



GENERAL CATALOGUE



PROMISOL

TECHNOLOGY AND INNOVATION
APPLIED TO YOUR CROPS

**MORE THAN 40 YEARS
INNOVATING IN
PLANT NUTRITION**

www.promisol.com



Soil conditioners

Better soil structure.
Salinity and pH correction.
Contribution of organic matter.



Ancillary

Precise pH regulation.
Control of nutrient solubility.
Improved compatibility between products.



NPK fertilisers

NPKs for foliar and root application.
Technical grade ingredients and maximum purity.
High solubility in water.



Fertilisers and deficiency correctors

Prevention/correction of micronutrient deficiencies.
Systemic action.
Nutrient combinations for specific uses.



Promitec Biostimulants

Better nutrient and water use efficiencies.
Better tolerance to abiotic stresses: heat, drought, frost, hypoxia, salinity.
Better quality: sugars, color, post-harvest shelf life.



Specialties

Custom products for export.
Synergists with nutrients and biostimulants.
Complementary to Plant Protection Products.



Promieco. Organic Agriculture

Products usable in organic agriculture.



**Soil
conditioners**



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Ancillary



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NPK fertilisers



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**Fertilisers and
deficiency correctors**



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Specialties



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Organic Agriculture**



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Founded in 1983, PROMISOL S.A. is dedicated to the formulation and manufacturing of plant fertilisers and biostimulants.

The company began with a then innovative soil conditioner called Promi-Sal®.

Since that time, the company's dedication to research, development, and sustainability has enabled us to broaden our range of solutions, providing products at competitive prices without sacrificing quality.

Today, we are proud to provide customers worldwide with our highly differentiated products, as well as custom formulation services tailored to meet the needs of the most discerning clients.

Our strength lies in establishing longterm partnerships founded on prompt responsiveness and exceptional service.



Our range of soil correctors and conditioners provides solutions designed to enhance the physical, chemical, and microbiological properties of the soil, thereby ensuring optimal support, growth, and development of crops.



SOIL CONDITIONERS

PRODUCT RANGE:

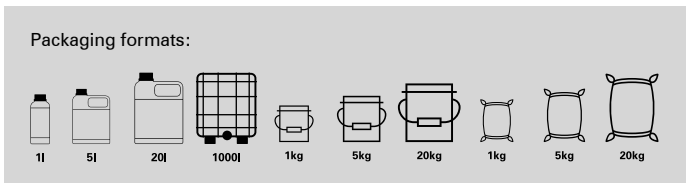
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Soils are defined by their physical, chemical and biological properties. From an agronomic perspective, some of the most important parameters are: cation exchange capacity, organic matter content, sodium adsorption ratio, pH and electrical conductivity.

For soils with the same characteristics, there may be significant local variations, either for climatic reasons or due to previous agricultural use.

This line of products will help improve these five parameters, in addition to other soil properties, such as texture, water retention capacity or microbial composition and activity.

We recommend starting from a soil analysis, and following technical criteria, choosing the products and doses that best adapt to the needs of each location and crop.





PROMI-SAL®

LIQUID MIXTURE OF CALCIUM AND MAGNESIUM
Fertigation

Guaranteed composition (% w/w)

7.2% Water-soluble Calcium Oxide (CaO)
0.3% Water-soluble Magnesium Oxide (MgO)

Formulation: Soluble concentrate

The accumulation of excess soluble salts in the root zone leads to a loss of soil productivity in terms of crop yield. This phenomenon is of great concern throughout the world. This product provides a solution to excess salinity-sodicity.

Salinity is due to geological processes or can be artificial. There is no critical salinity point where plants do not grow. As salinity increases, growth slows until plants become chlorotic and die.

To improve crop growth in these soils excess salts must be removed from the root zone. The use of an appropriate amendment will accelerate this process to a greater or lesser extent depending on the infiltration and drainage characteristics of the soil and the electrolyte level of the irrigation water.

PROMI-SAL® was the first product developed by the company to address issues related to saline or saline-sodic soils. It contains organic acids that sequester cations that interfere with plant development such as sodium and release calcium, an essential nutrient.

For 30 years it has been a successful product for all types of crops, especially in areas with a Mediterranean, semi-arid or arid climate, where salts tend to accumulate naturally or due to agricultural overexploitation.

PROMI-SAL® EXTRA

LIQUID MIXTURE OF CALCIUM AND MAGNESIUM
Fertigation

Guaranteed composition (% w/w)

10.2% Water-soluble Calcium Oxide (CaO)
0.3% Water-soluble Magnesium Oxide (MgO)

Formulation: Soluble concentrate

An evolution of PROMI-SAL®

It is a product even richer in organic acids and calcium. These organic acids contain a large number of carboxylic groups, which act as carriers for exchangeable calcium ions. When these soluble organic acids reach the soil, they exert their action by replacing calcium with sodium in the colloid.

In addition, PROMI-SAL® EXTRA promotes soil flocculation, counteracting the dispersive effect of sodium ions. This property is explained by the high electrical polarity of organic acids: negative charges on the surface of clay particles are attracted to the positive poles of the acids, creating stable aggregates. Between those aggregates, roots, air and water can easily penetrate, giving the soil a structure suitable for high-yield agricultural production.

The dosage of the product must be calculated from a soil analysis. When these are not available, the dose is decided according to the following diagnostic criteria: water infiltration problems, cracked soil when dry, decreased germination or vigor, and presence of saline spots.



PROMI-HUMUS® LEONARDITE

HUMIC ACIDS
Fertigation

Guaranteed composition (% w/w)

22%	Total Humic Extract
12%	Humic Acids
10%	Fulvic Acids
5%	Water-soluble Potassium Oxide (K ₂ O)

Formulation: Soluble concentrate

PROMI-HUMUS® LEONARDITE is an amendment that increases the concentration of organic matter in the soil due to the contribution of humic and fulvic acids. It improves its structure, cation exchange capacity, nutrient availability, root growth and the proliferation and activity of beneficial microorganisms.

Chemically, humic substances consist of plant material resistant to further decomposition, of decomposing substances, of complexes resulting from decomposition (either by hydrolysis or by oxidation and reduction), and of various compounds synthesized by microorganisms.

With respect to water, when applied to clay soils humic acids can help reduce compaction allowing greater water penetration and better growth and development of the root zone. When applied to sandy soils, humic acids add essential organic material necessary for water retention.

PROMI-HUMUS® PLUS

HUMIC ACIDS WITH POTASSIUM, MAGNESIUM AND IRON
Fertigation and foliar application

Guaranteed composition (% w/w)

30%	Total Humic Extract
3%	Water-soluble Potassium Oxide (K ₂ O)
0.45%	Water-soluble Magnesium Oxide (MgO)
0.4%	Water-soluble Iron (Fe)

Formulation: Soluble concentrate

With 30% total humic extract, this product constitutes a concentrate of organic matter, especially indicated for soils depleted of nutrients, for those soils subjected to intensive agriculture or for those cases in which crops that are particularly demanding in organic matter are planted.

All acids present in this formulation are aliphatic and weak aromatic, rich in carboxyls and hydroxyls that make them highly reactive. They have a low molecular weight that ranges between 1000Da and 10000Da, so they can be classified as Fulvic Acids. They can be easily absorbed by the roots, stems and leaves of plants and carry trace elements and other nutrients with them. They are excellent additions for both row and foliar applications, as fulvic acids are the most effective carbon chelating compounds known.

This formulation provides potassium, magnesium and iron along with these fulvic acids and therefore, in addition to acting as a soil improver, it acts as a preventive treatment for chlorosis and as a photosynthesis enhancer. Fulvic acid also stimulates root growth so plants can increase water and nutrient absorption.



