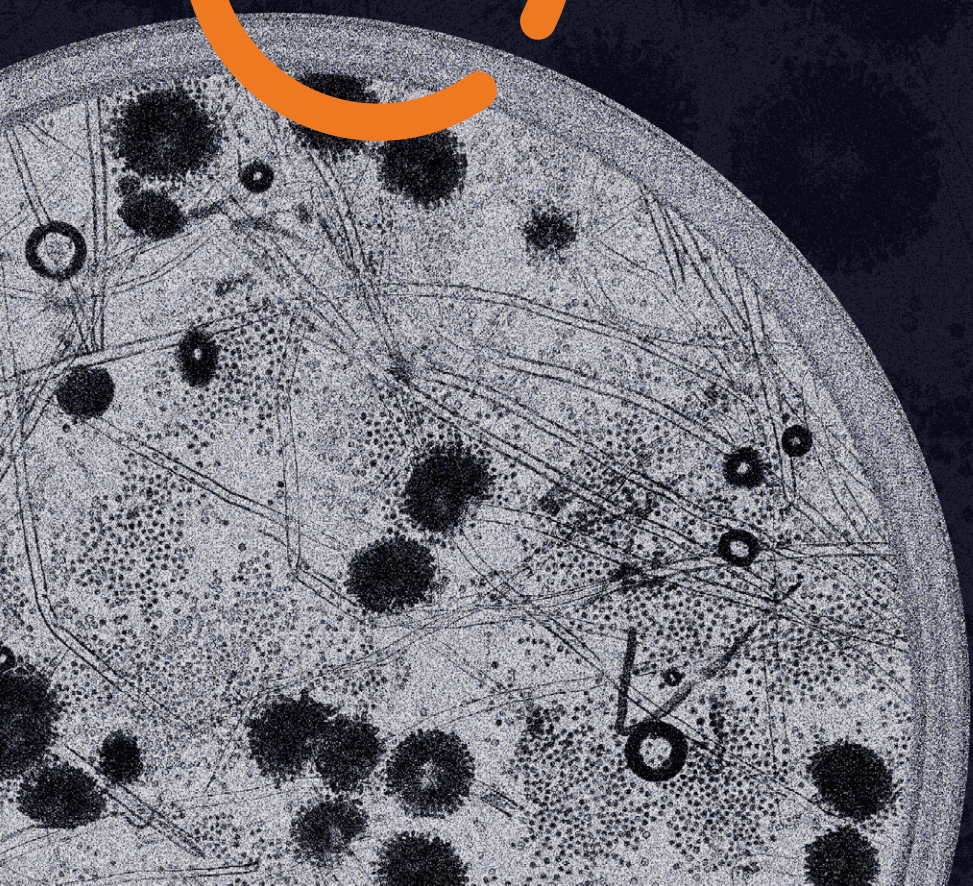


servalesa®

BIOLOGICALS
CATALOGUE
@ B'Nature



BIOSTIMULANTS
WOW!

CATALOGUE UPDATED IN AUGUST 2023



Biological are becoming indispensable for **crop growth** and **maintaining soil fertility**. Their key properties include: supporting the **incorporation of nutrients** into the plant and increasing its **resistance to adverse conditions**. Moreover, they **improve the physico-chemical** and **biological conditions of the soil** while **controlling a wide range of pathogens**.

Microbiology is already included in many strategies; it is a reality and will continue to play a major future role in the **evolution of agriculture**. Servalesa, with the **B'Nature** range, makes this innovative biomimetic technology available to farmers.

