

An aerial photograph of a textile mill, showing rows of looms arranged in a grid pattern. The looms are dark with yellow highlights, and the rows are separated by light-colored aisles. The perspective is from above, looking down at the rows of machinery.

servalesa®

**PRODUCT
CATALOGUE**

DEVELOP YOUR METHOD OF FARMING

We are a Spanish company dedicated to **the development of sustainable technology applied to agriculture**. We have more than 40 years of experience in the sector, which has positioned us as **market-benchmarks in biostimulants**.

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COMPREHENSIVE BIOSOLUTIONS MODEL

In a world where consumers are increasingly sensitive to food quality, we must support farmers to ensure safe, sustainable and profitable agricultural production.

Our proposal is based on the management and use of sustainable technologies, designed for every moment of need during the crop cycle. In this way, we manage to restore balance to soils and crops, thus maximising the farmer's profitability.



TO PROTECT

With the use of technology to address pests and diseases with sustainable alternatives

- Pest management
- Disease management
- Foliar treatment optimisation

TO NURTURE

Using technology based on micro and macro-elements of a high level of assimilation

- Completing phases of high nutritional demand
- Correcting shortcomings / deficiencies
- Optimising the nutritional balance of crops to achieve higher yields

TO STIMULATE

Through the use of technology designed to activate various key metabolic routes at critical moments in the crop cycle

- Abiotic stress management
- Optimisation of plant development
- Improvement of quality parameters



TO REGENERATE

The soil, the rhizosphere and the root using microbiology-based technology, developed by Biológica Nature

- Biofertilisation (N_2 fixation, P_2O_5 and K_2O solubilisation)
- Optimisation of water resources
- Soil regeneration of your microbiota
- Protection of the root and rizosphere



BIOSTIMULANTS WOW!

THE WOW! EFFECT OF BIOSTIMULANTS SERVALESA

The WOW! effect comes from a perfect combination of elements.



R&D FOR OUR BIOSTIMULANTS

Our aim is to surprise through innovation and technology. To create unique products that meet the needs of today's agricultural sector.



AGRONOMIC DEVELOPMENT

We study, fully understand and can demonstrate the efficacy and scope of our biostimulants. We devote a large part of our efforts and resources to the positioning and agronomic development of our biostimulants.



THE ART OF MANUFACTURING

Our experience and research work over four decades has resulted in the development and creation of unique formulations. One of the main things that sets our biostimulants apart.



THE EMERGENCE OF BIOSTIMULANTS

The role of biostimulants in today's agriculture is crucial. Thanks to our Regulatory team, we have become pioneers in registration processes and have been able to position our wide range of biostimulants with registration and in accordance with the law.



A UNIQUE SELLING PROCESS

A cycle should be closed in the best possible way. At Servalesa we do this with a sales process and customer support where the friendliness and transparency of our team, along with the quality and safety of our products, characterise us and set us apart from our competitors in the market.



QUART DE POBLET HAS A WOW EFFECT ON EVERYONE!

And we don't just say so ourselves (that wouldn't look too good...), but those who visit us say so. Our new facilities are equipped with the latest technology for the research, development and manufacture of biostimulants.

3 RANGES OF BIOSTIMULANTS THAT WILL WOW YOU!



Sigue leyendo





3 UNIQUE RANGES

One of the keys to the WOW! factor that our biostimulants produce is that they comprise 3 unique ranges consisting of over 45 products that position Servalesa as a benchmark company in biostimulant products.



NEOESTIM

The range set to revolutionise the biostimulant sector. This group of products evolves the conventional concept of biostimulants and includes active ingredients and modes of action that make them unique.



B'NATURE

The range of biostimulants based on micro-organisms. These products are unique on the market thanks to the Biological Nature seal of approval. Our technology *partner* is a team with more than 30 years of experience, dedicated to researching, developing and producing microorganism-based formulations in-house.



BIOSTIMULANTS

The Servalesa range of biostimulants are unique formulations that have contributed to the positioning of Servalesa as a benchmark company. The aim of this range is to evolve and complement conventional formulations to achieve excellence in effectiveness.



The biostimulants of the future

Exclusive range of latest generation of biostimulants, aimed at stimulating and/or improving the physiology of the plant in order to strengthen it at key stages of the crop cycle, to obtain a higher yield and a better quality of the harvest.

- **Routes activation metabolic in phases critics** to contribute to a optimal development in the different moments of the growing cycle
- **Exclusive formulations** based on specific active substances and declared in the label to cover different crop needs and contribute to optimal management in critical phases
- **Registered and authorised by anses (france)** as biostimulants and with amm no.

servalesa®

BIOSTIMULANTS
WOW!



MAS RAIZ+®

Neoestim

SOIL AND ROOT OPTIMIZER

Biostimulant based on GABA, glutamic acid and soluble sugars

Nº AMM: 1180618



PCa2 MAX®

Neoestim

SOIL AND ROOT OPTIMIZER

Biostimulant based on silicon dioxide, vitamin B1 and algae extracts

Nº AMM: 1210051



QUALIFUN®

Neoestim

CRITICAL MOMENTS

Biostimulant based on hydrogen sulfate

Nº AMM: 1180617



SERGOMIL® L60

Neoestim

CRITICAL MOMENTS

Biostimulant based on sucrose derivatives and systemic copper

No AMM: 1180403



SIDEFUN®

Neoestim

CRITICAL MOMENTS

Biostimulant based on unsaturated organic acids

Nº AMM: 1180613



TANISER®

Neoestim

CRITICAL MOMENTS

Biostimulant based on unsaturated fatty acids and condensed tannins

Nº AMM: 1190699



MAS RAIZ®+

✓ STIMULATES ROOT SYSTEM DEVELOPMENT

Biostimulant product authorized in France with registration number **AMM 1180618**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries.



FEATURES AND APPLICATIONS

MAS RAIZ®+ is a biostimulant product formulated with saccharides and proteogenic and non-proteogenic amino acids, which plays a fundamental role in the development of the root system, in the increase of seed germination rate and in the development of seedlings (the priming effect). The biostimulant effect of **MAS RAIZ®+** is based on the combined effect of its main components, soluble sugars, glutamic acid and gamma-aminobutyric acid (GABA), which provide a source of energy that translates into increased rooting capacity, establishment of newly transplanted crops and improved root-rhizosphere interaction.

On the one hand, the function of GABA as a biostimulant is based on its capacity as a signaling molecule in the regulation of growth and development. It is also an important component of nitrogen metabolism and as a regulator of antioxidant systems. All these functions are decisive in the early stages of cultivation, when the root system is in the initial stages of development.

On the other hand, saccharides or sugars are the initial links of primary metabolites generated during photosynthesis through the fixation of atmospheric CO₂. The metabolic and physiological role of sugars is diverse, ranging from the formation of basic structures of new plant tissues (cell wall) to the synthesis of molecules to accumulate energy.



CONTENT AND GUARANTEED RICHNESS

Dry matter	51.40 %
Soluble sugars	13.00 % (w/w)
Glutamic acid	1.30 % (w/w)
Gamma-aminobutyric acid (GABA)	1.10 % (w/w)
Boron (B)	0.20 % (w/w)
Iron (Fe)	0.80 % (w/w)
Manganese (Mn)	1.00 % (w/w)
Molybdenum (Mo)	0.05 % (w/w)
Zinc (Zn)	0.80 % (w/w)



DOSE

· Leaf application: **250 ml/ha**

Crop

Vine: **1.5 L/ha**

Stone and seed-bearing fruit trees: **1.5 L/ha**

Corn, protein, cruciferous and protein crops: **1.2 L/ha**

Vegetable crops: **1.50 L/ha**



ALTERNATIVE FOR ORGANIC FARMING >



MAS RAIZ® ECO

**POWER DEVELOPMENT
OF YOUR ROOTS**

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ECO CATALOG HOMOLOGUES





PCa2 MAX®

UNLOCKS SOIL POTENTIAL

Biostimulant product authorized in France with registration number **AMM 1210051**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries.



FEATURES AND APPLICATIONS

PCa2® MAX is a biostimulant product formulated with silicon dioxide, thiamine hydrochloride and seaweed extract, which plays a key role in unlocking soil nutrients and promoting their availability to optimise nutrition and significantly influence crop growth and improve quality parameters (caliber and °brix). The biostimulant effect of **PCa2® MAX** is based on the combined effect of its main components, silicon dioxide, vitamin B1 and algae extract, which synergistically contribute to making nutrients available to the crops.

In order for silicon to be assimilated by the plant, it must be in an amorphous and opaline state which, when hydrolyzed with water, forms orthosilicic acid. **PCa2® MAX** contains high concentrations of orthosilicic acid which, when applied directly to the soil, has numerous benefits:

1. Firstly, it increases the availability of phosphorus as it can react with the complexes and take the place of the phosphate ion, releasing the phosphorus and increasing its availability in the soil.
2. It also has the ability to leach heavy metals by creating complexes with aluminium, iron, manganese, etc.
3. It can influence the CEC and increase water retention in the soil. It can also reduce salinity.
4. High silicon concentrations in the soil-plant system can increase the proportion of air-filled space, contributing to a better oxygenation of the rhizosphere and increasing the oxidizing power of heavy metals.

On the other hand, it is important to highlight the fundamental role of Vitamin B1 in the formulation — it is a growth-promoting agent and plant bioactivator which improves the root condition and metabolic processes of the plant, protecting it against abiotic stress phenomena and improving the production and quality of the harvest. Finally, the role of seaweed extract as a soil quality improver and its high content of matrix and reserve polysaccharides, bioactivators and bioantioxidants, in addition to other growth factors, should also be highlighted.



CONTENT AND GUARANTEED RICHNESS

Dry matter	35.00 %
Total silicon dioxide (SiO ₂)	20.70 % (w/w)
Thiamine hydrochloride (vitamin B1)	0.02 % (w/w)
Algae extract	1.00 % (w/w)
Total potassium oxide (K ₂ O)	9.70 % (w/w)



DOSE

· Irrigation application:

Crop

Leafy vegetables: **8 L/ha**
 Fruiting vegetables: **8 L/ha**
 Potato: **8 L/ha**
 Corn: **8 L/ha**
 Cereals: **8 L/ha**
 Soybeans: **8 L/ha**
 Vines: **1.5 L/ha**
 Stone and seed fruit trees: **1.5 L/ha**



PEELS®

✓ STIMULATES AND STRENGTHENS THE SKIN OF YOUR CROPS

Biostimulant product authorized in the Czech Republic with registration number **5461**



CONTENT AND GUARANTEED RICHNESS

Sorbic acid	27.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	12.00 % (w/w)
Salicylic acid	1.00 % (w/w)



FEATURES AND APPLICATIONS

PEELS® is a product formulated based on a concentrated solution of potassium in the form of an inorganic salt, designed to improve the quality of the skin of fruit trees.

PEELS® is specially designed to stimulate and reinforce the cell wall in fruit trees, optimising resistance to abiotic stress phenomena and other critical moments in the crop cycle, contributing to the maintenance of turgor and the osmotic balance.



DOSE

· Leaf application: **250 ml/hl**



QUALIFUN®

✓ METABOLISM ACTIVATOR

Biostimulant product authorized in France with registration number **AMM 1180617**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries.



CONTENT AND GUARANTEED RICHNESS

Dry matter	41.10 %
Total water-soluble sulphur dioxide (SO ₂)	28.00 % (w/w)
Total nitrogen (N)	5.00 % (w/w)
Ammoniacal nitrogen (N)	4.90 % (w/w)



FEATURES AND APPLICATIONS

QUALIFUN® is a biostimulant product formulated with ammonium hydrogen sulphate, which plays a fundamental role in stimulating plant growth and improving fruit size. The biostimulant effect of **QUALIFUN®** is based on the combined effect of its main components, systemic sulphate and different chemical forms of oxygen, which exert a unique mode of action.

QUALIFUN® is not only an aqueous formulation of systemic soluble sulfur since the product is formulated in a medium of high oxidation with a significant concentration of different chemical forms of oxygen. These reactive oxygen species (ROS) are directly involved in the stimulation and activation of different key metabolic systems in critical moments of the cycle, inducing optimal development of the plant and contributing to improve quality parameters of the harvest.

Its physiological role goes beyond the merely nutritional. Although the sulfur plays a fundamental role in the formation of proteins, chlorophylls and other compounds of the primary metabolism that ensure optimal vigor and development of the plant, also plays a key role against situations of abiotic stress, as it is a fundamental piece in the synthesis of compounds linked to free radical detoxification mechanisms usually generated in such situations.



DOSE

· Leaf application: **250 ml/hl**

Crop

Vine: **1.5 L/ha**
Stone and Seed Fruit Trees: **1.5 L/ha**
Corn: **1.0 L/ha**
Vegetable crops: **1.25 L/ha**



SERGOMIL® L60

✓ A ONE-OF-A-KIND

Biostimulant product authorized in France with registration number **AMM 1180403**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries.



FEATURES AND APPLICATIONS

SERGOMIL® L60 is a biostimulant product formulated with saccharide derivatives as acid monomers, which play a role in inducing plant vigor, growth and development. Induction of plant vigor, growth and development. **SERGOMIL® L60** is based on a unique formulation, developed by Servalesa, which combines two main components: saccharide derivatives (of plant origin, obtained by biological fermentation and containing bioactive molecules) and systemic ionic copper, with the ability to penetrate inside the crops, exerting a diverse mode of action.

On the one hand, **SERGOMIL® L60** is capable of supplying and increasing copper systemically in crops. The benefits of increasing copper levels in the plant are multiple because this element is part of several enzyme complexes linked to photosynthesis and respiration. On the other hand, the increase of copper in crops mitigates several physiopathologies associated with its deficiency.

SERGOMIL® L60 stimulates the biosynthesis and accumulation of lignin in plant cell walls, thus strengthening plant tissues and improving fruit firmness and optimizing crop quality.

SERGOMIL® L60 activates key metabolic processes and pathways for the biosynthesis of proteins and specific secondary metabolites associated with critical phases of the crop cycle, contributing to improve the plant development of the crop.



CONTENT AND GUARANTEED RICHNESS

Dry matter	37.00 %
Sucrose derivative	19.50 % (w/w)
Total copper (Cu)	5.50 % (w/w)
Water-soluble copper (Cu)	5.30 % (w/w)



DOSE

· Leaf application:

Crop

All the crops except corn and potato: **1.2 L/ha**
Fruit trees, vegetables and vines: **1.8 L/ha**



ALTERNATIVE FOR ORGANIC FARMING >



SERGOMIL® ECO

NEXT GENERATION
METABOLIC ACTIVATOR

See page 76
ECO CATALOG HOMOLOGUES





SIDEFUN®

✓ STRENGTHENS THE CELL WALL

Biostimulant product authorized in France with registration number **AMM 1180613**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries



FEATURES AND APPLICATIONS

SIDEFUN® is a biostimulant product formulated with unsaturated organic acids in the form of potassium salts, which play a fundamental role in optimizing plant growth parameters, improving yield and crop quality. The biostimulant effect of **SIDEFUN®** is based on the combined effect of its main components, unsaturated organic acids at a concentration of 19.00 % w/w and potassium oxide at 7.90 % w/w, which exert a unique mode of action.

The unsaturated organic acids contained in **SIDEFUN®** are acids with antioxidant activity and multiple functions in the plant associated with photosynthesis and activation of key metabolic pathways for optimal development and quality. This antioxidant effect alleviates the oxidative stress generated in the cell wall at critical crop times, which causes cell degradation leading to loss of yield and crop quality. Applying **SIDEFUN®** will result in improved fruit firmness and optimizing cell wall conditions, thanks to the role played by unsaturated organic acids.

On the other hand, potassium is one of the essential macronutrients necessary for normal plant growth and development, and plays an important role in plant water relations and in the regulation of the osmotic potential of plant cells. Potassium is a cofactor for numerous key enzymes that control basic metabolic reactions in plants, and is important in osmoregulation, cell extension, stomatal conductance, photosynthesis, respiration, solute transport and protein synthesis.