HUMUSLIGHT® 30 M.O.

ORGANIC MATTER

Fertigation and foliar application

Guaranteed composition (% w/w)

30% Organic Matter
16% Organic Carbon

Formulation: Soluble concentrate

This formulation contains a high concentration of fulvic acids and the highest amount of organic carbon in this range of products. It is particularly suitable for soils poor in organic matter, for example sandy soils.

Organic carbon is vital to the soil's ability to support a soil ecosystem. The condition of this capacity is called soil health, a term that refers to the value of understanding soil as a living system and not as an abiotic component.

Total organic carbon influences many soil characteristics, such as color, nutrient retention capacity (cation and anion exchange capacity), nutrient turnover and stability, and also microbial activity, since organic carbon is a food source for microorganisms. All these parameters in turn influence the relationship between water, aeration and workability.

The organic carbon content of a soil can be easily measured and is a valuable indication of the chemical potential of a soil.

AZUFLOW®

ACID SOLUTION OF NITROGEN AND SULPHUR

Fertigation

Guaranteed composition (% w/w)

15% Urea Nitrogen (N)
40% Water-soluble Sulphur Trioxide (SO₃)

Formulation: Soluble concentrate

It is used in all types of crops through localized irrigation to correct limestone and/or alkaline soils. It reduces its salt content and improves soil structure in addition to solubilizing nutrients.

Sulphur is an essential nutrient for plant growth. Oil crops, legumes, forages and some vegetable crops require considerable amounts of sulphur. In many crops, its amount in the plant is similar to phosphorus.

Some of Sulphur's main roles are:

- Found in some amino acids, the ingredients of proteins. Most of the sulphur absorbed by plants, around 90%, is used for this purpose.
- Essential for the formation of chlorophyll. It is a main component of one of the enzymes necessary for the formation of the chlorophyll molecule.
- Essential in the synthesis of oils (oil crops).
- Active in nitrogen metabolism.



pH regulators
for soil and water.

ANCILLARY

PRODUCT RANGE:

- ACIDAN® pg. 9
- PROMI-ACID® pg. 9

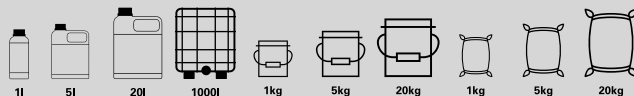
Soil pH is a critical chemical property as it affects both the availability of nutrients and the activity of soil microorganisms.

Soil texture, nutrients, amount of organic matter, current and desired pH are used to determine the necessary pH regulators. These parameters, together with water analysis, can be determined through standardized analyses.

While many plants can tolerate pH ranges between 5.2 and 7.8, most grow best in mineral soils when the soil pH is between 6.0 and 7.0. This general rule applies to most fruits, vegetables, flowers, trees and shrubs. Grass tends to grow best between 5.5 and 6.5 and evergreen trees and shrubs prefer a pH range of 5.0 to 6.0.

The optimal pH range for plant growth in organic soils (peat and rubble) is lower than the optimal range in mineral soils. For many plants, the most favorable range in organic soils is pH 5.4 to 6.2.

Packaging formats:





ACIDAN®

NITROGEN SOLUTION

For phytosanitary broths and alkaline soils

Guaranteed composition (% w/w)

15% Total Nitrogen (N)
15% Urea Nitrogen (N)

Formulation: Soluble concentrate

It is a strongly acidic solution used to adjust the pH of phytosanitary broths, as well as the pH of the soil.

It can be used in all types of crops through fertigation. It modifies limestone and alkaline soils, reducing their salt content and improving their structure.

Allows the mobilization of micronutrients for rapid root assimilation.

Due to the different compositions of water and soil, the dosage can vary greatly from place to place. Request technical agronomic advice and control the pH precisely.

Do not mix with calcium nitrate.

PROMI-ACID®

CALCIUM SOLUTION

Fertigation

Guaranteed composition (% w/w)

7.2% Water-soluble Calcium Oxide (CaO)

Formulation: Soluble concentrate

PROMI-ACID® increases soil pH.

Its use is recommended when the soil pH is less than 6. Increasing the pH will increase the availability of nitrogen, phosphorus, potassium, calcium, magnesium and molybdenum. Additionally, increasing soil pH prevents the toxicity of high concentrations of iron, aluminum, copper, zinc, manganese or cobalt.

PROMI-ACID® contains organic acids. Their negative charge gives them a great affinity for dissolved cations, giving the product great properties as a nutrient complexant.

Due to the different compositions of water and soil, the dosage can vary greatly from place to place. Request technical agronomic advice and control the pH precisely. Keep in mind that each crop requires a different pH for maximum yield.

Our basic nutrition solutions provide the primary elements necessary to efficiently meet the basic nutritional demands of any crop, while improving its development, vitality and productivity.



NPK FERTILISERS

PRODUCT RANGE:

PROMI-FERTIL® PK SUPREM	pg. 11
PROMI-FERTIL® 20-20-20	pg. 11
PROMI-FERTIL® 18-8-6	pg. 11
PROMI-FERTIL® 7-21-7	pg. 11

There are numerous ingredients that plants need for healthy and optimal growth.

Without these nutrients, plants cannot fulfill their potential, will provide lower yields and will be more susceptible to disease.

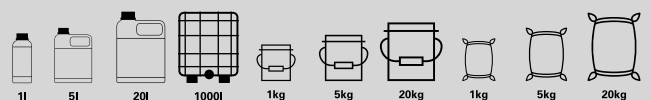
The three most important nutrients are called macronutrients: Nitrogen (N), Phosphorus (P) and Potassium (K).

Soils often lack these nutrients, either naturally or as a result of overcultivation or other environmental factors. In cases where soils are poor, nutrients must be returned to the soil to create the ideal environment for optimal plant growth.

All products are suitable for application as a foliar spray or through fertigation, without posing a risk of nozzle clogging.

Seek technical agronomic advice before using these products to maximize their profitability and avoid harmful overdose.

Packaging formats:





PROMI-FERTIL® PK SUPREM

NPK FERTILISER

Fertigation and foliar application

Guaranteed composition (% w/w)

3%	Urea Nitrogen (N)
20%	Water-soluble Phosphorus Pentoxide (P_2O_5)
28%	Water-soluble Potassium Oxide (K_2O)

Formulation: Soluble concentrate

The best combination for root growth and fruit development, fattening, coloration and organoleptic quality. Contains EDTA as a stabiliser.

PROMI-FERTIL® 18-8-6

NPK FERTILISER

Fertigation and foliar application

Guaranteed composition (% w/w)

18%	Urea Nitrogen (N)
8%	Water-soluble Phosphorus Pentoxide (P_2O_5)
6%	Water-soluble Potassium Oxide (K_2O)

Formulation: Soluble concentrate

Liquid formulation suitable for the development phases of all crops and to enhance photosynthesis thanks to its high nitrogen content.

PROMI-FERTIL® 20-20-20

NPK FERTILISER

Fertigation and foliar application

Guaranteed composition (% w/w)

20%	Total Nitrogen (N)
4%	Ammonia Nitrogen (N)
10.5%	Urea Nitrogen (N)
5.5%	Nitric Nitrogen (N)
20%	Water-soluble Phosphorus Pentoxide (P_2O_5)
20%	Phosphorus Pentoxide (P_2O_5) soluble in Neutral Ammonium Citrate and Water
20%	Water-soluble Potassium Oxide (K_2O)

Formulation: Crystalline solid

Balanced NPK solid mixture based on highly water-soluble ingredients.

