

CROP NUTRITION AND BIOPROTECTION



For over 30 years, perseverance has helped our team at Aspe Agrobiologico through the many challenges of creating the best products and services on the market, therefore, with the same enthusiasm and dedication as in the first year, we would like to thank our customers for the their commitment and trust over the years and introduce our new Aspe Agrobiologico Catalog for 2019.

We will further ensure our daily commitment so that you will keep on providing the same support as before. As a famous author once said: "Where there is a will, there's always a way"



Dr. Juan J. Sanchez Andreu

CATALOG 2021 CROP NUTRITION AND BIOPROTECTION





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ADJUVANTS





Any substance added to a spray tank separate from the formulation, that will enhance the properties of water so it can deliver the formulation faster and more efficiently.





ADJUVANT: PENETRANT -SURFACTANT - ACIDIFIER

CHARACTERISTICS

LENOL700 is a non-ionic surfactant, multipurpose, with acidifying, penetrating and translocation action whose use increases the effectiveness of herbicides, insecticides, fungicides, foliar fertilizers and growth regulators.

LENOL700 reduces the surface tension of spray solutions to decrease the contact angle of the droplet with the plant surface, which results in a greater amount of coverage by improving the chemical into contact with the vegetable and absorption.

LENOL700 can also be used as acidifying to lower the pH of the solutions, preventing the loss of active ingredient by alkaline hydrolysis.



MULTIPURPOSE

LENOL700 contains Lecithin and is formulated as a unique technology to allow you to expect more from your pesticide application. It delivers **five important benefits:**

DOSES AND APPLICATION

COMPOSITION

Lecithin	35,0
Propionic acid	35,0
Linear Ethoxylated Alcohol	10,9

%w/w



SPREADABILITY - Provides better leaf spread to increase pesticide contact.

ADHESION - Droplets remain on target to ensure pesticide effectiveness.

PENETRATION - Provides better breakdown of waxy leaf cuticle to allow for enhanced pesticide penetration into the plant.

DROPLET MANAGEMENT - Manages the droplet size to minimize loss due to drift or evaporation.

ENVIROMENTAL - Made from natural occurring soybean oil.

GOAL	DOSES ml/100	DL Comments
Reduction of pH.	50 – 100 (> 8 pH) 30 – 50 (< 8 pH)	
Insecticides - fungicides.	50 - 100	Do not apply with high temperatures. Add to water in spray tank before adding PESTICIDE
Herbicides	125 - 250	Recommended for use in mixing with defoliants, desiccants and for annual weed control.
	250 - 500	Use the highest dose of Lenol700 for the control of perennial and other weeds. (Equisetum bogotense) (Malva nicaensis), (Cynodon dactylon), (Cyperus rotundus).
Foliar fertilizers	100-250	Tank mixing with other agricultural chemicals may increase the potential for crop damage check with supplier.
Assistance in droplet size management	100-200	LENOL700 will reduce the fine droplets associated with, but not eliminate, off target movement. This is contingent upon good agricultural spraying practise and appropriate nozzle choice.

CONDITIONS FOR SAFE AND EFFECTIVE APPLICATION: LENOL700 can be used in any condition in which the application of pesticides is recommended. Avoid applying in conditions of heat or extreme solar radiation. Avoid applying LENOL 700 in strong wind conditions, with rain or presence of dew. INCOMPATIBILITY: LENOL 700 is incompatible with products containing metallic Cu.





BIOPROTECTORS





The intensive use of synthetic pesticides in pest control activities can cause resistance and therefore resurgence of target pests. Undesirable effects on the environment, including reduction in natural enemies (predators and parasitoids) and beneficial insects, are also possible.

A major concern is the effects of synthetic pesticides on human health. In the last few decades, biofertilizers have emerged as a potential alternative to synthetic insecticides. Currently, biofertilizers share only a small portion of global pesticide and fertilizer market, but growth is faster in this area than in synthetic products.

This growth is mainly driven by a rising interest in the demand for organic agricultural products. This review will discuss biofertilizers history, categories, advantages, disadvantages, conventional and nonconventional extraction technology, and consumption.



The information contained in these data sheets is result of the work of the people that make up the Department of Research and Development of ASPE AGROBIOLOGICO. His experience acquired from the bibliography, laboratory and field experiences, have allowed us to design the products included in this section.

"Botanicals are future potential sources for development of ecofriendly products for crop



ARANKA

BIOINSECTICIDE AND ACARICIDE

ARANKA is a Bio-insecticide / acaricide of natural origin. It's highly recommended for the Red Spider mainly those belonging to the genera Tetranychus and Eutetranychus.

ARANKA is a liquid formulation which contains an active molecular fraction obtained from leaves fractionation from Umbelliferae family. Synergy of different active molecules with different mechanisms of action that disrupt various phases of the insect's life cycle. Aranka manages to get a delay in the appearance of resistance.

This product has a mixture of lipid and organic surfactants as complements. Within each of them there is a formation of polymeric and biodegradable microspheres.

All of them enhance the product dispersion and adhesion, showing its high efficiency.

It reaches 80% of adult mortality after 3 hours of application ("Knock down" effect), due to its powerful contact action. This direct efficacy is complemented by a long-term effect on the spiders feeding behavior.

ACTIONS

- Instant death by asphyxiation due to the filling of a tracheal Stigma.
- The protective layer of the insect is destroyed, causing dehydration and subsequent death by suffocation.

Anti-inflammatory effect: Inhibition of feeding through the interaction of the formulation components with the gustatory receptors of the spider.

Repellent effect: Strong repellent effect due to the interaction of the volatile components with the olfactory receptors of the spider.

DOSES AND APPLICATIONS

1L









%w/w

NATUREX

NATUREX is a natural biofungicide based on Zinc, Tea tree (*Melaleuca alternifolia*) oil and terpenic alcohols which prevents oxidative stress, and in particular, the damage caused by different fungi.

NATUREX contains Melaleuca Alternifolia Tea Tree Oil and anti-disease agents as well as other adjuvants to ensure nutrient uptake and improve product efficacy.

NATUREX is a natural Biofungicide that acts in a preventive and curative way, by inhibiting the development of spore germination, inhibition of mycelial growth and expansive lesion; inhibition in the production of sporangia, by suppression and eradication of colonies of pathogens present in fruits and leaves.

With its unique mode of action, **NATUREX** is an excellent tool for Resistance Management. It can be applied throughout the year without resistance and is non-toxic to crops, users and the environment.







Black sigatoka

a fijiensis) (Erysiphe cichoracearum

Grey mold Bacterial diseases (Botrytis cinerea) (Alternaria solani)

• Multiple modes of action

- Control of a wide range of plant pathogens,
- particulary bacterial and ascomycete diseases

Preventive and curative action

Resistance management

DOSES AND APPLICATION



COMPOSITION

Melaleuca Alternifolia extract	20,0
Vegetable Oils	76,0
Zinc (Zn)	1,5
Manganese (Mn)	0,5



• No residues; no MRL

- Zero toxic load
- No measurable affect on beneficial insects and bees
 Easily adapted sustaintable and IPM practices
- Non-Persistent in the enviroment

Crop	Disease	Latin name	Dose <i>ml/Ha</i>	Crop	Disease	Latin name	Dose ml/Ha
Bananas	Black sigatoka Yellow sigatoka	Mycosphaerella fijiensis Mycosphaerella musicola	350-900	Rice	Blast Grain complex	Pyricularia oryzae Bipolaris oryzae	500-1000
Berries	Alternaria	Alternaria spp.	800-1500		Sheath blight	Rhizoctonia solani	
	Anthracnose Fruit rot Grey mold Powdery mildew	Colletotrichum spp. Rhizopus stolonifera Botrytis cinerea Sphaerotheca macularis		Tomato	Bacterial diseases	Pseudomonassyrigae Xanthomonas spp. Clavibacter michiganen Alternaria solani	800-1500 sis
Cucurbits	Powdery mildew	Sphaerotheca fuliginea Erysiphe cichoracearum	800-1500		Early blight Grey mold	Botrytis cinerea Cladosporium fulvum	
Leafy greens	Powdery mildew White mold	Erysiphe cichoracearum Sclerotinia sclerotiorum	500-1000		Leaf mold Powdery mildew	Oidium spp. Leveillula taurica	
Peanuts	Early leaf spot	Cercospora arachidicola	800-1000			Erysiphe poligony	
Peppers	Alternaria rot Anthracnose Bacterial canker Bacterial spot	Alternaria alternata Colletotrichum spp. Clavibacter michiganensis Xanthomonas campestris	800-1500	Vines	Grey mold Powdery mildew Sour rot complex	Botrytis cinerea Erysiphe necator Botrytis cinerea, Pennicillium, and others	800-1200
	Frog-eye leaf spot Grey mold Powdery mildew Syringae leaf spot	Cercospora capsici Botrytis cinerea Leveillula taurica Pseudomonas syringae		Wheat	Fusarium head blight	Fusarium graminearun	ז 500-1000

Apply NATUREX using suitable equipment to ensure thorough coverage of all foliage. A minimun of 200 L/Ha and a maximun of 1000L/Ha is recommended.







%w/w

70,0

/0,0 8,0 2,0 2,0 18,0

100

Zero

BIONEMATICIDE

NEMATURAL Botanical is an organic product that must be applied to the soil by irrigation (drip, flood, spraying).

At the time of its application, NEMATURAL causes nematode immobilization Botanical subsequently causing its death.

NEMATURAL Botanical fully respects beneficial soil microorganisms.

The biostimulating effect of NEMATURAL Botanical L-Amino Acids makes the plant to grow new roots and will not suffer stress like in other chemicals application.

Due to its mode of action by contact, NEMATURAL Botanical has the advantage of not causing resistance to the application of the product, that is, by using an all-natural active principle.

NEMATURAL Botanical controls plant parasites nematodes at the soil





Meloidogyne sp.

Ditylenchus sp. Rotylenchulus sp.

<u>m</u>	
NEW	A
lematural Iotanical	a Cán

COMPOSITION

Plant extract (Gramineae Sp.)

Phosphorus (P₂O₅)

Potassium (K,O)

L-Amino Acids Organic Matter

DOSES AND APPLICATION				
Сгор	L/Ha	Applications (1,2 or 3)		
Garlic	10-20	Transplant - at 30 days		
Aubergine	10-30	Transplant - at 30 days		
Zucchini	10-20	At the beginning of crop		
Onion	10-20	Transplant - at 30 days		
Lawn	10-20	After cut - at 21 days - at 21 days		
Citrus	20-40	After fruit curd - at 30 days - at 45 days		
Ornamental	10-40	After cutting - at 30 days - at 30 days		
Strawberry	20-40	Transplanting - at 21 days		
Fruit	10-20	After fruit set - at 30 days		
Green bean	10-25	Beginning of crop		
Melon, watermelon	10-25	Transplant - at 21 days		
Potato	10-25	Seeding - at 21 days		
Cucumber,	10-20	Transplant - at 30 days - at 30 days		
Pepper	15-30	Transplant - at 30 days - at 30 days		
Pineapple	40-60	February - July		
Banana	40-60	April - September		
Tobacco	20-30	Transplant - at 30 days		
Tomato	20-40	Transplant - at 30 days - 30 at days		
Grape	15-40	After flowering - at 30 days		

Apply in sufficient water to move the product into the root zone. Apply to nematode-infested soil 14 days before planting or transplanting. Repeat applications at 6 week intervals as needed to suppress plant parasitic nematode populations during the crop period



protector



%w/v

ACTIVATOR OF NATURAL VEGETAL DEFENCES

CHARACTERISTICS

Drotector is a product designed by Agricola de Aspe. It's established as an organic product of vegetable origin. Because of its great purity and quick absorption in different vegetable tissues, PROTECTOR makes an essential product for the growth, maintenance and protection of plants.



CO	MPO	OSIT	ION

Total Nitroger	n (N)	4,8
Ureic Nitrogen	I (N)	4,8
Zinc water-solu	Ible complex (Zn)	1,0
Manganese w	ater-soluble complex (Mn)	2,0
Copper water-	soluble complex (Cu)	2,0
Density 1,0 pH 2,0 Complexing agents: Aluminium Lignosulphonate and gluconic acids		

Due to its complete systemia (ascending and descending) **Drotector** stimulates a complete distribution throughout the whole plant and an immediate response from the plants's self-defense systems against external agents such as endogenous and exogenous fungi, agents such as downy mildew in viticulture, Verticilium in olive trees, Phytophtora nicotianae in Horticultural Crops, highly aggressive Eutypain grape vines and several fruit crops (Eutipiosis), Phellinus igniarius Stereum hirsutum, producers of yesca in grape vines and grape arbours, pH. Citrophthora in Citrus Fruits, Botrytis, Patristic pernospora in vegetable crops, several types of mildew and other fungi in vegetable crops, stone and pipfruit trees, tropical, subtropical and industrial crops, olive trees, dry fruits, flowers, ornamental plants, etc.

Cl	ROPS	FOLIAR APPLICATION	DOSAGE
ALL GRAP	CROPS PEVINES	Wetting the whole plant, including its trunk, well. As a preventive measure, 2-3 times throughout the vegetative cycle Raise the dosage spraying the trunks.	200-400cc per 100lts of water 1 litre per 100 litres of water
С	ROPS	TRICKLE IRRIGATION	DOSAGE
ADUI F	LT TREE PLANTS CROP	Diluted in water before applying Diluted in water before applying Diluted in water before applying	10cc/ Ft 5cc/ Ft 1cc/ Ft
Apricot (Cotton	Almond and hazelnut Khaki Citrus Ornamentals	Strawberries
Green beans	Lettuc	e Watermelon Peach Olive Potato Pear an	d Apple Tomato Vine
Packi	ng 🔶		
ı	5L	20L 200L Aspe	Tertilizer Fertilizer



BIOSTIMULANTS





``Agricultural biostimulants include diverse formulations of compounds, substances and other products that are applied to plants or soils to regulate and enhance the crop's physiological processes, thus making them more efficient. Biostimulant act on plant physiology through different pathways than nutrients to improve crop vigor, yields, quality and post-harvest shelf life/conservation.''

EBIC, 2013 (European Biostimulants Industry Council)

EFFECTS

Biostimulants foster plant growth and development throughout the crop life cycle from seed germination to plant maturity in a number of demostrated ways, including but not limited to:

Improving the e⁻cienc y of the plant's metabolism to induce yield increases and enhanced crop quality.

Increasing plant tolerance to and recovery from abiotic stresses.

Facilitating nutrient assimilation, translocation and use.

Enhancing quality attributes of produce, including sugar content, colour, fruit seeding, etc.

Regulating and improving plant water balance.

Enhancing certain physicochemical properties of the soil and fostering the development of complementary soil microorganisms. What distinguishes biostimulants from traditional crop inputs?



HUMIC & FULVIC ACIDS BIOSTIMULANT



🐋 FOLIAR APPLICATION

CROPS	APPLICATIONS	ANNUAL DOSAGE
Lawn	5-6 app.	5L / 1.000 m ²
Ornamental	5-6 app.	100 cc / 20 Lts
Vegetable	3-4 app.	1-2 L / 200 Lts

General dosage 1-3 Lts 🔊 🕹 / 200 Lts.

SOIL APPLICATION

COMPOSITION	%w/w
Total Humic Extract	20,0
Humic Acids	10,0
Fulvic Acids	10,0
Organic Nitrogen	0,5
Potassium (K ₂ O)	7,5
Magnesium (Mg)	0,2
Density	1,27
pH	13,5

NOL is a liquid humic acid corrector made from vegetable matter. **NOL** is a completely soluble microfiltered product.

When **AOL** is added to the **SOIL** it stimulates the root and micro organism growth, unlocking the nutrients that are in an unassimilable form for the plant.

FOLIAR application improves the uptake and transport of nutrients as well as of other compounds (hormones, vitamins, etc...)

The application of **AOL** is safe and easy throughout all stages of plant growth, from planting to harvesting.

Enhance efficiency of nutrient use Increase stress tolerance Decrease disease incidence Improves sprouting and root system

	CROPS	SEASON	ANNUAL DOSAGE
Gr	Citrus Fruits Fruit Trees Strawberries Cut Flowers Open-air Horticultural Crops reenhouse Horticultural Crops Maize Olive Trees Pear Trees Wine Grapes Table Grapes	From budding to mid-cycle From budding to mid-cycle Throughout the whole cycle Throughout the whole cycle Throughout the whole cycle In the first irrigations Throughout the whole cycle From budding to mid-cycle From budding to mid-cycle From budding to mid-cycle	 100-130 cc / tree 100-150 cc / tree 100 litres/ Ha 100-120 litros / Ha 80-100 litres / Ha 100-120 litres / Ha 50-80 litres/ Ha 100-150 cc / tree 150-200 cc / tree 30-50 litros / Ha 70-100 litres / Ha

SHAKE THE CONTAINER WELL BEFORE OPENING. Keep **CONTAINER WELL BEFO**









%w/v

FULVIC ACID AND AMINO ACIDS

CHARACTERISTICS

MOL AMYN is an extremely bioactive growth promoting and soil improving agent in liquid form with a high concentration of natural fulvic acids and amino acids. Mol Amyn is 100% water-soluble and suitable for all crop and garden cultures for foliage and soil application. It may be used alone or in combination with soluble fertilizers and currently, plant protection agents.

MOL AMYN is a natural and versatile bio stimulant. It is produced through a bacterial fermentation process using plant raw material.

MOL AMYN contains a complex array of plant based soil biostimulants including natural phytohormones (cytokinins, auxinsm gibberellins), polyamines, antioxidants, betaines, peptides, secondary metabolites, polysaccharides, auxins, vitamins, carbohydrates and organic mater to improve nutrient availability in soil, resulting in a hight uptake in plants.

BIOAVAILABILITY

HIGHLY SOLUBLE
 STABILITY

ACTIONS

SMALL PARTICLE SIZE

V OPTIMUM VIGOUR CROP

✓ INCREASES STRESS TOLERANCE

- / PROMOTES ROOT GROWTH
- / IMPROVE THE NUTRIENTS UPTAKE AND TRANSPORT
- INCREASES THE MICROBIAL ACTIVITY IN THE SOIL
 YIELD AND QUALITY

COMPOSITION

Total Fulvic Acid	22.0%
Free Amino Acids	16.5%
Total Polysaccharides	8.0%
рН: 5-6	0,0,0
Density: 1,27 g/cc	



APPLICATIONS

Foliar: 200-300 mls/100 water Fertirrigation: Drip: 5-10 L/ha

CROPS	Season and annual dosage
Blueberries and Cranberries	10L/ha Apply 3 times; budding, fruit setting and fruit sizing.
Cereals	Minimum dose: 4L/ha once. Can be applied mixed with herbicides. In summer cereals, apply at 35-40 days after seeding.
Fruiting vegetables and cut flowers	4-6 applications from the beginning of the crop, depending on stress and development.
Greenhouse vegetable	Apply through the cycle of the crop of the crop every 7-14 days; foliar or fertigate.
Orchards, Citrus, Subtropical and Olives	Apply and bud break, pre-bloom and once the fruit setting is complete. Use when crops stressed.
Vegetable (melon, watermelon, lettuce, etc)	Leafy crops: Apply regularly in early stage of growth.
Vines	Apply during vegetative growth; repeat 2 to 3 times from post berry set until the beginning of ripening.

Packing













FULVIC ACIDS. BIOSTIMULANT

CHARACTERISTICS

MOL FULVIC is an organic amendment residue from plants, wich added to soil, stimulates the roots growth and microorganisms, and unlocks the nutrients that are not assimilated by the plant (nitrogen, phosphorus, potassium, iron, manganese, copper, zinc ...).

MOL FULVIC is a completely soluble, micro-filtered, easy to apply in the localized irrigation systems (drip, exudation, and aspersion) and gravity systems. The foliar application of **MOL FULVIC** improves the uptake and transport of nutrients in the plant and other compounds: hormones, vitamins, etc... A proper use of **MOL FULVIC** will allow a saving in the dose of fertilizer, thus improving their uptake by the plant, facilitating their transport to the places where nutrients are necessary for the perfect plant development.

MOL FULVIC is a strong metabolic activator because of the high fulvic acids content.

APPLICATION AND DOSAGE

SOIL APPLICATION

CULTURE	STAGE OF APPLICATION	ANUAL DOSE
CITRUS	Spring-half cycle	100-140 cc/tree
FRUIT TREES	Spring-half cycle	100-160 cc/tree
STRAWBERRY	Whole cycle	120 L/Ha
CUT FLOWER	Whole cycle	100-120 L/Ha
OPEN HORTICULTURE	Whole cycle	80-120 L/Ha
GREEN HOUSE	Whole cycle	100-120 L/Ha
CORN	During the first irrigation	50-80 L/Ha
OLIVE TREE	Whole cycle	110-120 cc/tree
PEAR TREE	Spring-half cycle	30-50 L/Ha
GRAPE WINE	Spring-half cycle	30-60 L/Ha
GRAPE FRUIT	Spring-half cycle	70-100 L/Ha

FOLIAR APPLICATION

GENERAL DOSE 1-3 L MOL / 200 L RAYGRASS

ORNAMENTAL 100 cc / 20 L

HORTICULTURES 1-2 L/200 L

SEED APPLICATION

Submersion of seeds in a 0.05% solution (5ml/10L water), for approximately 5 hours, then dry.

5 L/1000 m2



5-6 applications

5-6 applications

3-4 applications

COMPOSITION

Total humic extract	51,5
Fulvic Acid	51,5
Total Nitrogen (N)	5,15
Phosphorus (P2O5)	0,25
Potassium(K,O)	9,20
Density: 1,26 pH: 5,5	

%w/w

HIGH CONTENT OF FULVIC ACIDS



INCREASES PLANT GROWTH, YIELD AND NUTRIENT UPTAKE

INCREASES GERMINATION OF SEEDS

PREVENTS THE ABIOTIC STRESS



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ORGANIC SOIL AMENDMENT



MOL SOLID is a highly concentrated potassium humate. It is a plant stimulant of the highest quality and improves soil conditions.

MOL SOLID can be applied to agricultural, horticultural and gardening plants by soil, and seed application.

COMPOSITION	%w/w
Total Humic Extract	82,0
Humic Acids	78,5
Fulvic Acids	3,5
Potassium (K ₂ O)	12,0
pH (10% solution)	10-11

ORGANIC SOIL AMENDMENT

ROOT DEVELOPMENT

NUTRIENT UPTAKE

THE GERMINATION OF SEED

MOL SOLID can be used to be alone or mixed with most fertilizers. As product solid granular form, it can be transported easily.

MOL SOLID is able to enhance the efficacy of fertilizers and reduces input costs.

APPLICATION A	AND DOSAGE	
CROP	OBJECTIVE	RECOMENDED APPLICATION
Soil application		
Cereals, potatoes, legumes (Spinklers and pivot system)	Soil conditioning, root growth stimulation, increasing of soil fertility and fertilizer utilisation	6-8 kg/ha divided into several doses (1-2 kg/ha) during the season and at the time of fertilzer application
Fruit trees (Apple, citrus)	Soil conditioning, root growth, increasing of soil fertility and fertilizer utilisation	8-10 kg/ha divided into several doses (1-2 kg/ha)
In all crops	Soil conditioning, increasing of soil fertility and fertilizer utilisation	6-8 kg/ha divided into several doses (1-2 kg/ha) during the season
Open field vegetable	Soil conditioning, root growth, increasing of soil fertility and fertilizer utilisation	6-8 kg/ha divided into several doses (1-2 kg/ha)
Ornamental plants and tree nursery, turf grass, landscaping (in general)	Soil conditioning, root growth, stimulation, increasing of soil fertility and fertilizer utilisation	8-10 kg/ha divided into several doses (1-2 kg/ha) or 1kg/m³ during the preparation of
Vegetables in greenhouses	Growth stimulant, and increases foliar fertilizer utilisation	150-300g/100Lwater every two weeks during the season

Foliar application

Growth stimulant, and increases foliar fertilizer penetration. Application: 150-300 g/1000L water every two weeks during the season





%w/w



FULVIC ACIDS. BIOSTIMULANT

COMB is a product developed

by Asset , which includes in its composition Macro and Micronutrients complexes with **Fulvic Acids** (natural chelating agents) extracted from liquid fossil. Ensures the immediate incorporation of nutrients to the plant's metabolism, as well as the activation of the breathing process.

