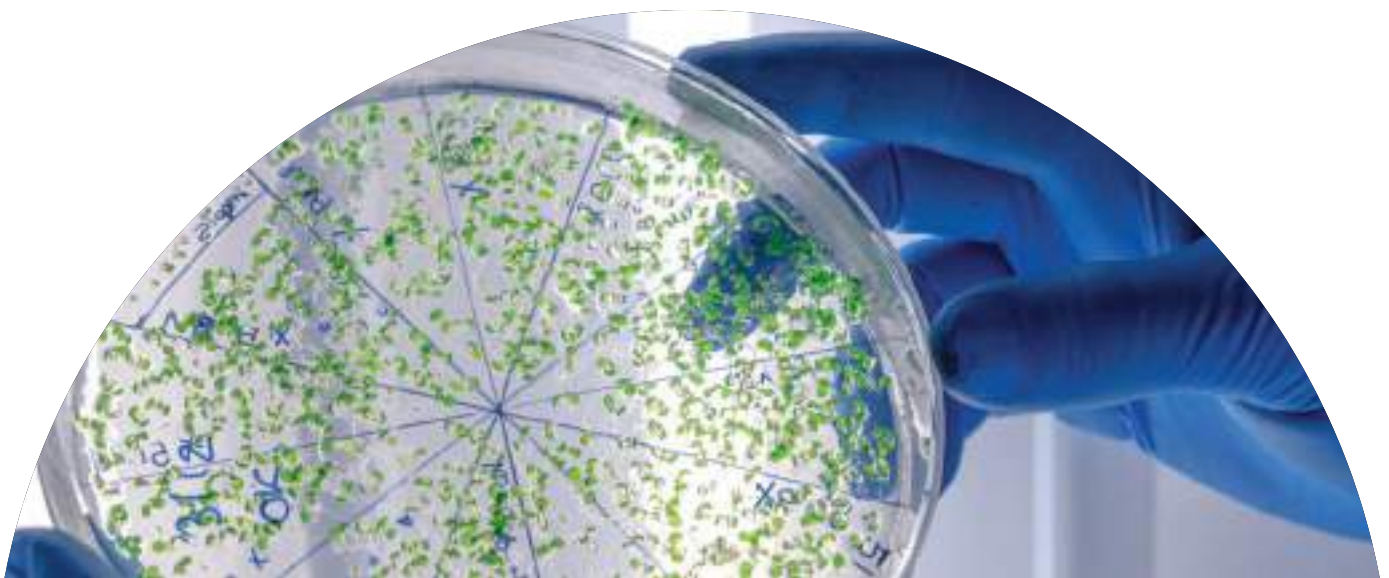


Cultivation soils for turf vary considerably in physical and chemical composition. however, regardless of their properties, most soils contain a wide range of living organisms, from larger creatures like worms and insects to microscopic invertebrates, bacteria, fungi, actinomycetes, yeasts, algae, and protozoa.

All of these organisms affect turfgrass health in important ways. However, perhaps the most important and least understood are bacteria, fungi and actinomycetes.

These organisms also participate in complex relationships with turfgrass roots, providing organic nutrients and minerals and imparting resistance to disease, fungi and drought.

Soil microbiologicals are of paramount importance in the nutrient cycling of turfgrass soil. It is only through their actions that nutrients from organic fertilizers are released for use by turfgrass plants.





Products

GROWTH PROMOTER

GREENPGPRs



GreenPGPRs is a microbial compound that enhances plant growth by improving nutrient availability and absorption. It promotes vegetative growth and stimulates root development by enhancing microbial life.

It is a microbial consortium composed of plant growth-promoting bacteria (pgpr), yeasts, and organic molecules. These attract and stimulate the growth of specific microorganisms that decompose organic matter, multiplying their population. In natural environments, microorganisms live in communities, providing benefits to plants.

When introduced into the soil, this microbial consortium has a greater capacity to establish itself in turf and interact with plants, mimicking natural soil conditions.

The introduction of this consortium promotes plant growth, enhances defense responses during pathogen attacks, and protects the plant root system by displacing potential phytopathogens.

Key mechanisms of GreenPGPRs application:

- Increases bacterial populations near the roots, developing greater competitive activity in the rhizosphere.
- Fosters biological balance by increasing soil enzymatic activities, accelerating the decomposition of organic matter in the rhizosphere, facilitating the release of locked nutrients.
- Enhances the availability of essential nutrients (n, p, k, ca, b).
- Positively affects the plant-microorganism interaction facilitates the colonization of the soil surface by beneficial microorganisms.

The application of greenpgprs contributes to improved soil conditions, healthier turf growth, and increased resistance to stress factors and pathogens.