PROMI-FERTIL® 7-21-7

NPK FERTILISER

Fertigation and foliar application

Guaranteed composition (% w/w)

7%	Urea Nitrogen (N)
21%	Water-soluble Phosphorus Pentoxide (P_2O_5)
7%	Water-soluble Potassium Oxide (K_2O)

Formulation: Soluble concentrate

Liquid formulation for root development, seed production and vegetative growth without neglecting basic fertilisation.

Rapid and effective foliar and root assimilation of secondary elements and micronutrients to overcome deficiencies and optimize yields.



FERTILISERS AND DEFICIENCY CORRECTORS

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PROMI-FERRO® WG-4.8	pg. 16
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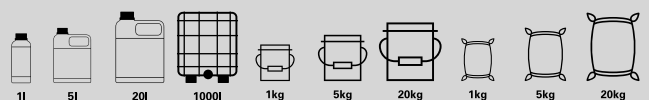
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CUPROGEL®	pg. 19

This range includes products that provide secondary nutrients and micronutrients, both in liquid and solid forms. Therefore, it is complementary to basic fertilisation.

The appropriate combination of products will depend on local needs established according to agronomic criteria.

They can be used together with biostimulants to reduce the number of applications.

Packaging formats:





PROMI-FERTIL® NITRON PLUS - BORON

NITROGEN SOLUTION WITH BORON

Fertigation and foliar application

Guaranteed composition (% w/w)

20%	Total Nitrogen (N)
20%	Urea Nitrogen (N)
2%	Water-soluble Boron (B)

Formulation: Soluble concentrate

It is particularly effective in foliar spraying, since all the nitrogen is in urea form. The absorption of urea is highly efficient due to its great solubility and neutral charge.

Promi-Fertil® Nitron Plus - Boron is recommended for periods of high demand, for example, in the initial phases of development to ensure adequate flowering, setting and growth of the fruit or grain. It is essential for crops that are more sensitive to boron deficiencies such as alfalfa, fruit trees, olive trees, grapevines, cauliflower, sugar beets, rapeseed, sunflowers, carrots and tomatoes.

Supplying boron not only increases yield, but also improves the quality of the harvested forage, as boron-deficient leaves dry out much faster than stems and are often lost in raking or baling. This loss of leaves causes protein levels in the forage to decrease significantly.

PROMI-FERTIL® K SUPREM

NK FERTILISER SOLUTION

Fertigation and foliar application

Guaranteed composition (% w/w)

3%	Total Nitrogen (N)
3%	Urea Nitrogen (N)
31%	Water-soluble Potassium Oxide (K ₂ O)

Formulation: Soluble concentrate

It is recommended for the efficient supply of potassium during the stages of greatest demand for the crop. Potassium is generally critical during ripening processes. Contains EDTA as a stabiliser.

Most of the positive effects attributed to potassium in terms of precocity and visual and organoleptic quality of the fruit (size, color...) are, in fact, shared with phosphorus. Both improve ripening processes and counteract any negative problems arising from excessive nitrogen fertilisation. The most advisable stages for its application are flowering, fruit set and maturation.

Potassium is known to participate in the following metabolic processes in plants:

- Regulation of cellular pH (acid-base balance)
- Osmolarity
- Maintenance of turgor
- Opening and closing of stomata
- Tolerance to drought and salinity
- Perspiration



PROMI-CAL® EXTRA

CALCIUM + ZINC

Fertigation and foliar application

Guaranteed composition (% w/w)

17% Water-soluble Calcium Oxide (CaO)
0.5% Water-soluble Zinc (Zn)

Formulation: Soluble concentrate

It is a liquid calcium deficiency corrector supplemented with zinc, whose concentration is usually low in many agricultural soils.

Some of the main functions of calcium are its role as a cell signaling ion, as a component of the cell wall, as a structural stabiliser of cell membranes and finally as a component of calmodulin, an activating protein of several enzymes.

Zinc has many important functions in plants: enzymatic cofactor, structural stabiliser of proteins and cell membranes, and also plays a role as a component of DNA histones.

PROMI-CAL® EXTRA is especially recommended for crops that are more sensitive to calcium deficiencies, such as tomatoes and apples.

It can be used on any crop when conditions exist that can cause calcium deficiency, such as excessive phosphate fertilisation, low soil pH, high air humidity, low light intensity, low temperatures and drought.

PROMI-CALCIUM® EXTRA + BORON

CALCIUM, BORON AND ZINC

Fertigation and foliar application

Guaranteed composition (% w/w)

17% Water-soluble Calcium Oxide (CaO)
1% Water-soluble Boron (B)
0.4% Water-soluble Zinc (Zn)

Formulation: Soluble concentrate

When a supply of boron is needed along with calcium, this is the smartest option.

Boron and calcium can be highly incompatible when mixed in a liquid solution. This formulation is completely stable and supplies calcium and boron in the correct proportion for most crops.

Some of the main effects produced by calcium deficiencies in crops are greater susceptibility to environmental stress, diseases and pests; lower plant development, lower root growth, root deformations, chlorosis in the leaves, lower activity of the leaf buds, lower quality of the fruits and fruit physiopathies.



PROMI-CALFOR®

CALCIUM FORMATE

Fertigation and foliar application

Guaranteed composition (% w/w)

42% Water-soluble Calcium Oxide (CaO)
67% Formate

Formulation: Soluble powder

High concentrations of calcium increase the mechanical resistance of cell walls to penetration by a wide range of pests and pathogens. Furthermore, it promotes the stability of plant cells and therefore also reduces physiological damage to fruit and plant parts.

This product has two main advantages over other calcium-based fertilisers: Calcium formate is quickly absorbed by plants and the formate ion is an agent with proven bacteriostatic activity.

We recommend carrying out joint applications of this product together with a biostimulant based on amino acids, to improve calcium absorption and ensure the quality of the fruit, its firmness and its post-harvest conservation time.

PROMI-CALFOR® MICROS

CALCIUM FORMATE WITH MICRONUTRIENTS

Fertigation and foliar application

Guaranteed composition (% w/w)

34% Water-soluble Calcium Oxide (CaO)
56% Formate
1% Water-soluble Boron (B)
2% Water-soluble Zinc (Zn)
2% Zinc (Zn) chelated by EDTA

Formulation: Soluble powder

A calcium deficiency can be the origin of several physiological problems such as bitter pit in apples, apical burn in lettuce, hollow heart in cabbage and strawberries, root bifurcation in beet, black heart in celery, boll drop in cotton and most notably fruit splitting in many crops.

If zinc and boron are also needed, it is best to use this mixture to reduce the number of applications. Zinc chelated by EDTA is quickly and efficiently absorbed.

Both this product and the previous one at the top of this page are used extensively in hydroponics as well.



PROMI-FERRO® WG-4.8

IRON CHELATE

Fertigation

Guaranteed composition (% w/w)

6% Water-soluble Iron (Fe)
4.8% Iron (Fe) chelated by EDDHA (o-o)

Formulation: Water-soluble microgranules

The effects of iron deficiency on plants need not be emphasised. The effects are well known.

Iron is poorly available to crops, especially in intensely washed sandy soils, soils with high pH (pH>7), calcareous soils (with more than 15% calcium carbonate), soils where calcareous amendments have been recently applied and in soils with salinity problems.

To overcome deficiencies, chelated forms of iron are the preferred option. The ortho-ortho configuration is the most stable in soils where the pH is neutral or alkaline. The higher the percentage of ortho-ortho, the better in limestone soils.

EDDHA is much superior in calcareous soils to other chelating agents derived from polyaminocarboxylic acids such as EDTA, DTPA or HEDTA that do not have the phenolate group in their structure.