Fulvic acids Biostimulants for improved nutrient uptake, balanced growth and to promote beneficial biology

COMPOSITION

Fulvic acids	30,0	
Calcium (CaO)		3,0
Magnesium (Mg	1)	3,0
Iron (Fe)		5,0
Manganese (Mn)	5,0
Zinc (Zn)		5,0
Boron (B)		1,0
Annearance	Micrograpulated	

pH (solution 10%) 6 - 7

ACTION FULVIC ACIDS

- Increases the microbiological activity in the soil
- Improves the availability and take up of soil nutrients
- Are excellent in transporting nutrients from the root to the plant
- Allows cellular membranes in helping the assimilation
- Enhances flowering and fructification
- Increases root formation

DOSES AND APPLICATION

1 Enrichment of substrates

Mix 10-20 g. **XOL COMBI** per m³ of substrate. 2 Strawberries

Foliar: 30-60 g/100L; 2-6 treatments (total dose per crop: 100 - 200 g/1000 m²). Do not spray at flowering.

Soil: 50-100 g/1000 m^2 and application, repeat the treatment every 3-5 weeks (total dose per crop: 300 - 500 g/1000 $m^2).$

3 Vegetables

Foliar: : 20-50 g/L; 2-4 treatments (total dose per crop: $100 - 200 \text{ g}/1000 \text{ m}^2$). In radishes. Do not exceed concentrations of 10 g/100 L).

Soil: 50-100 g/1000 m² and application, repeat the treatment every 2-4 weeks (total dose per crop: 200 - 600 g/1000 m²). Higher doses will be used on crops of high yield (tomato and cucumber in greenhouse, etc.).



4 Nurseries

Nurseries: applications in spraying concentration 20-40g/ 100L.

Containers: prepare a 0,05% solution (0,5 g/l) and apply at the rate of 200 g per liter of substrate.

Perennials: irrigate with a solution 0,1% (1 g/L) at a rate of 100 - 150 g / 100 m².

5 Fruit trees

Foliar: 50-150 g/100L; 2-6 treatments (total dose per year: 3-8 Kg/Ha).

Soil: 0,5-1,5 Kg/Ha and application, repeat the treatment every 2-5 weeks (total dose per year: 4-7 Kg/Ha).

MOL COMBI is compatible with the majority of fertilizers and plant protection products normally used. Do not mix with very acid solutions.



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%w/v



STY

WITH **I.S.I.** INMUNOLOGICAL SYSTEM INITIATOR

Spain

2	SOIL DOSAGE	Lts/	ha
STRAWBERRIES	Every 10 days after transplanting	4	
FRUIT TREES	From budding until the swelling of the fruit	6	
BANANA PLANTS	Every 15 days between March and June	6	
OLIVE TREES	Throughout the whole cycle	18	
TABLE GRAPES	From budding until the end of the cycle	5	
DRY FRUITS	From budding until the swelling of the fruit	5	
CITRUS FRUIT	From flowering until the swelling of the fruit	12	
COTTON	10 days after shooting until 20 days after the flow	ering 6	
ORNAMENTAL PLANTS	Every 15 days after transplanting	4	

	FOLIAR DOSAGE	CC/ 100L
HORTICULTURAL CROPS	Every 10 days after transplanting	200
STRAWBERRIES	Throughout the whole cycle	200
TUBERS	Every 15 days	250
FRUITTREES	From budding until the swelling of the fruit	200-300
BANANA PLANTS	Every 15 days	250
OLIVETREES	Throughout the whole cycle	200-300
TABLE GRAPES	From budding until the end of the cycle	250
WINE GRAPES	From budding until the end of the cycle	2L/Ha
DRY FRUITS	From budding until the swelling of the fruit	200-300
CITRUS FRUITS	From flowering until the swelling of the fruit	200-300
BEET	2 applications every 15 days	2,5 L/Ha
COTTON	10 days after sprouting until 20 days after the	300
	first flower.	
ALFALFA	After every mowing	2,5 L/Ha
ORNAMENTAL PLANTS	Every 15 days after transplanting	250
LAWN	After sowing/Growth phase	3-5 L/Ha

Foliar application of STYM 25 can increase amino acid and peptide availability for plant uptake by reducing the competition with soil microorganisms.

comp	etition wi	ith soil mic	roorganisms	5.		
	Pack	king o				
1L	5L	20L	200 L	1000 L		
				نحصن	Aspe	IMPORTED FROM UE

CO	Μ	PC)S	IT	10	Ν	

Free Amino Acids	25,0	
Organic Nitrogen	2,5	
Organic Carbon	14,4	
ISI (Disease-Resist	3,0	
pH 6,7 Density 1,16		5,0

STYM 25 is a natural bioactivator based on amino acids obtained through enzymatic processes, making **STYM 25** more efficient than chemical process based products. It is recommended for all crops and all times, especially when the plants need more nutrients such as in pre-blooming, setting, the swelling of the fruit, vegetative growth, for saline or climatic condition, etc. Aspe has developed a group of molecules that we call **I.S.I. capable of acting as disease resistance activators.**



www.aspeagro.com





%w/v

ORGANIC MICRONUTRIENTS CORRECTOR

CHARACTERISTICS

STYMMIX is a molecular mixture made from iron, manganese, zinc and copper which are complexed with amino acids.

STYM MIX presents a great stability over a wide pH range and offers an excellent compatibility with most varieties of salts and complexed fertilizers used on crops, without presenting any phytotoxicity problems.

INCREASES CROP YIELD AND QUALITY

RAPID UPTAKE AND TRANSLOCATION OF MICRONUTRIENT

SUPPORTS PLANT RESISTANCE TO STRESS

NATURAL ORGANIC FERTILIZER AMINOACIDS AND PEPTIDES, SAVING THE BIOLOGICAL ENERGY

ENHANCES THE EFFICACY OF PLANT PROTECTION AGENTS AND FERTILIZERS



COMPOSITION

Manganese (Mn)3,25Zinc (Zn)3,25	Aminoacids (Free) Copper (Cu) ron (Fe) Manganese (Mn) Zinc (Zn)	4,20 3,25 3,25 3,25 3,25 3,25
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The aminoacid/metal/complex is better formed and more safely absorbed by the leaves tissues. It is also particulary involved in **increasing the rate of micronu**trients transport inside the plant to get a fast response.

CROPS	DOSAGE	APPLICATION
In all crops	5-7 L/ha in case of stress (salinity, drynes divided in several doses (2-3 L/ha).	Stress reduction, improvement of efficiency plant protection treatment, micronutrients deficiency corrector.
Vegetables in green houses (tomatoes, peppers, eggplants, cucumbers).	7 L/ha in 2-3 applications every 10-15 days, from the transplanting to peak the yield.	Output, sprouting leaf quality, growth, micronutrient deficienciy correction.
Horticultural trees (kiwis, citrus groves, banana, wine grapes, stone fruit).	5-7 L/ha every 10-15 days, from pre-blooming stage until the beginning the colouring stage.	Fruit seting, fruit growth and quality micro nutrients deficiency correction.
Open field vegetables.	5L/ha every 7-10 days after the first true leaves.	Output, micronutrient deficiency correction.
Cereals (wheat, rye, barely, oat, maize, rice) potatoes, beans, peanuts.	6-8 L/ha divided in 3 applications every 15 days after the first true leaves appear.	Output, micronutrient deficiency correction.
Ornamental plants and forest nursery, turf and grass	7L/ha every 7-12 days after the transplanting.	Root formation, sprouting leaf quality, growth, micro nutrient deficiency correction.

CAUTION:

You should not mix with cupric or organ-cupric products, mineral oils, Sulphur or any kind of product very alkaline (pH greater than 8)





% w/w

5.00

4.50

0.10

5.60

5.00

0.05

19.50

COMPOSITION

Nitrogen (Ammonium)

Phosphorus (P₂0₂)

Magnesium (MgO)

Potassium (K_0)

Fulvic Acid

Folcisteine

Folic Acid

CHARACTERISTICS

Spain

Forza *Plus* is a plant growth biostimulant and a highly concentrated liquid foliar fertilizer that is used as a supplement to a normal fertilization program.

RZ

Plus

FORZA *Plus* is a 10/20/5 NPK and contains a balanced concentration of trace elements, folcisteine and fulvic acids.

The folcisteine contained in **Forza** *Plus* increases the plant biochemical reserves and optimizes the physiological pathways. These elements help the plant to withstand critical periods of its development. Folcisteine is a compound that penetrates into the plant.

FORZA Plus EFFECTS

- ASSISTS IN THE PLANT'S RECOVERY FROM ABIOTIC STRESS
- INCREASES CROP YIELD AND QUALITY
- HELPS TO RECOVER FROM THE HARMFUL EFFECTS OF STRESS (like the fall of flowers and fruits).
- INCREASES THE UTILIZATION OF NUTRIENTS

DOSAGE AND FOLIAR APPLICATION

COMPOSITION	
COMPOSITION	p.p.m
Iron (Fe)	500
Zinc (Zn)	100
Manganese (Mn)	100
Boron (B)	80
Copper (Cu)	50
Molibdenum (Mo)	2



Сгор	Dose per 100 L water	Time of application
Alfalfa	200cc	10-15 days after every cutting.
Cotton	200cc-400cc	3 times, first application when the third true leaf unfolds. Repeat when first floral buds are visible and when 20% of bolls have attained their final size.
Cereals (wheat, barley, oats, rice)	200cc	2 times, first when the flag leaf sheath extends. Repeat when milky grain.
Strawberry	200cc	3 times, first when 9 or more leaves unfold. Repeat at the beginning of the stolon formation and after the 2nd harvest. Can be use monthly after the 3rd. harvest.
Fruit trees: Apple, Peach, Walnut and Citrus	200cc-400cc	3 times, first application when the new vegetative growth has more than 20 cm. Repeat 15 days after and when developing fruits.
Legumes; Peas, Beans, Soybean	200cc	2 times, first application when 9 or more leaves unfold. Repeat when the 3rd. side becomes visible.
Corn and Sorghum	200cc	2 times, first application when 4 true leaves unfold. Repeat when 6 true leaves are unfolded.
Potato	200cc-400cc	3 times, first application when 9-10 leaves of the main stem are unfolded. Repeat 15 days after and 20% of the total final tuber mass is reached.
Vegetables, Tomato and Pepper	200сс	3 times, first application 15/d after transplanting. Repeat at the beginning of the flowers bottom formation and when fruits have >1 cm diameter. For undetermined Tomato add one or more applications at a 15/d interval after the third application.
Cucurbits	200cc	3 times, first application 10 days after transplanting. Repeat two times more with 8-10 days interval.
Rice	400cc	The culture tillering.
Vine	200cc	2 treatments should be done every 10 days, starting in bloom.
All Crops in general	200cc-400cc	Foliar application during the period of growth and flowering.

FORZA *Plus* is compatible with most insecticides, fungicides, herbicides and fertilizers of agricultural use. It does not produce plant toxicity when used at the recommended rates.





BIOSTIMULANT FOR MATURATION STAGE

CHARACTERISTICS

MATUR is a product specially designed to improve the quality parameters during the maturation stage:

ENHANCES THE COLOR

INCREASES THE SUGAR CONTENT

and during production:

IMPROVES THE SIZE

INCREASES THE WEIGHT

SPECIAL FOR FRUITS AND TABLE GRAPES

MATUR is a tool that increases the color on table grape varieties such as Crimson Seedless, Flame Seedless and Red Globe. They sometimes do not reach a sufficient color development, may be rejected or lose value. Factors that are influencing the intensity of the berries, peel color of the vines, such as the light intensity, ambient temperature and growth regulators.





DOSES AND APPLICATION

CROP	TREATMENT	DOSE	PS
Fruit and table grapes	45, 30 and 15 days before the date of harvesting.	2-3 L/Ha. performing 3 applications	NP

No residue, being able to make applications between the collection stages.





COPPERS





- Highly eficient formulation: Gel
- Maximum eficiency
- Uniform distribution on the plant surface
- Easy Absorption/Translocation
- Optimized size particles
- Important action fungicide/Bactericide (Preventive and Healing)



COPPER OXYCHLORIDE COLOIDAL. DEFICIENCY CORRECTOR FUNGICIDE BACTERICIDE



		%W/V
	Copper (Cu) Copper (Copper Oxychloride)	38,0 70,0
Age	Density: 1,5	

CUC 38 SC is used as a source of copper in large consumers crops of this element to prevent deficiency states. It has remarkable fungicidal action.

Adjust the dose according to nutritional needs and crop situation. Apply when the crop has enough leaves to get treatment. Do not apply during bloom. Do not apply to crops under plastic greenhouse. Do not mix with polysulphide, thiram or very acid or very alkaline reactive substances.

Shake the bottle before application; we recommend using machinery agitator.

- RESISTANT TO BE WASHED AWAY BY RAINFALL
- COVERS LEAF SURFACE HOMOGENEOUSLY

01

- SUPERB RESISTANCE TO DISEASE AND STRESS CONDITIONS
 - HIGH COPPER CONCENTRATION

 \mathbf{SC}

Copper Oxyclorure

Deficiencies Corrector

FUNGICIDE PROTECTION

CROPS

DOSE IN FOLIAR APPLICATION

Citrus • Fall 75 -150 cc / Hl, winter 200 - 250 cc / Hl Horticultural • - 150-300 cc / HI Woody crops • - > 150-350 cc / HI Nuts • - 150-175 cc / HI Olive • - 200 - 400 cc / Hl, are advised to apply in spring, summer and fall. Vigne • In vegetation 100-250 cc / Hl and 150-300 cc / Hl in winter ▶ 125 cc / HI and use 200L water per hectare is recommended to apply Cereals • from the second true leaf cereal until the second appearance of the second node; in the presence of deficiency symptoms the concentration can be increased to 250 cc / HI maintaining the same water quantity per hectare **Packing** 1L 5L



COPPER GLUCONATE DEFICIENCY CORRECTOR FUNGICIDE BACTERICIDE

CHARACTERISTICS

Copper gluconate solution characterized by the ability of being well uptaken by both foliar and root.

It is used as a source of copper in the prevention and correction of deficiencies of this element. Remarkable, fungicidal-bactericide action (Botrytis, Fusarium, Mildiu, Monilia, Phoma, Phythium, Phytophtora, Rhynchosponium, Rhizoctonia, Sclerotinia, Spilocacea, Xanthomonas...), since the copper chelated by the gluconic acid penetrates much better than other copper compounds (oxides) the fungus spore inhibiting in germination.

COMPOSITION

%w/v %w/w

Copper (Cu) 8.0 6,5 Organic complexant agent: D-gluconic acid

Density

1,23-1,33 g/cc



DOSES AND APPLICATIONS

	FOLIAR	FERTIRRIC	GATION
LANDSCAPE	200-400 ml/hl	400 ml/hl	
CEREALS	2 L/Ha	-	
CITRUS	1,5-2 L/Ha,	2-3 L/Ha,	In spring and autumn
FRUIT TREES	2-3 L/Ha,	3-4 L/Ha,	Plefloral application and after harvesting
VEGETABLES	2-3L/Ha,	3-4L/Ha,	Depending on the conditions and cultivation
OLIVE-TREE	2-3 L/Ha,	3-4 L/Ha,	In spring, during the fruit development and autumn
VINE	2-3 L/Ha	-	According leaf development, as complement of phytosanitary treatments

It is recommended to treat between 6 and 25 °C. Avoid applications in cases of extreme drought, humidity, frost and rain. Shake the container well for its homogenization. In case of mixing with other products, always carry out a previous test. Incorporate this product into the last phase.

Compatible with most insecticides and fungicides. Do not mix with acids or alkalis. Not add amino acids.





20% (200 g/L)

75%(750 g/L)

26%(260 g/L)

COPPER SULFATE DEFICIENCY CORRECTOR FUNGICIDE BACTERICIDE

COMPOSITION

COPPER SULFATE **75 FLOW**

Action Bactericide - Fungicide Systemic - Broad Spectrum

0

1,4

4,5-5

Copper (Cu)

Sulfur (SO_)

Density

pН

Copper sulfate

COPPER SULFATE is a flowable Copper sulfate used in foliar application.

The smaller particle size delivers a better plant coverage, which means better protection against fungal and bacterial diseases.

COPPER SULFATE formulation readily mixes in water and stays suspended longer than any other liquid formulation.

KEY DISEASES CONTROLLED

Especially active against: Alternaria, Anthracnose, Bacterial spot, Botrytis, Cercospora, Collectrochum spp., Downy mildew, Exorporium, Fire blight, Phomopsis, Pseudomonas leaf spot, Scab, Xanthomonas and different types of bacteria and repiles.

KEY USES

Preventive treatment for the following crops: Berries, vines and hops Chives Conifers Turfgrass Field crops, including citrus Ornamentals

Seed dressings **Tropical crops** Vegetable crops

COPPER SULFATE ADHESION

COVERAGE

FORMULATION

PROTECTION

DOSES AND APPLICATIONS

Apply foliar spray diluted in water, shaking previously the container.			
CITRUS	75-125cc/Hl	OLIVE	300-600cc/HI
FRUITS TREES (WINTER)	250-400cc/HI	PISTACHIO	200-400cc/Hl
FOREST NURSERIES	150-180cc/Hl	VEGETABLES	150-180cc/Hl
HERBACEOUS&LIGNEOUS	150-250cc/Hl	VINE	200-300cc/HI

Compatible with most insecticides and fungicides. Do not mix with acids or alkalis. Do not add amino acids.





CROPS





The exponential development than has occurred in recent years in relation to plant nutrition of crops, means the possibility of developing fertilizer specially designed for a particular crop.

Thus, the knowledge of certain metabolic pathways that include: the assimilation of the nutrients, their transport specific, certain physiological actions, etc., leads us to design fertilizers including certain nutrients that intervene in physiological processes essential for certain species, as in the case of the elements Molybdenum and Boron in the enzyme nitrogenase, responsible for the fixation of atmospheric nitrogen in legumes, or the direct involvement of microelements such as Boron and Calcium in the production of sugars in certain species like the Brassicaceae. We could cite many examples thanks to as we have said before, the breaktrhough in plant nutrition.

Therefore, Aspe proposes a series of specific fertilizer products for various crops, based on current knowledge and our own experience acquired throughout our yeears of activity.



BIOSTIMULANT. SEED TREATMENT

GRAIN START is extracted from vegetables and seaweed. **GRAIN START** contains amino acids and other natural nutrients which provide the nutrition-energy to seeds, thus increas ing the seeds germination percentage and providing a vigorous start for the plant.

MODE OF ACTION

GRAIN START has an excellent sticking ability to seeds. After a seed treatment with **GRAIN START**, the product will cover all the seeds surface, and after the germination of root from the seed, the product will be immediately be uptaken by the plant. It provides the nutrition and energy for the plant to emerge from the soil, improving its root development in the process.

GRAIN START favors a greater number of plants ready to produce, resulting in an increase in the final productivity.

Increases germination of seeds

Enhances root development

Increases viability inoculants

Has an effect on the uniformity and speed of emergence

Protects the seed from desiccation

COMPOSITION	%w/w
Total aminoacids	9,0
Free aminoacids	6,0
Total nitrogen (N)	5,0
Total organic matter	30,0
Seaweed extract	6,0



CROPS	DOSE L/1000Kg seeds	APPLICATION
Wheat	1-1,5	Dilute it with water to 10L of total volume.
Corn	2-2,5	Dilute it with water to 12L of total volume.
Sunflower	1,5	Dilute it with water to 10L of total volume.
Soy	2	Dilute it with water to 10L of total volume.
Rice	2	Dilute it with water to 10L of total volume.
Rape	3-4	Dilute it with water to 12-15L of total volume.

Apply **GRAIN START** directly to the seed in a container that provides a good distribution of seeds.

Place half of the seeds in a container and apply half of the required **GRAIN START** product on the surface of the seeds. Mix and stir manually or using suitable machinery. Add the remaining seed and the required **GRAIN START** and stir.

GRAIN START certainly applies in seeds treated with inoculants, fungicides and insecticides. It is advisable to first add the inoculant, fungicide and insecticide and then **GRAIN START**

www.aspeagro.com





MANGANESE AND ZINC CORRECTOR. SPECIAL CITRUS

CHARACTERISTICS

Special formulation that helps prevent and correct deficiency states simultaneous for manganese and zinc.

CINCUS Mn-Zn PLUS is a highly concentrated emulsion (Flow) of Zinc and Manganese salts and it's chloride free and fully water soluble.

A combined application of Zn and Mn is more effective than single sprays on their own.

The main roles of zinc are as a cofactor of enzymes and involvement in the production of growth regulators responsible for internode elongation and chloroplast development. Low zinc levels reduce the fruit number per tree and, to a lesser extent, fruit size, resulting in decreased yields.Zinc deficiency symptoms in citrus first appear as chlorotic leaf spots ('mottle leaf') and/or white interveinal areas with green veins. Manganese is involved with photosynthesis, efficient use of N, protein metabolism and enzyme activation. Manganese deficiency is usually seen on young leaves as a mottled yellowing of the leaf.

Thanks to the physical characteristics of CINNUS Mn Zn PLUS it is possible to optimize the uptake of nutrients (Zn and Mn) and a longer stay of the product on the leaf, so that the period of effectiveness of the application is extended.

INCREASES THE SIZE OF LEAVES, SHOOTS AND FRUITS

ENHANCE CONTENTS IN VITAMIN C

IMPROVES QUALITY (INCREASES 'TSS' CONTENT OF THE FRUIT)

INCREASES YIELD. A HIGHER NUMBER OF FRUIT PER TREE

APPLICATIONS AND DOSAGE

Foliar:

300-500 cc / hl.

Make 2-4 applications during the crop cycle, according to needs and development.

-Citrus, application should be performed after the onset of the new shoots of spring and summer when the shoots reach 2/3 of its development.

DILUTION : Recommended water rate is 500-1500 L per hectare. Always shake the container before opening.

The spray tank should be filled with half of the required amount of water. Measure the required amount of CITRUS MnZn Plus and add to the tank maintaining constant agitation. Add remaining water and Spray.

CITICUS Mn-Zn PLUS should be stored in frost free conditions with optimum storage range between 5-40°C. In situations of prolonged storage there may be slightly settling of the nutrient particles. This is reversible on shaking.



COMPOSITION

Total Zinc (Zn)	13,50	
Total Manganese	13,50	
Total Nitrogen	5,80	
Density pH (10% solution)	1,65 5,5-6,5	

%w/v



KELOM COTTON

BIOACTIVATOR. SPECIAL COTTON

CHARACTERISTICS

KELOM COTTON's components mobilise the special plant process for the adaptation to particular stress conditions, increasing and maintaining the retention capacity of flowers and small fruits in the most advantageous positions and branches, to maximise production and the earliness of the crop.

MAXIMIZE COTTON PRODUCTION INCREASED RETENTION AND QUALITY OF THE CAPSULES PRECOCITY

KELOM COTTON's is made of enzymes and growth substances from natural origin by a special fermentative extracting procedure from seaweeds, in order to stabilise and balance its composition, it contains organic acids (polyhidroxicarboxylic acids) and chelated micronutrients for the elimination of yield's limiting factors. Micronutrient is known to take part in essential enzymes needed to compensate the loss of cellular energy. The preparation is completed with a metabolic activator.