Composition:

Type of organic soil conditioner: composted green soil conditioner

Mycorrhizae content	0,01 %
Rhizosphere bacteria content	2x108 UFC/g
Mesophilic bacteria	

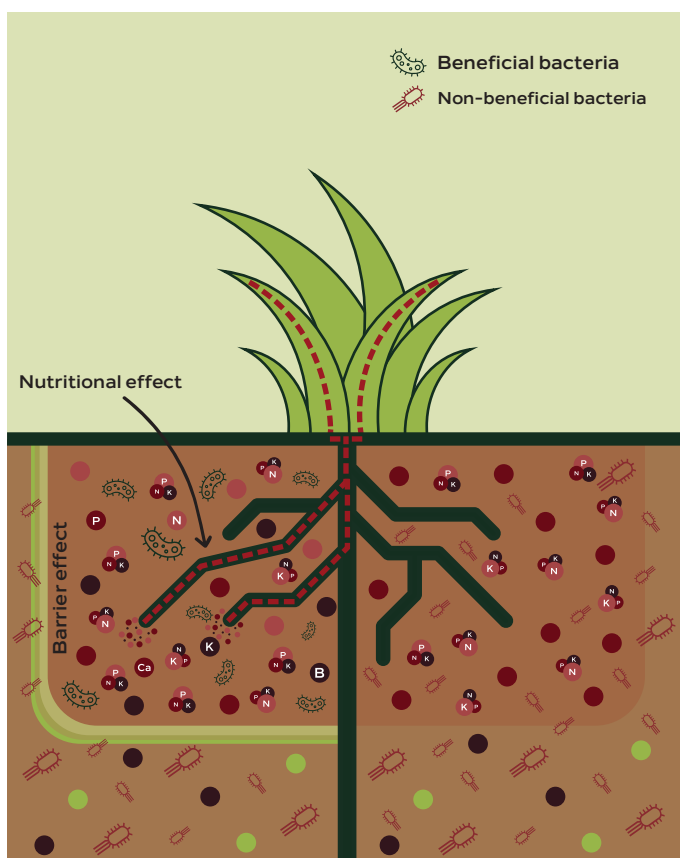
Absence of GMOs and pathogenic organisms

Containers:

- 1L
- 5L

Recommended dosage: 5 L/Ha

Volume: 400-1000 L/Ha





GROWTH PROMOTER

RHYZOGREEN



Rhyzogreen is a microbial complex that enhances both the structure and fertility of the soil, allowing for the gradual reduction of mineral fertilizer usage while simultaneously inhibiting pathogen attacks. This results in a significant reduction in the use of phytosanitary products.

It is indispensable for maintaining a living, healthy soil and plant in a completely sustainable manner.

It is a biofertilizer and bio-stimulant based on a bacterial strain with the potential to promote plant growth and activate the induced resistance system. This enables crops to maintain an activated defense state to prevent the entry of pathogens.

Composition:

Type of organic soil conditioner: composted green soil conditioner

Mycorrhizae content 0,01%

Rhizosphere bacteria content 2x10⁸ UFC/g

Bacteria velezensis

Absence of GMOs and pathogenic organisms

Containers:

● 1L ● 5L

MYCORRHIZAE

MICOPRIUS PLUS



Micoprius Plus is a unique, specially formulated product based on mycorrhizae and soluble humic acids, designed for application in all irrigation systems.

When applied to the soil, it colonizes the roots, establishing a positive and persistent symbiotic relationship. It enhances plant tolerance to water stress and salinity, improves nutrient transport, and provides greater resistance to pathogenic organisms.

Recommended dosage: 4-5 L/Ha

Root application: 2 Kg/ha twice a year (April and September).

Volume: 400-1000 L/Ha

Benefits of using rhyzogreen:

- **Increases the physiological activity of the plant** acts as a potential bio-stimulant and promoter of plant growth by producing indole acetic acid, one of the plant's main hormones, and gibberellic acid. It also has the ability to produce the enzyme 1-aminocyclopropane-1-carboxylate (ACC) deaminase, which reduces ethylene levels in the roots.
- **Activates induced systemic resistance** releases specific secondary metabolites that activate genes, signaling pathways, and enzymatic activities, protecting the plant from attacks by pathogens and pests. These defense genes are expressed rapidly and at elevated levels thanks to the priming effect of rhyzogreen.
- **Production of siderophores** natural compounds that act as iron solubilizers and transporters to plants.
- **Secretion of volatile organic compounds.**

Recommended dosage: 1-2 L/Ha

Volume: 400-1000 L/Ha

Composition:

Total Humic Extract	33,00 % w/w
Humic Acids	25,00% w/w
Fulvic Acids	5,00% w/w
Potassium (K ₂ O)	4,00% w/w
Mycorrhizae (Rhizoglopus irregularis)	800 sp/gr

Containers:

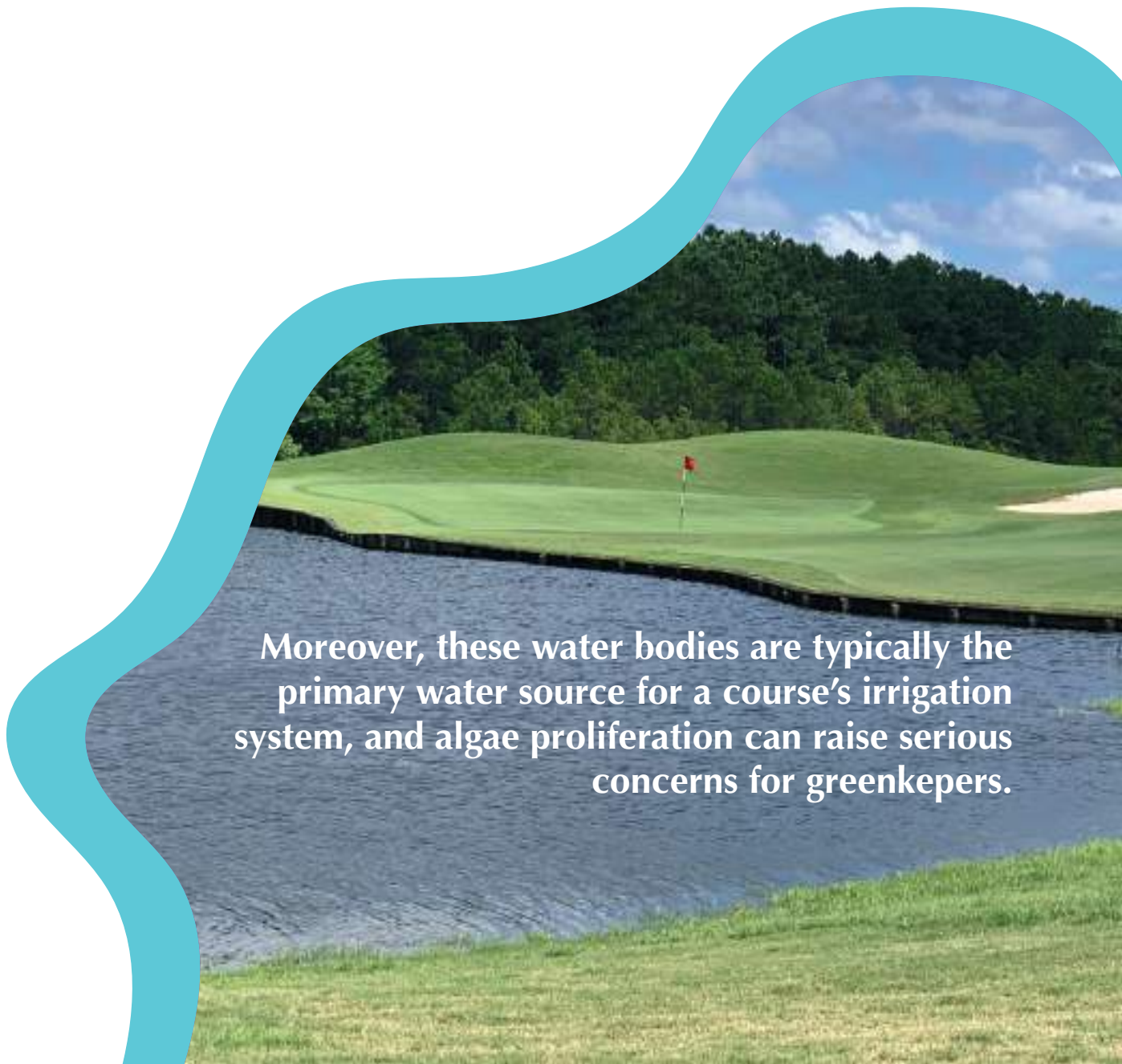
● 1L ● 5L

Complementary.





Golf courses often feature water hazards, lakes, and ponds that enhance the landscape, adding beauty, tranquility, and improving the golfer's experience. Unfortunately, golf course lakes and ponds can be plagued by algae, causing distraction, inconvenience, and potentially damaging the landscape and wildlife.



Moreover, these water bodies are typically the primary water source for a course's irrigation system, and algae proliferation can raise serious concerns for greenkeepers.



Products

WATER CONDITIONER

BLUEFORCE



Blueforce is a reliable algae control solution that requires minimal manual intervention, is safe to use, and has proven to be highly effective in algae control.

It is undoubtedly the most economical and straightforward way to control algae, minimizing their population while creating a natural blue appearance in the water.

A natural and environmentally friendly product, blueforce delivers fast and long-lasting results.