PROMI-FERRO® WG-3.5

IRON CHELATE

Fertigation

Guaranteed composition (% w/w)

6% Water-soluble Iron (Fe)
3.5% Iron (Fe) chelated by EDDHA (o-o)

Formulation: Water-soluble microgranules

Iron chelate with an ortho-ortho content of 3.5%. This formulation is best suited for soils with neutral to slightly acidic pH, or with low to moderate calcium concentration.

PROMI-FERRO® WG-3

IRON CHELATE

Fertigation

Guaranteed composition (% w/w)

6% Water-soluble Iron (Fe)
3% Iron (Fe) chelated by EDDHA (o-o)

Formulation: Water-soluble microgranules

Iron chelate with an ortho-ortho content of 3%. This formulation is more suitable for soils with slightly acidic pH, or with low calcium concentration.



PROMI-FERTIL® BORON 21%

BORON

Fertigation and foliar application

Guaranteed composition (% w/w)

21% Water-soluble Boron (B)

Formulation: Soluble powder

Boron shortage causes several physiological deficiencies, such as inhibition of mitosis, cell elongation, cell differentiation and development, suppression of respiration and photosynthesis, and increased auxin content in the cells, in particular indole acetic acid.

Boron deficiency often results in empty pollen grains, low pollen vitality, reduced number of flowers per plant and stunted root growth.

Boron deficiency is very common in acid sandy soils with low organic matter and in soils with high adsorption and retention capacity (e.g. soils with high pH and rich in clay minerals).

This product is highly soluble in water, but should be used alone, as boron can interact with calcium or other divalent cations in solution, forming precipitates.

PROMI-FERTIL® BORON 17.5%

BORON

Fertigation and foliar application

Guaranteed composition (% w/w)

17.5% Water-soluble Boron (B)

Formulation: Soluble powder

This is a boric acid based product. Its dissolution in water can lead to low pH values that must be corrected to almost neutral before application.

PROMI-FERTIL® BORON 15%

BORON

Fertigation and foliar application

Guaranteed composition (% w/w)

10.9% Water-soluble Boron (B)

Formulation: Soluble concentrate

This is a liquid form of boron, complexed with ethanolamine to facilitate its absorption.

It can be used in fertigation, hydroponics or as a foliar spray.



PROMI-FERTIL® MIX

MICRONUTRIENT MIXTURE

Fertigation and foliar application

Guaranteed composition (% w/w)

0.65%	Water-soluble Boron (B)
0.28%	Water-soluble Copper (Cu) and chelated by EDTA
7.5%	Water-soluble Iron (Fe) and chelated by EDTA
3.5%	Water-soluble Manganese (Mn) and chelated by EDTA
0.3%	Water-soluble Molybdenum (Mo)
0.7%	Water-soluble Zinc (Zn) and chelated by EDTA

Formulation: Soluble powder

Solid mixture of all micronutrients to be used at all stages and in any crop to ensure optimal development.

Micronutrients are found in sufficient quantities in most soils to meet the needs of crops. However, some sandy soils and other soils with little organic matter are naturally deficient in micronutrients, and soils with high pH can make some micronutrients less available and therefore deficient.

Deficiencies are usually detected visually; to calculate the dose to be provided, the analysis of plant tissues is more reliable than soil analysis. It is recommended to follow technical criteria to avoid overdoses and phytotoxicity.

PROMI-FERTIL® FATTENING SUPREM

PK FERTILISER WITH MICRONUTRIENTS

Fertigation and foliar application

Guaranteed composition (% w/w)

25%	Water-soluble Phosphorus Pentoxide (P_2O_5)
25%	Phosphorus Pentoxide (P_2O_5) soluble in neutral ammonium citrate and water
32%	Water-soluble Potassium Oxide (K_2O)
0.2%	Water-soluble Boron (B)
0.4%	Water-soluble Molybdenum (Mo)

Formulation: Soluble powder

This product is recommended for the fruit fattening phase. It has been widely used on fruit and citrus trees as a foliar spray.

It also contains a mixture of vitamins that promote fruit growth, sugar accumulation and actually help alleviate some types of abiotic stress such as excessive salt concentration in the soil or drought.

Molybdenum has been included in the formulation as it is necessary for the synthesis and activity of the nitrate reductase enzyme. Its availability increases with pH, unlike other nutrients. Although necessary in minimal quantities, it is closely linked to nitrogen metabolism.



PROMI-FERTIL® TRIPLEX

MAGNESIUM, BORON AND MOLYBDENUM

Fertigation and foliar application

Guaranteed composition (% w/w)

5.5%	Water-soluble Magnesium (MgO)
13.3%	Water-soluble Sulphur Trioxide (SO ₃)
7.5%	Water-soluble Boron (B)
8%	Water-soluble Molybdenum (Mo)

Formulation: Soluble powder

Magnesium is key for photosynthesis since it is part of chlorophyll.

Its application is recommended on alkaline soils (for B), limestone soils (calcium carbonate >15%), coarse-textured intensive leaching soils (B and Mo) or acidic soils (for Mo).

The elements Copper, Iron, Manganese, Zinc have a positive charge in the soil and therefore bind easily to soil particles. Its deficiencies are more likely in limestone soils or in soils with excessive organic matter, where 100% is chelated and retained in the soil.

Boron and Molybdenum have a negative charge and are easily leachable. Deficiencies occur in places with excess irrigation or rainfall.

CUPROGEL®

CORRECTOR OF COPPER DEFICIENCIES

Foliar application

Guaranteed composition (% w/w)

19%	Total copper (in the form of oxychloride)
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Formulation: Suspension

Copper is not readily available to crops in clay, alkaline or saline soils, or when there is a high concentration of calcium carbonate. Deficiency correctors like this product can supply the extra amount of copper to crops needed for maximum yields.

It is an essential cofactor of enzymes related to photosynthesis, respiration or the phenylpropanoid pathway.

Overdosage is the most important factor to take into account, since excess copper inhibits plant growth and damages important cellular processes (for example, electron transport in photosynthesis).



Our exclusive range of biostimulants integrates the latest advancements in biotechnology, physiology, and plant pathology to enhance the physiological functions of crops, bolster their defense mechanisms against diseases, and improve their tolerance to environmental stress.

PROMITEC BIOSTIMULANTS

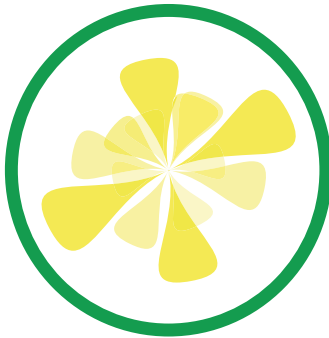
PRODUCT RANGE:

MUCIGEL®	pg. 21
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PROMI-FERTIL® FLOWERING	pg. 26
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Packaging formats:

1L 5L 20L 1000L 1kg 5kg 20kg 1kg 5kg 20kg



MUCIGEL®

NPK FERTILISER WITH AMINO ACIDS AND SEAWEED EXTRACT
Fertigation



Guaranteed composition (% w/w)

19%	Seaweed Extract
1%	Total Nitrogen (N)
1%	Water-soluble Phosphorus Pentoxide (P ₂ O ₅)
8%	Water-soluble Potassium Oxide (K ₂ O)
2%	Free amino acids

Formulation: Soluble concentrate

MUCIGEL® contains extracts of seaweed of the species *Ascophyllum nodosum* rich in proteins, polysaccharides and natural hormones or substances with hormonal activity in the appropriate proportion for optimal rooting.