APPLICATIONS AND DOSAGE

AdditionPhenological stage1stBeginning of flowering2nd40-45 days after the firstaddition

Dosage 1,0 L/Ha 0,75 L/Ha

A higher growth and yield in cotton cropping is obtained with KELOM COTTON

1º Addition	2º Addition
Increases the number of fruitful branches and positions within them. Issuance of all possible fruiting bodies.	 -Retention around 60% of fruiting bodies. -Balanced development and maintenance of the emission of these organs. -Formation and ripening of fruits. -Precocity of the harvest and greater number of harvestable capsules in the 1st collection.
Packing 1L SL 20L 1000 L AS	De

COMPOSITION

%w/w

Polyhydroxy carboxylic acids (PHCA)	25,0
Total amino acids	15,0
Betaine	9,0
Nitrogen (N) Organic	2,0
Iron (Fe)	1,68
Manganese (Mn)	0,63
Zinc (Zn)	0,34
Copper Cu)	0,04
Boron (B)	0,34
Molybdenum (Mo)	0,004



Vital for Mr



CHARACTERISTICS

Vital fol Mn is specifially designed to improve crop yield and quality in potato and taproot crops (carrots, radish, sugar beet, etc.) Vital fol Mn is rich in Manganese, a Micronutrient activator of multiple enzymes involved in photosynthesis and carbohydrate biosynthesis. The effect of manganese is supplemented by Macro and other Micronutrients that optimize the plant nutritional status and by the presence of phosphorus in a highly bioavailable form that improves nutrients uptake and transport.

As a result, **Vital** fol Mⁿ stimulates tuber formation, tuber enlargement, and starch accumulation, leading to increased number, size and quality of potatoes. Similarly, **Vital** fol Mⁿ stimulates the development and elongation of taproots.

INCREASES NUMBER, SIZE, AND QUALITY OF POTATO TUBERS

IMPROVES THE DEVELOPMENT OF TAPROOT CROPS

RECOMMENDED FOR CROPS WITH HIGH MANGANESE DEMAND

Vital for Mⁿ can be mixed with all common formulations, except with products with alkaline reaction based on Copper and Sulphur, mineral oils and emulsions. A simple mixture test to check compatibility is advisable.

DOSAGE AND APPLICATION

-		
COMP	OSITION	%w/w
Total Nitrog	gen	2,00
Phosphoru	s (P ₂ O ₅)	30,00
Potassium	(K,Ó)	3,00
Boron (B)	2	0,01
Copper (Cu) chelated by EDTA	0,02
Iron (Fe) ch	elated by EDTA	0,02
Manganes	e (Mn)	4,00
Molybdenu	ım (Mo)	0,001
Zinc (Zn)		0,01
Density	1.30	



Сгор	Time of application	Number of applications	Dosage
Industrial crops (potato, carrot, radish, sugar be green bean, broad bean, soybean)	et, At the beginning of the crop cycle	3-4 applications every 7-10 days	2,5-3 L/ha
Strawberry	At the beginning of the crop cycle	3-4 applications every 7-10 days	2,5-3 L/ha
Fruit trees	At pre-flowering and fruit enlargement	3-4 applications every 7-10 days	2,5-3 L/ha

Packing







BORON AND CALCIUM

CHARACTERISTICS

Sukra FLOWB +Ca and SukraSolid B +Ca are a liquid and solid defiency correctors for foliar application or directly to soil by fertirrigation. For its high content of BORON, is used at low doses, and it's fully exploiting in crops.

In sugar beet prevents it heart desease or putrid of the root. in apple and pear prevents bitter pit, and cracks. In grape, improves the flowering and prevents the cluster fall and the formation of small and wrinkled fruits. In the olive tree, it prevents loss of production, and the deformation of the olive. In horticulture, it prevents hearth rot in celery, the coiled leaves in cauliflower and broccoli. In lettuce it prevents hearts rotting and burning side, in stud prevents drying of the tip and stems, in potato it avoids the necrotic of tubers with deformities.

SukraSolid B+Ca

DOSAGE AND APPLICATION

Horticulture, fruit, citrus, vines and olive trees:

- Weak deficiencies: 100-200 gr/100L
- Moderate deficiencies: 300-400 gr/100L
- Strong deficiencies: 500-600 gr/100L

Field crops (Sugar beet): 2-3 kg/ha

Sukra FLOWB + Ca

DOSAGE AND APPLICATION

Horticulture, fruit, citrus, vines and olive trees:

- Weak deficiencies: 100-200 cc/100L
- Moderate deficiencies: 300-400 cc/100L
- Strong deficiencies: 500-600 cc/100L

Field crops (Sugar beet): 4-6 L/ha

CORRECTOR

COMPOSITION	Flow %w/v	Solid %w/w
Boron (B)	15,0	15,0
Calcium (CaO)	7,0	7,0

QUALITY AND POST-HARVEST LIFE

DOES NOT CONTAIN ETHANOL AMINE



COMPATIBILITY

Sukra FLOWB +Ca and SukraSolid B +Ca are compatible with most products. Do not mix with mineral oils, alkaline products or sulfocalcics mixtures.

Add as the last component.





%w/w

RICE3 is a new natural organic food for crops. RICE 3 activates the biochemical functions in the plant, improving the metabolic process. It contains a naturally balanced mixture of Amino Acids available for proteins synthesis without energy uptake, saving biological energy. Furthermore RICE3 contains natural bio promoters N-Acetyl Thiazolidine-4 Carboxylic Acid (ATCA) which through a slow enzymatic breakdown leads to the formation of proline which has a fundamental role to prevent the negative effects due to environmental stress (excessive heat, drought, poor fertilization, excessive rain fall etc.) and Cysteine, whose anti-oxidant activity stimulate the regeneration of the enzymes, the catalytic agents for the proteins syntesis, lowering the cells senescence, and a mix of micronutrients: Boron favors pollen germination, fruit set and the growing of tissues. Iron and Manganese plays a fundamental role in chlorophyll synthesis and also in catalytic reactions. Zinc promotes the production of auxins, favors fruit enlargement, the transport of phosphates, formation of seeds and their ripening.

EFFECTS

- Improves photosynthesis, respiration, synthesis of carbohydrates, nucleic acids, lipids, etc
- Promote seed germination, blooming, seed enlargement
- Faster and improved development of the root's system
- Accelerated plant growth
- Better stress resistance

APPLICATION AND DOSAGE

BIOSTIMULANT. SPECIAL RICE

COMPOSITION

Total aminoacids		17,0
N-Acetyl Thiazolidine-4 Carboxilic		1,00
Iron (Fe) chelated EDTA		0,18
Manganese (Mn) chelated EDTA		0,10
Copper (Cu) chelated EDTA		0,18
Zinc (Zn) chelated EDTA		0,10
Boron (B)		0,08
Density at 20 °C pH (1% water solution)	1,25 g/ml 8,0 <u>+</u> 0,5	



CROPS	Foliar spray ml/ ha per application	N° applications	APPLICATION & INTERVAL
Rice Seeds	-	-	Before sowing leave the seeds for 24 hours in solution with 2 cc for 1 Lt water
Dry Rice	600-800	2	First application 45 days after sowing Repeat 70 days after sowing
Flooded Rice	500-700	2	At germination stage Repeat 10 days before tillering stage

For each application spray RICE 3 uniformly on the leaves using at least 400 liters of water per hectare.

RICE 3 is compatible with most products used in agriculture unless strongly alkaline. RICE 3 must be applied in the cooler daytime period.




MACRONUTRIENTS





Nitrogen (N)

Nitrogen is the nutrient with the greatest influence on crop yield through the effect on chlorophyll and protein production.

- Intensiÿes the green colour (chlorophyll).
- Increases leaf size
- Increases growth rate
- Increases ÿnal yield
- Increases protein content

Phosphorus (P)

Phosphorus is important in root development, the ripening processes and particularly in the manufacture and use of sugars and complex carbohydrates. A good supply of phosphorus is essential in the early stages of a plant's life and for early maturity.

- Stimulates root development
- Helps plants to become stablished early in the season
- Encourages maturity

Potassium (K)

Potassium is associated with the regulation of water within the plant and with the control of water loss from the leaves. It is particularly important in plants than store large amounts of sugar and starch e.g. potatoes. It is also vital for the root nodule bacteria on legumes which fix nitrogen from the air.

- Encourages healthy growth
- Renders crops more resistant to drought and disease
- Improves the quality of the produce

Magnesium (Mg)

This nutrient is an important constituent of chlorophyll and a large number of enzymes necessary for normal growth. It plays an active part in the movement of nutrients, especially phosphate, within the plant and is associated with the control of water within plant cells.

Sulphur (S)

Sulphur is an essential component of several plant amino acids, the building blocks of protein. Deficiency of this element shows as pale leaves, and stunted growth. This results in reduced yields and protein contents. In parts of the world, air pollution has been reduced as cleaner industries emit less sulphur dioxide and there has been an increasing incidence of sulphur deficiency. This has especially occurred in crops with higher sulphur requirements such as oilseed rape, legumes, and grass cut for silage or hay.

Calcium (Ca)

Calcium is required for plant growth, cell division and elongation. Root and shoot tips and storage organs are affected by calcium deficiency as it is part of cell membranes. Calcium is also vital for pollem growth.







NPK FERTILIZER WITH TRACE ELEMENTS. GEL FORMULATION FOR FERTIRRIGATION AND FOLIAR APPLICATION

SOLDENSO Is a formulated nutritional product and not just a simple mixture of raw materials, as are most of NPK fertilizers in powder form.

SOLDENSO has an uniform and simultaneous solubility of all the nutrients, during use, while avoiding sedimentation in the storage containers of the nutrient solution. In contrast, common NPK water soluble powder fertilizers, which are produced through a mixture of raw materials, have increase variability in grain size that results in a non-uniform dilution of nutrients, since the smallest grains are dissolved firstly.

The conductivity and the salinity index are maintained in very low levels so that the soil will not be burndened with undesirable, salt concentration.

CHARACTERISTICS

Neutral pH, unlike most liquid foliar that are highly acidic o highly alkaline. SOLDENSO can be used at higher doses, no being aggressive with the cells that form stomas.

More comfortable for the farmer toot do inggate wolume instead of on weight.

Best solution in terms of speed and ease to use. Allow highe liquid dispersion homogeneity than solid products.

Guarantee solubility by its GEL formulation.



During the vegetative and fruit stages

For application during the vegetative stage and stress situation



Improves the development of the root system and promotes flowering and fruit set



Improves fruit sugar content and promotes fruit development and size







NPK FERTILIZER WITH TRACE ELEMENTS. **GEL FORMULATION FOR FERTIRRIGATION** AND FOLIAR APPLICATION

SOLDENSO FORMULATIONS:

SOL	DENSO
	YELLOW GEL

SOL Denso Equal	27-27-27+Te
SOL Denso Equal	25-25-25+Te
SOL Denso Equal	22-22-22+Te
SOL Denso Equal	20-20-20+Te



SOL Denso Blue	30-10-10+1
SOL Denso Blue	18-11-14+1
SOL Denso Blue	28-11-14+1

30-10-10+Te
18-11-14+Te
28-11-14+Te

SOL Denso Green	10-50-10+Te
SOL Denso Green	13-40-13+Te
SOL Denso Green	20-30-10+Te
SOL Denso Green	10-30-10+Te
	SOL Denso Green SOL Denso Green SOL Denso Green SOL Denso Green

	SOL Denso Red SOL Denso Red	11-17-47+Te 12-05-42+Te
RED GEL	SOL Denso Red SOL Denso Red	04-40-55+Te 10-10-50+Te







NPK FERTILIZER WITH TRACE ELEMENTS. GEL FORMULATION FOR FERTIRRIGATION AND FOLIAR APPLICATION

SOLDENSO SPECIALS+

SOLDENSO SPECIAL FORMULATIONS:

SOLDENSO + Amino Acids	SOL Denso Equal SOL Denso Blue SOL Denso Green SOL Denso Red SOL Denso Red	20-20-20+Te+3Aa 45-00-00+Te+3Aa 10-50-10+Te+3Aa 10-15-30+Te+3Aa 15-10-30+Te+3Aa
SOLDENSO + Fulvic Acids	SOL Denso Equal SOL Denso Blue	20-20-20+Te+6,5%FA 19-09-11+Te+10%FA
SOLDENSO + Macronutrients	SOL Denso Equal SOL Denso Equal SOL Denso Blue SOL Denso Blue SOL Denso Green SOL Denso Red SOL Denso Red	20-20-20+Te+4,7MgO 25-25-25+Te+3,8MgO 14-07-14+Te+14CaO 14-00-08+Te+17CaO+3,6MgO 12-65-05+Te+0,5MgO 09-09-39+Te+6,7MgO 18-11-59+Te+2,0MgO
SOLDENSO + Seaweed	<mark>SOL Denso Equal</mark> SOL Denso Blue	20-20-20+Te+5% Seaweed 19-09-11+Te+5% Seaweed

www.aspeagro.com

SOLDENSO 20+20+20+Te 🗟 🏵

SOLUBLE FERTILIZER

%w/v

CHARACTERISTICS

SOLDENSO is a formulated nutritional product and not just a simple mixture of raw materials, as are most of NPK fertilizers in powder form.

SOLDENSO has an uniform and simultaneous solubility of all the nutrients, during use, while avoiding sedimentation in the storage containers of the nutrient solution. In contrast, common NPK water soluble powder fertilizers, which are produced through a mixture of raw materials, have increase variability in grain size that results in a non-uniform dilution of nutrients, since the smallest grains are dissolved firstly.

The conductivity and the salinity index are maintained in very low levels so that the soil will not be burndened with undesirable, salt concentration.

Application is suitable for different crops: fruit trees, coffee, olive trees, vegetable crops, industrial crops, meadows, etc. It can be used in drip irrigation, foliar application and flood irrigation.

Neutral pH, unlike most liquid foliar that are highly acidic or highly alkaline. COMPLEX DENSO can be used at higher doses, not being aggressive with the cells that form stomas.

More comfortable for the farmer to dosing per volume instead of on weight.

Best solution in terms of speed and ease to use. Allow higher liquid dispersion homogeneity than solid products.

Guarantee solubility by its GEL formulation.

Adjuvant: promotes effectiveness of plant protection products when applied jointly.

APPLICATIONS

COMPOSITION

Total Nitrogen (N)	20,00
Phosphorous $Oxide(P, O_i)$	20,00
Potassium Oxide (K Ω)	20,00
Boron (B)	0,016
Iron (Ee) chelating agent EDTA	0,047
Copper (Cu) chelating agent EDTA	0,016
Mangapasa (Mn) chalating agent EDTA	0,016
Zinc (Zn) cholating agent EDTA	0,016
Molybdonum (Mo)	0.016
	- /



Crops	Dosages		Applications
Cereals	2-51/ha	600 ml/100l	1-2 applications.
Citrus	2,0 - 3,0l/ha	200-300 ml/100l	2-3 applications with 15 day intervals.
Fruits and Vines	1,5 - 3,0l/ha	100-200 ml/100l	Apply before flowering. Repeat every 15 days.
Ornamentals	1,0 - 2,0l/ha	50-100 ml/100l	Use low rate on young or delicate plants.
Potatoes	2,0 - 3,0l/ha	400 ml/100l	1-2 applications early in crop cycle.
Sugar Beet	3,0l/ha	500ml/100l	1-2 applications early in crop cycle.
Vegetables	2,0 - 2,5 l/ha	200 ml/100l	2-4 applications once transplanting established
Rice:			
Seed nursery	3,0 l/ha	300 ml/100l	1-2- applications before transplanting
Root soak	-	200 ml/100l	Soak roots prior to transplanting
Post transplant	2,0 l/ha	200 ml/100l	Apply at tillering

DENSO can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.



SOLDENSO 30+10+10+Te 📽

Blue Gel

SOLUBLE FERTILIZER

%w/v 30.00

10,00

10,00

0.016

0.047

0,016

0,016

0.016

0,016

CHARACTERISTICS

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APPLICATIONS

\sim					
	FOLIAR APPLICATION				
	CROPS		DOSAGE		
	Horticulture		200-250 cc/100L		
	Citrus, fruit trees		200-300 cc/100L		
	Olive		250-500 cc/100L		
	Extensive crops		200-250 cc/100L		
	SOIL APPLICATION				
J	Horticulture		4-8 L /Ha		
	Citrus, fruit trees		4-8 L /Ha		
	Olive		4-8 L /Ha		
	Extensive crops		4-8 L /Ha		

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Molybdenum (Mo)

Total Nitrogen (N)

Boron (B)

COMPOSITION

Iron (Fe) chelating agent EDTA

Zinc (Zn) chelating agent EDTA

Copper (Cu) chelating agent EDTA

Manganese (Mn) chelating agent EDTA

Phosphorous $Oxide(P_2O_2)$

Potassium Oxide (K,O)

DENSO 12+05+42+Te



%w/v

Red Gel

SOLUBLE FERTILIZER

CHARACTERISTICS

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Adjuvant: promotes effectiveness of plant protection products when applied jointly.

APPLICATIONS

	FOLIAR APPLICATION				
	CROPS	DOSAGE			
	Horticulture	200-250 cc/100L			
	Citrus, fruits, and vine trees	200-300 cc/100L			
	Olive trees	250-400 cc/100L			
\sim	Extensive crops	200-250 cc/100L			
	SOIL APPLICATION				
Ŭ	Horticulture	5-10 L /Ha			
	Citrus, fruits and vine trees	5-10 L /Ha			
	Olive trees	5-10 L /Ha			
	Extensive crops	5-10 L /Ha			

OLDENSO can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.



COMPOSITION

Total Nitrogen (N)	12,00
Phosphorous $Oxide(P_{-}O_{-})$	05,00
Potassium Oxide (K.O)	42,00
Boron (B)	0,016
Iron (Fe) chelating agent EDTA	0,047
Copper (Cu) chelating agent EDTA	0,016
Manganese (Mn) chelating agent EDTA	0,016
Zinc (Zn) chelating agent EDTA	0,016
Molybdenum (Mo)	0,016



SOLDENSO 13+40+13+Te 🗟 😂

Green

SOLUBLE FERTILIZER

%w/v

CHARACTERISTICS

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Adjuvant: promotes effectiveness of plant protection products when applied jointly.

APPLICATIONS

Crops	Dosages	Applications
Cereals	2-5l/ha 250 ml/100l	Early in crop cyrcle. Followed by 2nd application 14 days later.
Paprika	2,0 - 3,0l/ha 200-300 ml/100l	1st application 3 weeks after transplanting, followed with a 2nd application 14 days later.
Roses and Ornamentals	2,0 - 3,0l/ha 200-300 ml/100l	Monthly applications on perennials. 2 applications 14 days apart on annual during initial growth stages.
Strawberries	3,0l/ha 300 ml/100l	Single application 3 weeks after planting.
Tomatos and Peppers	2,0 - 3,0l/ha 200-300 ml/100l	1st application 3 weeks after transplanting, followed by a 2nd application 14 days later.
Vegetables	3,0l/ha 200-300 ml/100l	1 to 2 applications early on in growth period of crop.
Other crops	2,0 - 2,5 l/ha 300 ml/100l	For crops with phosphate deficiencies, repeat at 10-14 days intervals as required.

OLDENSO can be combined with almost all the fertilizers and pesticides. In case of doubt we recommend a trial or consult our technical department.



COMPOSITION

Total Nitrogen (N)	13,00
Phosphorous Oxide (P_2O_5)	40,00
Potassium Oxide (K_2O)	13,00
Boron (B)	0,016
Iron (Fe) chelating agent EDTA	0,047
Copper (Cu) chelating agent EDTA	0,016
Manganese (Mn) chelating agent EDTA	0,016
Zinc (Zn) chelating agent EDTA	0,016
Zinc (Zn) chelating agent EDTA Molybdenum (Mo)	0,016





NITROGEN LIQUID FERTILIZER OF CONTROLLED RELEASE

CHARACTERISTICS

AZOL is a nitrogen fertilizer of high efficiency and persistence. The N-urea meets the immediate needs and the N-formaldehyde ensures progressive availability. Safe and environmentally friendly.

- Progressive release. Compatible with pesticides. **GENERAL** ADVANTAGES
 - Foliar application.
 - Reduce, drift and improves the absorption. Keep vegetative/productive balance in crops where (N)
 - has direct influence on production.
 - Risk of washing, maximum use of nitrogen, environmentally friendly.
 - CEREAL
 - Specific weight increases
 - Increases protein content Decreases risk of lodging
 - MAL
 - In the early stages homogenize the crops.
- BENEFITS CROPS RICE
 - Increases the specific weight. Largest filled of the Spike.
 - OLIVE
 - Homogenized fruit ripening. Greater fruit size.
 - Net increase production.

COMPOSITION

Total Nitrogen (N) N (Urea-formaldehyde) N (Ureic)		28% 85% 15%
Biuret, Max less pH(water 10%, 20°C) Density (20°)	: than 9-11 1,23-1,25kg/L	0,7%

%w/v



CROPS	DAYS	STATE OR USE MODE	DOSAGE
Cotton	n.p.	In the phenological stages of 4 sheets, after flowering and during capsule formation	5-8 l/ha - 6-10 kg/ha
Rice	n.p.	The emergence of the flag leaf	10-15l/ha - 12-19 kg/ha
Cereals	n.p.	1st treatment between full tillering to the first knot. 2nd treatment between flag leaf and flowering	10-25 l/ha - 12-31 kg/ha
Lawn	n.p.	Applications every 50-60 days	15-24 l/ha - 19-30 kg/ha
Citrus	n.p.	After fruit set and floral differentiation	5-10 l/ha - 6-12 kg/ha
Citrus	n.p.	End of winter, from vegetative recovery	64-96 l/ha - 80-120 kg/ha fertirrigation
large strawberries	n.p.	Beginning of flowering and repeat every 15 days	5-10 l/ha - 6-12 kg/ha
Stone fruit	n.p.	Fruit before flowering and repeat every 30 days	5-10 l/ha - 6-12 kg/ha
Stone fruit	n.p.	End of the winter to fruit set	64-96 l/ha - 80-120 kg/ha fertirrigation
Pome fruit	n.p.	Before flowering and repeat every 30 days	5-10 l/ha - 6-12 kg/ha
Pome fruit	n.p.	End of the winter to fruit set	64-96 l/ha - 80-120 kg/ha fertirrigation
Leafy vegetables	n.p.	The formation of the bud and repeat every 14 days	5-8 l/ha - 6-10
Horticultural	n.p.	Before flowering and applications every 10-14 days	5-10 l/ha 6-12 kg/ha
Horticultural	n.p.	At the beginning of the growing season	48-80 l/ha 60-100 kg/ha fertirrigation
Corn	n.p.	Early post-emergence, together with herbicides	10-15 l/ha - 12-19 kg/ha
Corn	n.p.	Acaricide treatment for spider mites	10-15 l/ha - 12-19 kg/ha
Olive	n.p.	Since before flowering and repeat every 30 days	5-10 l/ha - 6-12 kg/ha
Olive	n.p.	End of winter, from vegetative recovery	64-120l/ha - 80-150 kg/ha fertirrigation
Soy	n.p.	State R2-R3	4-8 l/ha - 5-10 kg/ha
Vine	n.p.	Post-flowering	5-10 l/ha - 6-12 kg/ha
Vine	n.p.	End of winter, from vegetative recovery	48-80 l/ha - 60-100 kg/ha fertirrigation

Packing

30 Kg 1200 Kg



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1,7

7-8

Phosph

Phosphat

%w/v

45

50

COMPOSITION

Phosphorus (P_2O_2)

Potassium (K,O)

pH (solution 10%)

Density

CHARACTERISTICS

K Phosphate is a high solubility mineral fertilizer for foliar or fertirrigation application.