CONTENT AND GUARANTEED RICHNESS

Dry matter	26.00 %
Unsaturated organic acids	19.00 % (w/w)
Potassium oxide (K ₂ O)	7.90 % (w/w)



DOSE

· Leaf application: **300 ml/ha**

Crop

Vines and Vegetables: **1.8 L/ha**
Stone and Pome Fruit Trees: **2.4 L/ha**



TANISER®

✓ YOUR ALLY IN CRITICAL MOMENTS

Biostimulant product authorized in France with registration number **AMM 1190699**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries



CONTENT AND GUARANTEED RICHNESS

Dry matter	33.00 %
Unsaturated organic acids	6.00 % (w/w)
Potassium oxide (K ₂ O)	2.40 % (w/w)
Condensed tannins (catechin)	3.00 % (w/w)



FEATURES AND APPLICATIONS

TANISER® is a biostimulant product formulated with unsaturated organic acids in the form of potassium salts and condensed tannins (Catechin), which play a fundamental role in optimizing plant growth parameters, improving yield and crop quality. The biostimulant effect of **TANISER®** is based on the combined effect of its main components, unsaturated organic acids, potassium oxide and condensed tannins (catechin), which exert a unique mode of action.

The unsaturated organic acids contained in **TANISER®** are acids with antioxidant activity and multiple functions in the plant associated with photosynthesis and the activation of key metabolic pathways for optimal development and quality. This antioxidant effect alleviates the oxidative stress generated in the cell wall at critical crop times, which causes cell degradation leading to loss of yield and crop quality. The antioxidant role of condensed tannins, which are phenolic compounds that influence physiological and biochemical processes including photosynthesis, ion uptake, membrane permeability, enzymatic activities, flowering, heat production, plant growth and development, should be emphasized. The combination of these two compounds has a biostimulant effect as we have observed in efficacy trials conducted with **TANISER®**, promoting optimal growth at critical crop cycle times.

Potassium participates in the osmotic regulation of the plant in the face of water deficits, is the main cation in the stomatal opening and closing processes and in the maintenance of cellular electron neutrality. It activates numerous enzyme systems involved in photosynthesis and respiration. It is also involved in protein synthesis and in the metabolism of sugars, including their translocation, which enables fruit development.



DOSE

· Leaf application: **300 ml/ha**

Crop
Vineyard: **1.8 L/ha**
Pome fruit trees: **1.8 L/ha**
Strawberry: **1.8 L/ha**



VENUSER® FULL

✓ STIMULATES THE PLANT AT CRITICAL MOMENTS

Biostimulant product authorized in the Czech Republic with registration number **5464**. Biostimulant commercialized under Mutual recognition (Regulation (UE) 2019/515) in other UE countries



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	6.00 % (w/w)
Ammoniacal nitrogen (N)	6.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	6.00 % (w/w)
Water-soluble sulphur trioxide (SO ₃)	32.00 % (w/w)
Sorbic acid	18.00 % (w/w)



FEATURES AND APPLICATIONS

VENUSER® FULL is a stable solution of nitrogen in ammoniacal form with potassium in the presence of sulphur in a high concentration. Due to its systemic absorption it can be applied by leaf spraying to any crop. **VENUSER® FULL** complements conventional nutrition and plays a bioactivating role when applied to crops.

The application of **VENUSER® FULL** leads to more efficient fertilisation with greater assimilation by the crops, increasing the profitability of fertilisation. Thanks to its unique composition, **VENUSER® FULL** participates in the stimulation of the plant's metabolic processes at critical crop cycle times.



DOSE

· Dosage: **3-5 ml/ha**

Crops: Vines, vegetables, fruit trees, red fruits, tropical fruits.

For more information about uses, applications and water quantity, please contact Servalesa S.L.U. technical department.

Products developed based on microorganisms

Servalesa's B'Nature range consists of a careful selection of products based on microorganisms and other special products developed by Biológica Nature and Simbiom, our technology suppliers.

The application of biostimulants and biofertilisers included in the range provide sustainable solutions to soil and plant problems in order to increase the yield and quality of crops.



**BIOLÓGICA
NATURE**



- **Products based on microorganisms and/or secondary metabolites**
- **Microbiota soil enhancers**, increasing the amount of beneficial soil microorganisms and exerting control over other pathogens
- **Soil regenerators**, maintenance of soil fertility and its physicochemical conditions. In turn, they stimulate the rhizosphere as well as root and plant development

servalesa®

BIOSTIMULANTS
WOW!



RIZOBACTER® N®

B'Nature

ATMOSPHERIC NITROGEN FIXER

Biofertilizer based on *Azotobacter chroococcum*

Nº Reg: 0034776/21



FUSVER®

B'Nature

REGENERADOR DE SUELOS

Microbial biostimulant based on *Bacillus subtilis*

Nº Reg: F0004083/2030



NOVA®

B'Nature

SOIL REGENERATOR

Microbial Biostimulant based on *Lysinibacillus xylanilyticus*

Nº Reg: F0004105/2030



RENOV® MICRO

B'Nature

SOIL REGENERATOR

Microbial Biostimulant based on: *Bacillus megaterium*, *Bacillus amyloliquefaciens*, *Pseudomonas fluorescens* y *Bacillus siamensis*

Nº Reg: F0004270/2031



RENOV® TRICCO

B'Nature

SOIL REGENERATOR

Microbial biostimulant based on *Trichoderma harzianum*

Nº Reg: 0034780/21



RENOV® SUPER 6

B'Nature

SOIL REGENERATOR

Biostimulant based on a consortium of 6 rhizobacteria:
Bacillus subtilis, *Bacillus pumilus*, *Bacillus siamensis*, *Bacillus amyloliquefaciens*,
Bacillus megaterium, *Pseudomonas fluorescens*

Nº Reg: 0034775/21



FUSVER®

- ✓ **SOIL REGENERATOR AND ACTIVATOR OF METABOLIC PATHWAYS AT CRITICAL CROP TIMES. MICROBIAL BIOSTIMULANT BASED ON *Bacillus Subtilis***

FERTILISATION WITH NON-MYCORRHIZAL MICROORGANISMS

Registration number in the Spanish Register of Fertilizer Products: **F0004083/2030** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

<i>Bacillus subtilis</i> (strain BC03-Bss)	4.67 x 10⁸ UFC/ml
Nitrogen (N) total	9.00 % (w/w)
Ureic nitrogen (N)	9.00 % (w/w)
Water-soluble phosphorus pentoxide (P ₂ O ₅)	3.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	3.00 % (w/w)



FEATURES AND APPLICATIONS

FUSVER® is a biostimulant based on a concentrate of the plant growth-promoting rhizobacterium (PGPR) *Bacillus subtilis*. This bacterium colonises the rhizosphere very quickly, greatly benefiting the soil and the plant. In combination with the microorganism, the product incorporates an adequate balance in macronutrients, increasing and improving the fertilising effect. Through leaf application, they also increase plant vigour and strength against adverse abiotic conditions.

Rhizobacteria are the main edaphic biotic components. They provide considerable benefits to both the crop and the soil: they improve its physicochemical and biological conditions and are responsible for its fertility; they intervene in the biological cycle of various essential nutrients, decompose organic remains, transforming them into elements that can be assimilated by the plant, release various organic compounds with biostimulant effect and promote plant growth and increase photosynthetic efficiency and the chlorophyll content of the plant.



DOSE

Vegetables:

- Leaf application: **4 L/ha**
- Irrigation application: **4 L/ha**

Apply at the end of irrigation to encourage the development of rhizobacteria, and at the same time avoid losses due to washing. Conduct 2-3 applications with intervals of 10-15 days between them.



FUSVER® ECO

- ✓ **SOIL REGENERATOR BASED ON RHIZOACTERIA OF THE *Bacillus* genus**

MYCORRHIZAL FUNGUS INOCULATION

Registered as Fertilizer, for Biological Use, at the Ministry of Agricultural and Forestry Policies of Italy. Registration number in process.



CONTENT AND GUARANTEED RICHNESS

Non-composted simple plant amendment	
Mycorrhizae content	0.001%
Rhizosphere bacteria content	1 x 10⁸ CFU/g



FEATURES AND APPLICATIONS

FUSVER® ECO is a biofertilizer based on mycorrhizal fungi and rhizobacteria of the *Bacillus* genus, specially selected for their effectiveness as plant growth promoters (PGPR).

The mycorrhizal microorganisms present rapidly stimulate the metabolic processes of the rhizosphere, improving soil fertility. At the same time, they establish a beneficial interaction with the plant, which results in increased crop growth and vigor, greater tolerance to unfavorable abiotic conditions, as well as higher crop yields.



DOSE

- Dosage: **4 L/ha**

It can be applied on all types of crops, directly to the soil in an aqueous solution and/or incorporated into irrigation water.



MYCODRIP®

- ✓ **HIGH CONCENTRATION OF MYCORRHIZAE. OPTIMISES ROOT DEVELOPMENT**

Authorized in the Czech Republic with registration number 3862 commercialized under mutual recognition (Regulation (UE) 2019/515) in other UE countries.

Marketing authorisation number: **3862**



CONTENT AND GUARANTEED RICHNESS

Rhizopagus irregularis **4000 spores/g ***
* minimum spore concentration



FEATURES AND APPLICATIONS

MYCODRIP® is a biofertiliser based on a high concentration of spores of mycorrhizal fungi of the *Rhizopagus spp* genus. This high concentration of spores (minimum 4000 spores/g) favours rapid root colonisation and, thanks to symbiosis, enhances the development of the root mass: main root, secondary roots and absorbing hairs.

With **MYCODRIP®** we improve the plant's capacity to absorb nutrients and water, mitigating the effects caused by drought and soil salinity. It also improves crop establishment following seedling transplantation and improves yield and crop quality.



DOSE

- Irrigation application: **250-500 g/ha**
- In mixture with substrate: **250-500 g/m³**

NICAN®

- ✓ **LEAF BIOSTIMULANT THAT ACTIVATES METABOLIC PATHWAYS**

Biostimulant product authorized in the Czech Republic under registration number **5462** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

EDTA-chelated iron (Fe) **0.30 % (w/w)**
EDTA-chelated manganese (Mn) **1.60 % (w/w)**
EDTA-chelated zinc (Zn) **0.10 % (w/w)**



FEATURES AND APPLICATIONS

NICAN® is a liquid blend of microelements to improve plant nutritional and physiological conditions, plant growth and leaf stimulation.

The application of the product protects the plant against unfavourable abiotic conditions, producing stronger and more vigorous plants and, ultimately, higher crop yields. **NICAN®** is also an activator of key metabolic pathways at critical moments in the crop cycle.

The product can be applied to all types of crops: vegetables, fruit trees, vines, ornamental plants, etc.



DOSE

- Leaf application: **3-5 L/ha**



NOVA®

- ✓ **STIMULATOR OF METABOLIC PATHWAYS AT CRITICAL CROP TIMES. MICROBIAL BIOSTIMULANT BASED ON *Lysinibacillus xylanilyticus*.**

FERTILISATION WITH NON-MYCORRHIZAL MICROORGANISMS

Registration number in the Spanish Register of Fertilizer Products **F0004105/2030** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

<i>Lysinibacillus xylanilyticus</i> (strain Bc05-Lx)	1.54 x 10⁸ UFC/ml
EDTA-chelated iron (Fe)	0.40 % (w/w)
EDTA-chelated manganese (Mn)	1.50 % (w/w)
EDTA-chelated zinc (Zn)	0.10 % (w/w)



FEATURES AND APPLICATIONS

NOVA® is a biofertiliser based on a concentrate of the plant growth-promoting rhizobacterium (PGPR) *Lysinibacillus xylanilyticus*. The bacteria colonise the rhizosphere very quickly, greatly benefiting the soil and the plant. Combined with the microorganism, the product incorporates an adequate balance of EDTA-chelated microelements, increasing and improving the fertilising effect. Through leaf application, they also increase plant vigour, strengthening it against adverse abiotic conditions.

Rhizobacteria are the main edaphic biotic components. They provide considerable benefits to both the crop and the soil: they improve its physicochemical and biological conditions and are responsible for its fertility; they intervene in the biological cycle of various essential nutrients, decompose organic remains, transforming them into elements that can be assimilated by the plant, release various organic compounds with biostimulant effect and promote plant growth and increase photosynthetic efficiency and the chlorophyll content of the plant.



DOSE

Vegetable crops:
 · Leaf application: **4 L/ha**
 · Irrigation application: **4 L/ha**



RENOV® MICRO

- ✓ **MICROBIAL BIOSTIMULANT, SOIL REGENERATOR AND ENERGISER FOR VEGETABLES. CONSORTIUM OF MICROORGANISMS BASED ON *Bacillus spp.* and *Pseudomonas spp.***

FERTILISATION WITH NON-MYCORRHIZAL MICROORGANISMS

Registration number in the Spanish Register of Fertilizer Products **F0004270/2031** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

<i>Bacillus megaterium</i> (strain BC07-Bmeg)	1.10 x 10⁷ UFC/ml
<i>Bacillus amyloliquefaciens</i> (strain BC04-Ba)	1.00 x 10⁷ UFC/ml
<i>Pseudomonas fluorescens</i> (strain BC06-Pf)	1.40 x 10⁷ UFC/ml
<i>Bacillus siamensis</i> (strain BC02-Bsm)	1.40 x 10⁷ UFC/ml



FEATURES AND APPLICATIONS

RENOV® MICRO is a biostimulant based on a concentrate of plant growth-promoting rhizobacteria (PGPR). These bacteria colonise the rhizosphere very quickly, competing for space with other organisms and greatly benefiting the soil and plant.

Rhizobacteria are the main edaphic biotic components. They provide considerable benefits to both the crop and the soil: they improve its physicochemical and biological conditions and are responsible for its fertility, they intervene in the biological cycle of various essential nutrients, decompose organic remains, transforming them into elements that can be assimilated by the plant, release various organic compounds with biostimulant effect and promote plant growth and increase photosynthetic efficiency and the chlorophyll content of the plant. They enhance the root system, protecting it against unfavourable abiotic conditions.



DOSE

Vegetable crops:
 · Irrigation application: **10-15 L/ha**



RENOV® SUPER 2

- ✓ **SOIL REGENERATOR AND ENERGISER SPECIFICALLY DESIGNED FOR USE IN WOODY CROPS. PRODUCT FORMULATED BASED ON A CONSORTIUM OF 2 PLANT GROWTH-PROMOTING RHIZOBACTERIA.**

Registered as Fertilizer, for Biological Use, at the Ministry of Agricultural and Forestry Policies of Italy under the number **0034780/21** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Non-composted simple plant amendment	
Mycorrhizae content	0.001%
Rhizosphere bacteria content	1.1 x 10⁸ UFC/ml



FEATURES AND APPLICATIONS

RENOV® SUPER 2 is a biostimulant based on plant growth-promoting rhizobacteria (PGPR). These bacteria quickly establish themselves in the rhizosphere of the plant, living with other organisms in the same space and greatly benefiting the soil and the plant. **RENOV® SUPER 2** is composed of two strains of plant growth-promoting rhizobacteria (PGPR).

Bacillus subtilis (strain BC03-Bss)
Bacillus megaterium (strain BC07-Bmeg).

Rhizobacteria provide a lot of crop benefits, such as the improvement of physicochemical and biological conditions and are responsible for its fertility. In addition, rhizobacteria participate in the decomposition of organic remains and their transformation into elements that can be assimilated by the plant, thus releasing organic compounds with biostimulant and plant growth-promoting effects. They also act as root system developers and increase protection against abiotic conditions unfavourable to the plant.



DOSE

Irrigation application:
· Woody crops: **5-15 L/ha**
· Other crops: **5-15 L/ha**



RENOV® SUPER 6

- SOIL REGENERATOR AND ENERGISER FOR ALL TYPES OF CROPS. PRODUCT FORMULATED BASED ON A CONSORTIUM OF 6 PLANT GROWTH-PROMOTING RHIZOBACTERIA.**

Registered as Fertilizer, for Biological Use, at the Ministry of Agricultural and Forestry Policies of Italy under the number **0034775/21** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Non-composted simple plant amendment	
Mycorrhizae content	0.001%
Rhizosphere bacteria content	4.9 x 10⁷ UFC/g



FEATURES AND APPLICATIONS

RENOV® SUPER 6 is a biostimulant based on plant growth-promoting rhizobacteria (PGPR). These bacteria quickly establish themselves in the rhizosphere of the plant, living with other organisms in the same space and greatly benefiting the soil and the plant. **RENOV® SUPER 6** is composed of six strains of plant growth-promoting rhizobacteria (PGPR), creating great synergies and benefits for the plant.

Bacillus subtilis (strain BC03-Bss)
Bacillus pumilus (strain BNT10-Bp)
Bacillus siamensis (BC02-Bsm)
Bacillus amyloliquefaciens (strain BC04-Ba)
Bacillus megaterium (strain BC07-Bmeg)
Pseudomonas fluorescens (strain BC06-Pf).