BIOFERTILISERS

- Nitrogen fixators
- Phosphorus solubilisers
- Potassium solubilisers
- Nutrition optimisers (siderophores)
- Bioremediation (degradation of contaminants)
- Decomposition of organic matter (humification process)
- Aggregate formation

BIOSTIMULANTS

Production of substances that promote the plant growth:

- Phytohormones such as auxins, gibberellins, cytokinins, among others.
- Organic acids

BIOCONTROL

- Production of protective *biofilms*
- Production of volatile compounds
- Colonisation of the rhizosphere (competition for space and/or nutrients)
- Production of lytic enzymes
- Antibiotic production
- Predation and parasitism



For the in-house development and production of this range, we rely on our technology *partners*:





RIZOBACTER® N

- NITROGEN-FIXING BIOFERTILISER BASED ON *Azotobacter chroococcum*



GUARANTEED CONTENTS AND RICHNESS

Non-composted simple plant amendment	
Mycorrhizae content	0.001%
Rhizosphere bacteria content	1.8×10^7 UFC/g



FEATURES AND USES

Biofertiliser based on mycorrhizal fungi combined with plant growth-promoting rhizobacteria (PGPR) *Azotobacter chroococcum* (strain BNT-09-AC). Due to its capacity to fix atmospheric N and make various nutrients available to the plant, the application of the RIZOBACTER®N product makes it possible to reduce the application of mineral fertilisers.

In addition, it has several beneficial effects on the plant and the soil, such as increasing the growth of the root system and the rest of the plant, supporting the development of the soil's microbial flora, and generally improving the soil's physico-chemical and biological characteristics.



DOSAGE

Application by fertigation: **5-20 L/ha** for all crops.

Use mainly at the end of irrigation to favour the establishment of microorganisms and to avoid losses due to washing.

Fertiliser for use in organic crop production according to EU(R)2018/848.

Registered in Italy with registration number: **0037620/22**

RIZOBACTER® PK

- MICROBIAL BIOFERTILISER WITH PHOSPHORUS AND POTASSIUM SOLUBILISER FUNCTION BASED ON *Bacillus megaterium* AND *Pseudomonas fluorescens*



GUARANTEED CONTENTS AND RICHNESS

Non-composted simple plant amendment	
Mycorrhizae content	0.001%
Rhizosphere bacteria content	1.8×10^8 UFC/g



FEATURES AND USES

Biofertiliser based on two strains of rhizobacteria specially selected to enhance and optimise fertilisation. The microorganisms present in RIZOBACTER® PK produce a biostimulant effect, increasing the development and vigour of crops. At the same time, they reduce the need to apply synthetic fertilisers to crops, due to the high capacity of these rhizobacteria to make phosphorus and potassium from the soil available to the plant, as well as to improve their uptake.

- Bacillus megaterium* (strain BC07-Bmeg)
- Pseudomonas fluorescens* (strain BC06-Pf)



DOSAGE

Application by fertigation: **5-20 L/ha** for all crops.

Apply at the end of irrigation to encourage the establishment of rhizobacteria and at the same time avoid losses due to washing.

Fertiliser for use in organic crop production according to EU(R)2018/848.

Registered in Italy with registration number: **0037621/22**





Fertiliser for use in organic crop production according to EU (R) 2018/848.

FUSVER® ECO

✓ **MICROBIAL BIOFERTILISER, SOIL REGENERATOR AND ROOT SYSTEM ENHANCER, BASED ON RHIZOBACTERIA OF THE GENUS *Bacillus***



CONTENIDOS Y RIQUEZAS GARANTIZADAS

Non-composted simple plant amendment
Mycorrhizae content
Rhizosphere bacteria content

0.001%
1 x 10⁸ UFC/g





FEATURES AND USES

Plant biostimulant, based on a liquid formulation of mycorrhizal fungi together with the plant growth promoting rhizobacterium (PGPR) *Bacillus subtilis* (strain BC03-Bss). **FUSVER® ECO** contributes to improved root system development, induce plant resistance to abiotic stress, increase nutrient and water uptake and promote beneficial microbiota in the rhizosphere to contribute to optimal plant growth and yield.

FUSVER® ECO is recommended for soil regeneration strategies, contributing to a gradual increase of beneficial microorganisms, helping to optimise the degradation of organic matter and improving the physico-chemical and biological characteristics of soils.