K Phosphate it has a particularly formulation suitable to be applied when required to provide an adequate supply of phosphorus and potassium in specific vegetative stages. The proper ratio of phosphorus-potassium

K Phosphate promotes color and flavor and favoring the flowering.

FERTILIZER RICH IN PHOSPHORUS AND POTASSIUM

- **BETTER FLOWERING**
- **ROOT DEVELOPMENT**

OPTIMAL FRUIT DEVELOPMENT

IMPROVES THE DEVELOPMENT OF NODULES IN LEGUMINOUS

FOLIAR APPLICATION				
CROPS	DOSES	PERIOD OF APPLICATION		
Apple and Pear	4-5 L/Ha	From the end of flowering.		
Beet	5 L/Ha	When the crop has 4-6 leaves. Repeat after 10-14 days if necessary.		
Cereals	5 L/Ha	During tillering. Repeat after 10-14 days if necessary. An application between the emergence of the spike and the end of flowering can also be beneficial for the development of the crop.		
Citric	4-5 L/Ha	With the new shoots of spring.		
Corn	4-5 L/Ha	With 4-6 leaves and repeat the treatment 10-15 days later.		
Cotton	4-5 L/Ha	At the beginning of flowering.		
Garlic and Onion	4-5 L/Ha	At the beginning of the crop		
Olive	200-400ml/hl	Apply in pre flowering and fruit setting		
Potatoes	10 L/Ha	To increase the number of tubers, apply at the beginning of tubers formation. To increase the size of the tubers, from the beginning of the fattening and repeat at least once during the fattening, starting 10 days after the first treatment.		
Rape	5 L/Ha	In autumn when the crop has 6-8 leaves. Repeat in spring.		
Rice	3-4 L/Ha	Between the beginning and the end of reed period formation		
Vine	4-5 L/Ha	Apply from the separate inflorescences		

SOIL APPLICATION

Fertirrigation application: 5-10 L/Ha Repeat 2 or 3 times depending on the needs of the crop.

Post harvest application: Some crops can need a post-harvest application, depending on the nutritional status of the crop / soil and the type of cycle of the same (deciduous/evergreen).





NITROGEN AND POTASSIUM FERTILIZER

CHARACTERISTICS

Nitrate GEL is a highly concentrated, water soluble emulsion containing both Potassium and Nitrogen.

Potassium increases crop yield and improves quality. It is required for numerous plant growth processes.

Visual deficiencies of potassium are light mottling of the leaves around the margins and between the veins.

- Increases root growth and improves drought resistance
- Activates many enzyme system
- Maintains turgor, reduces water loss and witing
- Aids in photosynthesis and food formation
- Reduces respiration, preventing energy losses
- Enhances traslocation of sugar and starch
- Procduces grain rich in starch
- Increases protein content of plants
- Builds cellulose and reduces lodging
- Helps retard crop diseases

DOSES AND APPLICATION

COMPOSITION

Potassium (K ₂ O)	
Nitrogen (N)	

%**w/v** 46,0 11,0

Density: 1,5



Crops	Rate L/Ha	Rate	ml/100L Details
Avocados	2,5	500	Multiple applications required up to 30 days before harvest
Apples	2,0	400	2-3 applications starting at petal fall to fruitlet stage
Citrus	2,0	400	1-3 applications
Cotton	2,5	500	2 applications at beginning and end of boll ripening. Apply with boron at 2 L/Ha
Flowers	2,0	400	3-4 applications during main growth stage
Grapes	2,0	400	2-3 applications from flowering to ripening
Maize	2,0	400	1-2 applications during growth period
Olives	2,0	400	3-4 applications during fruit development
Peppers & Tomatoes	2,5	500	2-3 applications from fruit set
Potatoes	2,0	400	2-3 applications from flowering to tuberisation
Rice	20	400	2 applications starting at flowering

) **400** 2 applications starting at flowering

K NITRAGEL GEL should be stored in frost free conditions with optimum storage range between 5-40°C. K NITRAGEL GEL is a non-hazardous and not flammable foliar fertilizer. Always shake the container before opening.



FLOWER 50



%w/v

PRE-FLOWERING FLOWERING AND FRUIT SETTING

CHARACTERISTICS

FLOWER 50 provides Phosphorus immedia tely assimilated by the plant. **Especially indicated in the stages of pre-***cowering, cowering and fruit* **setting**. Improve the phytosanitary status of the crops, powering the root system and increases the resistance to stress.

It can be used as a source of Phosphorus in citrus, fruit, vegetables, ornamental, vine, plant nursery etc, especially when the deficiency symptoms occur as a result of an excess of lime active on the soil.

Phosphorus (P) is essential for all known life forms, because it is a key element in many physiological and biochemical processes.

Component of each cell in all organisms, Phosphorus is essential and cannot be replaced by anything else. **Phosphorus is the most in "uecing nutrient in the development of "owers and fruits.**

By applying **FLOWER 50** in "owering, pre-"owering and fruit setting, you get:

COMPOSITION

Phosphor	50,0	
Free amir	2,0	
Lysine		2,0
Total Orga	anic Nitrogen (N)	0,6
Boron (B)	1,0	
Calcium (0,005	
Density	1,4	
рН	5 - 6	

Improved training and opening of the "owers Facilitates the work of pollinating insects More and better fruits

APLICATION	DOSE	2	
Foliar	100 - 200 c.c/HI 1-2 L/H a i		
		200	
ROPS			
CITRUS STRAWB	RRIES FRUIT TREES	CULTURAL WALNUT	OLIVE VINEYAF
Packing -			

1L 5L	20L 1000 L	200	
			<u> </u>
	WWW.a	ispeagro.com	

Color K



		COMPOSIT Potassium (K ₂ O) Nitrogen (N) EDTA Density 1,4 pH 11,	₽9-1,53 @18°C ,5-12,5	%w/v 50,0 3,0 1,0
Potassium Fertil Engrais potassique Foliar & Fertirrigation	Potassium Fortilizer Evid a detainen Fotar & Fertingston Rich LEVR POTASSIUM BORCENTRANDON	Color K is a c containing potase presence of EDTA by improving the in the plant wint RECOMMENDED CROPS. Color K helps environment uning such as podery mited	concentrated for sium and nitro increases the availability of hen it most FOR ALL T s the plant cre witing to leaf p dew and botry	ormulation ogen. The efficiency potassium needs it. YPES OF ate a leaf pathogens tis.
CROP YIELD AND QUALITY	TRADITION INNOVATION	THE CONCEN THE AVER/ THE THE	TRATION OF SU AGE FRUIT WEIG FRUIT SIZE PRODUCTION	IGARS
CROPS	STATE		DOSA	GE
Citrus Fruits:	Apply when the fruit is setting, harvesting.	swelling and before		
Cotton:	2-4 treatments during the crop'	s life cycle.		
Cotton: Fruit Trees:	2-4 treatments during the crop' Apply when the fruit is setting harvesting.	s life cycle. , swelling and before		
Cotton: Fruit Trees: Grapes:	2-4 treatments during the crop' Apply when the fruit is setting, harvesting.Apply when the fruit is sw gaining colour.	s life cycle. , swelling and before elling, ripening and	FOLIAR DC	DSAGE:
Cotton: Fruit Trees: Grapes: Horticultural Crops:	2-4 treatments during the crop' Apply when the fruit is setting, harvesting.Apply when the fruit is sw gaining colour.2-6 applications throughout to cycle.	s life cycle. , swelling and before elling, ripening and the crops vegetative	FOLIAR DC 200-500 cc /	DSAGE: / 100 Lts
Cotton: Fruit Trees: Grapes: Horticultural Crops: Olive Trees:	 2-4 treatments during the crop' Apply when the fruit is setting, harvesting. Apply when the fruit is sw gaining colour. 2-6 applications throughout for cycle. Apply when the fruit is setting harvesting. 	s life cycle. , swelling and before elling, ripening and the crops vegetative , swelling and before	FOLIAR DC 200-500 cc / FERTIRRIGATIO 1 0-30 Lts / Ha ex	DSAGE: / 100 Lts DN DOSAGE: very 15 days
Cotton: Fruit Trees: Grapes: Horticultural Crops: Olive Trees: Strawberries:	 2-4 treatments during the crop' Apply when the fruit is setting, harvesting. Apply when the fruit is sw gaining colour. 2-6 applications throughout for cycle. Apply when the fruit is setting harvesting. 1-3 treatments during flowerin formation of the tubers. 	s life cycle. , swelling and before elling, ripening and the crops vegetative , swelling and before g, fruit formation and	FOLIAR DC 200-500 cc / FERTIRRIGATIO 1 0-30 Lts / Ha ev	DSAGE: / 100 Lts DN DOSAGE: very 15 days.
Cotton: Fruit Trees: Grapes: Horticultural Crops: Olive Trees: Strawberries: Sugar Beet:	 2-4 treatments during the crop' Apply when the fruit is setting harvesting. Apply when the fruit is sw gaining colour. 2-6 applications throughout to cycle. Apply when the fruit is setting harvesting. 1-3 treatments during flowerin formation of the tubers. From 2 months before harvesti 	s life cycle. , swelling and before elling, ripening and the crops vegetative , swelling and before g, fruit formation and ng and onwards.	FOLIAR DC 200-500 cc / FERTIRRIGATIO 1 0-30 Lts / Ha ev	DSAGE: / 100 Lts DN DOSAGE: very 15 days.

DILUTION: Recommended water rate is 500-1500 Litres per hectare. Always shake the container before opening.
Packing





Color K Neutral



POTASSIUM FERTILIZER



CROP YIELD AND QUALITY

COMPOSITION%w/vPotassium (K20)34,5Free aminoacids7,5Density1,4pH (1% water solution)7

CHARACTERISTICS

ColorK Neutral is a pH NEUTRAL Potassium fertilizer. Fully miscible in water and assimilable by foliar or radicular via.

ColorK Neutral potassium is complexed by aminoacids, which facilitate the uptake and transportation of K through the phloeme, reaching the tissues of the fruit and the rest of the plant, where this element is required. The moments of greatest demand of Potassium correspond to development, growth and maturation of the fruits, roots and tubers.

SIZE AND COLOR ENHANCEMENT FAVORS FRUIT MATURATION AND GROWTH

APPLIED IN OLIVE, IMPROVE FAT CONTENT

CROPS	APPLICATION	DOSAGE
Citrus	In the fruit set, fruit enlargement and before harvesting.	
Cotton	2-4 applications along the crop cycle.	
Fruit	In the fruit set, fruit enlargement and before harvesting.	
Horticultural	2-6 applications during the crop cycle.	
Olive	In the fruit set, fruit enlargement and before harvesting.	Fertirrigation 15-40 L/Ha
Ornamental	2-4 applications during the crop cycle.	Foliar 300-600 cc/100L
Strawberry	1-3 applications on flowering and fruit formation of tubers.	
Sugar beet	Starting 2 months before harvest.	
Tropical fruits	2-4 applications during the crop cycle.	
Vine	In times of fruit enlargement, ripening and coloring.	\bullet
COIOCK NEUTRAL However, before mixin	is compatible with the majority of fertilizers and phytosanitary products g it is recommended to perform a prior test.	s commonly used in agriculture.

To improve fruit quality (sugar, color, firmness, etc), apply from the beginning of fruit development, with an interval of 10-20 days.





olor

Coress



ress

LEVA

POTASSIUM

CENTRA



%w/w

50,0

3,0

1,0

5,0

SOLID POTASSIC FERTILIZER

COMPOSITION Potassium (K₂O) Total Nitrogen (N) Magnesium (MgO) Chelating Agent EDTA

> **Color K** *Xpress* is a product with high potassium content, nitrogen and chelating agent EDTA. The presence of EDTA contributes by facilitating the absorption of micronutrients in the soil. **Color K** *Xpress* should be applied in stages of potassium peak demand, specially during the formation and maturation of the fruit.

> > HIGHER SIZE FRUIT BEST CONSISTENCY MORE INTENSE COLOUR ADVANCEMENT OF RIPENING

CROPS	FOLIAR	DOSAGE
VINEYARD	2-4 applications separated by 10-15 days starting from the nouasion stage and during ripening.	Ì
FRUIT TREES Stone fruits Pip fruits	2-3 applications separated by 15 days starting at the beginning of fruits growth and up to 2 weeks before harvest.	3-4 Kg/ha Optimal concentration 300g/hl-400g/hl
FIELD CROPS Beets, potatoes, taproots	3-5 interventions on sufficiently developed foliage.	Maximum concentration 1000g/hl On young and fragile foliage maximum 500g/hl
VEGETABLES Tomatoes, pepper, melon	3-5 interventions on sufficiently developed foliage.	
	FERTIRRIGATION	
	Use 7-15 kg/ha per application. (to be diluted to 10% maximum in the mother solution)	
Packing	•	•
1 Kg 5 K		Fortiliser to the second secon







SIZE, COLOR AND FLAVOUR OF FRUIT

CHARACTERISTICS

Color K Sea is a liquid fertilizer with high potassium concentration, enhanced with seaweed extract and Boron.

Color K Sea

BIO POWERING FORMULATION

THE COMBINATION OF COMPONENT IMPROVES:

FRUIT SIZE AND THE FRUIT COLOR

LIFE POST HARVEST OF FRUIT IN COLD STORAGE

THE SUGAR CONTENT OF THE FRUIT

STRESS TOLERANCE (WATER, TEMPERATURE...)

DOSAGE AND APPLICATION

COMPOSITION	
Potassium (K ₂ O)	

Boron (B)

Ecklonia maxima (seaweed extract)

%w/v
25,0
3,0
1,0



Vine	2 a 3	6-8 L/Ha	From pint in 7-5 days later.
Peach	2 a 3	3,5 L/Ha	Apply every 7 days for early varieties and every 15 days in late
			varieties, from development to start intermediate colored fruit.
Cherry-tree	2	7 L/Ha	Applying at least 2 times every 5 days, 10 and 15 days before
			harvest.
Kiwi	4	6-8 L/Ha	Apply every 20 days in the last third of fruit growth.
Oive	1 a 2	7,5 L/Ha	Apply every 7-15 days from fruit set.
Strawberry	2 a 3	3-5 L/Ha	Apply from the first fruit set fruit every 10-12 days.
Citrus	2 a 3	6-8 L/Ha	Apply from the first fruit set fruit every 10-12 days.
Tomatoes	4 a 6	6-8 L/Ha	Apply from fruit set of the 2nd to 5th bunch every 5-7 days.
Garlic and	2	5 L/Ha	Apply 15 and 30 days before harvest.
Onions			
Vegetables	2 a 3	3-5 L/Ha	Applying from 1/3 of development of the crop over the row, every
and Potatoes			10-15 days.





KELOM 🕃



%w/w %w/v



- Sulfur deficiencies corrector.
- Fungicide action (Powdery Mildew and Oidium).
- Improves availability of iron and manganese.
- Increased speed of action of pesticides.
- Increased content of aminoacids and proteins.

COMPOSITION

pН

Nitrogen (N	11,0	15,0	
Sulfur (SO ₃)	64,0	87,5	
Density	1,36 g/cc @18	°C	

CHARACTERISTICS

7-8

SULFUR is a key element for plant growth and development being a important constituent of enzymes and amino acids involved in photosyntesis and protein formation.

KELOM is a liquid fertilizer based on Nitrogen and Sulfur, wich is at high concentration.

KELOM () is used as Sulfur source in the prevention of this deficiency. Arable crops including sugar beet, brassicas, cereals and certain fruit crops will benefit from sulphur applications. Crops will respond immediately to the applications of **KELOM (**) and it will be rapidly absorbed by the plant.

In the combination with herbicide (Glyphosate, Oxyfluorfen, MCPA, Paraquat,...) acts as an enhancer, increasing their speed of action.

DOSES AND APPLICATIONS

Most agricultural and horticultural crops including oilseed rape, grass, cereals, sugar beet, brassicas and potatoes.

FOLIAR	L/Ha	ml/100L	APPLICATION
Cereals	10	3000	Apply in autumn sufficient cover, up to 1st node stage.
Grassland	10	3000	Apply in spring, 1st spray after firts cut and 2nd spray after 2nd cut.
Oilseed rape	5	1500	Maintenance application early in spring during maximun growth, before stem extension.
	10	3000	Deficiency.
Olive	5	1500	Application before flowering.
Potatoes	5	1500	Apply when crop meets in row where deficiency confirmed.
Sugar Beet	5-10	1500-3000	Apply from 4 leaf stage.
FERTIRRIGATION			
Green House Open Field	30-50 50-70		
Packing	•		•
	⊃ 20L	200L	
			WWWW aspeadro com





Organic Ca/Mg/B/Si complex for correction of nutrients deficiencies

CHARACTERISTICS

GOUP is a liquid solution of calcium enriched with Mangnesium, Boron and Silicon.

CaUP

Goup is a completely chelated foliar fertilizer using complexes derived from natural plant sources: Gluconic acid. It is designed to address calcium (Ca) and magnesium (Mg) deficiencies that often occur at the same time.

Boron is addded in the ideal ratio to improve the mobility of calcium in the plant and improves the uptake of potassium.

It decreases the incidence of physiological disorders:

Bitter pit in apple trees, Cork in pear, black bat in grapes, apical necrosis in tomatoes, peppers, cucumbers, watermelons and melons; stained cavities in carrots, black heart in celery, tip burn in lettuce, internal burning (tip) in cabbage, internal necrosis in cabbages of Brussels and in potato tuber necrosis.

COUP is suitable for all crops, especially for fruit, vegetables and ornamental. Use at times of high demand for calcium especially in the formation and maturation of the fruit is encouraged.

Calcium is involved in cell growth and multiplication as well as in regulating the pH in the root system. Also influences nitrogen uptake mechanisms and translocation of carbohydrates and proteins within the plant.

Manganese is predominant in metabolism of organic acids. Role in important enzymes involved in respiration and enzyme synthesis. Direct influence on sunlight conversion in chloroplast.

COMPOSITION

%w/v

Boron is important in protein synthesis. Promotes maturity. Affects nitrogen and carbohydrate metabolism. Increase flowering set.

Silicon promotes resistance to disease and pest, uptake of nutrients and enhances resistance to environmental stress and quality of fruit.





🚭 FOLIAR

Fruit and citrus Horticultural Ornamental and flowers

150-300 cc/100l, 2-3 applications 150-300 cc/100l, first half of the cycle 150-250 cc/100l

FERTIRRIGATION

6-12 l/ha between 3 and 4 applications4-9 l/ha between 3 and 4 applications2-8 l/ha during the first half of the cycle

Warnings: if you mix compounds previous compatibility test is recommended. Shake well before use





KELOM Ca Mg Aa



%w/v

24,00

0,075

3,00

0,15

0,06

0.03

0,075

10,00

0.0015

PREVENTION OF PHYSIOPATHOLOGIES CAUSED BY Ca AND Mg DEFICIENCIES

15

5,5-6

KELOM Ca Mg Aa e

KELOM

Ca Mg Aa

COMPOSITION

Calcium (CaO)

Iron (Fe)

Zinc (Zn)

Boron (B)

Densitv

LEVE

ONCENT

Copper (Cu)

Aminoacids

pH (10% solution)

Magnesium (MgO)

Manganese (Mn)

Molvbdenum (Mo)

CHARACTERISTICS

KELOM Ca Mg Aa is a fully water soluble fluid emulsion fertilizer that allows an immediate and well-balanced uptake of calcium and magnesium, even in conditions of water imbalance and enviromental stresses. It is highly effective in any stage of the crop cycle by foliar application. The presence of aminoacids is useful to the plant in the fruit enlargement stage.

KELOM CG Mg AG in fruits prevents and cures physiopathologies such as bitter pit in apple trees and rachis dessication in grapes. In horticulture prevents and cures physiopathologies caused by calcium and magnesium deficiencies: blossom and rot in tomato and pepper, desiccation of leaf stalk, leaf margin in melon, collar tip in salad. In floricultre increases leaves and flowers growth and color and prevent leaf spot.

THE COMBINATION OF COMPONENT ELEMENTS:

- Increases the sugar content of the fruit.
- Improves fruit firmness, color and skin.
- Prevents and cures physiopathologies causes by Ca and Mg deficiencies.
- Increases resistance to fruit cracks and browning.

20L

5L

• Lengthens shelf-life and storability.

DOSAGE AND APPLICATION

CROP	CONDITION CONTROLLER	RATE I/ha	RATE ml/100l	APPLICATION DETAILS
Apples	Bitter pit	2,0 - 3,0	200 - 300	5 - 7 applications starting at the first sign of growth. Combine with cover sprays.
Avocados	Pulp spot	4,0 - 8,5	400 - 850	Multiple applications.
Broccoli	Brown head	2,0 - 3,0	200 - 300	4 - 6 applications starting shortly before head formation.
Brussels Sprouts	Internal browning	4,0 - 6,0	400 - 600	Multiple applications.
Cabbage, Cauliflower, Lettuce, Endive	Tip burn	2,0 - 4,0	200 - 400	4 - 6 applications starting shortly before head formation.
Celery, Chicory	Black heart	3,5 - 5,0	350 - 500	Weekly applications starting shortly before black heart symptoms arise.
Cherries, Plums	Cracking	3,5 - 6,0	350 - 600	3 - 4 applications starting 6 - 8 weeks before harvest.
Cotton	Square shedding	4,0	400	3 applications between 5 - 7 leaf stage and flowering.
Cucumbers, Melons, Peppers, Tomatoes	Blossom end rot	1,5 - 3,5	150 - 350	6 - 12 applications during periods of heat stress.
Grapes	Reduction of stem dieback and shot berry	3,0 - 6,0	300 - 600	3 - 4 applications from beginning of berry softening to maturity.
Kiwi	Blossom end rot	4,0 - 8,5	400 - 850	Multiple applications.
Ornamentals	Improved vase life	2,5	250	Weekly applications.
Peaches, Nectarines	Improved fruit firmness	3,5 - 5,0	350 - 500	4 - 5 treatments from fruit-set.
Potatoes	Internal brown spot	2,5 - 5,0	250 - 500	Multiple applications during periods of heat stress.
Pears	Superficial scald	4,0 - 6,0	400 - 600	Multiple applications.
Strawberries and other berries	Increased fruit firmness	6,0	600	3 applications in conjunction with last pre-harvest



1L

Always shake container before opening.



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6,1

LIQUID FERTILIZER WITH CALCIUM. BORON AND AMINOACIDS

Total amino acids

CHARACTERISTICS

Spain

KELOMGaForte is a Calcium deficiency corrector that is applied as a foliar spray or through fertirrigation. A faster response will be observed when foliar is being applied, especially during periods of stress (drought, high temperature, etc...).

CaForte

Calcium from **KELO**ACG Forte is guickly uptaken and translocated to the growing points of the plant. In addition, the Free amino acids present in the formulation are used by the plant to increase its photosynthetic activity and other metabolic processes, thus reducing the stress factors and mobilizing the active Calcium.

KELOMCaForte prevents and corrects Calcium deficiency in plants.

- Blossom end rot (apical necrosis) in tomatoes, peppers, eggplants and watermelons.
- Watercore and glassiness in melons.
- Internal leaf and curb defects in cauliflower.
- Internal browning of Brussels sprouts.
- Leaf tipburn in spinach, lettuce, celery, cabbage and strawberry.
- Internal browning, hollowheart, storage disorders, and poor skin set in potatoes.
- Cavity spot in carrots.
- Bitter pit, cork spot, cracking, internal brownspot, and water core in apples.
- Hypocotyl necrosis in beans and other legumes.
- Meristem death or distortion of new growth from meristems in many plants (cupped leaves).
- Cracking in mango, cherry and plum.