The **RENOV® SUPER 6** application has the benefit and mode of combined action of the different strains included in its formulation that will allow:

1. Colonize the rhizosphere with beneficial microorganisms, capable to generate biofilms, volatile compounds and other elements that contribute to optimal root development, improving the interaction symbiotic rhizosphere-soil, reducing the moments of exposure to critical phases of the crop cycle.
2. Regenerate soils, through exogenous input and bioaugmentation of beneficial microorganisms. Rhizobacteria participate in the decomposition of organic remains and their transformation into elements assimilable for the crop, thus releasing organic compounds with biostimulant effect and plant growth promoters.
3. Ability to solubilize phosphorus and potassium.



DOSE

Irrigation application:
· Woody (fruit trees, citrus and vineyard): **5-15 L/ha**
· Vegetable crops: **5-15 L/ha**
· Other crops: **5-15 L/ha**



Product certified for use in organic agriculture by the Ministry of Agriculture in Italy.



RENOV® TRICCO

- ✓ **SOIL REGENERATOR AND ACTIVATOR OF METABOLIC PATHWAYS AT CRITICAL CROP CYCLE TIMES.**

MICROBIAL BIOSTIMULANT BASED ON *Trichoderma harzianum*

TARGETED PRODUCT.

MYCORRHIZAL FUNGUS INOCULATION.

Registered as Fertilizer, for Biological Use, at the Ministry of Agricultural and Forestry Policies of Italy under the number **027559/19** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Type of organic amendment	Leonardite
Mycorrhizae content	0.001%
Bacterial content of the rhizosphere	1 x 10 ³ UFC/g
Trichoderma content	1 x 10 ⁷ UFC/g



FEATURES AND APPLICATIONS

RENOV® TRICCO is a soil regenerator based on mycorrhizal fungi, beneficial rhizobacteria and microorganisms of the genus *Trichoderma*. Its use generates an increase in soil microbial flora and fertility, in addition to favouring the absorption of water and nutrients. It enhances the root system, protecting it against unfavourable abiotic conditions. It achieves higher crop yields due to an overall increase in plant vigour and strength.

RENOV® TRICCO can be applied to all types of crops: vegetables, strawberries, fruit trees, citrus trees, vines, olive trees, cereals, ornamental plants, etc. It should not be used with acid reaction products, NPK fertilisers, calcium, sulphur, copper, fungicide products or any other type of biocide. If any of these products are applied to the crop, apply **RENOV® TRICCO** again.



DOSE

Irrigation application:

- Short-cycle crops: **1-2 kg/ha** distributed throughout the crop or vegetation cycle.
- Long-cycle crops: **2-4 kg/ha** distributed throughout the crop or vegetation cycle.
- Seedbeds: **10-20 g/1.000 plants**. Apply after the germination of the seedlings and repeat a second application as soon as the first leaves appear.

RIZOBACTER® N

- ✓ **NITROGEN FIXER. BIOFERTILISER BASED ON RHIZOSPHERE BACTERIA *Azotobacter chroococcum***

MYCORRHIZAL FUNGUS INOCULATION

Registered as Fertilizer, for Biological Use, at the Ministry of Agricultural and Forestry Policies of Italy under the number **0037620/22** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Mycorrhizae content	0.001%
Rhizosphere bacteria content	1.8 x 10 ⁷ UFC/g



FEATURES AND APPLICATIONS

RIZOBACTER® N is a biofertiliser based on the atmospheric nitrogen fixing and plant growth promoting rhizobacterium *Azotobacter chroococcum* (PGPR), strain BNT-09-Ac, with a high concentration of colony forming units (CFU).

Microorganisms play a very important role in the assimilation of nitrogen by plants, especially nitrogen-fixing bacteria, which are capable of transforming atmospheric nitrogen into forms that can be assimilated by the plant.

RIZOBACTER® N is formulated with a high concentration of *Azotobacter chroococcum*, considered a free-living, non-symbiotic PGPR with the ability to fix nitrogen under aerobic conditions and which, through a series of reduction reactions, produces ammonium and makes it available to the plant. **RIZOBACTER® N** makes an outstanding contribution to optimizing fertilization and conventional nitrogen fertilizer use strategies. In addition, the **RIZOBACTER® N** formulation contributes to stimulate the synthesis of metabolically active substances (phytohormones and enzymes), helping to stimulate crop growth and development.



DOSE

- Irrigation application: **5-20 L/ha**



RIZOBACTER® PK

- ✓ **PHOSPHORUS AND POTASSIUM SOLUBILIZER BASED ON *Bacillus megaterium* AND *Pseudomonas fluorescens* FERTILIZATION OPTIMIZER**

MYCORRHIZAL FUNGUS INOCULATION

Registered as Fertilizer, for Biological Use, at the Ministry of Agricultural and Forestry Policies of Italy under the number **0037621/22** and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Type of organic amendment: simple non-composted vegetable amendment
Mycorrhizae content **0.001%**
Rhizosphere bacteria content **2 x 10⁸ CFU/g**



FEATURES AND APPLICATIONS

RIZOBACTER® PK is a liquid biofertilizer formulated with mycorrhizal fungi combined with a high concentration of two plant growth promoting rhizobacteria (PGPR): *Bacillus megaterium* (strain BC07-Bmeg) and *Pseudomonas fluorescens* (strain BC06-Pf).

The rhizobacterial strains present in **RIZOBACTER® PK** have been specially selected to enhance and optimize soil fertilization and induce crop resistance to stress. Thanks to the secretion of acidic substances by both rhizobacteria, phosphorus and potassium are solubilized from insoluble forms, allowing the plant to assimilate them. These rhizobacteria are also capable of synthesizing phytohormones (auxins, gibberellins and cytokinins) with proven regulatory action on plant metabolism, as well as producing high affinity chelators (siderophores) that capture iron and facilitate the correction of its deficiency.

The application of **RIZOBACTER® PK** makes it possible to reduce the use of synthetic fertilizers. In addition, it generates a biostimulant effect on crops that optimizes their development and efficiently increases production.



DOSE

· Irrigation application: **10-20 L/ha**

ZYMEX®

- ✓ **LEAF BIOSTIMULANT ACTIVATOR OF METABOLIC PATHWAYS**

National inorganic fertilizer commercialized under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

EDTA Copper (Cu)	0.50 % (w/w)
EDTA-chelated iron (Fe)	0.30 % (w/w)
EDTA-chelated manganese (Mn)	0.90 % (w/w)
EDTA zinc (Zn)	0.50 % (w/w)



FEATURES AND APPLICATIONS

ZYMEX® is a liquid blend of growth-promoting microelements that stimulate natural plant fortification systems in stems and leaves. They also improve the nutritional and physiological conditions of the plant.

The application of the product protects the plant against unfavourable abiotic conditions, producing stronger and more vigorous plants and, ultimately, higher crop yields.



DOSE

· Leaf application: **1,5-2,5 L/ha**



Biostimulants

State-of-the-art formulations

This range has unique formulations that contribute to the improvement of tolerance to abiotic stress, optimising the use and efficiency of nutrients and activating plant metabolism. In this way, they contribute to better plant development, improving the quality parameters of the harvest and the yield.

A range of bioestimulants is formulated with active ingredients of natural developed by Servalesa capable of stimulating physiological processes at specific times of greatest need.

- **Boosting crop development in each crop**
development at each phenological stage of the cycle through the activation of different metabolic pathways
- **Increased crop tolerance to environmental**
tolerance to adverse environmental factors (drought, extreme temperatures, salinity, etc.)
- **Efficient optimization** of nutrient assimilation via foliar and irrigation

servalesa®

BIOSTIMULANTS
WOW!



BETASER®

Biostimulants

MITIGATES ABIOTIC STRESS

Biostimulant based on glycine - betaine and seaweed extracts



BIOCROP® EXTRA

Biostimulants

BIOACTIVATOR OF METABOLISM AND OPTIMIZER OF NUTRITION

Biostimulant based on algae extracts



DESES-3®

Biostimulants

MITIGATES ABIOTIC STRESS

Biostimulant based on glycine-betaine and proline



FEEDSER®

Biostimulants

FAVORS FRUIT FATTENING AND GRAIN FILLING

Biostimulant based on glycine-betaine, potassium and calcium



FOLSER®

Biostimulants

STIMULATES FLOWERING AND FRUIT SET

Biostimulant based on vitamin extracts and seaweed extracts



SERGOMAX®

Biostimulants

REGENERATOR OF CONDUCTIVE VESSELS AND ACTIVATOR OF SAP FLOW

Biostimulant based on molecular complexes



SERVAPTON®

Biostimulants

METABOLISM BIOACTIVATOR

Biostimulant based on a high concentration of amino acids



AMISER®

✓ BIOSTIMULANT BASED ON AMINO ACIDS

Special fertilizer registered in Portugal with registered number **87/2016** under Decree-law 103/2015 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	2.60 % (w/w)
Total nitrogen (N)	3.80 % (w/w)
Ureic nitrogen (N)	3.20 % (w/w)
Organic nitrogen (N)	0.60 % (w/w)
Water-soluble phosphorus pentoxide (P ₂ O ₅)	8.50 % (w/w)
Water-soluble potassium oxide (K ₂ O)	4.00 % (w/w)
Water-soluble boron (B)	0.10 % (w/w)

Aminogram: glutamic acid (2.6% w/w) obtained by fermentation of sugarcane with *Corynebacterium glutamicum*.



FEATURES AND APPLICATIONS

AMISER® is an aqueous solution based on biologically fermented amino acids in a primary nutrition matrix, with the addition of boron. Its application is designed for all types of crops, especially those with a large leaf mass, to promote protein biosynthesis and sugar transport. Application may be conducted at times of vegetative difficulty (such as cold and impoverished soils) and at stages of necessary nutritional supply, to promote growth, flowering or fruit set.



DOSE

- Leaf application: **200-300 ml/ha**
- Irrigation application: **3-4 L/ha**



BETASER®

✓ DO NOT LET YOUR CROP SUFFER ABIOTIC STRESS. PROTECT IT.

Special fertilizer registered in Portugal with registered number **404/2020** under Decree-law 103/2015 marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

<i>Ascophyllum nodosum</i> algae extract	10.00 % (w/w)
Alginate acid	1.50 % (w/w)
Mannitol	0.50 % (w/w)
Total nitrogen (N)	2.50 % (w/w)



FEATURES AND APPLICATIONS

BETASER® is a state-of-the-art biostimulant with an exclusive formulation composed of a high concentration of glycine betaine, plant extracts of marine origin and other selected growth factors. **BETASER®** has been specifically designed to overcome extreme abiotic stress situations (heat stress, water stress, salt stress) and to allow optimal crop development throughout the cycle, resulting in higher yield and crop quality.

The application of **BETASER®** is recommended in order to:

1. Improve crop yield under stress conditions (drought, high and low temperatures).
2. Improve plant protection through the osmoregulatory effect of the cells.
3. Improve photosynthesis.
4. Increase biomass.
5. Increase yield, yield components and production quality.



DOSE

- Leaf application: **200-300 ml/ha**



INSUMOS UNE



INSUMOS UNE

BIOCUAJE® ECO

✓ FRUIT SETTING STIMULANT FOR ORGANIC FARMING

Special fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

<i>Ascophyllum nodosum</i> algae extract	8.00 % (w/w)
Water-soluble boron (B)	0.2 % (w/w)
Water-soluble molybdenum (Mo)	2.50 % (w/w)
Mannitol	0.30 % (w/w)



FEATURES AND APPLICATIONS

BIOCUAJE® ECO is a biostimulant product for fruit setting based on seaweed extract and microelements, with a high concentration of molybdenum. Its application is designed to promote fruit setting, achieving chemical affinity between pollen and pollen tube through molybdenum, also favouring flower fertilisation. Its application is especially recommended in organic farming.



DOSE

· Leaf application: **100-150 ml/hl**

BIOCROP® EXTRA

✓ BIOSTIMULANT BASED ON MARINE EXTRACTS

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

<i>Ascophyllum nodosum</i> algae extract	8.00 % (w/w)
Water-soluble boron (B)	0.25 % (w/w)
Water-soluble iron (Fe)	0.50 % (w/w)
Water-soluble manganese (Mn)	0.70 % (w/w)
Water-soluble molybdenum (Mo)	0.05 % (w/w)
Water-soluble zinc (Zn)	0.50 % (w/w)
Water-soluble sulfur trioxide (SO ₃)	2.50 % (w/w)
Mannitol	0.40 % (w/w)



FEATURES AND APPLICATIONS

BIOCROP® EXTRA is an aqueous solution based on microelements and seaweed extracts (*Ascophyllum nodosum*) with good systemicity, so it can be used by fertigation or spraying. Thanks to the "carrier" effect carried out by the algae extracts contained in **BIOCROP® EXTRA**, the transport and assimilation of nutrients is favoured, increasing the productivity of fertilisers. In this way, the maximum value is extracted from each one to contribute to the physiological processes that will generate optimum production.

BIOCROP® EXTRA plays a fundamental role in the development of the crop at each phenological stage as an activator of production, both in quantity and quality.



DOSE

· Leaf application: **100-300 ml/hl**
· Irrigation application: **3-5 L/ha**



DESES-3®

✓ THE BULLETPROOF SHIELD AGAINST ABIOTIC STRESSES

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	19.00 % (w/w)
Total nitrogen (N)	11.90 % (w/w)
Organic nitrogen (N)	11.90 % (w/w)

Aminogram: Glycine (9.5%) obtained by synthesis by ammonification of chloroacetic acid and potassium salts. Proline (9.5%) obtained by fermentation from vegetable glucose with *Corynebacterium glutamicum*.



FEATURES AND APPLICATIONS

DESES-3® is a state-of-the-art biostimulant with an exclusive formulation containing a high concentration of glycine-betaine and proline. In addition, the formulation includes selected growth factors.

DESES-3® has been specifically designed to help crops overcome extreme abiotic stress situations, mitigating yield and/or crop quality losses. The osmoprotective function of the formulated components allows the accumulation of solutes inside the cell and positively influences the adjustment of the osmotic potential, regulating the stomatal closure and, as a result, mitigating the loss of cell turgour and the decrease of the photosynthetic rate.

DESES-3® also supports key metabolic processes in the crop cycle: photosynthesis, reproduction, growth and nutrient assimilation.

The application of **DESES-3®** is recommended in order to:

1. Mitigate the effects caused by abiotic stress situations due to cold, heat, drought, etc.
2. Support cell osmoregulation processes.
3. Favour photosynthesis and biomass production.



DOSE

• Leaf application: **1-2 kg/ha**



FEEDSER®

✓ FATTENING UNDER STRESS IS FEEDSER®'S SPECIALITY

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	10.00 % (w/w)
Total nitrogen (N)	3.00 % (w/w)
Organic nitrogen (N)	3.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	25.00 % (w/w)
Water-soluble sulfur trioxide (SO ₃)	22.00 % (w/w)
Water-soluble calcium oxide (CaO)	10.00 % (w/w)
Óxido de Calcio (CaO) complejoado por ac. glucónico	9.00 % (w/w)

Aminogram: 10% glycine obtained by chemical synthesis by ammonification of chloroacetic acid and potassium salts.



FEATURES AND APPLICATIONS

FEEDSER® is a cutting-edge biostimulant with an exclusive formulation composed of glycine-betaine, potassium and calcium complexed by gluconic acid. In addition, the formulation includes selected growth factors.

FEEDSER® has been specifically designed to provide your crops with fruit fattening and grain filling stimulation. Thanks to its composition, crops will also find it easier to overcome situations of extreme abiotic stress (heat, water, salt stress, etc.). This contributes to an optimal fruit size, improving the profitability of the harvest.

The application of **FEEDSER®** is recommended in order to:

1. Favour fruit fattening and grain filling.
2. Improve crop yield under stress conditions (drought, high and low temperatures, etc).
3. Help optimise stomatal closure at critical moments, allowing optimal development at the time of fruit fattening.
4. It provides complexed high-assimilation calcium, which aids the production of proteins that regulate heat shock. In addition, it participates in the reinforcement of the cell wall structure, grouping into compounds that provide stability.
5. It provides potassium, capable of creating osmotic potential in the cells and neutralising negative electric charges, and participates in the translocation of amino acids and sugars in the fruits, contributing to improved fattening.