DOSAGE

Crops	Application			Dosage
	Time of application	Number of applications	Interval between applications (days)	
				
Vegetable crops	Throughout the full crop cycle	1-8	4-12	2-6 L/ha
Potato	Throughout the full crop cycle	1-8	4-12	2-6 L/ha
Garlic and onion	Throughout the full crop cycle	1-8	10-20	2-6 L/ha
Berries	Throughout the full crop cycle	1-12	4-12	2-10 L/ha
Fruit trees	Throughout the full crop cycle	1-8	10-20	2-10 L/ha
Grapes	Throughout the full crop cycle	1-8	10-20	2-10 L/ha
Tropical fruits	Throughout the full crop cycle	1-8	10-20	2-10 L/ha
Oat	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Barley	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Wheat	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Rye	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Triticale	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Oilseed rape	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Sunflower	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Rice	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Corn	Throughout the full crop cycle	1-4	10-20	1-5 L/ha
Soya	Throughout the full crop cycle	1-4	10-20	1-5 L/ha



FUSVER®

- ✓ SOIL REGENERATOR AND ACTIVATOR OF METABOLIC PATHWAYS AT CRITICAL MOMENTS OF THE CROP BASED ON *Bacillus subtilis*



GUARANTEED CONTENTS AND RICHNESS

<i>Bacillus subtilis</i> (strain BC03-Bss)	4.67 x 10 ⁸ UFC/ml
Total Nitrogen (N)	9% (w/w)
Ureic nitrogen (N)	9% (w/w)
Water-soluble phosphorus peroxide (P ₂ O ₅)	3% (w/w)
Water-soluble potassium oxide (K ₂ O)	3% (w/w)



FEATURES AND USES

Biostimulant based on a concentrate of the plant growth-promoting rhizobacterium *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. In addition, foliar application increases plant vigour and strength against adverse abiotic conditions.

Rhizobacteria are major components of the soil biota. They provide considerable benefits to both the crop and the soil, improve its physico-chemical and biological conditions and are responsible for its fertility. They intervene in the biological cycle of various essential nutrients, decompose organic waste, transforming it into elements that can be assimilated by the plant, release various organic compounds with biostimulant effects and promote plant growth. They increase the chlorophyll content of the plant and, therefore, its photosynthetic efficiency.



DOSAGE

- Vegetable crops:
- Foliar application: **4 L/ha**
- Application by fertigation: **4 L/ha**

Registered in Spain with registration number: **F0004083/2030**



RENOV® MICRO

- ✓ SOIL REGENERATOR AND ENERGISER FOR VEGETABLE CROPS. CONSORTIUM OF MICROORGANISMS BASED ON *Bacillus* AND *Pseudomonads*



GUARANTEED CONTENTS AND RICHNESS

<i>Bacillus siamensis</i> (strain BC02-Bsm)	1.4x10 ⁷ UFC/ml
<i>Bacillus amyloliquefaciens</i> (strain BC04-Ba)	1.0 x 10 ⁷ UFC/ml
<i>Bacillus megaterium</i> (strain BC07-Bmeg)	1.1 x 10 ⁷ UFC/ml
<i>Pseudomonas fluorescens</i> (strain BC06-Pf)	1.4 x 10 ⁷ UFC/ml



FEATURES AND USES

Biostimulant based on a concentrate of plant growth promoting rhizobacteria (PGPR). These bacteria colonise the rhizosphere very quickly, competing for space and nutrients with pathogenic organisms. Rhizobacteria are major components of the soil biota.

They provide considerable benefits to both the crop and the soil: they improve its physico-chemical and biological conditions and are responsible for its fertility; they are involved in the biological cycle of various essential nutrients; they decompose organic remains, transforming them into elements that can be assimilated by the plant; they release various organic compounds with a biostimulant effect; and they promote plant growth and increase photosynthetic efficiency. They also enhance the development of the root system and protection against unfavourable abiotic conditions.



DOSAGE

- Application by fertigation:
- **Vegetable Crops: 10-15 L/ha**

Fertiliser for use in organic crop production according to EU (R) 2018/848.