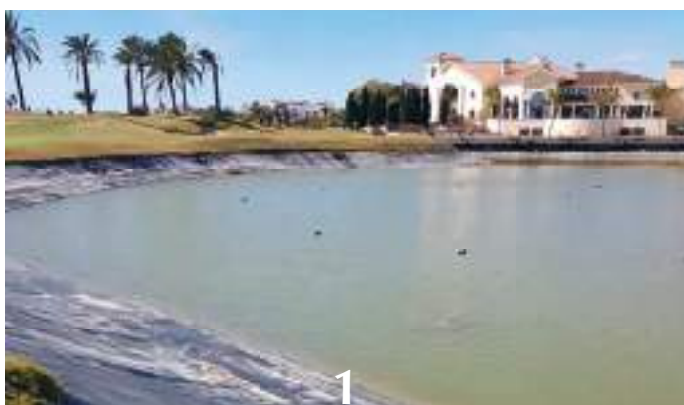
Composition:

Bright blue	100% w/w
Water solubility	100% w/w
pH	7
Density	1,10 gr/L

Containers:

- 1L
- 5L
- 20L

Recommended dosage: 1L/1000-1500m³ de agua



Process: 24 hours

How to use: Pour the product directly into the pond, fountain, or reservoir. due to its high solubility, it disperses quickly until homogenized. apply in any season except when the water temperature is below freezing. *Use 1 liter of Blueforce per 1,000-1,500 m3 of water.*

For ponds less than 1 meter deep, apply higher doses to ensure proper absorption of photosynthetically active solar radiation. do not apply after using potassium permanganate or wait for 30 days after application.



NON-IONIC SOIL SURFACTANT

LESSWATER



Lesswater is a unique soil surfactant that improves the initial wetting and subsequent soaking of soils in sports turf areas. It is formulated to ensure maximum water absorption in hydrophobic areas, whether sandy or clayey in texture.

This product provides uniform penetration and lateral movement of water and nutrient applications, stimulating increased root growth for enhanced nutrient and water absorption.

Recommended for use during periods of heat and water restrictions, lesswater is designed to maximize irrigation efficiency, water conservation, and promote a healthy, stress-resistant turf.

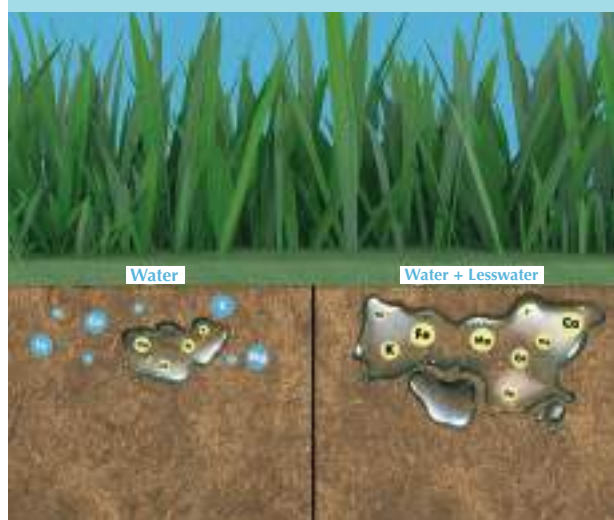
Benefits of using Lesswater:

- **Maximum water conservation:** reduces water surface tension significantly, allowing greater soil penetration and uniform distribution.
- **Stress resistance improvement:** strengthens the turf, making it more resistant to high temperatures and drought conditions. Even in water-stressed situations, lesswater-treated turf can maintain vitality and recover more rapidly.
- **Maintenance cost reduction:** by optimizing irrigation efficiency, lesswater significantly reduces water costs by up to 50% with minimal dosage.

Composition:

Active Surfactant	84,00% w/w
Tri-Block copolymer	64,00% w/w
Glycoethers	19,00% w/w
pH	7
Density	1,05 gr/cc

Lesswater, powerful surfactant for sports fields, maximum benefits with minimum doses. Conserves water, improves turf and saves maintenance costs.



This movement stimulates increased root growth which leads to greater nutrient and water uptake.

Lesswater is recommended for use during times of heat and water restrictions.

Lesswater has been specifically designed to maximize irrigation efficiency and water conservation while promoting healthy, water stress resistant turf.

Containers:

- 1L
- 5L

Recommended dosage in greens:

- First dose: 2L/Ha
- Subsequent doses: 1L/Ha

Recommended dosage in fairways:

- First dose: 1L/Ha
- Subsequent doses: 0,5L/Ha

What are surfactants, and how do they work?

Surfactants are surface-active agents used to improve water wetting and penetration in the soil.

They work by reducing the surface tension of water, facilitating its uniform distribution through the soil and aiding in maintaining adequate hydration even in water-stressed conditions.

Responsible application of surfactants can maximize irrigation efficiency, reduce total water consumption, and promote sustainable water resource management. Lesswater, a powerful surfactant for sports fields, offers maximum benefits with minimal doses—conserving water, improving turf, and saving maintenance costs.



WETTING AGENT-ADJUVANT-PENETRANT

MOJAGREEN



Mojagreen is a non-ionic surfactant that enhances the penetrability and wetting ability of phytosanitary sprays in all types of crops.

It reduces the surface tension of the spray and promotes the formation of a thin film on the sprayed plant, improving the effectiveness of the treatment.