DOSE

• Leaf application: **100-200 g/hl**
• Irrigation application: **1-2 kg/ha**



FEEDSER® SOIL

✓ AMINO ACID-BASED BIOSTIMULANT

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Aminoácidos libres	10.00 % (w/w)
Nitrógeno (N) total	10.00 % (w/w)
Nitrógeno (N) nítrico	8.30 % (w/w)
Nitrógeno (N) orgánico	1.70 % (w/w)
Óxido de Potasio (K ₂ O) soluble en agua	30.00 % (w/w)
Óxido de Calcio (CaO) soluble en agua	10.00 % (w/w)

Aminogram: 100% glycine obtained by chemical synthesis by ammonification of chloroacetic acid and potassium salts.



FEATURES AND APPLICATIONS

FEEDSER® SOIL is a state-of-the-art biostimulant with an exclusive formulation composed of glycine, nitrogen, potassium and calcium. In addition, the formulation includes selected growth factors.

FEEDSER® SOIL has been specifically designed to provide your crops, from the soil, with optimal stimulation and elements necessary to overcome extreme abiotic stress situations (heat stress, water stress, salt stress, etc.) at the time of fruit fattening and to contribute to optimal fruit size.



DOSE

· Irrigation application: **5-50 kg/ha and crop cycle**



FOLSER®

✓ BUILD YOUR HARVEST. STIMULATE FLOWERING AND SWELLING

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

<i>Ascophyllum nodosum</i> algae extract	13.00 % (w/w)
Alginate acid	1.50 % (w/w)
Mannitol	0.60 % (w/w)
Water-soluble potassium oxide (K ₂ O)	2.50 % (w/w)



FEATURES AND APPLICATIONS

FOLSER® is a state-of-the-art biostimulant with an exclusive formulation composed of a vitamin extract, plant extracts of marine origin, nutrients and other selected growth factors that help to improve plant growth and development, giving it greater vigour. **FOLSER®** helps to optimise flowering and improve fruit setting, helping to improve the yield and profitability of the crop.

The application of **FOLSER®** is recommended in order to:

1. Activate biomass growth and plant reproductive organs by increasing chlorophyll content in chloroplasts and stimulating amino acid synthesis.
2. Increase the production of chemical and physiological reserves (with an increased content of protein substances, carbohydrates, vitamins and growth hormones).
3. Improve metabolic functions, increasing enzymatic activity.
4. Activate the development of biomass (vigour) and plant reproductive organs.
5. Optimise flowering: flower emission and flower mooring.
6. Contribute to improved fruit setting, achieving higher yields and greater crop uniformity.



DOSE

· Leaf application: **200-400 ml/hl**
· Irrigation application: **3-5 L/ha**



NUTRIMAN® N24

✓ HIGH CONCENTRATION OF AMINO ACIDS

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	24.00 % (w/w)
Total nitrogen (N)	3.20 % (w/w)
Organic nitrogen (N)	3.20 % (w/w)

Aminogram: 16%1 Glutamic and 8% Glycine. Obtention process: glutamic via fermentation of cane molasses with *Corynebacterium glutamicum* and glycine obtained by soybean hydrolysis.



FEATURES AND APPLICATIONS

NUTRIMAN® N24 is based on a stable solution based on free amino acids, at a pH low enough to ensure the stability of these amino acids. The correct time to apply this complex of free amino acids is during periods of maximum nutritional needs, in order to favour vegetative development: these points can include transplantation, sprouting and periods after vegetative stoppage due to bioclimatic adversity. The application of the product ensures the continuity of protein synthesis and the development of the vegetative mass.



DOSE

- Leaf application: **100-200 ml/hl**
- Irrigation application: **2-3 L/ha**

OLIVO PLUS® B1

✓ CONTRIBUTES TO BETTER OLIVE GROVE DEVELOPMENT

Special fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Water-soluble boron (B)	1.20 % (w/w)
Water-soluble manganese (Mn)	1.00 % (w/w)
Water-soluble molybdenum (Mo)	0.10 % (w/w)
Water-soluble zinc (Zn)	0.50 % (w/w)
Mannitol	0.35 % (w/w)
<i>Ascophyllum nodosum</i> algae extract	3.50 % (w/w)



FEATURES AND APPLICATIONS

OLIVO PLUS® B1 is a stable aqueous solution based on *Ascophyllum nodosum* algae extracts and micronutrients specially designed for olive grove nutrition, which can be applied by leaf spraying.

OLIVO PLUS® B1 achieves a general invigorating effect on the crop, particularly in adverse crop situations.



DOSE

- Leaf application: **200-250 ml/hl**
- Irrigation application: **2-2,5 L/ha**



SERGOMAX®

✓ ACTIVATOR OF SAP FLOW AND REGENERATOR OF CONDUCTIVE VESSELS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	5.00 % (w/w)
Ureic nitrogen (N)	4.00 % (w/w)
Sulfur trioxide (SO ₃) water soluble	7.00 % (w/w)
Water-soluble copper (Cu)	1.80 % (w/w)
Water-soluble manganese (Mn)	0.80 % (w/w)
Water-soluble zinc (Zn)	0.50 % (w/w)



FEATURES AND APPLICATIONS

SERGOMAX® is a last generation biostimulant with an exclusive formulation based on molecular complexes of several metals (Cu, Mn and Zn). It is therefore a matrix of metal complexes in which these metals are bound to different molecules of an organic nature. One of the most outstanding characteristics of **SERGOMAX®** is its effectiveness in cleaning the conducting vessels, phloem and xylem, and even regenerating them when damaged.

SERGOMAX® is a biological activator, capable of reactivating the sap flow after periods of vegetative standstill, increasing the flow of nutritive elements in the plant. **SERGOMAX®** will help to homogenise sprouting and flowering.



DOSE

- Leaf application: **200-300 ml/hl**
- Irrigation application: **4-6 L/ha**



ALTERNATIVE FOR ORGANIC FARMING



SERGOMAX® L90 ECO

LET THE SAP FLOW



See page 76
ECO CATALOG HOMOLOGUES

FiBL



SERVAL® NK

✓ BIOSTIMULANT WITH AMINO ACIDS AND POTASSIUM

Special fertilizer registered in Portugal with registered number 95/2016 under Decree-law 103/2015 marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	68.00 % (w/w)
Total nitrogen (N)	9.00 % (w/w)
Organic nitrogen (N)	9.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	12.00 % (w/w)

Aminogram: main amino acids: 37% glutamic acid obtained by fermentation of cane molasses with *Corynebacterium glutamicum*, 31% glycine obtained by synthesis by ammonification of chloroacetic acid and potassium salts.



FEATURES AND APPLICATIONS

SERVAL® NK is a biostimulant based on a high content of amino acids and potassium. The nitrogen in **SERVAL® NK** has an exclusively organic origin and comes from the amino acids present in it, with a total absence of nitric, ammoniacal or ureic nitrogen sources. The amino acids in **SERVAL® NK** come from biological fermentation of protein-rich substrates, so they are always L-amino acids, which are those that can be used by the plant, as they are biologically active. The potassium contained in **SERVAL® NK** is of natural origin and easily assimilated by crops.

Its application is designed for all types of fertigation crops, as a nitrogen and potassium fertiliser, as well as to promote protein biosynthesis and sugar transport, favouring crop development. The application can be made at times of vegetative difficulty (cold and impoverished soils), and at stages of necessary nutritional supply, to promote growth and ripening.



DOSE

- Leaf application: **100-250 g/hl**



ALTERNATIVE FOR ORGANIC FARMING



SERVAL® NK ECO

BIOSTIMULANT WITH AMINO ACIDS AND POTASSIUM



See page 76
ECO CATALOG HOMOLOGUES



SERVANITRO® STAR

✓ ECOLOGICAL BIOSTIMULANT WITH AMINO ACIDS AND HIGH CONCENTRATION OF ORGANIC NITROGEN

Special fertilizer commercialized under Mutual recognition (Regulation (UE) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	82.00 % (w/w)
Total nitrogen (N)	12.00 % (w/w)
Organic nitrogen (N)	12.00 % (w/w)

Aminogram: Glutamic acid: 43%; Glycine: 39%. Obtained by microbial fermentation (*Corynebacterium glutamicum*) and enzymatic hydrolysis of vegetable (soybean) proteins, respectively.



FEATURES AND APPLICATIONS

SERVANITRO® STAR is a naturally obtained product based on enzymatic hydrolysis amino acids with total solubility in water. The amino acids it contains are obtained by biological methods, involving no chemical hydrolysis whatsoever. It has a high organic nitrogen content, which makes it an excellent gradual mineralisation fertiliser that avoids leaching losses.

SERVANITRO® STAR exerts a biostimulant action on crops due to its richness in amino acids of biological origin, being also an important source of organic nitrogen and a product indicated and certified for use in organic agriculture.

It is especially recommended during the initial stages of development and growth, flowering and fruit set, as well as at any time of plant growth and development.



DOSE

- Leaf application: **100-300 g/hl**
- Irrigation application: **2-4 kg/ha**

SERVAPTON®

✓ AMINO ACID-BASED BIOSTIMULANT

Special fertilizer registered in Portugal with registered number **240/2018** under Decree-law 103/2015 marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Free amino acids	11,00 % (w/w)
Total nitrogen (N)	9,60 % (w/w)
Organic nitrogen (N)	8,70 % (w/w)

Aminogram: Alanine 1.9%; Aspartic Acid 0.5%; Glutamic Acid 1.3%; Glycine 3.9%; Hydroxyproline 0.8%; Leucine 0.2%; Lysine 0.3%; Phenylalanine 0.2%; Proline 1.6%; Serine 0.3%. Obtained by chemical hydrolysis of animal proteins.



FEATURES AND APPLICATIONS

SERVAPTON® is a product based on a high richness of free amino acids, peptides and low molecular weight polypeptides. The product comes from animal proteins based on collagen, whereby we use a controlled hydrolysis process to obtain a stable, purified product which is ideal due to its total and rapid absorption by the plant.

Its amino acids are in the form of L levodexins, which are the active ones that form proteins in plants. In addition, it contains a rich aminogram, where all the essential amino acids are present.

After its immediate absorption, translocation and transformation into plant proteins, various metabolic processes are also activated, resulting in better vegetative development and consequently a higher yield.

Its application is conceived for all types of crops, both as a biostimulant and also to help overcome stress situations during phenological moments of high energy demand (such as fruit set and fattening), in situations of extreme temperatures, salinity and drought. In general, it can be applied when it is necessary to enhance crop activity. In olive groves, its application is recommended during spring-autumn periods and should not be applied to the edible parts of the crop.



DOSE

- Leaf application: **200-300 ml/hl**
- Irrigation application: **2-4 L/ha**

Bioestimulants



**STATE-OF-THE-ART
FORMULATIONS**



U.N.E.

NUTRIENT EFFICIENCY



IMPROVED TOLERANCE

ACTIVATION OF METABOLISM

STIMULATING PHYSIOLOGICAL PROCESSES AT SPECIFIC TIMES



**ABIOTIC STRESS
TOLERANCE**



**ECO
ATTITUDE**

**SULFUR
TRIOXIDE (SO₃)**

**POTASSIUM
OXIDE (K₂O)**

**+YIELD
+QUALITY**

COPPER (Cu)

ZINC (Zn)

BORON (B)

IRON (Fe)

UNIQUE FORMULATIONS



**POTASSIUM (Cu)
MANGANESE (Mn)
MOLYBDENUM (N)**

**IMPROVE
DEVELOPMENT**



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**REGISTERED AND
AUTHORIZED**



**STIMULATES
FATTENING**



Biocontrol

Sustainability for pest and disease control

The exclusive Biocontrol range is composed of products oriented to improve plant health in order to maximize crop yields and quality, by using tools focused on the control of pests and diseases with unique formulations based on authorized active substances.

- **Products with phytosanitary registration** under EU regulation 1107/2009 or as basic substance
- **Bioinsecticides and biofungicides** for pest and disease control

servalesa®



MILES®
Biocontrol

FUNGICIDE AGAINST PATHOGENIC FUNGI

Natural fungicide based on *Equisetum Arvense* L. fungicides

Basic substance



NICIS®
Biocontrol

POWDERY MILDEW AND MILDEW FUNGICIDE

Natural fungicide based on sodium hydrogen carbonate

Basic substance



MILES®

✓ NATURAL FUNGICIDE WITH PREVENTIVE AND CURATIVE ACTION BASED ON *EQUISETUM ARVENSE L.* AGAINST PATHOGENIC FUNGI

Placed on the market pursuant to Article 23 of Regulation (EC) N° 1107/2009 as Basic Substance, *Equisetum Arvense L.*



CONTENT AND GUARANTEED RICHNESS

Equisetum Arvense L. **2.00 % (w/w)**

(specifications according to European Pharmacopoeia)



FEATURES AND APPLICATIONS

MILES® is a preparation of *Equisetum Arvense L.* obtained by maceration and subsequent decoction of the aerial part of this plant, the use of which allows the prevention and control of the incidence and development of numerous fungi-pathogens.

The mode of action of **MILES®** is based on the compounds included in the preparation based on *Equisetum Arvense L.* phenols, flavonoids together with silicic and caffeic acid, and their ability to act on the sporulation of different pathogenic fungi and activate the defence systems of different crops. **MILES®** is a broad-spectrum product with proven microbial activity and an effective tool for inclusion in control programmes for various fungal diseases. We also recommend its use in a wide range of crops.

MILES® is a product that respects the environment, is suitable for organic farming under the UNE standard and has no withdrawal period. In addition, it shows excellent results in terms of managing resistance.



DOSE

Crop	Agent	ml/hl
Seed fruit trees	Scab and powdery mildew	200-400
Stone fruit trees	Dent	200-400
Vines	Mildew and powdery mildew	200-400
Cucumber	Powdery mildew and soil fungus (<i>Pythium</i>)	200-400
Tomato	<i>Alternaria</i> and <i>Septoria</i>	200-400
Strawberry	<i>Botrytis</i> , Powdery mildew, <i>Phytophthora</i> , <i>Colletotrichum</i>	225-450
Potato	<i>Phytophthora</i> , <i>Alternaria</i> , Powdery Mildew	225-450



NICIS®

✓ PREVENTIVE AND CURATIVE BIOFUNGICIDE FOR THE SUSTAINABLE CONTROL OF POWDERY MILDEW AND POWDERY MILDEW

Placed on the market pursuant to Article 23 of Regulation (EC) N° 1107/2009 as Basic Substance, Sodium Hydrogen Carbonate.



CONTENT AND GUARANTEED RICHNESS

Sodium hydrogen carbonate **99 % (w/w)**



FEATURES AND APPLICATIONS

NICIS® is a natural product with a biofungicidal effect based on sodium hydrogencarbonate. Its mode of action, with a shock effect, is preventive and curative, especially against different types of powdery mildew (*Sphaerotheca spp.*, *Oidium spp.*, *Uncinula necator*) and mildew (*Venturia inaequalis*), as well as against storage diseases (*Penicillium italicum*, *Penicillium digitatum*).

With its mode of action, it plays a fundamental role in the osmotic pressure exerted by carbonate and bicarbonate ions, which damage the cell wall of the fungi, disintegrating and drying the hyphae and spores and causing their death.

NICIS® is a product certified for use in organic farming



DOSE

Crop	Pathogen	kg/hl	kg/ha
Vegetables, soft fruit and ornamentals	Mildew and powdery mildew (<i>Sphaerotheca spp.</i> , <i>Oidium spp.</i>)	0.330-1	2-5
Vines	Powdery mildew (<i>Uncinula necator</i>)	0.420-2	2.5-5
Apple trees	<i>Venturia inaequalis</i>	0.5-1	2.5-5
Fruits of different types (oranges, cherries, apples, papaya)	Storage diseases (<i>Penicillium italicum</i> , <i>Penicillium digitatum</i>)	1-4 in 100L of water	



**SUSTAINABILITY
BASED TECHNOLOGY**



U.N.E.

Biocontrol



**NATURAL BIO-
FUNGICIDES AND
BIOINSECTICIDES**

PHYTOSANITARY REGISTERED PRODUCTS

SUSTAINABLE PEST AND DISEASE CONTROL



**PEST AND DISEASE
CONTROL**



UE 1107/2009



**ARICULTURE FREE OF
RESIDUES**



**+ YIELD
+QUALITY**

**NATURAL
INSECTICIDES**



**ECO
ATTITUDE**

**REGISTERED AND
AUTHORIZED**



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Water and soil improvers

One range, two objectives

It provides tools that contribute towards the mitigation of the adverse conditions present in soils, contributing to structure and improving the physicochemical conditions of the soil. It also contributes to the improvement of water conditions for performing more efficient foliar treatments.