DOSAGE AND APPLICATION

CROPS

HORTICULTURE **FRUITCROPS TROPICAL FRUITS FIELD CROPS** DOSAGE

Tomato, Pepper, Cucurbitis, Lettuce, Strawberry, Celery, Cabbage, Broccoli, etc.

- Apple, Pear, Peach, Cherry, Plum, Citrus, Grapes.
- Banana, Pineapple, Mango, Durian, Papaya, Cocoa, Guava.
- Cotton Potato, Sugar beet, Rice, Turf, Pastures.

Horticulture and field crops Fruit/Vine crops Drip or localized irrigation

Apply 3-6 ml/L or 3-6 L/ha. Apply 5-10 ml/L or 5-10 L/ha. Apply 15-30 L/ha.



COMPOSITION	%w/w
Calcium (CaO)	8,0
Boron (B)	0,2
Free amino acids	4,6



FIRMNESS IMPROVEMENT

PRESERVATION IMPROVEMENT

LESS PHYSIOPATHY INCIDENCE

MORE MARKETABLE FRUITS



%w/w

CALCIUM AND BORON DEFICIENCY MULTIPLE CORRECTOR

CHARACTERISTICS

STOP GOB is a solid formulation with Calcium in N.O.C. (Natural Organic Complexant) form and Boron as a synergic nutrient Boron helps Calcium mobility though the plant, reaching the fruits.

It is quickly fixed in the vegetal tissues and therefore it is particularly useful to produce fruits and berries more resistant to physiopaties and to strokes during harvest, to improve their keeping and to reduce the cracking (or splitting) of fruits. Applied just after fruit-set, it stimulates cell division and increases the size of fruits.

STOP GG B gives higher resistance to salinity, drought (reducing the drop of flowers, leaves, fruits) and late frost to any kind of plants.

CALCIUM

Spain

- Involved in activation of enzymes as a cofactor.
- Controls fruit ripening
- Participates in the selectivity of the membrane plant.
- Involved in cell division and cell elongation

BORON

- Essential in cell division and meristem development.
- Controls movement of sugars, starches and amino acids.
 It is clearly related to Calaium to provert the full of flower.
- It is closely related to Calcium to prevent the fall of flowers and fruits.
- Involved in fruit ripening.

HARDNESS AND CONSISTENCY FOR FRUITS

COMPOSITION

Calcium (CaO)	34,0
Boron (B)	2,0
N.O.C. (Natural Organic Complexant)) 64,0
pH (watery solution 1%) 7 ± 0.5	



ADVANTAGES

- Effective in the treatment of the bitter pit on Apple trees.
- Solves the blossom-end rot problem in tomatoes and leaf spot in pepper.
- Cure melon leaf drying and tip burn in lettuce, endive and escarole.
- Effective against cracks in the stone fruit.

CROPS	Fertigation Kg/ha	Foliar spray * gr/100 l water	APPLICATION
FLOWER AND ORNAMENTALS	2 - 4	100 - 200	Before flowering.
HORTICULTURE	4 - 8	100 - 150	After fruit set every 15 - 25 days.
NURSERY	2 - 3	200 - 300	In case of stress condition.
INDUSTRIAL CROPS		150 - 250	In cereals before the formulation of the panicle, generally before flowering.
ORCHARDS, VINEYARDS, CITRUS		250 - 500	After fruit set, along the season every 15 days.

*the dose refers to a volume of water of 10 hl/ha

DOSAGE AND USE

COMPATIBILITY

Good compatibility with all phytosanitary products, except for the products containing high percentage of phosphorus and sulfur.



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Promat



ALL-IN-ONE FOLIAR FERTILIZER

Pronat contains the best seaweeds to create a concentrate emulsion of macro and micronutrients

Increases the production of crops in danger of stress caused by high temperatures, water deficiency and viruses.





Total Nitrogen (N)	28% w/v	Zinc (Zn)	1/0 mg/l
Phosphorus	11% w/v	Auxines	600 ppm
Potassium	14% w/v	Cytokinins	2000 ppm
Boron (B)	170 mg/l		
Copper (Cu)	170 mg/l		
Iron (Fe)	480 mg/l		
Manganese (Mn)	170 mg/l		
• • •	÷.		

Pronat includes essential nutrients and organic matter from seaweed extract. It stimulates the root development, nutrients and water uptake.

CONCENTRATE EMULSION OF MICRO AND MACRONUTRIENTS WITH SEAWEED EXTRACT

FOR ALL CROPS

CROP	TIMING	RATE (L/Ha)	RATE (ml/l water)	COMMENTS
Bulb & Outdoor Flower	From 2 true leaves	2	-	Use early to promote root growth, later applications will help to increase plant height and number of flower.
Cereals	2-6 leaves to 1st node	3	100-200	Apply if soil and weather conditions prevent optimum growth or to relieve crop stress. Promotes root growth and improves uptake of nutrients from the soil
Field Vegetables	When crop is under stress or during rapid growth	2	-	Repeat as necessary every 10-14 days
Grassland	As required or when stress is evident	3	-	Repeat as necessary every 10-14 days
Hardy Nursery Stok	2-6 leaves to 1st node.	3	0.5-3	Use early to promote root growth. Use lower rate on young plants and repeat after 14 days. Promotes root growth and reduces transplant shock.
Legumes, Field and Root Vegetables	As required or when stress is evident.	3	-	Repeat as necessary every 10-14 days
OilseedRape	Early spring growth	3	-	Apply if soil and weather conditions prevent optimum growth or to relieve crop stress. Promotes root growth and improves uptake of nutrients from the soil

5

5L

CROP	TIMING	RATE (L/Ha)	RATE (ml/l water)	COMMENTS
Potatoes	3-4 weeks after emergence	2	-	Promotes root growth and improves canopy cover
	Bulking	5		Follow with 2-3 applications at 14 day intervals once crop meets across the rows.
Protected Edibles	From 2 true leaves	0.5-1	-	Use early to promote root growth. Use lower rate on young plants and repeat after 14 days. Promotes root growth and reduces transplant shock
Protected Omamentals	Earlyspringgrowth	-	0.5-2	Promotes root growth and improves canopy cover. Use lower rate on young plants and repeat after 14 days
SoftFruit	4-8 true leaves	2	-	Use early to promote root growth, later applications will help to improve bud promotion.
Sugar Beet	4-8 teaf stage	3	-	Promotes root growth, protects against stress.
Tree Fruit	Once new leaf 80% open	3	-	Promotes growth, protects against stress, aids fruit swell and skin finish

Packing

250ml

0.5L

1L



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MICRONUTRIENTS





Boron (B)

- Essential of germination of pollem grains and growth of pollen tubes
- Essential for seed and cell wall formation
- Promotes maturity
- Necessary for sugar translocation
- A[~] ects nitrogen and carbohydrate

Copper (Cu)

- Catalyzes several plant processes
- Major function in photosynthesis
- Major function in reproductive stages
- Indirect role in chlorophyll production
- Increase sugar content
- Intensiÿes color
- Improves , a vor of fruits and vegetables

Iron (Fe)

- Promotes formation of chlorphyll
- Acts as an oxygen carrier
- Reactions involving cell division and growth

Manganese (Mn)

- Functions as a part of certain enzyme systems
- Aid in chlorophyll synthesis
- Increases the availability of P and Ca

Molybdenum (Mo)

- Required to form the enzyme "nitrate reductase" which reduces nitrates to ammonium in plant
- Aids in the formation of legume nodules
- Needed to convert inorganic phosphates to organic forms in the plant

Zinc (Zn)

- Aids plant growth hormones and enzyme system
- Necessary for chlorophyll production
- Necessary for carbohydrate formation
- Necessary for starch formation
- Aids in seed formation

FUNCTIONS ▼ ELEMENTS ►	BORON	COPPER	IRON	ZINC	MANGANESE	MOLYBDENUM
PHOTOSYNTHESIS		*	*		*	
GROWTH	*			*		
FERTILITY	*	*				
PROTEIN SYNTHESIS		*		*	*	
LIGNIN SYNTHESIS		*				
NITROGEN FIXATION		*	*			*
REDUCTION OF NITRATES		*	*		*	*
TRANSLOCATION SUGARS	*					

BORZINC



BORON AND ZINC CORRECTOR

CHARACTERISTICS

BORZINC is a liquid fertilizer that contributes a very good relation of Boron and Zinc, that applied in a suitable dose and in the propitious phenological moments, raises the levels of these nutrients in an efficient form.

Thanks to its specific formulation, **BORZINC** is especially recommended to apply in pre-flowering and fruit setting of all crops.

Boron (B) exist primarily in soils solutions as the BO₃³⁻ anion the form commonly taken up by the plants. One of the most important micronutrients affecting membranes stability, B supports the structural and functional integrity of plant cell membranes. Boron-deficiency symptoms first appear at the growing points, and certain soil types are more prone to boron deficiencies.



Enzymatic function Growth Hormone Synthesis Protein synthesis

Zinc (Zn) is taken up by plants as the divalent Zn²⁺ cation. It was one of the first micronutrients recognized as essential for plants and the one most commonly limiting yields. Althought Zn is required only in small amounts, high yields are impossible without it.

DOSES AND APPLICATION

COMPOSITION %w/v Boron (B) 11.5

Zinc (Zn)

11,5 4,0

Chelating agent: EDTA (ethylenediaminetetraacetic acid)



Improves Flowering

Increases Vegetative Growth

Specially formulated for fruit trees sensitive to deficiencies of Boron and Zinc

Crops	Foliar	Application&Interval
Stone-pipe fruit	1-2 L/Ha	Perform 1-2 applications in bursting of buds and perform 1-2 applications in fruit set
Vine and Olive	1-2 L/Ha	Perform 1-2 applications in pre-flowering and make 1-2 applications in fruit set
Citrus	1-2 L/Ha	Perform 1-2 applications in bud swelling
Berries	1-2 L/Ha	Perform 1-2 applications in floral button status
Sunflower, Colza,	2-3 L/Ha	Perform the application with sufficient foliar mass developed.
Soybeans, Cereals		
Maize	2-3 L/Ha	Performs the application with sufficient foliar mass developed.
Potato	2-3 L/Ha	Perform the applications with 15 cm of height and in the state of tuber formation
Horticultural	2-3 L/Ha	After harvest and before the fall of leaves, always sufficient foliar mass developed
Woody crops	3-4 L/Ha	POST-HARVEST: After the harvest and before the fall of leaves, always with active green leaves
General Drip Ap	plication:	3-5 L/Ha Distributed in 2-3 applications according to the needs of the crop

Cautions

In woody and horticultural crops, it is not recommended to exceed the concentration of 0,2% (2L per 1000L of water); except in post-harvest applications. In extensive, it is not recommended to exceed the concentration of 1% (1L per 1000L of water). Using mixtures with other products, a compatibility test with small amounts of products is always needed. Does not apply during flowering nor color fruit change.





BORON



BORON DEFICIENCY CORRECTOR

CHARACTERISTICS

BORON is a liquid boron deficiency corrector for foliar or soil application. In sugar beet it prevents heart diseases or putrid of the root. In apple and pear, **BORON** prevents bitter pits and cracks. In grape, prevents the bunch, avoiding small, wrinkled fruits. In olive, **BORON** prevents the loss of production and the deformation of the olive. In horticulture, **BORON** prevents heart rot in cellery, the coiled leaves in cauliflower and broccoli. In lettuce it prevents heart rotting and burning side; in stud it prevents the drying of the tip and stems; in potato it avoid the necrotic of tubers

with deformities. The most important physiological effects of Boron in plants are:

Cell wall structure

Cell division

Sugar transport

Flowering and fruiting

Plant hormone regulation

DOSAGE AND APPLICATION

10L

20L

1000 L

5

5L

1L

COMPOSIT	%w/w	
Boron (B) Total Nitrogen (N)		11,0 4,8
Density pH (10% solution)	1,35-1,40 @ 18ºC 8,0-9,0	



Crop	Objective	Recommendation
In all crops	Supply with boron	1-4 l/ha as a foliar application in 200-400 l water or 5-8 l/ha as a soil application. During application with knapsack sprayer at 0,5%
Pit fruit	Pollen germination, flower quality, fruit setting, calcium transport, skin quality	2-3 x 1 l/ha from red bud until petal fall
Pit fruit, Stone fruit, Strawberries, Berries, Table grapes	Storage of reserve substances, regeneration, resistance against cold, flower quality	2 x 1 l/ha after harvest
Stone fruit	Flower quality, fruit setting	1 l/ha beginning of blossom time
Table grapes	Flower quality, fruit setting, regular maturity	2 x 1 l/ha from increasing of flower cluster until beginning of blossom
Fruit vegetables	Flowering, fruit setting, supply with boron	1-2 x 2 l/ha before blossom when enough leaves are developed
Crucifers, leaf vegetables, bulbous vegetables	Inner quality, against heart necrosis in cabbage, supply with boron	1-2 x 2-3 l/ha as soon as enough leaves are developed
Asparagus, root vegetables, tuberous plants	Quality (cracks; empty asparagus or tubers; inner scald), supply with boron	$1-2 \times 3$ l/ha as soon as enough leaves are developed
Cereals	Output, supply with boron	0,5-1 l/ha until end of tillering, a deficiency proof by leaf analysis provided
Potatoes	Inner quality, supply with boron	1-2 x 1 l/ha at meeting across the rows
Maize	Pollen quality, graining, grain yield, energy density, supply with boron	3 l/ha from 4 leaf stage onwards
Oil seed rape	Resistance against cold, regular flower and maturation, yield	2-4 l/ha in autumn from 4 till 6 leaf-stage
	Regular blossom-time and maturity, output, supply with boron	2-4 l/ha in spring until beginning of blossom
Sugar beet	Against heart and dry rot, output, quality, supply with boron	1-2 x 3 l/ha between 6-leaf-stage and meeting across the rows
Нор	Development of bud and sprout, quality	3-5 x 0,1 % until flowering
Packing		•





A COMPLETE LINE OF EDTA CHELATE MICRONUTRIENTS, SOLID AND LIQUID

		\frown			TC
P	51	U	D	U	
-	_	~	_	_	

		PRODUCT	COMPOSITION	%w/w	STATE
on EDTA	KELOA FEI3 Dia CHEAT Norman	KELO M Fe 13	Iron (Fe), EDTA chelated pH (10% in water) 4,5	13,0	SOLID
-					
	100 A				
er EDTA	KELOA CU14 EDA CHEAT DA CHEAT Higher Yield	KELO M Cu 14	Copper (Cu), EDTA chelated pH (10% in water) 6,5	14,0	SOLID
Сорр					
EDTA	KELONA ZA15 RMA CHLAR Higher	KELOM Zn 15	Zinc (Zn), EDTA chelated pH (10% in water) 6,5	15,0	SOLID
Zinc					







IRON EDTA CHELATE CORRECTOR

CHARACTERISTICS

Iron EDTA chelate, **KELO** Fe 13 provide the necessary chelated iron, stable, soluble and directly assimilated by plants.

The product is easily assimilated and uptaken by plants, the results are quick and visual in foliar application.

Very efficient in nutrient solutions. **KELO** Fe 13 contains fully chelated iron and stable in a wide pH range. It does not react with the salts commonly used in fertigation and hydro ponics that can block uptake by the plant.

DOSAGE AND APPLICATION

Cereals, Grain Legumes, Oilseed crops, Cotton, Corn	0.5-1.0 kg/ha	Foliar
Potatoes and other tuber crops	1.0 kg/ha	Foliar
Vegetables, cucurbits	0.5-1.0 kg/ha 5-10 kg/ha 1-3 kg/ha	Foliar Soil Fertigation
Grape vines (wine and table)	50-80 g/100L 1-2.5 kg/ha	Foliar Soil
Apples, Nut crops, Citrus, Mangoes, Stonefruit, Avocados, Pineapples, Olives	50-100 g/100L 1-2.5 kg/ha	Foliar Soil Fertigation
Strawberries, other berry crops	0.5-1.0 kg/ha 5-10 kg/ha 1-2.5 kg/ha	Foliar Soil Fertigation
Ornamentals	0.25-0.5 kg/ha 5-10 kg/ha 1-2.5 kg/ha	Foliar Soil Fertigation

Do not apply during flowering nor color fruit change. Do not use by foliar application on plum or apricot trees.

When applied with other EDTA foliar fertilisers products, the combination must not exceed the maximun hectare rate for each individual product for a specific crop.





IRON CORRECTOR





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COPPER EDTA CHELATE CORRECTOR

CHARACTERISTICS

Water-soluble powder copper EDTA Chelate for use as a soil application or foliar spray. Especially suitable to combat copper deficien cy states, caused by deficiencies or imbalances in the assimilation of the element.

KELOM Cu 14 is fully chelated so assimila tion is maximal, which together with the prop erties of copper make it have some fungicidal effect on crops.

COMPOSITION

Copper (Cu), EDTA chelated

SOLUBLE

65

%w/w

14,0

pH (10% in water) 6,5

DOSAGE AN		ATIONS	
Citrus and other fruit crops	Foliar: 0,5 kg/ha	Apply early in the season and repeat 3-4 weeks later. Avoid spraying during bloom and just before harvest. Apply in a minimum of 500 l water/ha.	OM Cu 14
Wheat, Barley, Oats, Maize and Onions	Soil: 0,5-1 kg/ha Foliar: 0,25-5 kg/ha	Apply immediately pre-planting in a minimum of 200 I water/ha. Apply annually until the deÿciency is correct. Thereafter apply every three years to prevent recurrence. If possible apply before deÿciencies occur and repeat 3-4 weeks later if necessary. Apply early in the growing season, as soon as the crop has su°cien t leaves to absorb the spray. Apply in a minimum of 200 I water/ha.	EDIA CHELATE COPPER CORRECTOR Higher Yield
Conifers	Foliar: 1 kg/ha	Apply by air, ULV or conventional sprayer to second generation trees. Apply in 200-500 I water/ha depending of the tree size.	COPPER CORRECTOR
Pasture	Re-seeding: 4 kg/ha	Spray and incorparate into the soil before to re-seeding.	EFFECTIVE
	Established pasture: 0,5-1	Spray early season before spriying growth starts, and	QUALITY

Foliar applications at high doses above 200 g/hl cause defoliation in certain crops.

kg/ha



again between cuts of silage

or hay. Keep sheep out of recently sprayed pasture.





ZINC EDTA CHELATE CORRECTOR

CHARACTERISTICS

KELOM Zn 15 provides a compound particularly effective in the preparation of nutritional solutions and preparation of substrates, allowing to adjust the dose independently of other trace elements, depending on the crop and the cycle time.

KELOM Zn 15 achieves a direct and balanced increase of active functional Zinc inside leaves; ensuring proper metabolism and plant deve lopment throughout the crop cycle.

COMPOSITION

Zinc (Zn), EDTA chelated

%w/w

15,0

pH (10% in water) 6,5

DOSAGE AND APPLICATIONS

Citrus and other fruit crops	Foliar: 0,5 kg/ha	Apply early in the season and repeat 3-4 weeks later. Avoid spraying during bloom and just before harvest. Apply in a minimum of 500 l water/ha.
Wheat, Barley, Oats, Maize and Onions	Soil: 0,5-1 kg/ha	Apply immediately pre-planting in a minimum of 200 l water/ha. Apply annually until the deficiency is corrected. Thereafter, apply every three years to prevent recurrence. If possible, apply before deficiencies occur and repeat 3-4 weeks later if necessary. Apply early in the growing season, as soon as the crop has sufficient leaves to absorb the spray. Apply in a minimum of 200 l water/ha.
Potatoes and other tubers	Foliar: 0,25-0,5 kg/ha Foliar: 1 kg/ha	Apply when symptoms appear. Minimum water 500L/ha. Apply when sufficient leaf area.
Vegetables	Fertirrigation and Soil: 4kg/ha	Minimum 500L/ha water.

Do not apply during flowering. Do not apply during the change of fruit color. Do not use foliar application in plum or apricot.

Do not exceed a concentration of 0,2% solution w/v (200mg per 100L of water).



ZINC CORRECTOR









%w/w

IRON, MANGANESE & ZINC CORRECTOR

CHARACTERISTICS

The action of the 3 chelated micronutrients in KELOM TRIPLE and the addition of Humic Acid makes a great synergy that gives an optimal photosynthetic efficiency and an improvement of the plants metabolism.

With KELOM TRIPLE you can get important improvements in the results, if you compare it with the use of each micronutrient separately.

KELOM TRIPLE is a solution that unifies the benefits of biostimulants and nutrition. It has a positive influence in the root environment and the yield increase.

KELOM TRIPLE includes 3 essential micronutrients that take part directly in the synthesis of the chlorophyll. Fe prevents and corrects iron chlorosis and /or deficiencies or unbalance. This action is strengthened by the presence of Mn and Zn, micronutrients that are necessary for the chrlorophyll formation.

KELOM TRIPLE has specific chelated agents for every micronutrient, porviding a stronger union, total chelating, great stability and persitence in every soil, including alkaline agricultural soils.

- Assimilable micronutrients
- Chlorophyll synteshis inductor
- Vegetal Growth Stimulant
- Yield increased

DOSAGE AND APPLICATION

COMPOSITION

Iron (Fe) Soluble	4,5
Iron (Fe) EDDHA	4,5
Manganese (Mn) EDTA	1,5
Zinc (Zn) EDTA	0,5
Humic Acids	6,0



Citrus, fruit trees, olive trees and other woody crops	Young trees. Start of production. Trees in the middle of their production	Distribute in 2-3 applications through the year. First application at the beginning of spring. Repeat each 30-40 days. Third application at sprouting in summer
Vine and bush	5-25 g/tree	Apply according to the development of the tree and distribute it through the year
Nursery	2-5 g/m ²	Divide this dose in 4-6 applications through the year.
Rose bush	50 g/m ²	Irrigate with the recommended dose, repeating application each 10-12 days.
Vegetables and ornamental herbaceous	2-4 kg/ha per application through the irrigation water	Apply 3 - 4 times per crop cycle, starting the application since transplanting or at the beginning of the vegetative actiity
	FERTIRRIGAT	ION
General dosage	1kg each 10 000L of irrigation	Repeat according to the necessities of the crop.
Packing		
		•

SOIL APPLICATION

www.aspeagro.com www.aspefactory.com www.aspeorganic.com



KELOM Mn Zn FLow



MANGANESE & ZINC CORRECTOR

CHARACTERISTICS

Special formulation that helps prevent and correct manganese and zinc deficiency states simultaneously.

KELOM Mn Zn Flow is a highly concentrated suspension (Flow) of Zinc and Manganese salts and is chloride free and fully water soluble. A combined application of Zn and Mn is more effective than single sprays o their own.

As a result to the physical characteristics of **KELOM Mn Zn Flow** it is possible to optimize the uptake of nutrients (Zn and Mn) and a longer stay of the product on the leaf, so that the period of effectiveness of the application is extended.

KELOM Mn Zn Flow contributes to rapid recovery of the plants affected by frost or other weather events, and also provides the sulfur and nitrogen plants, these being the main constituent elements of the enzymes.