It is particularly suitable for pest and/or disease control in crops that are challenging to wet due to their waxy surface. It is also used in herbicide treatments to enhance their effectiveness.

PH CORRECTOR

PH GREEN



Ph Green is a product designed to adjust the pH of water used in the preparation of solutions for foliar applications in various crops.

It contains a color indicator that changes according to the pH of the prepared solution.

Its primary use is to regulate the pH of solutions optimal for nutrient incorporation through the leaves and prevent the breakdown of many phytosanitary substances due to alkaline hydrolysis, thereby increasing their efficiency.

Recommended dosage: 20-40 cc/hL of water.
Use the higher dosage with harder, alkaline waters.

Composition:

Fatty alcohol ethoxylate	15,00% w/w
pH	12,00% w/w
Density	1,10 gr/cc

containers:

● 1L ● 5L ● 20L ● 200L

Recommended dosage: 1 cc/L
Volume: 400-1000 L/Ha

Composition:

Nitrogen (N)	1,00% w/w
Phosphorous (P ₂ O ₅)	6,00% w/w
pH	1,25
Density	1,16 gr/cc

Containers:

● 1L ● 5L ● 20L ● 200L







Fert-ways.





These nutrient compositions provide fairways with the optimal combination of macro nutrients. In addition to nutrient supply, fert-ways is expected to significantly reduce the frequency of fungi and enhance the plant's inherent resistance.

These high-performance fertilizers are specially designed for effective treatments on large turf areas, making them the perfect choice for lush and environmentally friendly sports turf. Both foliar and root absorption provide a rapid response that lasts for several weeks.

The fert-ways range is designed for year-round use and delivers excellent results when applied to large surfaces, especially golf course fairways.

Key features:

- Provides the necessary macro nutrients for turf.
- Reduces fungal incidence, maintaining a healthier and stronger plant.
- Indirectly increases root development.
- Minimizes the risk of leaching.
- Enhances plant nutrient absorption.
- Improves soil structure and fertility.
- Achieves longer-lasting green surfaces.





Products

BALANCES

FERT-WAYS 10-1-1

Ferts-Ways 10-1-1 is a fertilizer with a specific balance, featuring a high nitrogen content formulated with organic components that provide proper fixation and assimilation through roots and leaves.

The high concentration of nitrogen, in its urea form, produces a rapid initial effect on vegetative development.

Composition:

Total Nitrogen (N)	10,00% w/w
Urea Nitrogen (N)	10,00% w/w
Phosphorus (P ₂ O ₅)	1,00% w/w
Potassium (K ₂ O)	1,00% w/w
Organic Matter	5,00% w/w
Fulvic Acids	5,00% w/w
Organic Carbon	2,90% w/w
C/N Ratio	0,29
pH	10
Density	1,30 gr/cc

Containers:

● 5L ● 20L ● 200L

Recommended dosage: 50-80 L/Ha

Volume: 400-1000 L/Ha

FERT-WAYS 2-7-14

Ferts-Ways 2-7-14 is a fertilizer with a specific balance, featuring a high phosphorus and potassium content formulated with organic components that provide proper fixation and assimilation through roots and leaves.

This high concentration of phosphorus and potassium provides a specific balance to regulate growth.

Composition:

Total Nitrogen (N)	2,00% w/w
Urea Nitrogen (N)	1,60% w/w
Ammoniacal Nitrogen (N)	0,40% w/w
Phosphorus (P ₂ O ₅)	7,0% w/w
Potassium (K ₂ O)	14,00% w/w
Organic Matter	5,00% w/w
Fulvic Acids	5,00% w/w
Organic Carbon	2,90% w/w
C/N Ratio	0,29
pH	4,50
Density	1,17 gr/cc

Containers:

● 5L ● 20L ● 200L

Recommended dosage: 50-80 L/Ha

Volume: 400-1000 L/Ha



02

Compatibility table







Vellsam’s fertilization plan as a preventive strategy for the reduction of pesticides and diseases in grasses.

In the ongoing pursuit of sustainable and environmentally friendly practices, vellsam’s fertilization plan emerges as a fundamental tool in reducing pesticides and, consequently, preventing various diseases affecting grasses. this proactive approach not only promotes plant health but also contributes to biodiversity preservation and soil quality. below are ways in which vellsam’s fertilization plan acts preventively against various diseases:

1. Strengthening plant immune systems:

The fertilization plan excels in improving overall plant health by providing a balanced supply of nutrients, phyto-fortifiers, elicitors, bio-stimulants, and microbiologicals. this fortifies the plant’s immune system, making it more resistant to pathogens and reducing the need for intensive pesticide applications.

2. Stimulation of growth and development:

Proper application of fertilizers and bio-stimulants stimulates vigorous growth and robust plant development. this healthy growth serves as a natural barrier against diseases, as plants have a greater ability to recover from potential damage and resist pathogen invasion.

