



*Authorized in Organic Farming
DL 75-2010 - Regulation(CE) n. 889/2008*

Titano

Symbiosys to produce

-
- Mycorrhizae, Rhizosphere bacteria and special vegetal extracts – No Thricoderma inside**
- High content of Mycorrhizae**
- Improve root development**
- Reduce abiotic stress (drought, salt, transplant)**
- Improve the Rhizosphere microorganism flora**
- Reduce root biotic stress (natural barrier against root diseases)**



**Formulation:
Soluble Microgranules**





Bioactive Compounds

Titano

Symbiosys to produce

Bioactive Element	Definition	Function performed in the product
Mycorrhizae	Claroideoglomus claroideum (<i>G. claroideum</i>) Claroideoglomus etunicatum (<i>G. etunicatum</i>) Funneliformis mosseae (<i>G.s mosseae</i>) Funneliformis geosporum (<i>G. geosporum</i>) Glomus microaggregatum Rhizophagus intraradices (<i>G. intraradices</i>)	Improve root development Reduce abiotic stress (drought, salt, transplant) Improve fertilizer efficiency
Rhizosphere Bacteria	Azospirillum spp Azotobacter chroococcum Bacillus spp Rhizobia spp Streptomyces spp	Improve the Rhizosphere microorganism flora Reduce root biotic stress (natural barrier against root diseases) Improve nitrogen uptake
CITOKININE S (Zeatin, Kinetin, Isopentenyladenine) cytokinin like activity	Natural compounds that stimulate the internal production of hormonlike substances of the Cytokinin family	Increase cellular multiplication of fruit and pulp - healing effect - delay of senescence - chlorophyll protection - increased protein synthesis - stimulates apical dominance
AUXINE Auxin like activity	Natural compounds that stimulate the internal production of hormonlike substances of the Auxin family	It enhances the multiplication of roots, stimulates the relaxation of apical cells and leaf surface. Reduces the activity of enzymes that alter chlorophyll
Specific polysaccharides	Complex sugars (amilose, Pectinates) at slow release	Nutrizione della flora batterica a medio termine
Monosaccharides	Simple sugars (Glucose, Fructose etc.)	readily assimilated energy
Selected Humic Acids	Top quality Leonardite extracts by KOH	Improves the structure of the soil Maximum rizogenetic activity www.sfera.bio



Dosages

Titano

Symbiosys to produce

Crop	Mix with peat, other fertilizers or substrates g/lt	In the hole of transplantation (gr/plant
Orchard	6-7	0,5
Ornamental and forestry	6	0,6
Vegetable	5-6	0,3
Flowers	4-5	0,6
Turfs	6-8	0.2 g/m ² localized at sowing

Avoid any contact with fungicides for at least 3 weeks after the treatment
Avoid an excessive usage of mineral fertilizer (Phosphorus fertilizers especially)



Label

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Symbiosys to produce

CATEGORY: Product at special activity. Product at soil activity. Mycorrhiza inoculum

COMPOSITION	Content
Mycorrhiza	9,89x10 ⁵ propagules/Kg
Rhizosphere bacteria	5x10 ⁹ C.F.U./Kg
Tricoderma	Absent
Type of organic soil Improver: simple vegetal soil Improver, not composted	
The product doesn't contains genetically modified organisms or pathogens organisms as salmonella, fecal coliforms, aerobic mesophylls and nematode eggs	
Allowed in organic farming. Raw materials: Mycorrhiza inoculum	
Producer: SFERA srl - Via A. Einstein - Loc. Cascina Codazza c/o Parco Tecnologico Padano - 26900 Lodi (LO)- Italia P.I. 09807580965 R.E.A. LO - 1476149 Tel. +39 0371 4662452 info@sfera.bio - www.sfera.bio	



Raw Material

Mycorrhizae

The only one product with 6 species of Mycorrhizas

Claroideoglo mus claroideum
(*G. claroideum*)

Claroideoglo mus etunicatum
(*G. etunicatum*)

Funneliformis mosseae
(*G.s mosseae*)

Funneliformis geosporum
(*G. geosporum*)

Glomus microaggregatum

Rhizophagus intraradices
(*G. intraradices*)

Rhizosphere bacteria

Azospirillum spp

Azotobacter chroococcum

Bacillus spp

Rhizobia spp

Streptomyces spp

Special Vegetal Extracts

Specific Polysaccharides

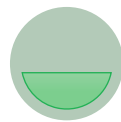
Monosaccharides

Alkaline hydrolyzed from Canadian Leonardite

Selected Humic Acids

Enzymatic hydrolyzed of Ascophyllum Nodosum

hormonlike compounds
(IAA e CK)



Process

In vivo production of Mycorrhizae and Rhizosphere bacteria

Alkaline hydrolyzed of Leonhardite

Enzymatic hydrolyzed of specific natural compounds and A. Nodosum

Spry dry

T° > 600 °C to keep intact all the biostructural features
Cold mixture of different compounds in order to keep intact all the fundamental compounds

Positionning



functioning

The **production in vivo** guarantee:

better shelf life of product (survival of propagules),

Better survival in stressful condition (the colony born in stressful condition)

Higher colonization level

Slower colonization than the microorganism produced in vitro

Special vegetable extracts, Seaweed and humic **hydrolysates**

stimulate the radical, vegetative, reproductive and fruiting physiology in a equilibrate way, maintaining a perfectly balanced plant



Objectives

Improve root development

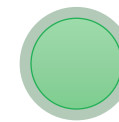
Reduce abiotic stress (drought, salt, transplant)

Improve the Rhizosphere microorganism flora

Reduce root biotic stress (natural barrier against root diseases)

To improve yield and quality maintaining a perfectly balanced plant

Absence of Trichoderma in order to avoid any agrochemicals claim



Note

Avoid any contact with fungicides for at least 3 weeks after the treatment

Avoid an excessive usage of mineral fertilizer (Phosphorus fertilizers especially)