INCREASES THE SIZE OF LEAVES, SHOOTS AND FRUITS

IMPROVES QUALITY (INCREASES 'TSS' CONTENT OF THE FRUIT)

INCREASES YIELD. A HIGHER NUMBER OF FRUIT PER TREE

COMPOSIT	%w/v	
Total Zinc (Zn) Total Manganese (M Total Nitrogen (N) Total Sulfur	ln)	13,5 13,5 5,8 15,0
Density pH (10% solution)	1,55 5,5-6,5	



DOSAGE AND APPLICATION

CROP	L/ha	cc/100L water	APPLICATION
Berries, Strawberry, Raspberry,	1,5	200 cc/hl	Apply in early sprouting and pre-flowering
Leaf vegetables	1-2	300 cc/hl	Apply with 4-6 true leaves hereinazer
Vegetable, tomato, onion, etc.	1-2	300 cc/hl	Apply with 5 leaf to flowering
Ornamental	1-2	300 cc/hl	Apply in early shoot growth
Citrus	3-5	150-200 cc/hl	At the start of spring shoot growth, repeat 20 days later. Repeat application during shoot growth summer-autumn
Peach, olive, cherry, hazelnut	3-5	150-200 cc/hl	Apply from green tips to 5-8 cm sprouts. Apply higher dose in post-harvest 30 days before leaf fall.
Apple, pear	3-5	150-200 cc/hl	During vegetative growth, starting from green leap. Repeat every 10-15 days. Apply higher dose in post- harvest.
Table grapes, wine, grape	3-5	150-200 cc/hl	Apply with sprouts 30-60cm, repeat to flowering. Apply postharvest higher dose 30 days before the start of fall leaves.

The spray tank should be filled with half of the required amount of water. Measure the required amount of KELOM Zn Mn FLow and add to the tank maintaining constant agitation. Add remaining water and spray. KELOM Zn Mn Flow should be stored in frost free conditions with optimum storage range between 5-40°C. In situations of prolonged storage there may be slightly setling of the nutrient particles. This is reversible on shaking. Always shake container before opening.





KELOM MIX SOLID



MULTIPLE DEFICIENCIES CORRECTOR

KELOM MIX SOLID is a solid compound, highly-soluble in all types of water and whose Iron, Manganese, Copper, Zinc, Boron, Molybdenum and Magnesium micronutrients contribute simultaneously to the plant by providing the necessary dosage of nutrients that are indispensable for the perfect development of any crop.



COMPOSITION	%w/w
Magnesium (MgO)	1,50
Iron (Fe)	4,00
Manganese (Mn)	3,00
Zinc (Zn)	3,00
Copper (Cu)	0,50
Boron (B)	0,50
Molybdenum (Mo)	0,05

CHARACTERISTICS

Chelating Agent EDTA

Except for the Boron and Molybdenum, the other nutrients in **KELOM MIX SOLID** are included in a molecule (EDTA, ethylenediaminetetraacetic acid) that protects them in the soil and, when applied to the leaves, facilitates their uptake and transport to the plant.

Its unique manufacturing process obtained by chemical mixing in the liquid phase ensures a complete chelation and a total homogeneity; keeping the same composition, size, density, color and guaranteed nutritional balance in each microgranule.

KELOM MIX SOLID allows easy and correct dosage which offers instant solubility and high agronomic efficiency; obtaining good yields and high quality crops.

CROP	RATE AP	PLICATION	CRITICAL COMMENTS	
Cereals, Grain Legumes, Oilseed crops, Cotton, Maize, Summer crops	1-1.5 kg/ha	Foliar	Apply early season, tillering and bolting.	
Pastures, lucerne and forage crops	1-2 kg/ha	Foliar	Apply after each grazing or cutting.	
Potatoes and other tuber crops	1 kg/ha	Foliar	Apply up to 4 applications from 10cm stage until post flowering, at 7-10 day in Apply in a minimum of 500L/ha of water.	ntervals.
Vegetables	0.5-1 kg/ha 5-10 kg/ha 2-3 kg/ha 2-3 kg/1000L	Foliar Soil Fertigation Hydroponics	Apply up to 3 applications at 10-15 day intervals when sufficient foliage is p Apply in a minimum of 500L/ha of water. Apply before sowing, transplanting or beginning of plant growth. Apply every 7-10 days during the crop cycle. Apply as required- 1L of prepared solution per 100 L irrigation water. Use the rate during crop development or periods of high temperature or duringshor cooler days.	oresent. higher ter and
Grapevines (wine and table)	100 g/100L or 0.5-1.0 kg/ha 2-3 kg/ha	Foliar Fertigation	Apply 2-3 times during the crop cycle. Apply by dilute application only. Do not maximum per hectare rate. Minimum water rate of 500L per ha. Apply every 7-10 days during the crop cycle.	exceed
Apples, Pears, Nut crops, Citrus, Mangoes,Stone- fruit, Avocados, Pineapples,	50 g/100L or 0.5-1.0 kg/ha 2-3 kg/ha	Foliar Fertigation	Apply 2-3 times during the crop cycle. Apply by dilute application only. Do not exceed maximum per hectare rate. Minimum water rate of 500L per ha. Apply every 7-10 days during the crop cycle.	
Olives	0.5-1.5 kg/ha 5-10 kg/ha	Foliar Soil	Apply when sufficient foliage is present. Apply in a minimum of 500L/ha of wat Apply before sowing, transplanting or beginning of plant growth.	ter.
Strawberries, other berry crops	2-3 kg/ha 2-3 kg/1000L	Fertigation Hydroponics	Apply every 7-10 days during the crop cycle. Apply as required- 1L of prepared solution per 100 L irrigation water. Use the rate during crop development or periods of high temperature or during shor cooler days.	higher rter and
1Kg 5Kg			Aspe	DRTED M UE





%w/w

EDDHA CHELATED IRON

CHARACTERISTICS

KELOMFe is an iron chelate, stable and highly soluble in water, with a clear celerity and shock effect and persistence. The chelating agent EDDHA provides extreme stability, even at higher pH.

The iron is essential for the chlorophyll synthesis and for the plant development. The iron takes part in the different levels of electron transportation chain, fundamental for the cell respiration and in the metabolism of enzymes and proteins. It also has an important role in the nitrogen fixation.

PERSISTENCE	CHELATE ORTHO-ORTHO
STARTING	CHELATE ORTO-PARA
HIGH LEVEL	PLANT CHLOROPHYLL

COMPOSITION

Total EDDHA iron	6,0	
Iron chelated ortho-or	4,8	
Iron chelated ortho-pa	0,3	
Iron total (Fe)	6 + 0,4	
pH (1% in water) pH interval stability	7,5 - 8,5 3 - 11	



DOSAGE AND APPLICATION

CROPS	DOSAGE g/tree	TREATMENT PERIOD
Fruit and Citrus Trees		
Breeding of plants	3 - 5	Fruit tree and Vine Crops
Seedlings	5 - 15	Apply by the end of winter or beginning of
Young trees	15-25	spring, matching up with start of new
Producting trees	25 - 50	sprouts.
Very grown trees and affected by the ferric	50 - 100	Citrus / fruit and other evergreen
chlorosis		crops
Vineyard	One application during the spring or at the beginning of the summer before the	
Young stocks	3 - 5	second sprouting.
Producing stocks	5 - 10	
Grapevine	10 - 25	
Horticultural and Ornamental Crops	Apply from the beginning of crop or after	
Beginning of season growth 1 - 2 g/m ²		
Full growth	2 - 5 gm ²	uprooting.
Strawberries (Hydroponic)	80-120g/1000l water	

KELOM Fe is compatible with pesticides as well as most commonly used fertilzers. It is advisable to confirm compatibility by preparing a sample of the mix at the intended concentrations.







MICRO HEPTA GLUCCO




MICRO HEPTA GLUCCO



The products GLUCCO meet all the requirements for sustainable agriculture and offers farmers an efficient and natural source of macronutrients and micronutrients for foliar and soil.

GLUCONATES serve as an efficient nutrient carriers and further protect valuable nutrients from undergoing any undesirable chemical transformation under adverse pH conditions when applied directly to natural soil, thus enabling 100% bio-availability of essential nutrients to crops.

GLUCCO is safe to use because it is not phytotoxic and is environmentally friendly.

GLUCCO CHARACTERISTICS

- Natural nutrient chelates
- 100% water soluble
- Stable over wider pH range
- Compatible with most common agrochemicals
- Biodegradable and organic

GLUCCO CHARACTERISTICS

- Highly efficient
- Quick and complete assimilation by plants
- For foliar, drip and fertirrigation applications
- Beneficial for variety of soils and crops
- Organic alternative

GLUCCO Fe



COMPLEXED ORGANIC IRON CORRECTOR

CHARACTERISTICS

GLUCCO Fe is a Fe complexed formulation with gluconic acid that gives stability to the product in extreme conditions. This complex ease the uptake and release of the nutrients in the plant.

WHAT IS Fe IMPORTANT FOR?

Iron deficiency. The most obvious symptom in plants is commonly called leaf chlorosis.

This is where the leaves of the plant turn yellow, but the veins of the leaves stay green.

Tipically, leaf chlorosis will start at the tips of new growth in the plant and will eventually work its way to older leaves on the plant as the deficiency gets worse.

Other signs can include poor growth and leaf loss, but these symptoms will always be completed with the leaf chlorosis.

Can be used in fertigation

- It's especially suitable for foliar application, as it is very gentle and acts without phytotoxicity
- It's highly water-soluble
- It's stable in the pH value range 2 12
- It´s suitable for use in organic agriculture
- Offers an environmentally friendly alternative due to its easy biodegradability (no accumulation in the soil and groundwater)

Offers very good cost-effectiveness

FOLIAR APPLICATION

DOSES AND APPLICATION





SOIL	ADDI	ICAT	ION
	10.0		

				\smile			
Crop	Aim/Problem	Recommendation	Time	Crop	Aim/Problem	Recommendation	Time
In all crops	To provide iron	3 - 7 L/Ha (in at least 300L water. Upon application with backpack sprayer 1%. Early application are more effective).	When required	Dessert Grapes	Prevention and alleviation of iron chlorosis	Lances per cane: 15-20 mL (with 1L water)	In February/March
Dessert Grapes	Prevention and alleviation of iron chlorosis	3 - 7 L/Ha (not during flowering)	From 3 leaf stage	Ornamental Plants	Prevention and alleviation of iron chlorosis	5-10mL(with 1L water/m ² or for fertigation, a maximum of 400 mL in 1000L water.)	When required
Greens	Prevention and alleviation iron chlorosis	5 - 7 L/Ha (in at least 400L water. 50-70mL/100m ² in at least 4L water/100m ²).	When required	Pome fruit	Prevention and alleviation iron chlorosis	3-7 L/Ha	In February/March
Ornamental Plants	Prevention and alleviation iron chlorosis	3 - 7 L/Ha (1L per 100L spray water, not during fflowering)	When required	Soft fruit	Prevention and alleviation iron chlorosis	Numerous applications 3-7L/ha	In spring from the start of vegetation
Pome fruit	Prevention and alleviation iron chlorosis	3 - 7 L/Ha	From hazelnut size	Stone fruit	Prevention and alleviation iron chlorosis	30-60mL/tree (in the irrigation procedure)	In February/March
Soft fruit	Prevention and alleviation iron chlorosis	400-500mL (per 100m row)	In February/March	Strawberries	Prevention and alleviation iron chlorosis	300-400mL (per 100m row)	In February/March
Stone fruit	Prevention and alleviation iron chlorosis	1-2 times, 3-7L/Ha	Fruit set to harvesting	Wine grapes	Prevention and alleviation iron chlorosis	Lances per cane: 15-20 mL (with 1L water)	In February/March
Strawberries	Prevention and alleviation iron chlorosis	Numerous applications, 5-7L/ha	In spring from the start of vegetation				
Wine grapes	Prevention and alleviation iron chlorosis	3 - 7 L/Ha (not during flowering)	From 3 leaf stage				

Cautions

Glucco Fe is compatible with all commonly used plant protection products. Since not all the influences appaearing in practice are predictable, a miscibility test with small amounts of the products provided for the sprying is always useful. In case of mixture with fertilizers or plant protection products fill sprayer up to 2/3 with water and add products separately. Add Glucco Fe as the last componen. Apply immediately stiring constantly.



GLUCCO Mn

COMPLEXED ORGANIC MANGANESE CORRECTOR

CHARACTERISTICS

GLUCCO Mn is an organic fertilizer. Mn is chelated by hepta-gluconic acid, which makes an easier uptake and transport through the plant. This way it keeps or corrects the ideal levels of Mn in the crops.

Manganese supplied to plants in Glucco Mn is:

Efficiently and quickly taken up by plants from solutions in foliar nutrition.

Safe for plants (according to the recommended doses).

Stable in multicomponent solutions used in foliar treatments.

Glucco Mn is essential for:

- Activation of enzymes for the synthesis of chlorophyll

- The assimilation of nitrogen.
- Synthesis of ascorbic acid
- Oxidation reduction reactions in photosynthesis

Manganese deficiency is shown by yellowing of leaves, black spots on the leaf, light green mottling between main veins, loss to quality, eg. Poor skin finish in potatoes.

WHY IS Mn IMPORTANT FOR?

Manganese is used in plants as a major contributor to several biological systems including photosynthesis, respiration and nitrogen assimilation. Manganese is also involved in pollen germination, pollen tube growth, root cell elongation and resistance to root pathogengs.

Transport of Mn within the phloem is limited. Therefore any deficiency symptoms will generally be visible first on the younger leaves. Severe deficiency symptoms can lead to interveinal yellowing with brown or grey flecks (grey speck in oats) and the brown discolouration of cotyledons and seeds of legumes.

Delayed maturity is another deficiency symptom in some species. White / Gray spots on leaves of some cereal crops are a sign of Manganese deficiency.

Once applied, either into the soil, hydroponics or foliar, product is readily assimilated by plants, and Mn on it moves free into floem.



Manganese (Mn) pH 6-7 Density: 1.3

Natural Chelating Agent (hepta-Gluconic Acid)

%w/v

6 0



Cautions

Glucco Mn is compatible with the common plant protection products. Since not all the influences appearing in practice are predicatble, a miscibility test with small amounts of the products provided for th spraying is always useful. In case of mixture with fertilizers or plant protection products fill sprayer up to 2/3 with water and add products separately. Add Glucco Mn as the last component.

FOLIAR APPLICATION

Crop	Aim / problem	Recommendation	Time
In all crops	To provide Mn	1-3 L/Ha (with foliar fertilizer in at least 200 L water. Upon application with backpack sprayer 0.5% $-1%$ numerous applications of small amounts increase effectiveness)	When required
Cereals	Yield, N efficiency, photosyntesis rate, winter hardiness	2-3 L/ha (recommendation for winter cereals)	In autumn from the 3 leaf stage
Cereals	Tillering, yield, N effciency, stability	2-3 L/ha (recommendation for winter cereals)	In spring from the start of vegetation
Cereals	Tillering, yield, N effciency, stability	2 times, 2-3 L/ha (recommendation for summer cereals)	From 3 leaf stage.
Potatoes	Reduction in susceptibility to scab	2-3 L /ha	From 3 leaf stage.
Potatoes	Skin quality, resilence	1-2 times, 2-3 L/ha	From the beginning of row closure
Legumes (soy included)	Yield, photosynthesis rate, resilience, winter hardiness	1-2 times, 2-3 L/ha	From 6 leaf stage
Oilseed rape	Yield, photosynthesis rate, resilience, winter hardiness	2-3 L/ha	In autumn from the 4 leaf stage.
Oilseed rape	Yield, photosynthesis rate, resilience, winter hardiness	1-2 times, 2-3 L/ha	In spring from the start of vegetation through to the beginning of flowering
Sugar beet	Yield, photosynthesis rate, winter hardiness	3-5 times, 2-3 L/ha	From 6 leaf stage
General vegetables	Improvement on leaf quality, photosyntesis rate, N efficiency	2-3 times, 2-3 L/ha	Once sufficient leaf mass has developed

Packing

1L



GLUCCO Zn



COMPLEXED ORGANIC ZINC CORRECTOR

CHARACTERISTICS

GLUCCO Zn is a Zn fertilizers solution complexed with hepta-gluconic acid. Once applied, either into the soil, hydroponics or foliar, product is readily assimiliated by plants, and Zn ion it moves free into floem.

Zn (Zinc) in GLUCCO Zn is chelated by gluconic acid in a ferric ammonium salt, assimilable and usable form by the plant, both foliar and root application. This provides to the product a high solubility.

WHAT IS Zn IMPORTANT FOR?

GLUCCO Zn is a key contituent of many enzymes and proteins. It plays an important role in a wide range of processes, such as growth hormone production and internode elongation.

Zinc deficiency is probably the most commons micronutrient deficiency in crops worldwide, resulting in substantial losses in crop yields and human nutritional health problems.

Deficiency in Zinc might result in significant reduction in crop yields and quality. In fact, yield can even be reduced by over 20% before any visual symptoms of deficiency occur.

Symptoms of Zinc deficiency include one or some of the following:

- stunting reduced height
- Interveinal chlorosis
- Brown spots on upper leaves
- Distorted leaves

FOLIAR APPLICATION

Crop	Recommendation	Time
In all crops	1-3 L/Ha (with foliar fertilizer in at least 200L of water. Upon application with backpack sprayer 0.25 - 0.5%)	When required
Cereals	2L /Ha (recommendation for winter cereals)	In autumn from the 3 - leaf stage
Cereals	2L /Ha (recommendation for winter cereals)	In spring from the start of vegetation
Cereals	2 times, 2L /Ha (recommendation for summer cereals)	From 3 leaf stage
Legumes (soy included)	1-2 times, 2L/Ha	From 6 leaf stage
Maize	2 -3 L /Ha	From 4 leaf stage
Hops	3 - 5 times, 2-3 L/Ha	0.5 m growth height to beginning of flowering
Apples and Pears	3L	2 applications, one early season and again after harvest in a minimum of 500L. Apply in 500 to 2000L water per ha.
Beans, groundnuts, peas, soybeans	2L	One to two applications early in 200L water per hectare.
Brassicae (cabbage, etc.)	2L	Apply at the first signs of a deficiency and repeat 3 to 4 weeks later if necessary. Apply in 500L water per hectare.
Citrus	3L	Apply as a full cover spray in spring to all new growth. Two to three applications. Do not spray directly before or during harvest. Apply in 2000L water per hectare
Cotton	2L	Do first application early in the season and repeat the application if required. Apply in 500L water per hectare
Cucurbit (Pumkins, etc)	2L	Apply at the first signs of a deficiency and repeat 3 to 4 weeks later. Apply in 500L water per hectare.
Lettuce	2L	One to two application early in the growing season. Apply in 500L water per hectare.
Solanaceae (peppers, etc.)	2L	Apply at the first signs of a deficiency and repeat 3 to 4 weeks later if necessary. Apply in 500L water per hectare.
Solanaceae (peppers, etc.)	2L	Apply very early in the season and then again after harvest Apply in 500 water per bectare

COMPOSITION %w/v Zinc (Zn) 5.0 pH 6-7 Density: 1.27

Natural Chelating Agent (Hepta-Gluconic Acid)



SCHEMATIC DIAGRAM OF THE CAUSES OF ZINC DEFICIENCY IN CROPS



Cautions

Glucco Zn is compatible with most agricultural remedies. It is however advisable to do a miscibility test prior to mixing with other chemicals. Do not mix Glucco Zn with highly alkaline material such as LIME SULPHUR and BORDEAUX mixture, or with any phosphate-containing fertilizers.



GLUCCOMnZn



%w/v

COMPLEXED ORGANIC MANGANESE AND ZINC CORRECTOR

CHARACTERISTICS

GLUCCO MnZn is a product developed to prevent and correct deficiencies of Manganese and Zinc in all crops. The complexation of these nutrients by the hepta-gluconic acid molecule improves the uptake and transport of these nutrients in the crops. GLUCCO MnZn is a product recommended for the preventive control and treatment of states in which there are deficiencies of Mn and Zn.

IMPORTANCE OF ZINC IN PLANTS

Zinc is an essential constituent of several important enzyme systems that affects many metabolic processes in the plant. It controls the synthesis of indoleacetic acid, and important plant growth regulator that is crucial for active growing tips and leaf enlargement. Terminal growth areas are affected first when Zinc is deficient. Zinc is also critical in the bud differentiation process.

IMPORTANCE OF MANGANESE IN PLANTS

Manganese plays a key role in chlorophyll production. Because it is used to split the water molecule during Photosynthesis. It is essential for plant health. Manganese also activates more enzym than any other nutrient. It is especially important in the production of proteins that are part of the plant 's natural defenses against disease.

HIGH PENETRATION
HIGHER QUALITY AND YIELD
INCREASES THE VITAMIN C CONTENT
IMPROVE FROST TOLERANCE
OPTIMAL ASSIMILATION OF Mn AND Zn
PREVENTIVE AND CURATIVE ACTION
STIMULATES METABOLIC PROCESSES SUCH AS CHLOROPHYLL FORMATION

COMPOSITION

Manganese (Mn)	5.0
Zinc (Zn)	5.0
рН 6-7	
Density: 1.27	
Natural Chelating Agent (Hepta-Gluconic Aci	d)



Mn and Zn complexed by gluconic organic compound

Balanced composition

Effective source of Mn and Zn

APPLICATION

Crops	Dosages	Objectives application
Citrus, avocado	2-4 L/ha 200-300 cc/100L	Boost vegetative growth. Start of sprouting in spring. Start of sprouting in autumn
Fruit trees of bone and pips	2-4 L/ha 200-300 cc/100L	Nutritional correction. From sprouting to post-harvest.
Vegetables in general	2-4 L/ha 200-300 cc/100L	Nutritional correction. From sprouting to post-harvest.
Strawberries and berries	1-2 L/ha 100-200 cc/100L	Nutritional correction. At any time of vegetative development.
Melon, watermelon, cucumber	2-3 L/ha 200-300 cc/100L	Nutritional correction. At any time of vegetative development.
Potatoes	2-4 L/ha 100-200 cc/100L	Nutritional correction. At any time of vegetative development.

Cautions

GLUCCO MNZN is compatible with most of the available fertilizers and phytosanitary products, even though it is advisable to perform a previous test. Do not mix with mineral oils, dinocap or reactive alkaline products.



GLUCCO FMZ

COMPLEXED ORGANIC IRON, MANGANESE AND ZINC CORRECTOR

CHARACTERISTICS

GLUCCO FMZ is a unique liquid fertilizer with iron, manganese and zinc that is complexed with hepta-gluconic acid. This makes an easier transport through the phloem / xylem (systemic) directly to the areas of growth and developmen of the plant.

This complex provides small molecules, giving a better uptake by the stomas and radial cells.

This results in chelate micronutrients Fe, Mn and Zn by gluconic acid, allowing:

MAXIMUM FOLIAR UPTAKE

FAST AND DIRECT TRANSPORT NUTRIENTS VIA XYLEM AND PHLOEM

AVAILABLE MIXTURE AND APPLICATION WITH MOST OF THE FERTILIZERS AND PESTICIDES

MAXIMUM EFFICIENCY

GLUCCO FMZ distributes nutrients to points of:

Vegetative growth (leaves, root hairs, stems and branches).Reproductive growth (buds, owers, fruits and seeds).

The unique formulation GLUCCO FMZ has been specially developed for correcting multiple deficiences of iron, manganese and zinc in differents crops (or early vegetative stages), appearance of the fruit and the beginning of growing, to improve quantitative and qualitative parameters of the harvest.

FOLIAR APPLICATION

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Cautions

GLUCCO FMZ is compatible with most of phytosanitary products for vegetal protection, except alkaline formulations, mineral oils and polysulfurous. It is not compatible with fertilizers, based in phosphate based solutions or high pH.



COMPOSITION

Iron (Fe) water soluble	2.6
Manganese (Mn) water soluble	2.6
Zinc (Zn) water soluble	2.6

%w/v

Natural Chelating Agent (Hepta-Gluconic Acid)





pH CORRECTORS





Each active material is stable provided that it is within a certain pH range. Above this optimum pH range, the active material is degraded and greatly diminishes its effectiveness. This phenomenon is known as alkaline hydrolysis.