3. Enhancement of soil fertility: microbiota and physicochemical properties:

The fertilization plan not only focuses on nourishing plants but also promotes soil health. by improving soil microbiota through sustainable fertilization practices, a beneficial environment for beneficial microorganisms is created. these act as natural biocontrol agents, helping prevent disease proliferation.





Leaf spot. (*Drechslera poae*)

4. Efficient use of water resources:

Precise nutrient application contributes to efficient water use by plants. proper water management reduces the risk of moisture-related diseases, such as fungi and bacteria, avoiding the need for additional pesticide treatments.

5. Integrated and sustainable approach:

The fertilization plan aligns with a sustainable approach. by considering not only plant nutrition but also the health of the surrounding ecosystem, a balance is encouraged that minimizes the need for aggressive pesticide products, thereby reducing pressure on the environment and human health.

In conclusion, this fertilization plan emerges as a comprehensive and preventive strategy for reducing pesticides and preventing diseases in crops. by embracing this approach, greenkeepers and groundskeepers not only promote the health of their fields but also actively contribute to the development of more sustainable and resilient systems.



Fusarium Patch. (*Microdochium nivale*)

The disease initially appears as small patches of yellowing grass, later turning brown, increasing in size, and merging. fusarium patch can occur at any time of the year but is more common and damaging during fall and winter when the weather is mild and humid. it can also appear in spring with moderate temperatures and during summer in warm, humid, or stormy conditions.



Anthracnose. (*Colletotrichum cereale*)

Causes include excess moisture, shaded areas, compaction, low mowing height, frequent cuts, low fertilization, and high plant stress. it can be controlled through proper irrigation management, decompaction, and the use of wetting agents to move water (lesswater).



Brown Patch. (*Rhizoctonia solani*)

Caused by the rhizoctonia fungus, its main symptoms include light brown, circular, and small spots (up to 40 cm in diameter). in the early morning, a greenish ring appears around the spot, which is the fungus's mycelium. as the day heats up, the mycelium disappears.



Dollar spot. (*Sclerotinia homoeocarpa*)

Occurs due to excess moisture on leaves for prolonged periods, low fertilization, thatch, compaction, etc. it can be prevented through balanced fertilization, decompaction, the use of wetting agents to mobilize water, and avoiding dew (lesswater).





Fairy rings (*Basidiomycetes*)

Caused by a lack of microorganisms in the soil, high thatch levels, excess nutrients, hydrophobicity of fungi, physical barriers, etc. they may appear as green patches and are more commonly observed in summer months due to high temperatures and irrigation-induced humidity.



Leaf spot. (*Drechslera poae*)

Primarily affecting rye grass and fescues, this disease is caused by the pathogenic fungus *Drechslera poae*. Leaf spots start as small ovals of red to purple, later developing centers of dead tissue with darker edges. The infecting fungi penetrate directly into the leaf sheaths, progressing to the basal area and potentially resulting in the death of the grass.



Roya. (*Puccinia* spp.)

Caused by various fungi of the *Puccinia* genus, it is characterized by the appearance of yellowish, orange, or brown pustules on the grass leaves, leading to general weakening and, in severe cases, plant death.



Thatch – Colchón

Caused by excessive growth, improper mowing height, overfeeding with nitrogen, excessive pesticide use (which eliminates bacteria breaking down thatch), lack of beneficial microorganisms, and over or under-watering.





Treatments.

1. Monthly treatments:

Eaglegreen: Organic amino-humic bioestimulant.

Dosage: 2,5 L/ha.

Fitoforce K: Phytofortifying inductor of plant defense mechanisms, high in phosphorus and potassium.

Dosage: 10 L/ha.

Greenforce SI: 23% silicon solution + 10% potassium, acting as a plant protector.

Recommendations: Prepare the tank with the rest of the products to be used, adding this one last, and regulate the pH to around 6.

Dosage: 2,5 L/ha.

Greenforce One: Elicitor based on 4% chitosan, an inducer of plant defense mechanisms.

Dosage: 3-4 L/ha.

Root Plus Green: Solid rooting agent with 75% free amino acids, including 10% tryptophan.

Dosage: 300 gr/ha.

Osmogreen Plus: Osmotic regulator based on 90% glycine betaine and 10% proline..

Dosage: 5 Kg/ha.

Rhyzoprime: Bacillus velezensis with antifungal properties.

Dosage: 1-2 L/ha.

GreenPGPRs: Microbial compound to improve soil physico-chemical conditions and promote plant development and health.

Dosage: 5 L/ha.