Promotes the development and formation of new roots, increases the density of fine root hairs and the number of lateral roots.

In addition, it promotes the secretion of mucilaginous substances that improve root protection and nutrient absorption.

MUCIGEL® can be used throughout the entire growing cycle, but with special emphasis from transplanting or germination to flowering.

MUCIGEL® can also help against endoparasitic nematodes, reducing the number of nodules and nematode eggs.

Biostimulants are not fertilisers. They are substances that are applied with the aim of increasing resistance to abiotic stress, improving the absorption and translocation of nutrients or boosting metabolic processes, such as photosynthesis.

These are our most valuable products, the result of our efforts in research and development and technological innovation.

PROMISOL has many years of experience in designing its own custom products with seaweed and amino acids, two of the most complete biostimulants.

PROMI-ROOT®

NPK FERTILISER WITH AMINO ACIDS
Fertigation



Guaranteed composition (% w/w)

5.4%	Total Nitrogen (N)
5%	Urea Nitrogen (N)
0.3%	Organic Nitrogen (N)
5%	Water-soluble Phosphorus Pentoxide (P ₂ O ₅)
5%	Water-soluble Potassium Oxide (K ₂ O)
2%	Free amino acids

Formulation: Soluble concentrate

PROMI-ROOT® is a fertiliser that contains nitrogen, phosphorus and potassium, as well as biostimulant compounds. Its application is recommended to promote rooting in any crop, especially in seedlings and cuttings.

PROMI-CUAJE®

NP FERTILISER WITH AMINO ACIDS
Foliar application

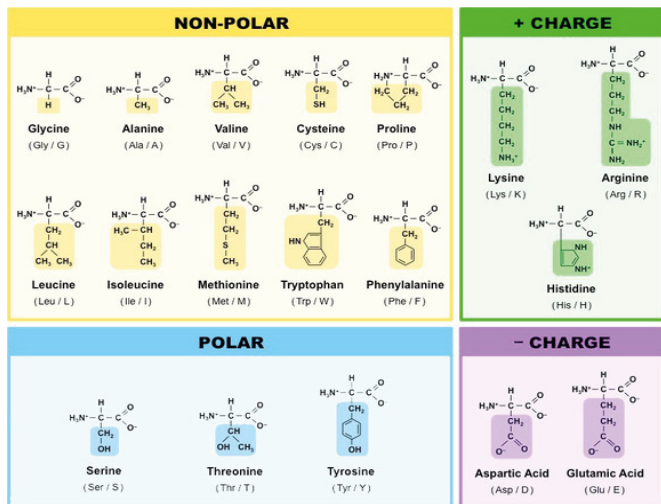


Guaranteed composition (% w/w)

3%	Total Nitrogen (N)
2.7%	Urea Nitrogen (N)
0.3%	Organic Nitrogen (N)
25%	Water-soluble Phosphorus Pentoxide (P ₂ O ₅)
2%	Free amino acids

Formulation: Soluble concentrate

PROMI-CUAJE® is a fertiliser with a high concentration of phosphorus as well as free amino acids. It is used during flowering to improve fruit setting, as well as during the fattening phase to improve their size, weight and organoleptic quality.



CYTOLAN® STAR

SOLID FERTILISER WITH SEAWEED EXTRACT AND AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

- 10% Total Nitrogen (N)
- 10% Water-soluble Phosphorus Pentoxide (P₂O₅)
- 10% Water-soluble Potassium Oxide (K₂O)
- 20% Seaweed extract
- 24% Free amino acids

Formulation: Crystalline solid

CYTOLAN STAR® contains 20% extracts of brown seaweed *Ascophyllum nodosum*.

This product can be used in any phase of the crop cycle as part of a fertilisation program, both as a preventive treatment against abiotic stress, as well as a productivity enhancer.

Brown seaweed are rich in active ingredients such as polysaccharides (alginates), alditols (mannitol), proteins, lipids, polyphenols and hormone-like compounds. All of them have positive effects on the physiology of the plant, whether as growth promoters, antioxidants or soil improvers.

The high concentration of free amino acids ensures the stimulation of all vital processes, as the presence of 18 distinct amino acids can influence any metabolic pathway. Additionally, these amino acids facilitate rapid recovery following episodes of water or thermal stress, such as droughts and frosts, and aid in managing excessive concentrations of metals in the soil or high levels of salts.

BIOSTIMULANTS WITH AMINO ACIDS AND SEAWEED EXTRACT

PROMISOL has extensive expertise in the development of biostimulants based on amino acids and seaweed.

Plants accumulate several amino acids in tissues in situations of abiotic stress, which have several functions: osmoregulation, ion transport, stomatal opening, detoxification of heavy metals, etc. In addition, they can modulate the synthesis of some enzymes and gene expression.

Seaweed contain many molecules that help plants overcome abiotic stress situations: alginic acid (improves soil structure), mannitol (antioxidant), hormonal compounds, peptides, micronutrients and many other substances such as phenols, terpenoids, etc.

In addition to those specified on the previous page and with the aim of offering differentiated products that can be applied in the greatest number of situations possible, the following ranges have been developed:

CYTOLAN®:
Products based on seaweed.

CYTO FLOW®:
Products based on amino acids, of natural origin.

PROMINOL®:
Products based on synthetic amino acids for maximum purity.



CYTOLAN® SEAWEED

SEAWEED EXTRACT

Fertigation and foliar application

Guaranteed composition (% w/w)

12% Seaweed Extract

Formulation: Soluble concentrate

CYTOLAN® SEAWEED contains 12% brown seaweed extract of the species *Ascophyllum nodosum*. It is the most valuable seaweed for agriculture, due to its diversity of active ingredients.

It is a liquid formulation to facilitate its use in fertigation, but it can also be used in foliar application.

It is advisable to dilute it in water with almost neutral pH to avoid incompatibilities with other fertilisers, blockages or the formation of precipitates. **Do not use this product at pH lower than 6.5 units.**

We recommend its preferential application in germination, transplantation and during the vegetative growth stage, to maximize its effects on rooting.

Since seaweed extracts have hormonal activity, we ask you to seek technical agronomic advice before using this product, especially if the use of a growth promoter is planned.

CYTOLAN® CONCENTRATED POWDER

SOLID SEAWEED EXTRACT

Fertigation and foliar application

Guaranteed composition (% w/w)

2.5% Total Nitrogen (N)
17% Water-soluble Phosphorus Pentoxide (P₂O₅)
5% Mannitol

Formulation: Soluble powder

CYTOLAN® CONCENTRATED POWDER contains 100% extracts of brown seaweed of the species *Ascophyllum nodosum*.

The product is sold in the form of 2-3 mm flakes, to facilitate handling and minimize dust formation.

Brown seaweed are rich in components with "bioactive" properties, such as certain polysaccharides (laminarin, alginates and fucans), certain proteins, lipids, polyphenols, cytokinins and gibberellins.

These components have "bioactive" properties, such as antioxidant properties and positive effects on crop physiology. For this reason, brown seaweed are raw materials of great interest in the fertiliser and biostimulant compound industry for agriculture.



CYTO FLOW® Fe

AMINO ACIDS WITH IRON

Fertigation and foliar application

Guaranteed composition (% w/w)

2.1%	Total Nitrogen (N)
5.2%	Water-soluble Iron (Fe)
16%	Free amino acids

Formulation: Soluble concentrate

This product is one of the company's oldest, and it is precisely its resistance to the passage of time that guarantees its effectiveness as a biostimulant. It should be used in the stages of greatest growth or metabolic activity.