With pH is achieved:

- Control the pH of the solution to be applied keeping it stable.
- Avoid the alkaline hydrolysis.
- Improvement e[~]cienc y of: pesticides, PGR, foliar fertilizers.

		-					
Insecticides	pH optimum	Insecticides	pH optimum	Fungicides	pH optimum	Herbicides	pH optimum
Abamectin	6-7	Fenazaquin	6-7	Benalaxyl	6	Alachlor	6
Acetamiprid	5-7	Formetanate	5-7	Captan	6	Atrazine	5,5-6,5
Amitraz	5	Fosalone	5	Carbendazim	6-7	Bentazon	57
Azinphos-methyl	5-6	Imidacloprid	5-6	Cymoxanil	5-6	Diclofop- methyl	5,5-7
Bacillus thuringien	sis 5-6	Lufenuron	6-7	Dinocap	6-7	Diuron	7
Benfuracarb	6-7	Methiocarb	6-7	Epoxiconazole	6-7	Fenmedifam	5,5-6,5
Bifenthrin	5,5	Methomyl	6-7	Famoxadone	5-6	Fluazifop-p-butyl	6-7
Carbaryl	6-7	Pirimicarb	6-7	Folpet	6	Glyphosate	5
Cifluthrin	6-7	Phosmet	5-6	Fosetyl-Al	7	Glufosinate	7
Cypermethrin	6-7	Propargite	6,5	Iprodione	6	Linuron	7
Cloropirifos	6,5	Tau-Fluvalinate	6-5	Kresoxim-Methyl	6-7	Metribuzin	7
Deltamethrin	6-5	Trichlorfon	7	Mancozeb	5-6	Oxifluorfen	6-7
Diazinon	7	Thiodicarb	5-6	Metalaxyl	6	Propanil	7
Dimethoate	5-6			Oxychloride	7	Quizalofop-p-eth	yl 5-6,5
Dinitroanilines	5,5			Pyrimethanil	6-7		
				Tebuconazole	7		

pH optimum for some phytosanitary products



pH REGULATOR, SURFACTANT WITH COLORING EFFECT

CHARACTERISTICS

KELOM PH Triple is a triple action product that has the following characteristics:

1. Its acidifying characteristics allows to **REGULATE THE pH OF THE SOLUTION** of the application between 4.5 to 6.5 (depending on the dosage used).

2. Increases the foliar dispersion. **SURFACTANT EFFECT**. It reduces surface tension of water by increasing wetting and spreading properties that improves pesticides and fertilizers performance and reduces losses and phytotoxic effects

3. THE SYSTEM CONTAINS A pH VALUE INDICA-TOR BY COLOR which helps an adequate preparation of the solution.

For these three reasons, **KELOM pHTriple** improves the effectiveness of phytosanitary treatments to prevent degradation and facilitate not only a more uniform distribution, but also an enhanced uptake.

DOSAGE AND APPLICATION

Dosages necessary to carry 1.000 L of solution at pH 6:

- If the pH of the solution is 7.0 a 8.0: 400 600 c.c.
- If the pH of the solution is 8.0 a 9.0: 500 600 c.c.
- If the pH of the solution is 9.0 a 10.0: 600 1000 c.c.

Fill the tank with a volume of water higher than the products to add:

Add **KELOM PHTriple** shaking the solution, put the products of treatment and complete the deposit, then apply.

COLORIMETRIC pH INDICATOR TABLE

In case of hard water, increase the doses by 20%.

COMPOSITION

Total Nitrogen (N)	3.0
Ureic Nitrogen	3.0
Phosphorus Pentoxide (P ₂ O ₅)	15.0

%w/w









PLANT DEFENSE INDUCTORS





The phosphite molecule contains three oxygen atoms that give high mobility in the plant tissue and soil. They are systemic compounds, easily absorbed and translocated through the xylem and phloem to all areas of the plant.



The phosphite is highly mobile within plants, unlike many fungicides. This means that you get protection throughout the plant.

PLAN INDUCTOR DEFENSE (PIS) is easily absorbed by leaves, roots and also through bark of trees. Due to its up and down systemic action, it acts readily over sensitive tissues:

- 1) INDIRECT ACTION. Increasing the host resistance against fungi attacks.
- 2) DIRECT ACTION. Slowing the growth of the pathogen and inhibiting the formation of spores.

Its stimulates the production of Phytoalexins, which enhance host natural defences against Oomycets fungi: Phytophthora spp., Plasmopara viticola, Bremia, Pseudoperonospora, Peronospora, Pythium and also some bacteriae: Pseudomonas and Erwinia.

• It is specially recommended to prevent diseases caused by these pathogens, such as:

Water spot and brown rot in citrus (fruits).

- Foot rot and trunk-branch canker (Gummosis) in avocados, citrus, top furits and ornamental trees.
- Fire blight in top fruits.
- Downy mildew in table and vine grapes, lettuces and onions.
- Blight of pepper.
- Root rot and downy mildew in: strawberries, tomatoes, cucurbits, vegetables and ornamentals.
- Brown blight of conifer fences.
- Damping-o[~] in tur f and lawns.

inmunor



%w/w

INDUCTOR OF THE NATURAL PLANT DEFENSE. CRYSTALLINE POTASSIUM PHOSPHONATE

CHARACTERISTICS

inmunor is a greater activator of the natural defense of the plant against certain pathogenic fungi and bacteria.

It stimulates the production of Phytoalexins, which enhance the host's natural defences against Oomyces fungi: *Phytohtora spp., Plasmopara viticola, Bremia, Pseudoperonospora, Peronospora, Pythyum* and also bacteriae: *Pseudomonas* and *Erwinia*.

It is specially recommended to prevent diseases caused by these pathogens, such as:

- Water spot and brown rot in citrus fruits.
- •Foot rot and trunk-branch canker (Gummosis) in avocados, citrus, top fruits and ornamental trees.
- Fire blight in top fruits.
- Downy mildew in table and vine grapes, lettuces and onions.
- Blight of pepper.

1Kg

3Kg

- Root rot and downy mildew in: Strawberries, toma toes, cucurbits, vegetables and ornamentals.
- Brown blight of conifer fences.
- Damping-o[~] in tur f and lawns.

DOSAGE AND APPLICATION

אָן 5Kg גע 10Kg וּ

COMPOSITION

95,0
57,0
38,0



Crop	Application	Doses/treatment	Spray volume	Remarks
	Foliar spray (H.V.)	250 g/hl	1.000 - 3.000 l/ha	Three (3) preventive treatments per season are recommended: in the beginning of Spring,
CITRUS AVOCADO	Foliar spray (mistblower)	600 g/hl	300 - 1.200 l/ha	summer and beginning of Autumn. In top truits, treat once or twice in pre-blossom or/and petal fall, to prevent Fire blight.
TOP FRUITS	Trunk painting	300 g/l	-	Scratch the infected part of the stem and paint the affected area. In case of high pressure of the disease, make three (3) treatments per season.
	Soil (through drip irrigation)	5 - 7 kg/ha	-	Make 2 preventive treatments: 1st in spring: 2nd in autumn.
STRAWBERRIES	Soil (through drip irrigation)	2,5 - 5 kg/ha	-	Make 2 - 3 treatments from rooting to flowering to prevent attacks of Phytophthora cactorum.
	Foliar spray	250 g/hl	800 - 1.000 l/ha	From the start of flowering to end of harvesting, make 3 - 4 treatments.
VINEYARD	Foliar spray (mistblower)	500 g/hl	300 - 500 l/ha	Treat every 15 days from flowering to ripening. A tank mix with preventive fungicides as
TABLE GRAPES	Foliar spray	250 g/hl	600 - 1.000 l/ha	Folpet or Mancozed are recommended.
LETTUCE and leaf crops	Foliar spray	2,5 Kg/ha	600 - 1.000 l/ha	Two (2) treatments are recommended: 1st: 7-10 days after transplanting. 2nd: 15 days later.
ONIONS	Foliar spray	1,5 - 2,5 Kg/ha	300 - 500 l/ha	Three (3): preventive treatments per season are recommended: 2nd: 15 days later. 3rd: 15-21 days later.
FENCES OF	Foliar spray	250 g/hl	600 / 1.000 l/ha	Make 4 treatments every month from Spring to mid Summer.
CONIFERS	Soil (drip irrigation or drenching)	10 g/m of fence	-	Use up to 20-30 g in case of isolated big trees (soil drenching).
TOMATOES/ CUCURBITS	Foliar spray	150 - 250 g/hl	800 - 1.000 l/ha	To prevent attacks of <i>Phytophthora infestans / Pseudoperonospora cubensis</i> fortnightly (15 days) from flowering until mid-end harvesting. A tank mix with Aliado is recommended to also control Alternaria.
PEPPERS	Soil (through drip irrigation or drenching)	2.5 Kg/ha	-	To prevent <i>Phytophthora capsici</i> attacks, treat every 15-21 days from one week after transplanting to harvesting. A tank mix with Hymexazol is recommended to also control Pythium .
TURF & GOLF COURSES	Foliar or sprinkler irrigation	0,75 -1 Kg/1000m ²	-	Monthly treatments from beginning of Spring to mid Autumn are recommended. To control also <i>Helminthosporium sp.</i> and <i>Rhizoctonia</i> , treat (in tank mix) with Chlorothalonil and Flutdani
Packi	ng 🚽 🚽			······



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%w/w

CHARACTERISTICS

Solution of potassium phosphite at 50%, free of chloride. The presence of phosphorus as a phosphite ion provides a prophylactic effect against oomicosis:

- Gummosis and watery in citrus.
- Root rot diseases. Pythium, Phytophtora.
- Mildius foliar.

As a source of PK, it should be used in a stage of high uptake of these nutrients: formations of the root system, flowering and fruit set.

KELOM PHOS 30 20 Phosphite generates defensive molecules in the plant. Phytoalexins and PR Proteins that attack on the pathogen.

DOSE AND APPLICATION

FOLIAR APPLICATION:

- Avocado, citrus, orchards, gardens, ornamentals and potato: 200-300 cc/hl.

- Strawberries and vegetables: 250-350 cc/hl.
- Olive and vine: 200-400 cc/hl.

FERTIRRIGATION:

- Avocado, citrus, orchards, gardens, ornamentals, potato and fruit trees: 6-15 L/ha. Post harvest, and before flowering in citrus; in the spring, early summer and early autumn wet well and the skirt of the trunk.

- Strawberries and vegetables: 4-10L/ha every 20 days.

INJURIES DESINFECTANT

Apply with a brush on the wound area a broth at a concentration of 350-700 cc / I (3.5-7 liters L/10).

Before preparing the final mixture, a compatibility test has to be done.

Do NOT mix directly with acid products of strong reaction, neither emulsifiable product with an alkaline reaction.



COMPOSITION

Phosphorus (P ₂ Potassium (K ₂ O)	O₅)	30 20
Density pH (1% solution)	1,4 g/cc 4 - 5	



Best flowering and fruiting

Greater weight and fruit size

Increase in fruit quality

81





KELOM PHOS AL is a liquid fertilizer suitable for the treatment of citrus, fruit and vegetables, which stimulates growth and improves the quality of the fruit.

The phosphite ion is a relatively simple compound but of great importance in plant health: it has a fungicidal effect against the type of Oomycete fungi and it's also an excellent nutrient.

Its fungal activity is twofold:

- On the one hand, it is involved in activating natural plant defense systems. The phosphite ion causes changes in the cell wall of the Oomycete, resulting fractions that act as external elicitors, triggering all the process of activation of defenses.
- The phosphite ion exerts a direct effect on fungal metabolism. This ion competes with phosphorus in different metabolic pathways catalyzed by various enzymes fosforilatives. In this way, the processes involved in energy transfer of the fungus suffer a considerable delay and may even be blocked.

DOSAGE AND APPLICATION

FOLIAR APPLICATION

-Avocado, citrus, orchards, gardens, ornamental plants and potatoes: 300-400 cc/hl Make 2 applications -Strawberries and vegetables: 250-300 cc/hl -Olive and vine: 200-400 cc/hl.

FERTIRRIGATION

-Avocado, citrus, orchards, gardens, ornamental plants and potatoes: 10-20 L/ha In two consecutive watering; at the end of the irrigation

-Strawberries and vegetables: 5-10 L/ha -Olive and vine: 10 cc/m2.

WOUND DISINFECTANTS

COMPOSITION %w/w		
Phosphoru: Aluminum	s (P ₂ O ₅) (AI)	21,4 4,2
Density pH	1,32 g/cc 2 - 3	



The richness in phosphorous and Aluminium promotes migration of sugar to the fruit.

Fertilizer rich in phosphorus and Aluminium which promotes flowering and the roots of plants and corrects deficiencies thereof.

Excellent preventive and curative activity against:

- Citrus Gummosis
- Root rot and neck in fruit
- Peronospora of grape
- Mildew of onions and garlic
- Phytophthora

Apply with a brush in the wound area in a broth concentration of 500-800 cc/l broth.









KELOM PHOS CU is a plant defense inductor and copper deficiency corrector enriched with phosphorus in the form of phosphite ion. The combined application of copper and phosphite ion allows on a single application to prevent copper deficiency at the same time strengthens the plant against the presence of parasitic fungi. Besides its high phosphorus content makes it an ideal complement for fertilization in flowering time or transplantation.

Increases the resistance of plants to environmental, nutritional and/or pathological critical situations.

DOSE AND APPLICATION

FOLIAR APPLICATION:

- Avocado, citrus, orchards, gardens, ornamental plants and potatoes: 300-450 cc / hl 2 applications

- Strawberries and vegetables: 250-350 cc / hl
- Olive and Vine: 200-400 cc / hl.

FERTIRRIGATION:

- Avocado, citrus, orchards, gardens, ornamental plants and potatoes: 7-20 L / ha

- In 2 consecutive irrigations; at the end of irrigation
- Strawberries and vegetables: 6-9 L / ha
- Olive and Vine 10 cc/m2.

INJURY DISINFECTANT

Brushing in the injury area broth at a concentration of 500-700 cc / l.

COMPOSITION %w/w		
Phosphorus Copper (Cu	s (P ₂ O ₅)	25.0 6.0
Density	1,4 g/cc	



KELOM PHOS CU provides the proper amount of high energy phosphorus and copper, obtaining:

Best flowering and fruiting

Greater weight and fruit size

Increase in fruit quality

Protection against pathogens

Before preparing the final mixture, a compatibility test has to be done. Do NOT mix directly with acid products of strong reaction, neither emulsifiable product or a product with alkaline reaction.



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KELOM PHOS MN ZN is a soluble liquid that has in its formulation phosphites of manganese (Mn) and zinc (Zn) used as contribution of these elements and in the correction of shortcomings due to deficiencies or imbalances in the assimilation of them by the plants in all vegetable crops.

KELOM PHOS MN ZN is manufactured under strict quality standards by KELOM - Spain, ensuring his composition as well as its effect on all crops.

MODE OF ACTION

The perfect balance that

smakes is that it stimulates self-defense mechanisms (phytoalexins), giving the plants a strengthening in trunk, neck and root on any type of horticultural, fruit cultivation, citrus or floriculture.

It has an excellent solubility which allows an immediate incorporation to the sap flow of the plant through the roots, stems, leaves, etc. Foliar and root applications are recommended and fertigation, while the addition of adjuvants is not necessary.

Performs the following functions:

-Controls and corrects the deficiencies of Mn and Zn due to deficiencies or imbalances of these elements which are very necessary for a proper development in different cultures.

-Due to the character, which is attributed, as inhibitor of the reproductive cycle of fungi, it prevents fungal attacks such as watering and rot (Phytophthora, downy mildew, etc).

-Balanced phosphorus contribution, macro element indicated and recommended for a proper nutrition from the plant in all of their vegetative periods.

	CROP	DOSE	APPLICATION TIME
Citrus, fruit	3	3-4 cc/l. in foliar application 4-9 l/ha soil application at the end of the irrigation	Period of maximum vegetative development. Make 2 treatments every 7-9 days.
Vegetables, strawber ornamental	ries,	3-4 cc/l. in foliar application 4-9 l/ha down at the end of irrigation	Period of higher vegetative development. Make 2-5 applications every 7-10 days.
Climbing vine, vine		1.5-3 cc/l. in foliar application	Period of higher vegetative development.
Saplings		1.5 cc/l. immersion A	Il crops: fruit trees, citrus, strawberries, vegetable transplant plants, ornamental
Painting		500 cc/l.	Painting and impregnated the trunk and the branches on the affected parties

Do not mix with oils, copper compounds or alkaline reaction products. If you want to mixtures with fungicides, insecticides, organic products etc, are recommended first to test compatibility.

Precautions:

-In case of accidental ingestion go to a medical center.

-It is recommended to take normal precautions in application of the product, use gloves and protect your eyes





COMPOSIT	ION	%w/w
Phosphorus (P ₂ O ₅) Zinc (Zn) Manganese (Mn))	14,5 5,0 3,0
Density at 20°C pH	1,3 g/cc 2 - 3	





PLANT GROWTH REGULATORS





PGR are compounds produced naturally by plants and are essential for regulating their own growth. They act by controlling or modifying plant growth processes, such as formation of leaves and flowers, elongation of stems, development and ripening of fruit.

CLASSIFICATION

Class	Action	Examples
Promoters	Cause faster growth	Auxins Cytokinins Gibberellins Brassinosteroids
Inhibitors	Reduce growth	Ethylene Abscisic acid (ABA) Jasmonic acid

GENERAL FUNCTIONS

- Auxins (cell elongation)
- **Gibberellins** (cell elongation + cell division / translated into growth)
- **Cytokinins** (cell division + inhibits senescence)
- **Abscisic acid** (abscission of leaves and fruit + dormancy induction of buds and seeds)
- Ethylene (promotes senescence, and fruit ripening

BLATSTIM



%w/v

CHARACTERISTICS

BLATSTIM is a organic biostimulant that works without altering the natural processes of metabo lism in crops.

BLATSTIM increases the quality and the quantity of the harvest, while providing a greater defense against stress and pathogen attacks (virus, bacteries).

It acts at 2 levels :

Provides thiol groups, which increase the enzyme activity and plant metabolism, favoring the vegetative development and a better harvest.

- Promotes flowering and fruit setting
- Improves the foliar fertilizers and biostimulants efficiency
- Stimulates seed germination and sprouting
- Defense against stress
- First vegetative stages: it improves root development and it speeds up the formation of vegetative structures
- Pre-flowering: increase of fertilization and the quantity of ripened fruit
- Setting: improvement of celular division and dicrease the fruits fall
- Beginning of fruit fattening: increase the final size

COMPOSITION

AATC	5,0
L-Aminoacid	6,1
Folic Acid	0,10



	CROPS	TREATMENT	DOSES	EFFECTS
	Olive	2-3 treatments : from pre-flowering, until post-flowering or fruit filling.	• 50 cc/HL	Better flowering Bigger fruits Higher oil content
Ve	egetable and Strawberry	3 treatments: from pre – flowering each 20 days.	50-100 cc/HL	Higher quiality Higher harvest Higher plant growth
	Citrus	3 treatments: from pre – flowering until the beginning of the color change of the fruit.	40-60 cc/HL	Better flowering Higher size of fruits Higher harvest
	Potatoes •	From 4-6 leaves each 20 days.	30-80 cc/HL	Higher harvest
	Fruit tree and Subtropicals	 Treatments from petal fall and continue at a rate of 15-20 days. 	• 50-60 cc/HL	Improves fruit set Improves stress toleran Higher harvest
	Table and wine grape	Pre – flowering, post flowering each 15 days.	• 40-50 cc/HL	Higher sugar content Higher harvest
	Cereals and rice	Stress situation.	500 cc/Ha	Higher harvest
	Sugar beet	Growth.	• 300-600 cc/Ha	Higher harvest
	Cotton	Growth.	500-600 cc/Ha	Higher harvest



GIBBERELLIC



PLANT GROWTH REGULATOR

BBEREL

DOSES

COMPATIBILITY

GIBBERELLIC is a plant growth regulator characterized by its physiological and morphological effects. Acts at very low concentrations; is translocated inside the the plant and usually affects only the aerial parts.

GIBBERELLIC reinforces apical dominance ,stimulating flowering, fruiting set, breaking the dormancy of seeds and vegetative organs and removing stress from some virus.



CAUTIONS FOR USE

Ensure that the wind does not drag the spraying to other neighboring crops. Apply the product shortly after mixing with water to prevent decomposition.

In the event of a precipitation, at 8 hours after treatment, it will lose some of its effectiveness, it is advisable to repeat the treatment.

USAGE INSTRUCTIONS:

Treat with high water volume (600-1500 l / ha). Add wetting

5L

CROPS/TREATMENT

Clementine: To improve the consistency of the peel (when the green treat is gone).	30-50 cc/hl
Lemon and Clementine boneless: To induce fruit set and fruit setting. Treat at petal drop and repeat the treatment at 3-4 weeks.	40 cc/hl
Tangerine: To prevent fruit drop (treat at petal drop, repeating at 3-4 weeks) and improve the consistency of the peel (when the green treat is gone).	40 cc/hl
Pear (cv. Blanquilla): To reduce fruit drop during filling and prevent frost damage. Treat with 30-60% open flower or 48 hours to avoid the effect of frost.	60-70 cc/hl
Vine (cv. Macabeo): To induce the elongation of the cluster and peduncles of the fruit. Apply before the falling of the flowerhoods.	30-50 cc/hl
Strawberry: To promote fruit set and fruit growth. Treat a little before the start of flowering. Can be reduced the dose in plantations over a year old.	60 cc/hl
Artichoke: To induce growth and harvest earliness. Treat to start fruiting.	40-50 cc/hl

Packing

250ml

1L



%w/v

Gibberellic acid (GA₃) Soluble liquid (SL) 1,6

STOP FRUIT



PLANT GROWTH REGULATOR

PRECAUTIONS

STOP FRUIT is completely soluble in water, which affect on the processes related into fruit abscission. The abscission occurs by formation of several layers of specialized cells that ensure the connection between the fruit and plant. Auxin **STOP FRUIT** promotes abscission when applied immediately after fruit set, but, if applied later, its effect is to delay fruit abscission preventing fruit drop.

is licensed for clearing of apple fruit, and apple and pear trees to prevent fruit drop.

THINNING FRUIT AND TO AVOID FRUIT FALL

USAGE INSTRUCTIONS: If you have no experience with **STOP FRUIT** or similar products, consult the technical service of the company.

SAFETY TERM: There is no safety term between the last application and harvest term security.

DOSAGE AND APPLICATION

STOP FRUIT apply by spraying, wetting the fruit well, with the indicated doses for guidance. Treatment is done when the temperature is between 15 and 25 ° C, and avoid the presence of dew such as the hours of high heat and will NOT MIX WITH OTHER PRODUCTS if compatibility is unknown.

FRUIT THINNING

Only Apple: 15-20cc/hl apply where the old wooden central fruit have a size of 10-15 mm in diameter, approximately 15-21 days after full flowering.

AVOID FRUIT DROP

APPLE 40cc/hl PEAR 15-25cc/hl Apply between 3 and 10 days before harvest, possibly repeated treatment with a ten to fifteen days. In late harvest varieties of higher doses may be required.

APPLICATION CONDITIONS

High relative humidity (> 70%). High water volumes are recommended 1000-1500 l / ha Avoid treat with high or very low temperatures. Ideal 15-22°C It is preferable to treat at dusk or on cloudy days. The ANA is destroyed by UV

STORAGE

Store in original container in a cool place (not direct sunlight), dry and locked out of reach of children. Do not allow product to freeze



COMPOSITION

%w/v 8.5

ANA (1-Naphthaleneacetic acid) SL (85 g/l)



GROWTH MIX



Calcium (Ca)

Fulvic Acids

Nitrogen (N)

Zinc (Zn)

GROW

%w/w

0.8

2,0

25.0

9,0

PLANT GROWTH REGULATOR

500 ppm

200 ppm

500 ppm

200 ppm

1110 ppm

COMPOSITION

Gibberellines 500 ppm

Auxines

Cisteine

Tiamine

Inositol

Optimal

hormonal

balance

Cvtokinins

CHARACTERISTICS

GROWTH MIX is a balanced plant growth regula tor with nutrients, amino acids and fulvic acids, all of great importance and which have an impact on physiological and metabolism processes of plants. All components in **GROWTH MIX** are in assimi lable form by leaves and other plant organs.