2. Monthly treatments under elevated soil conductivity conditions::

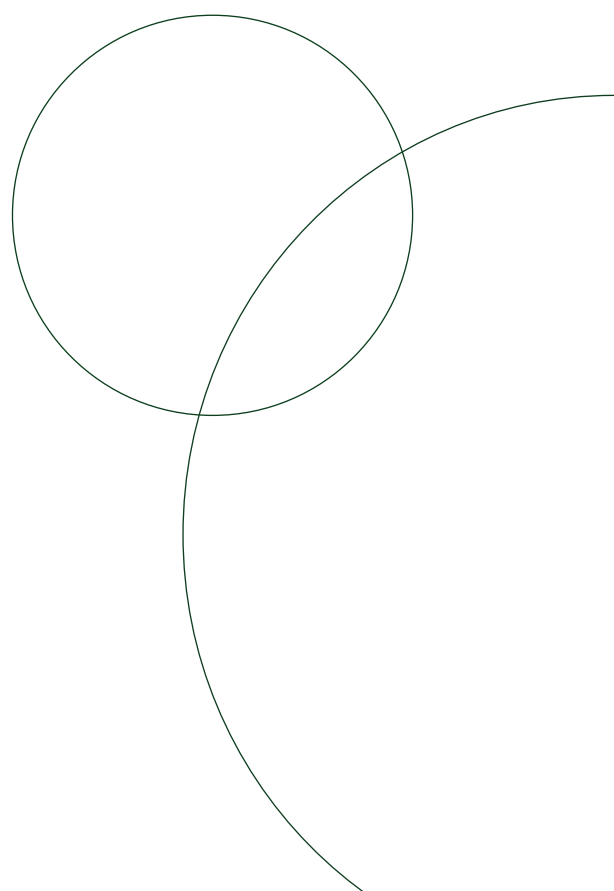
Grenspirull +C: Spirulina microalgae extract with cytokinin supplementation.

Dosage: 2 L/ha.

3. Twice-yearly treatments (april and september):

Micoprius Plus: Unique formulation based on mycorrhizae and soluble humic acids.

Dosage: 2 Kg/ha.