- **Organic matter** as a contribution of substance of organic and mineral origin to improve soil structure, nutrient absorption and, in general, the improvement of the physical and chemical conditions of the soil for optimal crop development
- **Saline correctors** aimed at reducing soil salinity and mitigating the impact of stress on the crop
- **pH regulators** and hard water conditioners

servalesa®





HUMITIERRA®

Water and soil improvers

SOIL IMPROVER

Organic matter based on humic extract



ORGANSER® L

Water and soil improvers

SOIL IMPROVER

Liquid organic matter of vegetable origin



ORGANTERRA® P

Water and soil improvers

SOIL IMPROVER

Organic matter and phosphorus



REGULSER® +3

Water and soil improvers

PH REGULATOR

pH regulator, moisturizer and defoamer



REGULSER® ECO

Water and soil improvers

PH REGULATOR

pH regulator, moisturizer and defoamer



TOTUSAL®

Water and soil improvers

SALT DISPLACER

Carboxylic acid-based salt displacer



HUMITERRA®

✓ ORGANIC MATTER BASED ON HUMIC AND FULVIC EXTRACTS

Special fertilizer registered in Portugal with registered number **20/2016** under Decree-law 103/2015 marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Special fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Humic Extract	16.00 % (w/w)
Acids (Humic)	9.00 % (w/w)
Acids (Fulvic)	7.00 % (w/w)
Potassium (K ₂ O)	10.00 % (w/w)



FEATURES AND APPLICATIONS

HUMITERRA® is a stable solution of organic matter based on humic extract, with a composition including fractions of humic and fulvic acid, based on Leonardite, lignite and other minerals that help to increase mineral contributions to the crop and facilitate the absorption of NPK and microelements.

HUMITERRA® improves soil structure and crop absorption in soils with high limestone, salinity or low nutritional levels. The quality of the raw materials makes it easy to apply in any irrigation or spraying system. It is soluble with easy passage through micropores to the plants, rapidly fortifying the crop.



DOSE

- Irrigation application: **10-20 L/ha**. Depending on requirements.
- Leaf application: **300-400 ml/ha**



ORGANSER® L

✓ LIQUID ORGANIC MATTER OF PLANT ORIGIN VEGETAL. WITHOUT PHYTOTOXIC IMPURITIES AND RESPECTING THE M.A.

Organic fertilizer registered in Spain with registered number **F0004652/2030** under Royal Decree 506/2013 marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	2.50 % (w/w)
Organic nitrogen (N)	2.50 % (w/w)
Total potassium oxide (K ₂ O)	5.50 % (w/w)
Total organic matter	38.00 % (w/w)
Organic carbon (C)	22.00 % (w/w)
C/N ratio	8.80 % (w/w)



FEATURES AND APPLICATIONS

ORGANSER® L is formulated with macro- and micro-elements that are essential for the plant. The associated organic carbon (OC) provides colloids with high cation exchange capacity. It achieves stimulation and enhancement of the root system during the implantation of crops and aids soil desalination. Its contribution achieves an increase in the use of nutrients and improved development of the plant during its growth, which will be decisive for its productivity.

ORGANSER® L improves both physicochemical and biological soil characteristics. It also influences the aggregation of soil particles and the formation of larger pores that retain water with less energy expenditure and provides energy resources to soil biota.



DOSE

- Irrigation application: **40 to 80 L/ha**.

Application 15 to 20 days throughout the cycle.



ORGAN TERRA® Ca

✓ CALCIUM WITH ORGANIC MATTER

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	5.00 % (w/w)
Nitric nitrogen (N)	4.50 % (w/w)
Ammoniacal nitrogen (N)	0.50 % (w/w)
Calcium oxide (CaO), water-soluble	12.00 % (w/w)
Boron, as boron ethanolamine, water soluble	0.10 % (w/w)



FEATURES AND APPLICATIONS

ORGAN TERRA® Ca consists of a solution of calcium with useful organic matter, such that calcium is presented as a non-ionic molecular species to be absorbed systemically. The total content of organic matter ensures perfect physical, chemical and biological properties of the soil for balanced plant nutrition and development.

Its application is intended to prevent calcium deficiencies in leaves and vegetable tissues, avoiding physiopathologies that entail great crop losses. Its absorption via leaves or roots allows the calcium to bond with the tissue structure that requires protection.



DOSE

Crop	Dose and period	No. of applications
Vegetable crops	Active growth 10 L/ha. Fruit formation 20 L/ha	Twice a week during the growing cycle
Fruit trees	Growth 50 L/ha. Production 100-150 L/ha	Throughout the cycle and whenever necessary
Vines	Growth 50 L/ha. Production 75-125 L/ha	Throughout the cycle and whenever necessary
Citrus trees	Growth 100-150 L/ha. Production 150-250 L/ha	Throughout the cycle and whenever necessary
Olive trees	Growth 50 L/ha. Production 100-150 L/ha	Throughout the cycle and whenever necessary



ORGAN TERRA® Ca-Mag

✓ CALCIUM AND MAGNESIUM WITH ORGANIC MATTER

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble calcium oxide (CaO)	10.00 % (w/w)
Water-soluble magnesium oxide (MgO)	5.00 % (w/w)
Water-soluble boron (B)	0.10 % (w/w)



FEATURES AND APPLICATIONS

ORGAN TERRA® Ca-Mag consists of a solution of calcium and magnesium with useful organic matter, such that calcium is presented as a non-ionic molecular species to be absorbed systemically. The total content of organic matter ensures perfect physical, chemical and biological properties of the soil for balanced plant nutrition and development.

Its application is intended to prevent calcium deficiencies in leaves and vegetable tissues, avoiding physiopathologies that entail great crop losses. Its absorption via leaves or roots allows the calcium to bond with the tissue structure that requires protection.



DOSE

Crop	Dose and period	No. of applications
Vegetable crops	Active growth 10 L/ha. Fruit formation 20 L/ha	Twice a week during the growing cycle
Fruit trees	Growth 50 L/ha. Production 100-150 L/ha	Throughout the cycle and whenever necessary
Vines	Growth 50 L/ha. Production 75-125 L/ha	Throughout the cycle and whenever necessary
Citrus trees	Growth 50 L/ha. Production 150-250 L/ha	Throughout the cycle and whenever necessary
Olive trees	Growth 50 L/ha. Production 100-150 L/ha	Throughout the cycle and whenever necessary



ORGANOTERRA® K

✓ NITROGEN AND POTASSIUM WITH ORGANIC MATTER

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	3.00 % (w/w)
Ureic nitrogen (N)	3.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	15.00 % (w/w)



FEATURES AND APPLICATIONS

ORGANOTERRA® K consists of a stable solution of nitrogen and potassium and also incorporates organic matter (sms) into the soil. Its application is recommended to maintain soil structure, improve water retention capacity and release a certain fraction of microelements. The contribution of potassium favours the biosynthesis of sugars and pigments and improves Brix levels and fruit growth, as well as the lignification of the vessels, preventing bioclimatic risk situations.



DOSE

Crop	Dose and period	No. of applications
Vegetable crops	Fructing 100L/ha.	Twice a week during the growing cycle
Fruit trees	Growth 100-150 L/ha. Production 100-200 L/ha	Throughout the cycle and whenever necessary
Vines	Production 100-150 L/ha	Throughout the cycle and whenever necessary
Citrus trees	Growth 100-150 L/ha. Production 100-150 L/ha	Throughout the cycle and whenever necessary
Olive trees	Growth 100-150 L/ha. Production 100-150 L/ha	Throughout the cycle and whenever necessary



ORGANOTERRA® P

✓ NITROGEN AND PHOSPHORUS WITH ORGANIC MATTER

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	4.00 % (w/w)
Ureic nitrogen (N)	3.90 % (w/w)
Total phosphorus pentoxide (P ₂ O ₅)	19.00 % (w/w)
Water-soluble phosphorus pentoxide (P ₂ O ₅)	19.00 % (w/w)
Water-soluble iron (Fe)	0.50 % (w/w)
Water-soluble manganese (Mn)	0.60 % (w/w)
Water-soluble zinc (Zn)	0.60 % (w/w)



FEATURES AND APPLICATIONS

ORGANOTERRA® P consists of a stable solution of nitrogen and phosphorus, with trace elements. Its application is recommended to maintain soil structure, improve water retention capacity and release a certain fraction of microelements. The supply of phosphorus catalyses protein synthesis and increases the energy of the vegetative process while promoting fruit setting, strengthening the conducting vessels and creating vegetative mass. It responds positively to adverse bioclimatic situations in the transplanting, rooting, sprouting, hail and frost injury stages.



DOSE

Crop	Dose and period	No. of applications
Vegetable crops	Transplanting 50 L/ha. Growth 100 L/ha	Twice a week during the growing cycle
Fruit trees	Post-transplanting 100-120 L/ha Growth 100-150 L/ha Production 100-200 L/ha	Throughout the cycle and whenever necessary
Vines	Production 100-150 L/ha	Throughout the cycle and whenever necessary
Citrus trees	Post-transplante 100-120 L/ha Growth 150-200 L/ha Production 100-200 L/ha	Throughout the cycle and whenever necessary
Olive trees	Post-transplante 100-120 L/ha Growth 100-150 L/ha Production 100-200 L/ha	Throughout the cycle and whenever necessary
Grafted edges and blankets	Transplanting 100 L/ha.	During planting



PRINCA®

✓ CALCIUM AND MAGNESIUM BASED SALT DISPLACER

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Calcium oxide (CaO) water soluble	20.00 % (w/w)
Magnesium oxide (MgO) water soluble	2.00 % (w/w)



FEATURES AND APPLICATIONS

PRINCA® is a solid formulation based on calcium, magnesium and organic acids, which conditions soils and increases crop yields.

The application of **PRINCA®** improves soil structure and reduces soil salinity. Under certain circumstances, the clay-humic complex exchange sites accumulate a very high percentage of sodium cations, which leads to the dispersion of clays and, consequently, to soil destructuring.

Thanks to **PRINCA®** mode of action, it is possible to neutralize the negative effects that excess salts cause in soils, in such a way that calcium, by cation exchange, displaces sodium in the clay-humic complex, increasing the formation of aggregates thanks to its cementing capacity. In addition, the organic acids in their deprotonated form sequester the sodium and form a stable complex, so that, after an irrigation wash, salinity is reduced.

PRINCA® not only improves the physicochemical characteristics of the soil, but also has a direct nutritional effect. The application of **PRINCA®** allows the incorporation of calcium, magnesium and organic acids into the soil solution as well as into the clay-humic complex, providing, in this case, an increase in nutritional reserves.



DOSE

· Irrigation application: **2 -3 kg/ha**



REGULSER®+3

✓ pH REGULATOR, MOISTURISER AND DEFOAMER

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	4.00 % (w/w)
Ureic nitrogen (N)	4.00 % (w/w)
Total phosphorus pentoxide (P ₂ O ₅)	15.00 % (w/w)
Water-soluble phosphorus (P ₂ O ₅)	15.00 % (w/w)



FEATURES AND APPLICATIONS

REGULSER®+3 is composed of an aqueous pH buffer solution, designed as a P supply, in which a certain concentration is protonated and another fraction is found as a base, forming a conjugated acid/base system with the capacity to buffer the pH of the application broths and prevent it from becoming excessively basic. In addition, it incorporates surfactants and defoamers for better conditioning and handling of leaf application broths.



DOSE

pH source water	Dosage/1000 L water	pH source water	Dosage/1000 L water
8	400-450 ml	9,5	600-700 ml
8,5	450-500 ml	10	900-950 ml
9	500-550 ml	10,5	1600-1700 ml



FiBL



REGULSER® ECO

✓ pH REGULATOR FOR ORGANIC FARMING

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble manganese (Mn)	1.00 % (w/w)
Water-soluble zinc (Zn)	1.00 % (w/w)



FEATURES AND APPLICATIONS

REGULSER® ECO is a pH buffering and acidifying aqueous solution, designed to provide micronutrients (Mn and Zn) and carboxylic acids of natural origin.

Its application is designed to avoid losses of efficacy in phytosanitary and/or nutritional treatments, due to a decrease in the effective concentration of these products in basic media. It can also be applied to eliminate clogging in nozzles or drippers due to incrustation of insoluble salts in a basic medium.



DOSE

· In general: **200 ml/1000 L of water.**

The dosage is considered variable depending on the initial pH and the optimum pH to be achieved.

TOTUSAL®

✓ SALT DISPLACER BASED ON CARBOXYLIC ACIDS

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Zinc (water-soluble)	2.00 % (w/w)
Zinc complexed with gluconic acid	2.00 % (w/w)

Complexed fraction stability pH range: 2-8



FEATURES AND APPLICATIONS

TOTUSAL® is a solution based on carboxylic acids with complexed zinc, with an improving effect on the quality of the irrigation water supplied.

TOTUSAL® acts as a corrector and regulator of the cationic level, as well as a solution that provides balance in the nutrient solutions applied throughout the crop cycle. In addition, it decreases nutrient leaching and achieves greater efficiency in plant nutrition. It solubilises Ca and Mg blocked in the soil and the anti-salt stress effect decreases. It also acts as a soil conditioner and its chemical action improves soil porosity and reduces surface compaction.



DOSE

· Irrigation application: **2-8 L/ha**



ONE RANGE TWO
OBJECTIVES

U.N.E.



MITIGATE
ADVERSE
CONDITIONS

SOIL ORGANIC MATTER

SALT CORRECTORS

PH REGULATORS

Water and soil improvers



+ YIELD
+ QUALITY

NITROGEN (N)
POTASSIUM OXIDE (K_2O)

CARBON (C)
POTASSIUM (K_2O)

REGISTERED AND
AUTHORISED



ZINC (Zn)
MANGANESE (Mn)

ECO
ATTITUDE



INCREASES
PRODUCTIVITY

STRUCTURE AND
IMPROVEMENT



ORGANIC MATTER



WATER RE-
TENTION



WWW.SERVALESA.COM

Key nutritional input for each stage of the crop cycle

The special nutrition range provides solutions at each key stage of the crop cycle and generates the perfect synergy to achieve optimal nutrition and/or correct any possible nutritional deficiencies and thus improve the yield and quality of the crop.

- **Complete nutrition** throughout the entire crop cycle
- **Prevention and correction** of nutritional deficiencies
- **Improved yield** and crop quality



MICROSER®

Special nutrition

SPECIAL NUTRITION

Multifunctional corrector based on chelated trace elements



NEKAMIL® STAR

Special nutrition

SPECIAL NUTRITION

Innovative formulation to promote the formation of carbohydrates and proteins



SERVAK®

Special nutrition

SPECIAL NUTRITION

Innovative formulated ripening inducer and improved crop quality
crop quality



VERDEZIN® OLIVO

Special nutrition

SPECIAL NUTRITION

Innovative formulation to improve the biosynthesis processes of biomolecules
for the biomolecule biosynthesis for olive grove development



VERDEZIN® Fe

Special nutrition

SPECIAL NUTRITION

Functional corrector for multiple deficiencies



ZIMAGBOR® PB

Special nutrition

SPECIAL NUTRITION

Innovative balance of chelated and rapidly assimilated magnesium, boron and zinc



BIOMAG®

✓ RAPIDLY ASSIMILATED MAGNESIUM

Fertilizer commercialized in Europe under Reg. UE 2019/1009. Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Water-soluble magnesium oxide (MgO)	6.50 % (w/w)
Magnesium oxide (MgO) complexed by lignosulphonates	3.25 % (w/w)



FEATURES AND APPLICATIONS

The application of **BIOMAG®** is designed to prevent magnesium deficiencies and the anomalies it causes. Therefore, when the concentration of magnesium in the leaves is poor, chlorophyll production is very slow and the biosynthesis of polysaccharides and carbonaceous matter is deficient, resulting in chlorotic symptoms and very weak leaves. Therefore, its application is especially recommended in alkaline soils where the magnesium cation is usually blocked as insoluble carbonate, leading to magnesium deficiencies in the plant. Its application is recommended in citrus, fruit trees, vegetables, olive trees and grapevines.