The union of amino acids with iron allows you to stimulate all the essential metabolic processes of the plant while boosting photosynthesis. Iron deficiency manifests itself as an easily recognizable interveinal chlorosis.

Iron is a component of several enzymes and some pigments, and helps in the reduction of nitrates and sulfates and in the production of energy within the plant. In addition, it is essential for photosynthesis, since one of the main protein structures involved, Photosystem II contains iron in its nucleus, which allows the transfer of electrons.

NEMAKOMPLET®

AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

1.2%	Total Nitrogen (N)
1.2%	Organic Nitrogen (N)
9%	Free amino acids

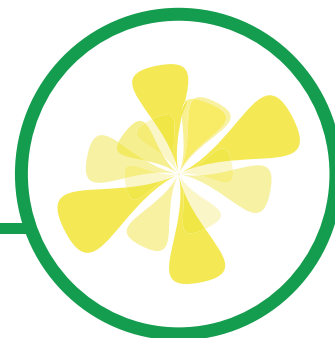
Formulation: Soluble concentrate

Liquid amino acid mixture. Its use has clearly helped combat both abiotic stress and fungal diseases and predation by nematodes, particularly the root knot nematode.

All amino acids are obtained by alkaline hydrolysis of plant materials. The aminogram is balanced to adapt to all the metabolic needs of plants. Apply as a preventive treatment, to allow plants to develop their natural stress resistance mechanisms.

The product incorporates ingredients that help minimize damage caused by various biotic agents, such as fungi or nematodes.

It can be used as a foliar spray or through fertigation, and is compatible with all common fertilisers and plant protection products. Adjust the pH for a foliar application between 5.5 and 7.



CYTO FLOW® PLUS 30

AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

4.7% Total Nitrogen (N)
4% Organic Nitrogen (N)
26% Free amino acids

Formulation: Soluble concentrate

The liquid product with the highest concentration of free amino acids: 26% w/w or 30% w/v. It can be used in low doses throughout the entire growing cycle. Some producers may prefer to predilute it to prevent overdose.

It is a product of low density and viscosity despite its high amino acid content. The balanced aminogram guarantees a stimulating effect on crops in any phase of the phenological cycle and protects against drought, salinity or sodicity and freezing, as it contains osmoprotective amino acids in a significant concentration.

It is compatible with all commonly used fertilisers and can be used in a very wide pH range without precipitation problems.

As an added advantage, amino acids allow secondary nutrients and micronutrients to be complexed, facilitating their absorption through root or foliar route.

CYTO FLOW® PLUS

AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

7% Total Nitrogen (N)
1.8% Organic Nitrogen (N)
5.2% Urea Nitrogen (N)
9% Free amino acids

Formulation: Soluble concentrate

This is a less concentrated version of the above product and therefore may be easier for some growers to handle.

It has an equally balanced aminogram, great compatibility with any fertiliser and works synergistically with many plant growth regulators and phytosanitary products, since many amino acids act as carriers of these active ingredients.

The main functions of amino acids in plants are: protein synthesis, resistance to abiotic stress, promotion of photosynthesis, regulation of stomatal activity, nutrient complexation, improvement of pollination rate and proper fruit development.

It should be noted that the application of amino acids to the soil increases microbial activity. The balance of the microbial flora in agricultural soil is a basic issue for good mineralization of organic matter and also for good structure and fertility of the soil around the roots.



CYTO FLOW® AMIN

AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

13.8% Total Nitrogen (N)
 12.9% Organic Nitrogen (N)
 80% Free amino acids

Formulation: Soluble powder

With a concentration of 80% free amino acids, this product presents in solid format the greatest concentration of amino acids of the entire range. It is marketed as a soluble powder, and can be used as part of a program throughout the entire growing cycle at very low doses.

It is compatible with all commonly used fertilisers and can therefore be added to any treatment and save on the number of field applications. Its synergistic effect with phytosanitary products guarantees the effectiveness of this product.

CYTO FLOW® AMIN 50

AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

17% Total Nitrogen (N)
 9% Ammonia Nitrogen (N)
 8% Organic Nitrogen (N)
 50% Total amino acids
 Min. 45% Free amino acids

Formulation: Soluble powder

As with liquid products, we also have in solid form a product rich in free amino acids, but less concentrated.

This product contains 50% total amino acids, quickly and easily soluble in all types of water, and equally compatible with any fertiliser or any commonly used phytosanitary product.

PROMI-FERTIL® FLOWERING

SOLID FERTILISER WITH SEAWEED EXTRACT

Fertigation and foliar application

Guaranteed composition (% w/w)

5% Total Nitrogen (N)
 5% Ammonia Nitrogen (N)
 26% Water-soluble Phosphorus Pentoxide (P₂O₅)
 1% Mannitol
 3% Water-soluble Boron (B)
 3% Water-soluble Molybdenum (Mo)

Formulation: Soluble powder

Solid fertiliser completely soluble in water, rich in phosphorus, and with contributions of seaweed extracts, boron and molybdenum. It is especially indicated to increase the number of flowers and improve their development in crops with high production. Its use is recommended during the initial stages of vegetative growth and pre-flowering.

PROMI-FERTIL® FATTENING

SOLID FERTILISER WITH SEAWEED EXTRACT

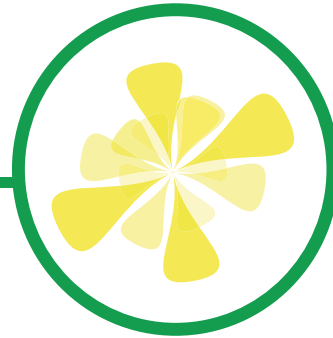
Foliar application

Guaranteed composition (% w/w)

25% Water-soluble Phosphorus Pentoxide (P₂O₅)
 25% Phosphorus Pentoxide (P₂O₅) soluble in neutral ammonium citrate and water
 1.1% Mannitol
 32% Water-soluble Potassium Oxide (K₂O)
 0.01% Water-soluble Copper (Cu)
 0.1% Water-soluble Iron (Fe)
 0.1% Water-soluble Manganese (Mn)
 0.4% Water-soluble Molybdenum (Mo)
 0.1% Water-soluble Zinc (Zn)

Formulation: Soluble powder

Solid fertiliser with a high content of phosphorus, potassium and with a contribution of seaweed extract and micronutrients, particularly molybdenum. Its use is recommended to promote fattening, ripening and the organoleptic qualities of the fruit.



PROMINOL® N

NITROGEN SOLUTION WITH AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

7% Total Nitrogen (N)
6.8% Urea Nitrogen (N)
0.2% Ammonia Nitrogen (N)
2% Free amino acids

Formulation: Soluble concentrate

PROMINOL® K

NK FERTILISER WITH AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

4.5% Total Nitrogen (N)
3.2% Nitric Nitrogen (N)
1.1% Ammonia Nitrogen (N)
0.2% Organic Nitrogen (N)
7% Water-soluble Potassium Oxide (K₂O)
2% Free amino acids

Formulation: Soluble concentrate

PROMINOL® Mn-Zn

AMINO ACIDS WITH MANGANESE AND ZINC

Fertigation and foliar application

Guaranteed composition (% w/w)

6% Water-soluble Manganese (Mn)
6% Water-soluble Zinc (Zn)
2% Free amino acids

Formulation: Soluble concentrate

PROMINOL® P

NP SOLUTION WITH AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

3.6% Total Nitrogen (N)
0.7% Nitric Nitrogen (N)
2.7% Ammonia Nitrogen (N)
0.2% Organic Nitrogen (N)
7% Water-soluble Phosphorus Pentoxide (P₂O₅)
2% Free amino acids

Formulation: Soluble concentrate

PROMINOL® Ca

CALCIUM CHLORIDE SOLUTION WITH AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

14% Water-soluble Calcium Oxide (CaO)
2% Free amino acids

Formulation: Soluble concentrate

PROMINOL® COMPLEX

NPK FERTILISER WITH AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

6.5% Total Nitrogen (N)
4.4% Urea Nitrogen (N)
1.5% Nitric Nitrogen (N)
0.2% Organic Nitrogen (N)
3.5% Water-soluble Phosphorus Pentoxide (P₂O₅)
6.5% Water-soluble Potassium Oxide (K₂O)
2% Free amino acids

Formulation: Soluble concentrate



Advanced, specialised solutions designed to provide optimal responses to the unique needs of crop development.