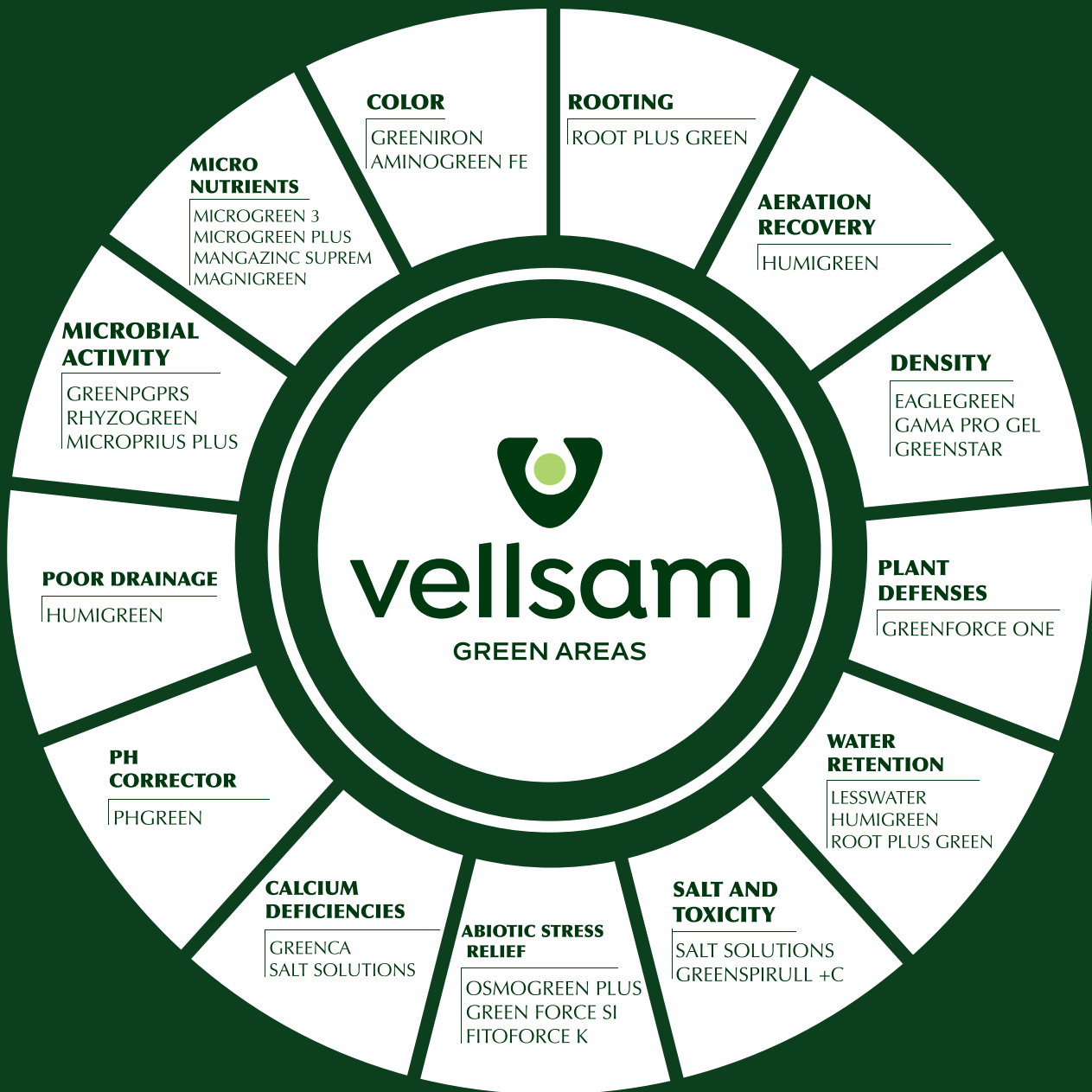


REDUCTION IN THE USE OF PHYTOSANITARY PRODUCTS IN CESPITOSE MANAGEMENT

Table of treatments for reducing the use of synthetic products



SOLUTION WHEEL



Notes.

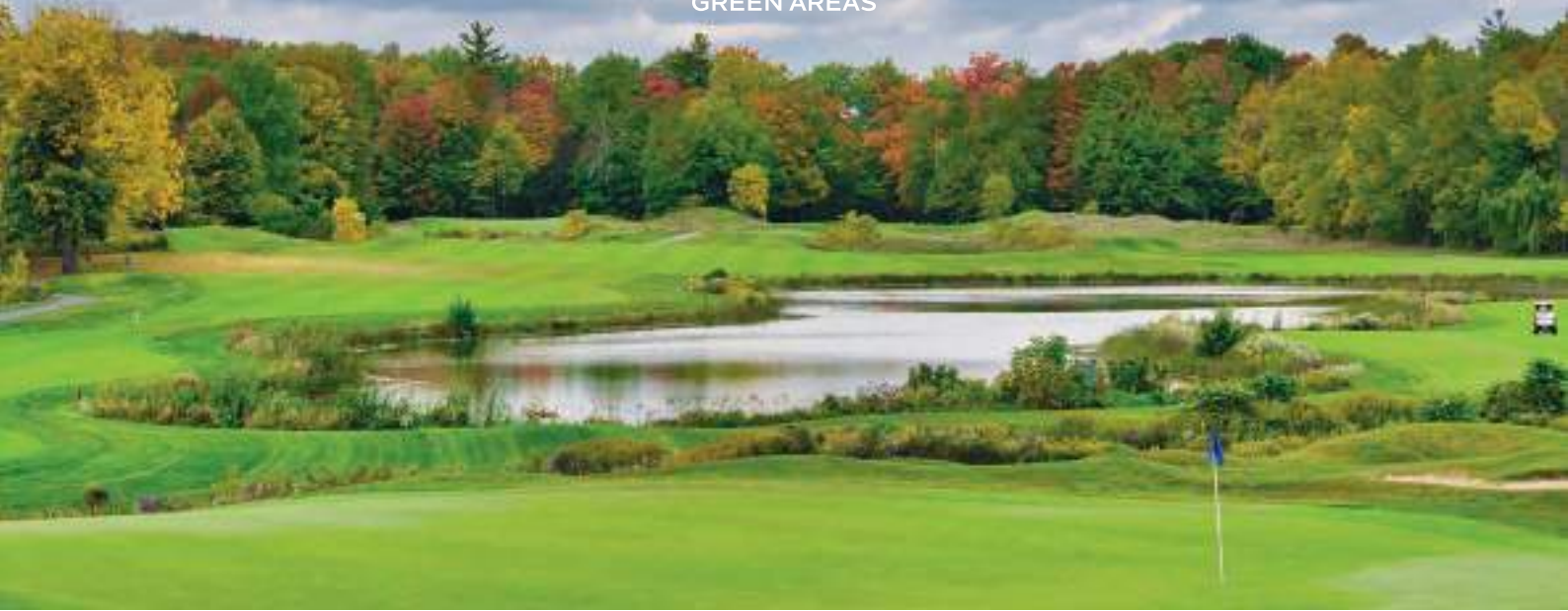


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GREEN AREAS



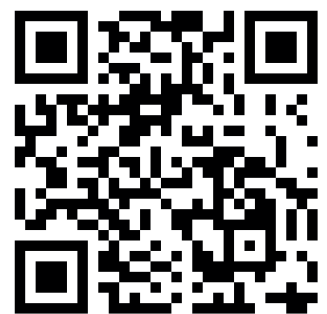
VELLSAM GREEN AREAS

Our product range provides specific solutions for sports turf and offers well-defined lines addressing various issues that may arise in these surfaces.

Vellsam has been a pioneer in the research, design, and production of biotechnological solutions (bio-stimulants and plant nutrients) for decades.

Our innovative efforts in research and development, coupled with adaptability to different markets, guide us in the development of new projects. green areas is the ultimate nutritional solution for sports turf.

DISCOVER MORE



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