DOSE

· Leaf application: **300-500 ml/hl**



BIOMAG® CALCIO

✓ INNOVATIVE FORMULATION BASED ON CALCIUM AND FAST-ASSIMILATION COMPLEXED MAGNESIUM

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Water-soluble calcium oxide (CaO)	7.00 % (w/w)
Complexed calcium oxide (CaO) by heptagluconic	3.50 % (w/w)
Water-soluble magnesium oxide (MgO)	7.00 % (w/w)
Complexed magnesium oxide (MgO) by heptagluconic	3.50 % (w/w)

pH range of stability of the complexed fraction: 2-10



FEATURES AND APPLICATIONS

BIOMAG® CALCIO is composed of partially complexed Calcium and Magnesium, so that they are available to the plant and easily assimilated. Its application is designed to prevent calcium and magnesium deficiencies and the anomalies they cause. Therefore, when the concentration of these elements in the leaves is poor, chlorophyll production is very slow, as well as the biosynthesis of polysaccharides and carbonaceous matter is deficient, resulting in chlorotic symptoms and very weak leaves.

The application of **BIOMAG® CALCIO** is especially recommended in alkaline soils where calcium and magnesium cations are usually blocked. This promotes photosynthesis, plant growth and fruit quality. Its application is recommended in citrus, fruit trees, vegetables, olive trees and grapevines.



DOSE

· Leaf application: **300-500 ml/hl**
· Irrigation application: **5-10 L/ha**



BORIDENO®

✓ FUNCTIONAL BORON AND MOLYBDENUM CORRECTOR

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble magnesium oxide (MgO)	10.00 % (w/w)
Water-soluble sulphur trioxide (SO ₃)	20.00 % (w/w)
Water-soluble molybdenum (Mo)	10.00 % (w/w)
Water-soluble boron (B)	7.00 % (w/w)



FEATURES AND APPLICATIONS

BORIDENO® is a special nutrition product, formulated in powder form, based on boron and molybdenum in a powder dispersive medium with complexing power to confer systemic properties and favour its application and efficacy.

Thanks to the action of molybdenum, which favours the synthesis of the nitrogen reductase enzyme, and boron, associated with the synthesis of glucan synthetase, pollen tube formation and pollen viability are favoured. In this way, both elements favour flowering and fruit set, so the application of **BORIDENO®** is especially indicated to favour both processes of the cycle and to increase the nutrient content at these moments of maximum need for the crop.



DOSE

- Leaf application: **150-300 g/hl**
- Irrigation application: **1.5-3 kg/ha**

It is advisable to carry out three treatments during the cycle, distributing the dose at the beginning of flowering, during fruit setting and fattening, or when necessary.

CALCIO SERVALESA®

✓ FUNCTIONAL CALCIUM DEFICIENCY CORRECTOR

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble calcium oxide (CaO)	12.00 % (w/w)
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FEATURES AND APPLICATIONS

CALCIO SERVALESA® is a compound formulated with calcium oxide (CaO). Its application is intended to prevent calcium and boron deficiencies in leaves and vegetable tissues, avoiding physiopathologies that entail crop losses. Its absorption via leaves or roots allows the calcium to bond with the tissue structure that requires protection, achieving a greater reinforcement of the cell wall.



DOSE

- Leaf application: **200-400 ml/hl**

Use in organic agriculture exclusively for the cultivation of apple trees.



CITROMIL®

✓ INNOVATIVE FORMULATION TO SUPPORT OPTIMAL CELL DIVISION

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble magnesium oxide (MgO)	10.00 % (w/w)
Sulphur trioxide (SO ₃)	43.00 % (w/w)
Water-soluble manganese (Mn)	16.50 % (w/w)
Total zinc (Zn)	8.00 % (w/w)



FEATURES AND APPLICATIONS

CITROMIL® is composed of a solid mixture of microelements and magnesium, with manganese being the majority, forming molecular species and therefore presenting good systemicity when applied via spraying or fertigation. Its application, as a solid easily dispersible in water, is especially advisable for the prevention of magnesium, manganese and/or zinc deficiencies. It helps to avoid or prevent abnormalities in chlorophyll function and in carbohydrate and protein biosynthesis.



DOSE

- Leaf application: **250 g/hl**
- Irrigation application: **2.5 kg/ha**



COLZASER®

✓ FUNCTIONAL BORON AND MOLYBDENUM CORRECTOR, INTENDED FOR CANOLA APPLICATION

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble boron (B)	14.00 % (w/w)
Water-soluble molybdenum (Mo)	0.60 % (w/w)



FEATURES AND APPLICATIONS

COLZASER® is a product based on boron (B) and molybdenum (Mo), homogenised in a powder dispersive medium with complexing power to confer systemic properties and favour its application and efficacy. Given the characteristics of the product, constant agitation of the mixture is recommended.

COLZASER® is specifically designed for the cultivation of rapeseed for the simultaneous supply of boron and molybdenum, avoiding deficiency situations that lead to abnormal photosynthesis and vegetative development.



DOSE

- Leaf application: **3 kg/ha**



FOSFASER®

✓ AN INNOVATIVE FORMULA TO IMPROVE METABOLIC PROCESSES AND CROP QUALITY

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble phosphorus pentoxide (P_2O_5)	29.50 % (w/w)
Water-soluble potassium oxide (K_2O)	5.00 % (w/w)
Water-soluble magnesium oxide (MgO)	6.70 % (w/w)



FEATURES AND APPLICATIONS

FOSFASER® is a stable colloidal solution of phosphorus and potassium in the presence of magnesium cation in a ratio balanced to optimally activate metabolic processes such as sprouting, flowering and fruit setting, resulting in a greater number of fruits of better quality and calibre. In cases of leaf application, it acidifies and stabilises the pH (buffering power), solubilising the nutritive elements supplied to the leaves, ensuring a better affinity and assimilation of the broth by the plant cuticle, without precipitation of the elements with the calcium carbonate in the water. Its special formulation activates cell multiplication, facilitating calcium assimilation, improving chlorophyll function and obtaining greater plant vigour and greenness.

Leaf application is recommended at all phenological stages: sprouting, flowering, fruit set and fattening. Each application will be accompanied by the nutrients demanded by the plant at its different phenological stages. In cases of fertigation, it favours root development and activity. The phosphorus in its formulation is highly available to the plant, is more efficient than traditionally used phosphorus sources and does not react with active limestone in the soil.



DOSE

- Leaf application: **250-500 ml/hl**
- Irrigation application: **4-5 L/ha**

HORMOSER® FLOW

✓ NITROGEN, PHOSPHORUS, BORON AND MOLYBDENUM BALANCE

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	1.70 % (w/w)
Ammoniacal nitrogen (N)	1.70 % (w/w)
Water-soluble phosphorus pentoxide (P_2O_5)	8.30 % (w/w)
Water-soluble boron (B)	0.70 % (w/w)
Water-soluble molybdenum (Mo)	3.00 % (w/w)



FEATURES AND APPLICATIONS

The formulation of **HORMOSER FLOW®** consists of a mixture of essential cations to avoid the anomalies that occur when these cations are not present in the sap in sufficient concentration, leading to deficiencies in flowering and fruit setting. Their absorption is systemic and they can be applied by spraying or fertigation.

The ideal time for the application of **HORMOSER FLOW®** is spring, during maximum sap flow, in pre-flowering to achieve a high fruit set rate and vegetative development by catalysing the biosynthesis of polysaccharides and proteins. It is especially recommended for cucurbits, vegetables, fruit and citrus trees.



DOSE

- Leaf application: **200-300 ml/hl**
- Irrigation application: **2-4 L/ha**



HUMIBOR®

✓ FUNCTIONAL BORON DEFICIENCY CORRECTOR

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble boron (B)	10.00 % (w/w)
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FEATURES AND APPLICATIONS

HUMIBOR® is a solution of boron complexed with alkylamine, forming a non-ionic complex molecular species in such a way that the boron element is absorbed and translocated systemically through the sap flow. Through the boron complex, sugars are transported to the young apical shoots.

Its application is designed to promote fertilisation and fruit setting, as well as to structure sprouting through the transport of vital units for biosynthesis of sugars.



DOSE

- Leaf application: **200-300 ml/hl**
- Irrigation application: **4-6 L/ha**

HUMICAL®

✓ INNOVATIVE FORMULATION BASED ON COMPLEXED CALCIUM WITH RAPID ASSIMILATION

Fertilizer registered in Portugal with registered number **89/2016** under Decree-law 103/2015 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble calcium oxide (CaO)	15.00 % (w/w)
Complexed calcium oxide (CaO) by lignosulfate	7.50 % (w/w)



FEATURES AND APPLICATIONS

HUMICAL® is formulated with a 15% calcium solution as a partially complexed Ca (II) cation, so its systemicity can be captured and it can be applied by spraying and/or fertigation.

Its application is intended to prevent calcium deficiencies in leaves and vegetable tissues, avoiding physiopathologies that entail great crop losses. Its absorption via leaves or roots allows the calcium to bond with the tissue structure that requires protection.



DOSE

- Leaf application: **300-400 ml/hl**



KELTAMIL®Fe

FAST-ASSIMILATION FUNCTIONAL CHELATED IRON CORRECTOR

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble chelated iron (Fe) by EDDHA	6.00 % (w/w)
O-o chelated Iron (Fe) EDDHA	4.20 % (w/w)



FEATURES AND APPLICATIONS

The formulation of **KELTAMIL® Fe** consists of an organic iron salt in a solid state which, in a solution, forms the stable chelate Fe EDDHA(o-o) with a pH-dependent stability range from 3.5 to 9.5 pH units. As a non-ionic molecular species, it presents effective systemicity when applied by fertigation or spraying.

Its application is advisable to prevent iron chlorosis in citrus, fruit trees, vegetables, olive trees, grapevines and ornamentals. The absorption via soil is totally free of blockages due to excess alkalinity, since it is a stable molecular species and not an ionic species, which ensures Fe assimilation and catalyses the chlorophyll function to avoid the effects of chlorosis.

The appropriate time of application is at the beginning of sprouting. In the case of citrus crops it is also recommended before the summer sap movement. In a curative regime, with the first symptoms of chlorosis, repeat applications every 15 days.



DOSE

Newly planted plant: **3-5 g**
Plants from 1st year of production: **10-15 g**
2nd and 3rd year plants: **25-50 g**
Plants established for more than 3 years: **100 g**

Apply the product locally on the tree or plant, making furrows around it or injected into the soil.



MICROSER®

MULTIFUNCTIONAL CORRECTOR BASED ON CHELATED OLIGOELEMENTS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Copper (Cu) chelated by EDTA, water soluble	0.30 % (w/w)
Iron (Fe) chelated by EDTA and EDDHSA, complexed by HGA, soluble in water	7.50 % (w/w)
Manganese (Mn), complexed by HGA, water-soluble	3.30 % (w/w)
Molybdenum (Mo), as sodium salt, water soluble.	0.10 % (w/w)
Zinc (Zn) chelated by EDTA, complexed by HGA, soluble in water.	0.60 % (w/w)

pH range in which a good stability of the chelated fraction is guaranteed: 2-12



FEATURES AND APPLICATIONS

MICROSER® is a formulation based on essential microelements that help to correct multiple deficiencies generated by the deficiency of these microelements in plants. It may be noted for its iron content (a key element of photosynthesis) and its manganese content (which favours vegetative development and flowering), with these two being microelements found in higher concentrations in the product. In addition, the formulation includes Boron, Copper, Molybdenum and Zinc.

To contribute to better systemic assimilation of micronutrients by the plant, via both the leaves and roots, the formulation includes chelating agents (EDTA, EDDHA) and complexing agents (HGA).

The application of **MICROSER®** is advisable to support the metabolic processes of plants at times of maximum need. It can be applied continuously and/or during times of maximum nutrient requirement and during maximum sap flow, to ensure a rapid increase in the biosynthesis of essential compounds that favour vegetative development.



DOSE

- Leaf application: **200-300 g/hl**
- Irrigation application: **2-3 kg/ha**



MICROSER® SB

✓ INNOVATIVE FORMULATION BASED ON CHELATED TRACE ELEMENTS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble copper (Cu)	0.30 % (w/w)
EDTA-chelated Copper (Cu)	0.17 % (w/w)
HGA-complexed copper (Cu)	0.13 % (w/w)
Water-soluble iron (Fe)	7.50 % (w/w)
EDTA-chelated iron (Fe)	3.33 % (w/w)
EDDHA-chelated iron (Fe)	0.17 % (w/w)
Iron (Fe) complexed by HGA	4.00 % (w/w)
Water-soluble manganese (Mn)	3.30 % (w/w)
EDTA-chelated manganese (Mn)	1.90 % (w/w)
HGA-complexed manganese (Mn)	1.40 % (w/w)
Water-soluble molybdenum (Mo)	0.10 % (w/w)
Water-soluble zinc (Zn)	0.60 % (w/w)
EDTA-chelated zinc (Zn)	0.35 % (w/w)
HGA-complexed zinc (Zn)	0.25 % (w/w)

Chelating agent: EDTA and EDDHA

Complexing agent: Heptagluconate (HGA)

(pH range of stability of the chelated fraction 2-12)



FEATURES AND APPLICATIONS

The formulation of **MICROSER® SB**, as a wettable, water-soluble powder, consists of a mixture of essential cations in order to avoid the anomalies that occur when these cations are not present in the sap in sufficient concentrations, leading to deficiencies in the biosynthesis of chlorophyll, polysaccharides, polyphenols, hormones and vitamins. It consists of EDTA- and EDDHA-chelated cations, which allows the systemic absorption of the minerals it provides.

It may be noted for its iron content (a key element of photosynthesis) and its manganese content (which favours vegetative development and flowering), with these two being microelements found in higher concentrations in the product. In addition, the formulation includes Copper, Molybdenum and Zinc.

Given the characteristics of the product, constant stirring of the mixture is recommended.



DOSE

- Leaf application: **200-300 g/ha**
- Irrigation application: **2-3 kg/ha**

MIX MICROS® PS

✓ BALANCED MULTIPLE DEFICIENCY CORRECTOR

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K ₂ O)	5.00 % (w/w)
Water-soluble magnesium oxide (MgO)	2.00 % (w/w)
Water-soluble sulphur trioxide (SO ₃)	30.00 % (w/w)
Water-soluble boron (B)	0.70 % (w/w)
Water-soluble copper (Cu)	0.40 % (w/w)
Water-soluble iron (Fe)	7.00 % (w/w)
Water-soluble manganese (Mn)	5.00 % (w/w)
Water-soluble molybdenum (Mo)	0.30 % (w/w)
Water-soluble zinc (Zn)	2.00 % (w/w)



FEATURES AND APPLICATIONS

MIX MICROS® PS is a powder formulation based on a mixture of microelements with potassium and magnesium in order to avoid the anomalies that occur when these cations are not present in the sap in sufficient concentrations, leading to deficiencies in the biosynthesis of chlorophyll, proteins, polysaccharides, polyphenols, hormones and vitamins.

MIX MICROS® PS incorporates microelements partially chelated with natural low molecular weight complexing agents to improve their absorption, both via leaf and fertigation methods. This fact makes **MIX MICROS® PS** a highly effective product in terms of the correction of the nutritional elements it contains.

The best time to apply the product is spring, during maximum sap flow, to cause a rapid increase in the biosynthesis of organic compounds essential for vegetative development.



DOSE

- Leaf application: **200-300 g/ha**
- Irrigation application: **2-4 kg/ha**



NEKAMIL®

✓ FUNCTIONAL POTASSIUM DEFICIENCY CORRECTOR

Fertilizer commercialized in Spain under Royal Decree 506/2013 Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K_2O)	33.00 % (w/w)
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FEATURES AND APPLICATIONS

NEKAMIL® is a special nutritional product, formulated with potassium of rapid assimilation. Due to its systemic absorption, it can be applied by spraying and fertigation.

Potassium intensifies the biosynthesis of sugars and pigments, as well as the content of lipids and carbohydrates, so the application of **NEKAMIL®** is especially indicated to promote fattening and ripening in crops where color and sugar content ($^{\circ}Brix$) are essential to ensure quality without losing acidity, as in wine grapes, citrus and vegetables.



DOSE

- Leaf application: **150-300 ml/ha**
- Irrigation application: **4-6 L/ha**



NEKAMIL® STAR

✓ INNOVATIVE FORMULATION TO PROMOTE THE FORMATION OF CARBOHYDRATES AND PROTEINS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K_2O)	25.00 % (w/w)
Water-soluble sulphur trioxide (SO_3)	40.00 % (w/w)
Water-soluble sulphur trioxide (SO_3) in the form of thiosulphate	40.00 % (w/w)



FEATURES AND APPLICATIONS

NEKAMIL® STAR is a concentrated solution of potassium in the presence of rapidly assimilated sulphur. Due to its systemic absorption, it can be applied by spraying and fertigation in any crop, when the biosynthesis of sugars and pigments is to be intensified. Its application is especially recommended in crops where colour and sugar concentration is essential for quality without losing acidity: wine grapes, fruit, citrus and vegetables. In turn, improves fruit set, fruit size and ripening, and fat yield in some crops.