SPECIALTIES

PRODUCT RANGE:

BIOESTIM® LINE	pg. 29
OMEGA SYSTEM® LINE	pg. 30
OMEGA SYSTEM® K-Si	pg. 30
PROMI-FERTIL® COLOUR	pg. 31
PROMADUR®	pg. 31
PROMI-NEEM®	pg. 31
PROMI-OLEATE®	pg. 31
CIRRUS®	pg. 31
DISOLKYN®	pg. 31

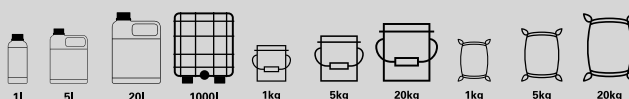
This category includes products of various nature. All of them are exported outside the EU.

On the one hand, there are 2 lines of products based on phosphonates, with and without incorporated amino acids, but both with different nutritional compositions.

Phosphonates are very soluble compounds and are also strong complexing agents and are therefore effective carriers of all micronutrients and secondary elements. However, they are not good phosphorus fertilisers, since plants cannot use phosphorus directly without being transformed into phosphate by soil bacteria.

On the other hand, there are 4 additional products for various abiotic stress scenarios in plants.

Packaging formats:





BIOESTIM® Product line

PHOSPHONATES

Fertigation and foliar application



When mixed with water, phosphonic acid lowers the pH dramatically. This acidic solution is too strong to be used on plants and must be combined with other chemicals to raise the pH of the solution and decrease the potential for plant damage. Carefully check the pH of the broth before using it as a foliar spray, as well as the pH of the water intended to be used in a fertigation system. Use pH regulators as necessary.

Phosphonates are absorbed by plants and incorporated into cells as phosphite ions (H_2PO_3^-). The fact that this ion has one less oxygen atom than phosphate means that it does not act in the same way as phosphate in plants. Although the phosphite ion can be transported to plant cells, it does not appear to be involved in any phase of phosphorus metabolism (ATP production, photosynthesis or respiration). Therefore, they should never be used as phosphate fertilisers.

As mentioned above, phosphite ions stimulate the synthesis of phytoalexins; these defence molecules accumulate at infection sites, inhibiting or delaying the spread of infection.

Therefore, the use of phosphonates can reduce the use of copper phytosanitary products and/or fungicides, which can cause undesirable environmental problems.

Phosphonates are the salts and esters of phosphorous acid.

These molecules are known to promote natural plant defenses, through the synthesis and accumulation of fungal-inhibiting chemicals called phytoalexins. These include many different chemical types, such as terpenoids, alkaloids or isoflavonoids; Many of them have modifications in their structure that make them unique for each plant species.

It is very important not to use excessive amounts of phosphonates, since high concentrations do not activate the enzymes responsible for the synthesis of phytoalexins. Low doses, particularly in the root zone, are most effective.

BIOESTIM® products consist of different combinations of phosphonates and nutrients, designed to adapt to any deficiency of any nutrient while promoting defense mechanisms against fungal infections.

Please seek technical defence agronomic advice before using this product, and check local regulations for any possible limitations on the use of phosphonates in your region.

These products are designed for export, not for use in the EU.

PRODUCT	Guaranteed composition (% w/w)
BIOESTIM® PLUS	10% Urea Nitrogen (N) 30% Water-soluble Phosphorus Pentoxide (P_2O_5) 10% Water-soluble Potassium Oxide (K_2O)
BIOESTIM® K	30% Water-soluble Phosphorus Pentoxide (P_2O_5) 20% Water-soluble Potassium Oxide (K_2O)
BIOESTIM® Ca	11.3% Water-soluble Phosphorus Pentoxide (P_2O_5) 3.85% Water-soluble Calcium Oxide (CaO) 0.5% Water-soluble Boron (B)
BIOESTIM® Ca-8	11.3% Water-soluble Phosphorus Pentoxide (P_2O_5) 8% Water-soluble Calcium Oxide (CaO)
BIOESTIM® Ca-8+B	11.3% Water-soluble Phosphorus Pentoxide (P_2O_5) 8% Water-soluble Calcium Oxide (CaO) 0.5% Water-soluble Boron (B)
BIOESTIM® Cu	20% Water-soluble Phosphorus Pentoxide (P_2O_5) 4% Water-soluble Copper (Cu)
BIOESTIM® Mag	40% Water-soluble Phosphorus Pentoxide (P_2O_5) 10% Water-soluble Magnesium Oxide (MgO)
BIOESTIM® Mn	32% Water-soluble Phosphorus Pentoxide (P_2O_5) 5% Water-soluble Manganese (Mn)
BIOESTIM® Mn-Zn	34.5% Water-soluble Phosphorus Pentoxide (P_2O_5) 5% Water-soluble Manganese (Mn) 6% Water-soluble Zinc (Zn)
BIOESTIM® Zn	34.5% Water-soluble Phosphorus Pentoxide (P_2O_5) 6% Water-soluble Zinc (Zn)



OMEGA SYSTEM®

Product line

PHOSPHONATES

Fertigation and foliar application

This range of products constitutes an evolution and improvement of the BIOESTIM® line, since it includes synthetic amino acids in all its products. These amino acids are of the highest purity and allow adding a biostimulant effect to the promoting effect of plant defences against infections.

Notably, we have been able to design a product that includes soluble silicon (detailed below), which allows for greater protection against infections by being physically incorporated into the walls of the plants as reinforcement; In addition, it has a drying effect that hinders the growth of fungi.

ELICITORS

Until now, disease control has largely relied on the use of synthetic fungicides; however, the dangerous effect of these chemicals or their degradation products on the environment and human health requires the search for alternative and harmless means for disease control.

There is a way to induce resistance to protect plants from diseases: elicitors are compounds that activate chemical defense in plants.

Phosphonates and silicon are some of these elicitors, although their mode of action is not perfectly understood until now. What we know is that they can induce similar defence responses as if the plants were actually attacked by pathogens.