Registered in Spain with registration number: **F0004270/2031**





RENOV® TRICCO

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



GUARANTEED CONTENTS AND RICHNESS

Type of organic amendment	Leonardite
Mycorrhizae content	0.001%
Rhizosphere bacteria content	1 x 10⁸ UFC/g
<i>Trichoderma</i> content	1 x 10⁷ UFC/g



FEATURES AND USES

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 on all types of crops.

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



DOSAGE

Application by fertigation:

- Short-cycle crops: **1-2 kg/ha**, distributed throughout the crop cycle.
- Long-cycle crops: **2-4 kg/ha**, distributed throughout the crop cycle.
- As a general rule, spread these amounts over 3 - 4 applications or 150-200 grams/hectare/week.
- 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.

Registered in Italy with registration number: **0027559/19**

RENOV® SUPER 2

- ✓ SOIL REGENERATOR AND ENERGISER, FORMULATED WITH A CONSORTIUM OF 2 PLANT GROWTH PROMOTING RHIZOBACTERIA



GUARANTEED CONTENTS AND RICHNESS

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



FEATURES AND USES

Bio stimulant based on plant growth promoting rhizobacteria (PGPR). These bacteria quickly establish themselves in the rhizosphere, coexisting 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 great number of benefits to the crop, such as improving the soil's physico-chemical 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 growth-promoting effects. They also act as root system developers and increase protection against abiotic conditions that are unfavourable for the plant.



DOSAGE

Application by fertigation:

- Woody crops: **5-15 L/ha**
- Other crops: **5-15 L/ha**

Fertiliser for use in organic crop production according to EU (R) 2018/848.

Registered in Italy with registration number: **0034780/21**



RENOV® SUPER 6

SOIL REGENERATOR AND ENERGISER FOR ALL TYPES OF CROPS, FORMULATED ON THE BASIS OF A CONSORTIUM OF 6 PLANT GROWTH PROMOTING RHIZOBACTERIA



GUARANTEED CONTENTS AND RICHNESS

Non-composted simple plant amendment
Mycorrhizae content
Rhizosphere bacteria content

0.001%
4.9 x 10⁷ UFC/g



FEATURES AND USES



Liquid and stable product based on 6 plant growth promoting rhizobacteria (PGPR). **RENOV® SUPER 6** is focused on optimising fertilisation, stimulating and promoting root and plant growth, competing for space and nutrients with pathogenic organisms, improving growth conditions and soil-root interaction in the rhizosphere, and promoting the increase of beneficial microorganisms in the agroecosystem to overcome critical phases of the crop cycle and achieve higher crop yields.

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

The application of **RENOV® SUPER 6** is recommended for soil regeneration strategies, contributing to a gradual increase of beneficial microorganisms, helping to optimise the degradation of organic matter and the improvement of physico-chemical and biological characteristics of soils.



DOSAGE

Crops	Application				Dosage
	Mode of application	Time of application	Number of applications	Interval between applications (days)	
 Vegetable crops	Fertirrigation	Throughout the full crop cycle	1-8	6-15	 5-15 L/ha
Potato	Fertirrigation	Throughout the full crop cycle	1-8	6-15	5-15 L/ha
Garlic and onion	Fertirrigation	Throughout the full crop cycle	1-8	6-15	5-15 L/ha
Berries	Fertirrigation	Throughout the full crop cycle	1-8	6-15	5-15 L/ha
Fruit trees	Fertirrigation	Throughout the full crop cycle	1-8	10-20	5-20 L/ha
Grape	Fertirrigation	Throughout the full crop cycle	1-8	10-20	5-20 L/ha
Tropical fruits	Fertirrigation	Throughout the full crop cycle	1-8	10-20	5-20 L/ha

Fertiliser for use in organic crop production according to EU (R) 2018/848.

Registered in Italy with registration number: **0034775/21**



NOVA®

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



GUARANTEED CONTENTS AND RICHNESS

<i>Lysinibacillus xylanilyticus</i> (strain BC05-Lx)	1.54 x 10⁸ UFC/ml
EDTA-chelated water-soluble iron (Fe)	0.4% (w/w)
EDTA-chelated water-soluble manganese (Mn)	1.5% (w/w)
EDTA-chelated water-soluble zinc (Zn)	0.1% (w/w)



FEATURES AND USES

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.