DOSE

- Leaf application: **150-300 ml/ha**
- Irrigation application: **4-6 L/ha**



POWER STOP® PLUS

✓ EXCLUSIVE SUPPLY OF PHOSPHORUS, POTASSIUM, CALCIUM, MAGNESIUM AND TRACE ELEMENTS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Ammonium citrate and water-soluble phosphorus pentoxide (P_2O_5)	18.00 % (w/w)
Water-soluble potassium oxide (K_2O)	11.90 % (w/w)
Water-soluble calcium oxide (CaO)	8.00 % (w/w)
Water-soluble magnesium oxide (MgO)	4.20 % (w/w)
Water-soluble boron (B)	0.15 % (w/w)
Water-soluble zinc (Zn)	0.20 % (w/w)
Water-soluble copper (Cu)	0.20 % (w/w)
Water-soluble molybdenum (Mo)	0.10 % (w/w)



FEATURES AND APPLICATIONS

POWER STOP® PLUS is a solid mixture of phosphorus, potassium, calcium, magnesium and trace elements for leaf application. Its application is advisable to prevent fruit drop due to nutritional deficiency, in flower induction and differentiation, or due to bioclimatic accidents (grapevine, fruit trees, vegetables, olive and citrus).



DOSE

· Leaf application: **200-300 g/hl**



SERBOCAL® PLUS GOLD

✓ CORRECTOR FOR THE DEVELOPMENT OF THE STRUCTURE OF CELL WALLS

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble calcium oxide (CaO)	25.00 % (w/w)
Calcium Oxide (CaO) complexed by gluconic acid	25.00 % (w/w)
Water-soluble magnesium oxide (MgO)	4.00 % (w/w)
Magnesium oxide (MgO) complexed by gluconic acid	2.00 % (w/w)
Water-soluble boron (B)	2.10 % (w/w)



FEATURES AND APPLICATIONS

SERBOCAL® PLUS GOLD is a formulation based on Calcium, Magnesium and Boron, with the most concentrated of these being Calcium. Its special design guarantees the high solubility of the product and, therefore, very effective assimilability of the nutrients contained, which in turn improves the use made by the plants.

Its application is intended to prevent calcium, magnesium and boron deficiencies in leaves and vegetable tissues, avoiding physiopathologies that entail great crop losses. Its absorption allows the calcium to bond with the tissue structure that requires protection. **SERBOCAL® PLUS GOLD** improves tissue plasticity, preventing the fruits from splitting. Similarly, it helps to maintain a good water balance within the cells.



DOSE

· Leaf application: **250-500 g/hl**



SERVAK®

✓ INNOVATIVE FORMULATED RIPENING INDUCER AND CROP QUALITY ENHANCER

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K_2O)	41.00 % (w/w)
Water-soluble magnesium oxide (MgO)	2.00 % (w/w)
Water-soluble sulphur trioxide (SO_3)	40.00 % (w/w)



FEATURES AND APPLICATIONS

SERVAK® is a mixture of potassium salts and nutrients of high concentration. It can be applied by spraying and fertigation in any crop.

Its application is indicated to promote fattening and ripening in crops where the biosynthesis of sugars and pigments is to be intensified, where color and sugar concentration is essential for quality without losing acidity: wine grapes, citrus and vegetables.



DOSE

- Leaf application: **250-400 g/hl de agua**
- Irrigation application: **4-8 kg/ha**

SERVAMIX®

✓ ACTIVE SUPPLY OF MAGNESIUM, SULPHUR AND TRACE ELEMENTS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble magnesium oxide (MgO)	10.00 % (w/w)
Water-soluble sulphur trioxide (SO_3)	40.00 % (w/w)
Water-soluble boron (B)	0.50 % (w/w)
Water-soluble copper (Cu)	1.50 % (w/w)
Water-soluble iron (Fe)	4.00 % (w/w)
Water-soluble manganese (Mn)	4.00 % (w/w)
Water-soluble molybdenum (Mo)	0.10 % (w/w)
Water-soluble zinc (Zn)	1.50 % (w/w)



FEATURES AND APPLICATIONS

SERVAMIX® is a powder formulation consisting of a mixture of essential cations in order to avoid the anomalies that occur when these cations are not present in the sap in sufficient concentrations, leading to deficiencies in the biosynthesis of chlorophyll, polysaccharides, polyphenols, hormones and vitamins.

SERVAMIX® incorporates microelements partially chelated with natural complexing agents of low molecular weight to improve their absorption, both via leaf and fertigation, and their systemicity. This fact, together with the presence of surfactants, makes **SERVAMIX®** a highly effective product in terms of the correction of the nutritional elements it contains. The best time to apply the product is spring, during maximum sap flow, to cause a rapid increase in the biosynthesis of organic compounds essential for vegetative development.



DOSE

- Leaf application: **200-300 g/hl**
- Irrigation application: **2-4 kg/ha**



VERDEZIN® EXTRA

✓ INNOVATIVE FORMULATION TO IMPROVE THE BIOSYNTHESIS PROCESS OF BIOMOLECULES

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Free amino acids	2.00 % (w/w)
Total nitrogen (N)	0.10 % (w/w)
Organic nitrogen (N)	0.10 % (w/w)
Magnesium oxide (MgO) water soluble	15.00 % (w/w)
Sulfur (SO ₂) water-soluble	41.00 % (w/w)
Water-soluble manganese (Mn)	8.00 % (w/w)
Water-soluble molybdenum (Mo)	0.05 % (w/w)
Total zinc (Zn)	18.00 % (w/w)

Aminogram: 2% glutamic acid obtained by fermentation of sugar cane molasses with *Corynebacterium glutamicum*.



FEATURES AND APPLICATIONS

VERDEZIN® EXTRA is a special nutrition product, formulated in powder form, based on a balance of nutrients and amino acids essential for the plant. It is specially designed to prevent and correct deficiencies generated by the deficit of macro and microelements, especially magnesium, zinc and manganese.

The application of **VERDEZIN® EXTRA** is recommended to increase nutrient reserves in the plant to optimize flowering, fruit set and cell division, improving crop development. These micronutrients also favor respiration, chlorophyll synthesis and consequently photosynthesis.



DOSE

• Leaf application: **200-300 g/ha**



VERDEZIN® Fe

✓ FUNCTIONAL CORRECTOR FOR MULTIPLE DEFICIENCIES

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Magnesium Oxide (MgO) water soluble	11.50 % (w/w)
Sulfur Oxide (SO ₂) water soluble	47.00 % (w/w)
Boron (B) water soluble	0.20 % (w/w)
Iron (Fe) water soluble	2.00 % (w/w)
Manganese (Mn) water soluble	5.90 % (w/w)
Molybdenum (Mo) water soluble	0.05 % (w/w)
Zinc (Zn) water soluble	10.00 % (w/w)



FEATURES AND APPLICATIONS

VERDEZIN® Fe is a special nutrition product developed by Servalesa, based on the balance of essential plant nutrients such as sulfur, magnesium, manganese, iron and zinc. It is designed to prevent and correct deficiencies generated by the deficit of macro and microelements, especially iron deficiencies.

VERDEZIN® Fe application is recommended to prevent deficiencies in the biosynthesis of chlorophyll, polysaccharides, polyphenols, hormones and vitamins, especially during spring, when the maximum sap flow and crop needs are concentrated. At the same time, photosynthesis and increased biosynthesis of organic compounds essential for vegetative development are favored.



DOSE

• Leaf application: **200-300 g/ha**
• Irrigation application: **2-3 kg/ha**



VERDEZIN® OLIVO

✓ INNOVATIVE FORMULATION TO IMPROVE THE BIOSYNTHESIS PROCESS OF KEY BIOMOLECULES FOR THE OPTIMAL DEVELOPMENT OF OLIVE GROVES

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble magnesium oxide (MgO)	10.00 % (w/w)
Water-soluble sulphur trioxide (SO ₃)	29.00 % (w/w)
Water-soluble boron (B)	8.00 % (w/w)
Water-soluble zinc (Zn)	7.50 % (w/w)
Water-soluble iron (Fe)	1.00 % (w/w)



FEATURES AND APPLICATIONS

VERDEZIN® OLIVO consists of a solid mixture of trace elements based on boron, iron and zinc, in the presence of a part of magnesium, with EDTA-type chelating agents and water-soluble sulphur. Its optimum solubility and complexation when in a solution ensure good systemicity, improving its absorption and efficacy. Due to its high concentration of magnesium, sulphur, boron, zinc and iron, **VERDEZIN® OLIVO** allows an optimal supply of nutrients that favour sprouting, pollination, fertilisation, flowering and fruit setting.

The essential cations that make up **VERDEZIN® OLIVO** enhance chlorophyll biosynthesis and activate the enzymatic processes involved in the synthesis of proteins, polysaccharides, polyphenols, hormones and vitamins. The special formulation of **VERDEZIN® OLIVO**, produces a great synergy between its components that increases photosynthetic activity in all metabolic processes of the plants, intensifying the biosynthesis of organic compounds essential for the vegetative development of the olive tree.

Its application is advisable at all critical points of olive grove development. It is especially advisable during sprouting, as it activates vigour and good development of terminal buds, stimulating sprouting and improving the growth of new tissues. During pre-flowering, it improves pollination and fertilisation, increasing fruit setting. As for the fruit, it strengthens its vigour, reducing fruit drop.



DOSE

- Leaf application: **200-300 g/hl**
- Irrigation application: **2-3 kg/ha**



VERDEZIN® PRO

✓ HIGH EFFICIENCY NUTRITION. MICROELEMENT CORRECTOR WITH AMINO ACIDS

Special fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Free amino acids	2.00 % (w/w)
Total nitrogen (N)	0.20 % (w/w)
Organic nitrogen (N)	0.20 % (w/w)
Water-soluble magnesium oxide (MgO)	14.50 % (w/w)
Water-soluble sulphur trioxide (SO ₃)	50.00 % (w/w)
Water-soluble manganese (Mn)	4.50 % (w/w)
Water-soluble zinc (Zn)	12.00 % (w/w)

Aminogram: 100% glutamic acid obtained by fermentation of sugar cane molasses with *Corynebacterium glutamicum*.



FEATURES AND APPLICATIONS

VERDEZIN® PRO is a special nutrition product developed by Servalesa based on a balance of nutrients: sulphur, magnesium, manganese and zinc, as well as free amino acids that help to optimise the assimilation and transport of these nutrients to the interior of the plant.

VERDEZIN® PRO is recommended to provide these nutrients in a way that helps to improve optimal development at times of maximum demand and/or to avoid the anomalies that occur when these cations are not present in the sap in sufficient concentration. In this sense, **VERDEZIN® PRO** promotes cell division and the biosynthesis of chlorophyll, proteins, polysaccharides, polyphenols, hormones and vitamins. **VERDEZIN® PRO** includes free amino acids in the formulation, obtained by fermentation of cane molasses with *Corynebacterium glutamicum*, which helps to complement the cations included in the formulation and improve their absorption, and provide organic nitrogen.



DOSE

- Leaf application: **200-300 g/hl (2-3 kg/ha)**
- Irrigation application: **2-3 kg/ha**



ZIMAGBOR® PB

✓ INNOVATIVE FORMULATION WITH MAGNESIUM, BORON AND ZINC

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble magnesium oxide (MgO)	10.00 % (w/w)
Water-soluble sulfur trioxide (SO ₃)	20.00 % (w/w)
Water-soluble boron (B)	10.00 % (w/w)
Water-soluble zinc (Zn)	10.00 % (w/w)



FEATURES AND APPLICATIONS

ZIMAGBOR® PB consists of a balance of secondary nutrients (Mg) and micronutrients (B, Zn). Both Boron and Zinc participate in the process of protein synthesis and sugar transport. Boron is also an essential element to optimise flowering. On the other hand, Magnesium, considered a basic component of chlorophyll, is involved in the activation of numerous enzymes necessary for plant development and also contributes to protein synthesis. Its application is especially recommended in oilseeds and olive groves, as well as in citrus, grapevine and fruit trees.



DOSE

· Leaf application: **250-300 g/hl**

Special nutrition



**OPTIMAL NUTRITION
FOR ORGANIC
FARMING**



U.N.E.

NUTRITIONAL DEFICIENCIES



IMPROVE PERFORMANCE

PREVENTION AND CORRECTION

KEY NUTRIENTS FOR EACH STAGE OF THE CYCLE



**MATURATION
INDUCERS**



**ECO
ATTITUDE**

**FULL
NUTRITION**



**+ YIELD
+ QUALITY**

**COPPER (Cu)
ZINC (Zn)**

**BORON (B)
IRON (Fe)**

**NUTRITIONAL
DEFICIENCIES**

**FUNCTIONAL
CORRECTORS**



**POTASSIUM (K)
MANGANESE (Mn)
NITROGEN (N)**

**CALCIUM
DEFICIENCIES**

**POTASSIUM
OXIDE (K₂O)**

**SULPHUR
TRIOXIDE (SO₃)**

**MAGNESIUM
OXIDE (MgO)**

**MAGNESIUM
OXIDE (MgO)**

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**REGISTERED AND
AUTHORIZED**



**OPTIMAL
CELL
DIVISION**

Products for specific times of need

The specific range consists of a wide variety of products oriented to meet the specific needs of the crop at specific times of the cycle.

- **Products for specific times of need**
- **Foliar treatment optimizers**
- **Products to reduce the surface moisture of the leaves**



ADIMEL® STAR

Specifics

BOOSTS FOLIAR TREATMENTS

Formulated with zinc and manganese



LECISER® PLUS

Specifics

BOOSTS FOLIAR TREATMENTS SUN PROTECTION

Complexed calcium and soya lecithin



SUMMA® CONTACT

Specifics

BOOSTS FOLIAR TREATMENTS

Increases treatment adherence



SUMMA® SYSTEM

Specifics

BOOSTS FOLIAR TREATMENTS

Foliar fertilizer based on nitrogen, phosphorus and sulphur



TEMPLARIO® PLUS

Specifics

CRITICAL MOMENTS

Potassium oxide based formulation



VENUSER® ZEN

Specifics

CRITICAL MOMENTS

Stimulates the plant. Formulated with sulfur and NPK



ADIMEL® STAR

✓ LEAF TREATMENT OPTIMISERS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble manganese (Mn) as sulfate	1.00 % (w/w)
Water-soluble zinc (Zn) as sulfate	1.00 % (w/w)



FEATURES AND APPLICATIONS

ADIMEL® STAR is a solution of zinc and manganese forming molecular species. Its application is especially indicated to enhance foliar treatments and achieve a greater homogeneity of the treatments on the leaf surface thanks to its manganese and zinc content.

ADIMEL® STAR participates as an improver and/or regulator of the treatments carried out on the crop and also increases the distribution of the application and a greater homogeneity on the leaf surface thanks to the breaking of the surface tension of the product on the leaf. This solution, specially formulated by Servalesa, gives it excellent dispersibility in aqueous systems and an excellent defoaming effect, so necessary for some treatments.



DOSE

• Leaf application: **50-300 ml/100 L**

FORTIOLIVO®

✓ HIGH-ASSIMILATION PHOSPHORUS AND MAGNESIUM FOR OLIVE GROVES

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total phosphorous pentoxide (P_2O_5)	29.50 % (w/w)
Water-soluble phosphorus peroxide (P_2O_5)	29.50 % (w/w)
Water-soluble potassium oxide (K_2O)	5.00 % (w/w)
Water-soluble magnesium oxide (MgO)	6.70 % (w/w)



FEATURES AND APPLICATIONS

FORTIOLIVO® is a stable formulation of phosphorus and potassium in the presence of magnesium cation. Its application is designed as a phosphorus and magnesium supplement to correct deficiencies of these essential elements. Together with the presence of magnesium cation in a balanced proportion to optimally activate metabolic processes such as sprouting, flowering and fruit setting, giving a greater number of fruits of better quality and calibre. As for phosphorus, it is highly available to the plant, is more efficient than traditionally used phosphorus sources and does not react with active limestone in the soil.

The application of **FORTIOLIVO®** by fertigation promotes root development and activity. In the case of leaf application, it acidifies and stabilises the pH (buffering power), solubilising the nutritive elements supplied to the leaves, ensuring a better affinity and assimilation of the nutrient solution by the plant cuticle, without precipitation of the elements with the calcium carbonate in the water.