PRODUCT	Guaranteed composition (% w/w)
OMEGA SYSTEM® PLUS	10% Urea Nitrogen (N) 30% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 10% Water-soluble Potassium Oxide (K ₂ O)
OMEGA SYSTEM® K	3% Urea Nitrogen (N) 30% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 20% Water-soluble Potassium Oxide (K ₂ O)
OMEGA SYSTEM® Ca	3% Urea Nitrogen (N) 11.3% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 8% Water-soluble Calcium Oxide (CaO)
OMEGA SYSTEM® Ca-B	3% Urea Nitrogen (N) 11.3% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 8% Water-soluble Calcium Oxide (CaO) 0.5% Water-soluble Boron (B)
OMEGA SYSTEM® Cu	3% Urea Nitrogen (N) 20% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 4% Water-soluble Copper (Cu)
OMEGA SYSTEM® Mag	3% Urea Nitrogen (N) 40% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 10% Water-soluble Magnesium (MgO)
OMEGA SYSTEM® Mn	3% Urea Nitrogen (N) 32% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 5% Water-soluble Manganese (Mn)
OMEGA SYSTEM® Mn-Zn	3% Urea Nitrogen (N) 34.5% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 5% Water-soluble Manganese (Mn) 6% Water-soluble Zinc (Zn)
OMEGA SYSTEM® Zn	3% Urea Nitrogen (N) 34.5% Water-soluble Phosphorus Pentoxide (P ₂ O ₅) 6% Water-soluble Zinc (Zn)

OMEGA SYSTEM® K-Si

PHOSPHONATE, SILICON AND AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

7% Water-soluble Phosphorus Pentoxide (P₂O₅)
16% Water-soluble Potassium Oxide (K₂O)
3.7% Water-soluble Silicon Dioxide (SiO₂)



Formulation: Soluble concentrate

Silicon appears to benefit certain plants when they are under stress. It has been found to improve drought tolerance and delay wilting in certain poorly irrigated crops and may improve the plant's ability to resist micronutrient and other metal toxicities (e.g., aluminum, copper, iron, manganese, zinc, etc.). Additionally, silicon has been found to help increase the mechanical strength of the stem.

It has been observed that mildew, *Phytophthora* infections and other fungal diseases can be controlled by regular applications of silicon. Its effects can last up to 3 weeks, depending on the weather.

Toxicity has been observed in some crops (e.g. tomato, cucumber) when silicon is applied at doses greater than 200 ppm by fertigation. As usual, look for technical advice and always make decisions based on soil and water analysis.



PROMI-FERTIL® COLOUR

COLOUR ENHANCER

Foliar application



Guaranteed composition (% w/w)

2%	Urea Nitrogen (N)
10%	Water-soluble Phosphorus Pentoxide (P_2O_5)
28%	Water-soluble Potassium Oxide (K_2O)
0.1%	Water-soluble Molybdenum (Mo)
2.5%	Water-soluble Zinc (Zn)

Formulation: Soluble concentrate

PROMADUR®

BIOSTIMULATOR FOR SUGAR CANE

Foliar application



Guaranteed composition (% w/w)

2.5%	Total Nitrogen (N)
0.8%	Urea Nitrogen (N)
1.7%	Organic Nitrogen (N)
0.5%	Water-soluble Phosphorus Pentoxide (P_2O_5)
7%	Water-soluble Potassium Oxide (K_2O)
2%	Free amino acids

Formulación: Soluble concentrate

PROMI-NEEM®

NEEM EXTRACT

Foliar application



Guaranteed composition (% w/w)

99%	Organic Matter
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Formulation: Soluble concentrate

PROMI-OLEATE®

POTASSIUM OLEATE

Foliar application



Guaranteed composition (% w/w)

46%	Potassium salt of oleic acid
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Formulation: Potassium soap solution

CIRRUS®

PLANT EXTRACT

Foliar application



Guaranteed composition (% w/w)

30%	Plant extract
2%	Seaweed extract
0.2%	Water-soluble Boron (B)

Formulation: Soluble concentrate

DISOLKYN®

SURFACTANT

Foliar spray



Guaranteed composition (% w/w)

70%	Sodium Dioctylsulfosuccinate
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Formulation: Emulsifying liquid



Our range of organic products stems from our commitment to sustainability and offers a diverse array of solutions suitable for organic farming.



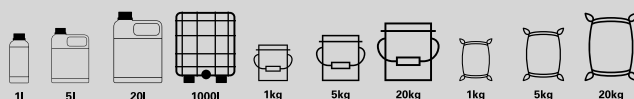
PROMIECO. ORGANIC AGRICULTURE

PRODUCTS CERTIFIED IN EUROPE FOR ORGANIC FARMING

PRODUCT RANGE:

BIO-MUCIGEL®	pg. 33
BIO-HUMUSLIGHT® M.O.	pg. 33
BIO-CYTO FLOW® AMIN 80	pg. 34
BIO-CYTOLAN® POLVO CONCENTRADO	pg. 34

Packaging formats:





BIO-MUCIGEL®

LIQUID MIXTURE OF AMINO ACIDS AND SEAWEED EXTRACT

Fertigation



Guaranteed composition (% w/w)

0.8%	Total Nitrogen (N)
0.5%	Organic Nitrogen (N)
2%	Free amino acids
1.8%	Alginic acid
0.3%	Mannitol

Formulation: Soluble concentrate

BIO-MUCIGEL® is based on *Ascophyllum nodosum* seaweed extracts rich in proteins, polysaccharides and natural hormones or substances with hormonal activity in the appropriate proportion.

Promotes the development and formation of new roots, increases the density of fine root hairs and the number of lateral roots. In addition, it promotes the secretion of mucilaginous substances that improve root protection and nutrient absorption.

BIO-MUCIGEL® is indicated to be used throughout the entire growing cycle, but with special emphasis from transplanting or germination to flowering.

BIO-MUCIGEL® can also help against endoparasitic nematodes, reducing the number of nodules and nematode eggs.

BIO-HUMUSLIGHT® M.O.

NK ORGANIC LIQUID FERTILISER OF PLANT ORIGIN

Fertigation



Guaranteed composition (% w/w)

2.7%	Total Nitrogen (N)
2.5%	Organic Nitrogen (N)
5.8%	Total Potassium Oxide (K ₂ O)
20.1%	Organic Carbon (C)
8.1 C/N Ratio (Corganic/Norganic)	

Formulation: Soluble concentrate

This formulation provides organic matter to the soil (of plant origin), to improve its texture and the retention and absorption of nutrients.

Its use is recommended on coarse-textured, compacted, salinized soils, or on soils with an excessive concentration of trace elements.



BIO-CYTO FLOW® AMIN 80

AMINO ACIDS

Fertigation and foliar application

Guaranteed composition (% w/w)

13.8% Total Nitrogen (N)
12.9% Organic Nitrogen (N)
80% Free amino acids

Formulation: Soluble powder

Hydrolysed protein of plant origin (soy) that provides a high content of free amino acids, suitable for any crop.

It has a balanced aminogram, with 18 different amino acids in the most appropriate proportions to help plants tolerate and recover from episodes of abiotic stress (frost, drought, etc.).

The amino acids provided exogenously allow the plant to save energy in its synthesis or absorption from the soil, and allocate this energy to vegetative growth, flowering and fruiting.

Applied together with nutrients or phytosanitary products, various amino acids have complexing capacity that helps the absorption of nutrients and increases the effectiveness of the active ingredients of pesticides and fungicides.

BIO-CYTOLAN® POLVO CONCENTRADO

SEAWEED EXTRACT

Fertigation and foliar application

Guaranteed composition (% w/w)

2.5% Total Nitrogen (N)
17% Water-soluble Potassium Oxide (K₂O)
5% Mannitol

Formulation: Soluble powder

BIO-CYTOLAN® POLVO CONCENTRADO is an extract of seaweed from the species *Ascophyllum nodosum* that contains natural elements that stimulate all the physiological processes of the plant.

Its application stimulates the metabolism and increases the photosynthetic capacity, which will allow us to overcome the tensions caused by high temperatures or frost, by excess or lack of water.

Its high percentage of organic matter and natural metabolites make BIO-CYTOLAN® POLVO CONCENTRADO a great activator of the soil microbiota that also favors the development of the root system.



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Soil Conditioners



Ancillary



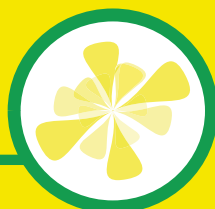
NPK fertilisers



**Fertilisers and
deficiency correctors**



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Specialties



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