DOSAGE

Vegetable crops:
 · Leaf application: Prevention of deficiencies: **2-3 L/ha**. Correction of deficiencies: **3-5 L/ha**
 Application by fertigation: **3-5 L/ha**

Fertiliser for use in organic crop production according to EU (R) 2018/848.

Registered in Spain with registration number: **F0004105/2030**

MYCODRIP®

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



GUARANTEED CONTENTS AND RICHNESS

<i>Rhizopagus irregularis</i>	4000 spores/g*
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* minimum spore concentration



FEATURES AND USES

MYCODRIP® is a biofertiliser based on a high concentration of spores of the mycorrhizal fungus *Rhizopagus irregularis*. This high concentration of spores (minimum 4000 spores/g) ensures 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 rooting following transplantation and improves crop yield and quality.



DOSAGE

- Application by fertigation: **250-500 g/ha**
- In mixture with substrate: **250-500 g/m³**

Registered in Czech Republic with registration number: **3862**



NICAN®

FOLIAR BIOSTIMULANT BASED ON *Bacillus mojavensis*. ACTIVATOR OF METABOLIC PATHWAYS



GUARANTEED CONTENTS AND RICHNESS

<i>Bacillus mojavensis</i> (strain BCBm01)	2 x 10⁸ UFC/ml
Total Nitrogen (N)	1.5% (w/w)
EDTA-chelated water-soluble iron (Fe)	0.3% (w/w)
EDTA-chelated water-soluble manganese (Mn)	1.6% (w/w)
EDTA-chelated water-soluble zinc (Zn)	0.1% (w/w)





FEATURES AND USES

NICAN® is a microbial plant biostimulant based on *Bacillus mojavensis* (strain BCBm01) formulated with a blend of chelated micronutrients.

After application, **NICAN®** releases biostimulant compounds such as auxins, gibberellins and cytokinins, volatile compounds and polysaccharides, and increase leaf chlorophyll content and, as a result, photosynthetic efficiency.



DOSAGE

Crops	Application				Dosage
	Mode of application	Time of application	Number of applications	Interval between applications (days)	
 Grapes	Foliar application	Throughout the full crop cycle	1-4	10-15	 3-5 ml/L (300-500 ml/ha)
Vegetable crops	Foliar application	Throughout the full crop cycle	1-6	6-10	3-5 ml/L (300-500 ml/ha)
Fruit trees	Foliar application	Throughout the full crop cycle	1-6	6-15	3-5 ml/L (300-500 ml/ha)
Berries	Foliar application	Throughout the full crop cycle	1-8	2-8	3-5 ml/L (300-500 ml/ha)
Tropical fruits	Foliar application	Throughout the full crop cycle	1-4	6-15	3-5 ml/L (300-500 ml/ha)

Fertiliser for use in organic crop production according to EU (R) 2018/84.

Registered in Czech Republic with registration number: **3862**



ZYMEX®

FOLIAR BIOSTIMULANT, ACTIVATOR OF METABOLIC PATHWAYS



GUARANTEED CONTENTS AND RICHNESS

Water-soluble copper (Cu)	0.5% (w/w)
EDTA-chelated water-soluble iron (Fe)	0.3% (w/w)
EDTA-chelated water-soluble manganese (Mn)	0.9% (w/w)
Water-soluble zinc (Zn)	0.5% (w/w)



FEATURES AND USES

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.

Its application results in more vigorous and stronger plants in the face of unfavourable cultural and environmental conditions.



DOSAGE

• Foliar application: **1.5-2.5 L/ha** for all crops.

ECO ATTITUDE

THE COMMITMENT THAT UNITES US

DISCOVER OUR PRODUCT CATALOGUE FOR
ORGANIC AND BIODYNAMIC FARMING



FiBL