It is recommended for all types of crops and soils. In particular, it is recommended for olive, citrus, fruit, vegetables, vines and ornamentals. In olive trees, its use is especially advisable where hard or alkaline water is used.



DOSE

• Leaf application: **200-300 ml/hl**
• Irrigation application: **4-6 L/ha**



K-VITRUM®

✓ REDUCES THE SURFACE MOISTURE OF THE LEAVES

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K_2O)	10.50 % (w/w)
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FEATURES AND APPLICATIONS

K-VITRUM® is a uniquely formulated product developed by Servalesa. It has a structural and cell wall reinforcement function derived from the accumulation of growth factors in the epidermis of leaves, stems and fruits, thus making the plant more robust, tough and elastic.

Another important parameter to highlight after the application of **K-VITRUM®** is the reduction of excessive accumulation of moisture deposited on the leaf surface, mitigating critical periods caused by this abiotic stress factor.



DOSE

· Leaf application: **300-500 ml/hl**



K-VITRUM® PLUS

✓ REDUCES SURFACE MOISTURE AND STIMULATES ENZYME SYNTHESIS

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K_2O)	14.50 % (w/w)
Sulfur trioxide (SO_3) soluble in water	12.60 % (w/w)
Chloride	0.05 % (w/w)



FEATURES AND APPLICATIONS

K-VITRUM® PLUS is a uniquely formulated product developed by Servalesa®, and has a structural and cell wall reinforcement function derived from the accumulation of growth factors in the epidermis of leaves, stems and fruits. This achieves a more robust, harder and more elastic plant.

Another important parameter to highlight after the application of **K-VITRUM® PLUS** is the reduction of excessive accumulation of moisture deposited on the leaf surface, mitigating critical periods caused by this abiotic stress factor.

In addition, **K-VITRUM® PLUS** includes growth factors in the formulation, which stimulate the plant's metabolic processes and enhance the biosynthesis of sugars and pigments.



DOSE

· Leaf application: **300-500 ml/hl**



LECISER® PLUS

✓ PROTECTS THE FRUIT FROM HIGH SOLAR RADIATION

Fertilizer registered in Portugal with registered number **91/2016** under Decree-law 103/2015 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble calcium oxide (CaO)	2.00 % (w/w)
Calcium oxide (CaO) chelated by EDTA	1.60 % (w/w)

Chelate stability pH interval: 4-8



FEATURES AND APPLICATIONS

LECISER® PLUS is a preparation designed to provide complexed calcium together with non-GMO soy lecithin. Soy lecithin protects the crop against bioclimatic attacks such as high solar radiation or low temperatures. In combination with calcium, it improves fruit colouration and promotes more uniform ripening. It also reduces the phytotoxicity hazards of other products applied later.

The use of **LECISER® PLUS** for post-harvest treatments makes it possible to maintain fruit qualities and delay senescence during storage.



DOSE

· Leaf application: **200-300 ml/hl**



LIMITSER® K

✓ UNLIMITED SOLUTION WITH POTASSIUM

Fertilizer marketed in other countries under mutual recognition (Regulation (EU) 2019/515). Fertilizer commercialized in Spain under Royal Decree 506/2013.



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K ₂ O)	6.00 % (w/w)
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FEATURES AND APPLICATIONS

LIMITSER® K consists of a stable potassium-based solution where the fatty acids are salified with potassium. The application of **LIMITSER® K** is designed to provide potassium to promote the biosynthesis of sugars and pigments. Its special adherence and viscosity protect the plant from certain external agents by means of a superficial layer.

LIMITSER® K is very useful in all types of crops: citrus, grapevine, olive, stone and pome fruit trees and ornamentals.



DOSE

· Leaf application: **300-500 ml/hl**



LIMITSER® P

✓ UNLIMITED SOLUTION WITH NITROGEN AND PHOSPHORUS

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	3.00 % (w/w)
Ureic nitrogen (N)	3.00 % (w/w)
Total phosphorus pentoxide (P ₂ O ₅)	17.00 % (w/w)
Water-soluble phosphorus pentoxide (P ₂ O ₅)	17.00 % (w/w)



FEATURES AND APPLICATIONS

LIMITSER® P consists of a stable nitrogen and phosphorus based solution. Its application is designed as a phosphorus supply to correct possible deficiencies of this essential nutrient in the plant. Its special adherence and viscosity allow the plant to be protected from certain external agents by means of a surface layer.

LIMITSER® P is very useful in all types of crops: citrus, grapevine, olive, stone and pome fruit trees and ornamentals.



DOSE

- Leaf application: **200-600 ml/hl**



NOVOMIL® PM

✓ HIGH-SOLUBILITY COMPLEXED COPPER

Fertilizer commercialized in Europe under Reg. UE 2019/1009.



CONTENT AND GUARANTEED RICHNESS

Water-soluble copper (Cu)	15.00 % (w/w)
Copper (Cu) chelated by EDTA	13.00 % (w/w)



FEATURES AND APPLICATIONS

NOVOMIL® PM is a solid mixture of copper – EDTA molecular complexes, so its absorption is systemic. Due to its systemic absorption, **NOVOMIL® PM** can be applied by spraying and fertigation on any crop, at times and under conditions where the copper supply is not phytotoxic.

In the case of stone and pome fruit crops, please be aware that the product should not be applied to vegetation as it may cause defoliation, so it should be applied only as a winter treatment. Given the characteristics of the product, constant agitation of the mixture is recommended.



DOSE

- Leaf application: **50 g/hl** in vegetables and **150 g/hl** in woody crops
- Application by fertigation: **500 g/ha** in vegetables and **1-1.5 kg/ha** in woody crops



PRE-SEM®

✓ GIVE YOUR GARLIC SEED A BETTER LIFE

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Water-soluble copper (Cu)	5.50 % (w/w)
Complexed copper (Cu) by gluconate	2.80 % (w/w)



FEATURES AND APPLICATIONS

PRE-SEM® is a product specially designed for the treatment of garlic seed and cereals, with the objective of stimulating the physiological mechanisms that improve germination and ensuring correct rooting of the crop. It is a stable complex in the form of lignosulphonates in a coloured matrix that allows the monitoring of treatments.



DOSE

· Seed treatment: apply in pre-sowing, treating garlic seeds at a dose of **2L/t** seed. In cereals at the dose of **2-2.5 L/t** of seed.



SUMMA® CONTACT

✓ INCREASES TREATMENT ADHERENCE

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Manganese (Mn) water soluble	2.00 % (w/w)
Manganese (Mn) soluble in water	2.00 % (w/w)



FEATURES AND APPLICATIONS

SUMMA® CONTACT is a fertilizer product formulated with highly soluble chelated manganese.

The components present in the composition of **SUMMA® CONTACT** favor adhesion on the plant surface, increasing persistence and reducing product losses due to runoff. **SUMMA® CONTACT** also favors the anti-rebound action of the spray droplets and the increase of the wetting surface, achieving a greater coverage of the treatment on the leaf and a homogeneous distribution of the treatment.

The application of **SUMMA® CONTACT** is indicated to retain the manganese present in its composition on the plant surface for a longer period of time and in greater quantity. These effects can be extended to other products included in the application tank, which will benefit from the mode of action of **SUMMA® CONTACT** maximizing the effects of the treatment.



DOSE

· Leaf application: **0.1-0.5 L/ha**

Maximum recommended dose 0.1%.



SUMMA® SYSTEM

✓ IMPROVES THE SYSTEMIC EFFICIENCY OF TREATMENTS

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	7.40 % (w/w)
Ammoniacal nitrogen (N)	2.90 % (w/w)
Ureic nitrogen (N)	4.50 % (w/w)
Sulphur trioxide (SO ₃)	7.50 % (w/w)
Water-soluble phosphorus pentoxide (P ₂ O ₅)	1.70 % (w/w)



FEATURES AND APPLICATIONS

SUMMA® SYSTEM is a liquid fertiliser solution for leaf application based on nitrogen, phosphorus and sulphur, suitable for all types of crops. Thanks to its unique composition, **SUMMA® SYSTEM** improves the systemic efficiency of the leaf treatments in which it is incorporated.

The application of **SUMMA® SYSTEM** is recommended in all types of crops.



DOSE

· Leaf application: **0,5-1 L/ha**



TEMPLARIO® PLUS

✓ STRENGTHEN YOUR CROP

Special fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Water-soluble potassium oxide (K ₂ O)	12.00 % (w/w)
Chloride	<0.05 % (w/w)



FEATURES AND APPLICATIONS

TEMPLARIO® PLUS is a product formulated with a concentrated solution of potassium in the form of inorganic salt and growth factors developed by Servalesa, oriented to improve the quality of the skin in fruit trees.

TEMPLARIO® PLUS is specially designed to stimulate and reinforce the cell wall in fruit trees, optimizing resistance to abiotic stress phenomena and other critical moments of the crop cycle, contributing to the maintenance of turgor and osmotic balance. It also stands out for its ability to reduce the excessive accumulation of moisture deposited on plant surfaces, mitigating critical moments caused by this abiotic stress factor.



DOSE

· Leaf application: **250 ml/ha**



TECNET GD®

✓ SPRAY EQUIPMENT CLEANER



CONTENT AND GUARANTEED RICHNESS

Sodium Tripolyphosphate (STTP)

88.55 % (w/w)



FEATURES AND APPLICATIONS

TECNET® GD is an exclusive cleaning product designed for the maintenance of spraying equipment and agricultural machinery. The unique **TECNET® GD** component allows for thorough cleaning of any type of active matter and/or residue accumulated in the equipment and, in addition, extends the useful life of the equipment.

1. **TECNET® GD** allows the cleaning of spraying equipment.
2. **TECNET® GD** eliminates residual active substances, limiting the appearance of these in future treatments as far as possible.
3. **TECNET® GD** extends the life of the equipment: it does not attack paints or varnishes and is non-corrosive.

TECNET® GD is recommended for:

1. Maintenance cleaning: frequent cleaning.
2. Thorough cleaning when changing product family and/or crop.
3. Winter cleaning: prior to storage of machinery to prevent rusting, and to protect seals and pipes.
4. Exterior cleaning: sprayer and other machinery (ploughs, subsoilers, harrows).



DOSE

	Volume of cleaning water	Tecnet GD Dose	Cleaning time
Maintenance cleaning	Minimum 100L of water, ideally up to 10% of the tank capacity should be filled	100 g/100 L	10 minutes minimum
In-depth cleaning	Minimum 100L of water, ideally up to 10% of the tank capacity should be filled	100-200 g/100 L depending on the degree of fouling or clogging	15 to 20 minutes minimum or leave overnight
Winter cleaning	Interior: same as for deep cleaning. Empty, but do not rinse.		Throughout the cycle and whenever necessary
Exterior cleaning	1. Rinse the material with water. 2. Spray with a solution of TECNET® GD using a backpack. 3. Brush the areas with encrusted dirt. 4. Rinse abundantly.	30-50 g/10 L	20 minutes minimum or more if the material is very dirty



VENUSER® ZEN

✓ STIMULATES THE PLANT AT CRITICAL MOMENTS

Fertilizer commercialized in Spain under Royal Decree 506/2013 and marketed in other countries under mutual recognition (Regulation (EU) 2019/515).



CONTENT AND GUARANTEED RICHNESS

Total nitrogen (N)	8.00 % (w/w)
Ammoniacal nitrogen (N)	8.00 % (w/w)
Water-soluble phosphorus pentoxide (P ₂ O ₅)	3.00 % (w/w)
Water-soluble potassium oxide (K ₂ O)	4.00 % (w/w)
Water-soluble sulphur trioxide (SO ₃)	44.00 % (w/w)



FEATURES AND APPLICATIONS

VENUSER® ZEN is a stimulator of the general development of the crop. It is an organic solution with sulfur and NPK, designed to provide these essential nutrients, stimulating the general development of the crop.

VENUSER® ZEN has a unique formulation developed by Servalesa, designed to stimulate the metabolic processes of the plant at critical moments of the crop cycle. Thanks to the application of **VENUSER® ZEN**, plant vigor is increased, developing stronger and more productive plants, thus increasing crop yields.



DOSE

• Leaf application: **150-300 ml/hl**

RESOLUTION OF SPECIFIC PROBLEMS



**ECO
ACTITUD**



TREATMENT OPTIMIZERS

TO REDUCE HUMIDITY

PRODUCTS FOR SPECIFIC MOMENTS OF NEED

Specifics

**ABSORPTION
SYSTEMATIC**



U.N.E.



COPPER (Cu)

MANGANESE (Mn)

MOLYBDENUM (Mo)

**FOLIAR
TREATMENTS**













**+ YIELD
+ QUALITY**



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COUNTERPARTS

ECO CATALOGUE

RANGE	CONVENTIONAL AGRICULTURE	
 Neoestim	 MAS RAIZ®+ Neoestim	 MAS RAIZ® ECO Neoestim
	 SERGOMIL® L60 Neoestim	 SERGOMIL® ECO Neoestim
 Biostimulants	 SERVAL® NK Biostimulants	 SERVAL® NK ECO Biostimulants
	 SERGOMAX® Biostimulants	 SERGOMAX® L90 ECO Biostimulants

ORGANIC AGRICULTURE

Free amino acids	2.00% (w/w)
Total nitrogen (N)	0.25% (w/w)
Organic nitrogen (N)	0.25% (w/w)
Boron (B) water soluble	0.20% (w/w)
Iron (Fe) water soluble	2.00% (w/w)
Manganese (Mn) soluble in water	1.00% (w/w)
Manganese (Mn) complexed by heptagluconate	1.00% (w/w)
Molybdenum (Mo) water soluble	0,05% (w/w)
Zinc (Zn) soluble in water	0.80% (w/w)
Zinc (Zn) complexed by heptagluconate	0.80% (w/w)

Aminogram: 60% glutamic acid obtained by fermentation of cane molasses with *Corynebacterium glutamicum* and 40% glycine obtained by hydrolysis of soybean.

DOSAGE

Foliar application: **100-300 ml/hl**
 Fertigation application: **2,5-5 L/ha**
 Seed treatment: **1.5 L/1000 kg of seed**



GUARANTEED CONTENTS AND RICHNESS

Copper (Cu) soluble in water	5,50 % (w/w)
Copper (Cu) complexed with lignosulphates	2,80 % (w/w)

DOSAGE

Foliar application: **150-300 ml/hl (1.5 - 3 L/ha)**,
 with a minimum interval of 15 days
 Fertigation application: **2-3 L/ha** with a
 minimum interval of 10 days



FiBL

GUARANTEED CONTENTS AND RICHNESS

Free amino acids	66,00 % (w/w)
Total nitrogen (N)	10,00 % (w/w)
Organic nitrogen (N)	10,00 % (w/w)
Potassium oxide (K ₂ O) water soluble	12,00 % (w/w)
Sulfur trioxide (SO ₃) water soluble	10,50 % (w/w)

Aminogram: main amino acids: 25% glutamic acid obtained by fermentation with *Corynebacterium glutamicum* cane molasses, 42% glycine obtained by hydrolysis of soybeans.

DOSAGE

Foliar application: **100-250 g/hl**



CONTENIDOS Y RIQUEZAS GARANTIZADAS

Copper (Cu) soluble in water	1,80 % (w/w)
Manganese (Mn) water soluble	0,80 % (w/w)
Zinc (Zn) water soluble	0,50 % (w/w)

DOSAGE

Foliar application: **200-300 ml/hl**
 Fertigation application: **4-6 L/ha**



FiBL

ECO ATTITUDE

THE BET THAT MAKES US U.N.E.

DISCOVER OUR PRODUCT CATALOG FOR
ORGANIC AND BIODYNAMIC AGRICULTURE



FiBL

SERVALESA'S ECO-ATTITUDE IS OUR WAY OF THINKING AND CONCEIVING ORGANIC FARMING



ECO
ATTITUDE



**PRODUCE BETTER
EAT BETTER**

142500:2017

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STIMULATE

+45 CERTIFIED
PRODUCTS

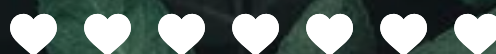
+ PERFORMANCE
+ QUALITY

315500:2017



SUSTAINABILITY

U.N.E.



EVOLVE YOUR WAY OF FARMING



**RIGOR
RELIABILITY
QUALITY**

66500:2017



**NATURAL
RESOURCES**



FiBL

servalesa®