The balance between the concentrations of auxins, gibberellins and cytokines in **GROWTH MIX** allows to have a significant contribution of these compounds to the plant without causing a hormonal imbalance.

Excelent flowering and fruit set

DOSAGE AND APPLICATION

Chard, spinach and open leaf lettuce: Apply 0.75 to 1 L/Ha of 3 to 4 weeks after emergence.

Cotton: Apply 0.75 to 1 L/Ha at the time of first or second squares. Apply mainly in medium and low size varieties or to exit from a stage of stress.

Garlic and onions: Apply 0.75 to 1 L/Ha in the moments before the bulb differentiation (10-12 weeks after planting).

Alfalfa: Apply 0.75 to 1 L/Ha after each cut when regrowth appears.

Celery: Apply 0.75 to 1 L/Ha of 4 to 6 weeks before cutting.

Broccoli, Cauliflower, Cabbage and Lettuce: Apply 0.75 to 1 L/Ha at the beginning of the formation of the head (inflorescence).

Scallion and leek: Apply 0.75 to 1 L/Ha at 30 days after transplantation for leek and 45 days after planting for onions, repeated 30 days later.

Cucurbits (cucumber, melon and watermelon): Apply 0.75 to 1 L/Ha when the plants are 3-5 true leaves. Repeat at the beginning of the formation of elvers, continue every 15 days until the last cut.

Cereals (wheat, barley, oats, triticale): Apply 0.75 to 1 L/Ha when full tillering, beginning of stalk formation and boot stage.

Melon: In plantations with 1 or 2 years, apply 0.75 to 1 L/Ha during the cycle. In cultured 3 more years to 2 applications with 30-day interval between each. The first when the plant is 30 cm height and the second 50cm height.

Flowers: Apply 0.75 to 1 L/Ha at the time of the appearance of the flower stems.

Beans, Green Beans, Soybeans: Apply 0.75 to 1 L/Ha at the time of the appearance of flower buds and repeat 1-3 times every 15 days.

Maize and sorghum: Apply 0.75 to 1 L/Ha between 6 and 8 fully developed leaves, and if possible repeat in full bloom.

Potato: Apply 0.75 to 1 L/Ha at the time of tuber initiation and repeat 15-30 days later.

Tomato, pepper and aubergine: Apply 0.75 to 1 L/Ha to the appearance of the flowers, repeat every 2 or 3 weeks until the last commercial flowering.

Tobacco: Apply 0.75 to 1 L/Ha at 30 days after transplanting and repeat 30 days later.

Citrus, avocado, mango, papaya and guava: Apply 150 to 200ml per 100L of water to the appearance of repeating blooms 30 days.

Apple and peach: Apply 150 to 200ml per 100L silver tips water (apple) and green tips (peach) and repeat when the fruit has 1 to 2 cm diameter.

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Strawberry: Apply 0.75 to 1 L/Ha once a month, starting at the time of appearance of the first flower cluster.

Packing









PLANT GROWTH REGULATOR

CHARACTERISTICS

CYTOK is a water/soluble syneergistic powder containing an array of major and trace elements. It acts as a valuable supplement to soil applied fertilizer programs and provides the nutrients needed to induce blooming and fruit set.

Application of **CYTOK** has preven successful in improving plant vigor, crop quality, early maturity and increased yields.

CYTOK is unique in its mode of action, resulting in heavy bloom and fruit set. The balance of nutrients in encourages faster transition from plant vegetative stage to the reductive stage of development, resulting in early maturify and increased yields.

is compatible with most liquid insecti cides and/or fungicides.

Stimulates early growth of the crop, early flowering, the fruit set and increased vegetative growth.

DOSE AND APPLICATION

Beans (fresh/dry): Apply 700 gr/Ha at first bloom.

Corn and Grain sorghum: Apply 560 gr/Ha at tasseling.

Cotton: Apply 420-560 gr/Ha directed to foliage immediately prior to bloom and 6 gr/Ha 2 weeks later. Apply 2-3 gr/Ha later in the season if growing conditions are good.

Field peas: Apply 420-560 gr/Ha after first bloom.

Melons and cucumbers: Apply 280-420 gr/Ha when plants begin to bloom. Repeat at 14-day intervals throughout growing season.

Oranges: Apply 700 gr/Ha when trees begin to bloom.

Outdoor/indoor flowwering shrubs, ornamental plants: Apply 140 gr/Ha of water sprayed in a fine mist every 14 days during the growing season.

Soybeans: Apply 700 gr/Ha as blossom begin to form.

Strawberries, tomatoes, squash and peppers: Apply 490-700 gr/Ha when plant begin to blossom. Repeat at 7-10 day intervals during growing season.

Turf: Apply 140 gr/1000 m^2 to maintain height and color.

Wheat and rice: Apply 420-560 gr/Ha early in the growing season, prior to panicle initiation stages.

This product may be applied alone or in a tank mix with insecticides and/or fungicides. Apply with any spray nozzle and equipment that delivers a fine, even mist to ensure coverage. Do not apply this product through any type of irrigation equipment.



COMPOSITION %w/w **CYTOKININS** 175 ppm Nitrogen (N) 10,0 Phosphorus (P2O5) 52.0 Potassium (K2O) 8.0 Boron (B) 0.020 Zinc (Zn) 0,050 Copper (Cu) 0,050 0,0005 Molybdenum (Mo) Manganese (Mn) 0,050 Iron (Fe) 0,100





QUALITY + COLOR





QUALITY + COLOR

EXTERNAL LEVEL

IMPROVES APPEARANCE

Size, shape, gloss and color

- IMPROVES FEEL Firmness, texture and peel thickness
- **REDUCES DEFECTS** Cracks, creases, marks and flaws

INTERNAL LEVEL

- IMPROVES TASTE sweetness, bitterness, sourness, saltiness and juice content
- IMPROVES TEXTURE Tenderness, firmness, crispness, crunchiness, chewiness and fibrousness

HIDDEN LEVEL

IMPROVES STORAGE AND SHELF LIFE

By reducing water loss and decay, discoloration, bruising and other mechanical injury, wilting and texture changes

- IMPROVES PROCESING QUALITY
- IMPROVES NUTRITIVE VALUE Content of sugars, proteins, starch, soluble solids, vitamins and minerals







FRUIT Q is an innovative product. Result of experience and research of Aspe. Its special formulation acts both structurally in fruits and vegetative organs of the plant, so stronger tissues are obtained.

The components of **FRUIT Q** stimulate the elasticity of the cell wall of the plant and especially in the fruits.

The physiopathies (cracking, sunburn ...), **FRUIT Q** helps to avoid the depreciation of the fruit (cracking) and limiting the entry of pathogens and the spread of diseases (leprosy, screening, monilia ...)".

FRUIT Q improves marketing of the fruit after harvest presenting fruit and vegetables without marks, healthier and more consistent.

ANTI-CRACKING EFFECT

INCREASES THE ORGANOLEPTIC QUALITY OF THE FRUITS

ORGANIC PRODUCT 100% NATURAL

SHELF-LIFE IMPROVEMENT

PROTECTS AGAINST SUNBURN

FOLIAR APPLICATION

Foliar application: 3-5cc/L (300-500 cc/hL).

The doses have to be optimized according to the characteristics of the soil and water, as well as the greater sensitivity of each crop. It is advisable to repeat the treatment at intervals of 10-15 days. It acts by contact, so it is recommended to wet the entire surface of the vegetable well.

Phytotoxicity

There are no known incompatibilities with commonly used insecticide and fungicide products, although compatibility tests are recommended. Do not mix with products with a strong acid reaction. It can be mixed with most other commonly used products, although a compatibility test is recommended.

Security Term

It has no residues, nor waiting period.

Usage Precautions

It does not need any special application and handling conditions. Do not store in areas with too high temperature.

Observations:

Read carefully the contents of the container label. The content of this page is for informational purposes only.



COMPOSITION

100% (phospholipids, glycolipids and natural polymers)







%w/w

CHARACTERISTICS

Kalitat is a product specially designed to improve the uniformity, coloration, consistency and maturation of the fruit. KALITAT is a producKalitat: ludes a special form in the quality and production of the fruit, as a consequence of its active biological components

Kalitat incorporates an organic molecular polymer of high weight, which confers more elasticity, hydration and firmness to the skin of the fruits. The contribution of calcium (Ca) and magnesium (Mg), give Kalitat the ability to reduce the permeability of cell membranes and the absorption of water, helping to increase the firmness of the fruit and, therefore, extend its useful life.

The **Kalitat** balanced formulation, designed with an organic matrix rich in polysaccharides, macro and microelements, key elements in the process of fruit setting and ripening, has been achieved because of a careful selection of various components, prepared in an optimal balance. The result is a product with the highest quality and efficiency.

IMPROVES NATURALLY FRUIT COLOR

INCREASES FRUIT CONTENT OF SUGAR

IMPROVES FRUITING AND PROLONG SELF LIFE

IMPROVES THE CALIBRE AND FIRMNESS OF THE FRUIT

ADVANCES THE FRUIT RIPENING

ADDUCATIO

COMPOSITION

Total Nitrogen (N)	3,0
Potassium (K ₂ O)	5,0
Calcium (CaO)	5,0
Magnessium (MgO)	2,0
Polysaccharides	25,0
Uronic acid	2,0
Boron (B)	0,1
Zinc (Zn)	0,1



FOLIAR AFFLICATION	
Crops	Doses
Fruit crops (table grapes, wine, apple, pear, peach, nectarine, apricot, cherry, kiwi, etc.)	ml 400-450/hl make 2-3 close treatments (7 days) beginning from veraison
Citrus fruits, oil and table Olive	ml 400-450/hl make 2-3 close treatments (7 days) beginning from veraison
Vegetable and industrial crops in full field (industrial and table tomatoes, pepper, eggplant, strawberry, watermelon, melon, Borlotti beans, sugar been, etc.)	ml 400-450/hl make 2-3 close treatments (7 days) beginning from veraison
Greenhouse vegetable crops	ml 300-400/hl make two treatments on each fruiting stage from mid enlarged fruits
Flowering plants, ornamentals and cut flowers	ml 200-300/hl
SOIL APPLICATION	
All crops	It 0,8-1,0/1000m ² by half enlarged fruit. we recommend the mixure with

It 0,8-1,0/1000m² by half enlarged fruit. we recommend the mixure with chelapotash $4\mbox{kg}/1000\mbox{m2}$





ROOTING





ROOTING

The root system of the plant is responsible of exploring the soil and take the water and mineral nutrients from it; an abundant root is one of the most direct and economical ways to increase efficiency in nutrient absorption, whatever is its income mechanism, "mass flow, diffusion or interception.

The relationship between a good root system and adequate vascular tissue formation is direct and together they establish one of the most important bases for the achievement of crop's greater productive potential.

In addition, at the root takes place the synthesis of the hormones that are responsibles for regulating the metabolism of the plant in processes as division, cell thickening and elongation, senescenc, fruit set and growth, etc.

CHARACTERISTICS

- Stimulates effectively the root system development.
- Helps plant overcome post-transplantation stress.
- Is safe, natural, highly innovative and easy to use.
- Maximizes plant's performances







%w/w

BIOSTIMULANT ROOT SYSTEM



2	SOIL DOSAGE	Lts/ha
Horticultural	3-5 applications after sowing or transplanting, during the early stages of cultivation and the entire crop cycle	
Fruit and Citrus	3-4 applications after transplantation, during the early stages of cultivation and in the crop cycle	
Strawberry	4-6 applications after transplantation, during the early stages of cultivation and in the crop cycle	6-8
	FOLIAR DOSAGE	
lorticultural, vine, nelon, kiwi, citrus, olive, hazelnut		200-250 ml/100Lwater
Meadow	 Under stress conditions. 	
	EXTENSIVE CROPS FOLIAR DOSAGE	Lts/ha
Maize	1-after the beginning of vegetation - development of	1-1.5
	leaves (BBCH 10-14)	
Oilseed rape	1-after the beginning of vegetation - development of	1-1.5
	leaves (BBCH 10-14) 2- the root system regeneration after the beginning of	1-15
	spring vegetation (BBCH 19/20)	1 1.5
Potato	1- development of leaves (BBCH 10-14)	1-1.5
Sugarbeet	1-after the beginning of vegetation - development of	1-1.5
	leaves - youth stage (BBCH 10-16)	
	2-development of leaves – rosette growth – crop cover (BBCH 18-33)	1-1.5
Wheat	1-after the beginning of vegetation - development of	1-1.5
	leaves - 3 leaves unfolded (BBCH 10-13)	
	2- the root system regeneration after the beginning of spring vegetation (BBCH 21/22)	1-1.5

COMPOSITION

Free amino acids	8,00
Nitrogen (N) Total	5,80
Phosphorus (P ₂ O ₅)	5,00
Potassium (K O)	4,00
Iron (Fe)	3,50
Manganese (Mn)	0,80
Zinc (Zn)	0,08
Boron (B)	0,10
Molybdenum (Mo)	0,04
Density	1,27
рН	6-7

STYM ROOT is a natural rooting and biostimulant specially developed and formulated with free and codifiable amino acids, enriched with NPK and essential microelements chelated of rapid assimilation, indicated to stimulate and enhance the development of the root system, as well as the biological activity and physiological processes of the plants.

STYM ROOT revitalizes, gives vigor and energy to the crops, while at the same time acting as an activating complex of the enzymatic plant metabolism.



- To increase the development of the root system at the time of transplantation in the first phases of cultivation.
 Stimulate the growth and general development of the plant in the first moments, as well as in situations of any type of stress.
alt facilitatos the quethosis of amine acids and the obtaining of
protein, with a considerable saving of energy.

STYARCOT It is compatible with a large part of plant protection and foliar fertilizers, except with mineral oils, cupric and organocupric products, sulfur or any very alkaline product. However, it is necessary to carry out a preliminary test of compatibility and selectivity of the products to be applied.









%w/w

BIOSTIMULANT ROOT SYSTEM

CHARACTERISTICS

STYM ROOTSOLID is a plant biostimulant that promotes development and root growth, in foliar and soil applications directly in the root areas, its effect contributes to increase the flow of nutrients from the soil solution to the plant, granting plants with greater resistance to adverse environmental effects.

STYM ROOTSOLID has a high concentration of Phosphorus (fast assimilation) and specific organic extracts rooting inducing for any stage of crop development.

STYM ROOTSOLID provides the conditions and elements necessary for the development of the root, increasing its growth and obtaining an increase in the vigor and resistance of the crop.

Each molecule of **STYM ROOTSOLID** has a specific function in the stimulation of root system development. In addition, the composition of Stym root solid is in a specifically studied balance in favour the development of the crop during the first stages.

Recommended for:

STYM ROOT SOLID is used at the beginning of the plant activity to stimulate the growth of the roots and favour the activity of the plant in the first stages; in cases of stress, it also activates the plant. Its use is recommended for all kind of crops.

of stress, it also activates the plant. Its use is recommended for all kind of crops. The relationship between the good root system and the proper formation of vascular tissues, is direct and together establish one of the most important bases for achieving a greate productive potential of the crop.

In addition to this, it is at the root that most hormones are responsible for regulating plant metabolism are synthesized in important processes as cell division, thickening and elongation; senescence, fruit setting and growth fruit, etc.

Principal actions of STYM ROOTSOLID

Induction of absorbent root hair formation

Root strengthening, thanks to the participation of phosphorus and potassium of high assimilation Increasing its growth and obtaining an increase in the vigor and resistance of the crop

of the crop In a stressful situation allows the reinforcement of the root zone necessary for the recovery and reactivation of crops

Increases the number of the crops

DOSES AND APPLICATION

COMPOSITION

Nitrogen (N) Total	7,00
Phosphorus (P ₂ O ₅)	35,0
Free amino acids	20,0
ndolbultyric acid (IBA)	1500 ppm
Naphthyacetic acid (ANA)	500 ppm



STYM ROOT SOLID STYM ROOT SOLID

CROP	DOSAGE Kg/Ha	APPLICATION TIME		
Substratum or substrate for trays	Dissolve 125-250g in enough water to humidify 100 kg of substrate	Use the low dosage at temperatures below 20°C and the high dosage at temperatures higher than 20°C		
Nurcery bad and trays	100g for each 200L of water	Apply once a week, starting in the third week of seeding development		
FIELD APPLICATIONS				
Transplant	100g for each 100L of water	Apply at the time of transplantation or one week after applying 400g pero 100L of water, apply directing to the base of the plant		
Foliars	0.5 to 1 Kg/ha	Apply in the second and third weeks after transplantation		
Drip irrigation	2kg/Ha	Dllute the product in irrigation water. Apply to the 2nd, 3rd and 4th week after transplantation		

STYM ROOT SOLID is applied by sprinkler a dissolved solution in the amount of water indicated in the recommendation.

In the case of newly transplanted seedlings it is suggested to apply **STYM ROOT SOLID** when the root activity is starting (1-5 days after transplantation), be careful that the product may stay deep in the root. For best results, it is recommended to repeat the treatment once or twice at a weekly interval.

In establishment annual crops we suggest applying STVA ROOTSOLID at an interval of 10-15 days, preferably during the cutting season. In the case of perennials apply it on when it starts the "root development" or during fruiting. For a better result it is recommended to repeat the treatment 2 or 3 times. It is recommended to be mixed with registered products in authorized crops, but compatibility test, It is suggested to avoid mixing with Calcium-base products non chelated.





REPELLENTS





In many occasions, damage to agriculture occurs when animals such as mammals or birds eat or destroy in any way the plantings and plantations of any kind.

The repellent products avoid this type of damage in a natural way and 100% safe for the environment and crops.

These products generate a repellence by means of unpleasant odors or flavors preventing the atacks from eating or coming back to the plantation. In addition these products do not leave residues in the plant or the fruit, so it does not affect the characteristics of quality of the harvest and avoids the safety term.



BIRD REPELLENCY



• REPELLENT



REPELLENT FOR BIRDS

CHARACTERISTICS

BIRD Repellent is a powerful biodegradable product for all kinds of birds, to be used in those places where rest, feed or nest.

Its taste and odor is very unpleasant for birds, causing the eviction of them from the place of the application.

It acts as a birds repellent without affecting them or cause them harm. Its effect is purely repellent.

DISSOLVES EASILY IN WATER AND CAN BE APPLIED WITH ANY TRADITIONAL SPRAY EQUIPMENT.

DOES NOT ALTER THE PHYSIOLOGY OF FRUITS, UNCHANGED THEIR ORGANOLEPTIC OR **AESTHETIC FEATURES.**

IT HAS NO RISK OF WASTE AND OTHER **POLLUTING ELEMENTS**

ORGANIC PRODUCT 100% NATURAL

NATURAL CROP PROTECTION AGAINST **ATTACKS OF BIRDS**

DOSAGE AND APPLICATION

For all kinds of birds; sparrows, pigeons, gulls, swallows, blackbirds, magpies, crows, etc. Apply 3 to 5 L/ha

Repellency active period: seven days.

In an application perform a week before harvest.

In two applications do at fourteen days and seven days before the harvest.

Apply with conventional equipment (1000 L/ha water), electrostatic (60 L/ha water), back pump and/or pressurized. For aerial applications, apply the product with volumes of moistening of 40-50 L of water/ha. Do not apply this product on wet surfaces. Shake well before using.

Do not apply with adjuvants, surfactants, adherents, dispersants, etc. It is incompatible with styrene and some plastic products, paints and varnishes. If you want to mix with any pesticide or fertilizer perform a compatibility test.

WAITING PERIOD: 8 DAYS BEFORE HARVEST

COMPATIBILITY

Do not mix with acids or alkaline products. Non-flammable, non-corrosive, non-explosive.





30,0



MAMMAL Repellent



CHARACTERISTICS

MAMMAL Repellent is a potent repellent of botanical origin with some action bioinsecticide, formulated with extract of seeds and fruits of hot pepper.

By vapors given off by performs an effective repellent action against rabbits, hares, deer and wild boars and other animal pests for crops.

DISSOLVES EASILY IN WATER AND CAN BE APPLIED WITH ANY TRADITIONAL SPRAY EOUIPMENT.

DOES NOT ALTER THE PHYSIOLOGY OF FRUITS, UNCHANGED THEIR ORGANOLEPTIC OR **AESTHETIC FEATURES.**

IT HAS NO RISK OF WASTE AND OTHER POLLUTING ELEMENTS

ORGANIC PRODUCT 100% NATURAL

NATURAL CROP PROTECTION AGAINST **ATTACKS OF MAMMALS**

DOSAGE AND APPLICATION

Foliar application: 200-300 cc/hl Fertigation: 2 L/ha

Two to three treatments per crop cycle. It is recommended to treat first thing in the morning or late in the afternoon. Do not mix with coppers and sulfur. Use water spray with pH neutral or slightly acidic. In the case of mixtures consult our technical service. Avoid contact with skin or eyes, wash with abundant water if it occurs. If it is necessary for persistent itching should be washed with water in a solution of bicarbonate to neutralize the effect; therefore the use of gloves and protective glasses is recommended. Do not ingest the product. If there is some dizziness by the use of repellent moves rapidly by placing it in a well ventilated area.

It can also be applied with a brush, paint the surface with a broth of water and product at 25%. Period of active repellency: 30-40 days depending on weather conditions

WAITING PERIOD: 8 DAYS BEFORE HARVEST

COMPATIBILITY

Do not mix with acids or alkaline products. Non-flammable, non-corrosive, non-explosive.



COMPOSITION

Oleoresin capsicum (hot pepper extract)





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SALINITY CORRECTORS




Saline and sodium chloride soils are an important problem for plants, specially plants that are sensitive to salinity. High levels of sodium bring about the increase levels of salinity and the dispersion of colloids destroying the soil structure and causing poor ventilation that affects to the growth of the roots.

The consequences are: not enough water and introduction of the roots, erosion problems, low germination and high stress for the plants.

EFFECTS IN PLANTS ARE:

Osmotic effect Low availa bility of nutrients Loss of structure Toxicity effect







KELOMSgl adds to the soil water soluble calcium and organic acids, in soluble and stable form, drastically reducing the "toxic" level of complex colloidal sodium.

KELOMSal reduces salinity, decreasing the levels of: electrical conductivity (EC), exchangeable sodium percentage (ESP) and Sodium Absorption Ratio (SAR/SAR)

KELOMSol contributes and releases calcium to the soil, decreasing and correcting calcium deÿciency su°ered by crops.

KELOMSal increases the rate of Soluble Calcium, occulate the soil and improves drainage in compacted soils.

KELOMSal improves soil structure by increasing the germination capacity of the crops that have problems with "crust formation".

DOSAGE AND APPLICATION

CROP

SOIL DOSES AND APPLICATION

AVOCADO, KIWY AND 50-70 L / Ha in 2-4 irrigations from spring to harvest.	BULB SALTS WA
CHERIMOYA	Treatment is recommend
LUCERNE 50-60 L / Ha in 4-5 treatments from the second irrigation	initiation of culture.
CITRUS 50-70 L / Ha in 2-4 treatments from shooting to fall.	watering) to wash the
STRAWBERRY Initial planting (Oct-Nov) 10-15 L/Ha. From pre-flowering to fruit set (Dec-Mar) 4-5 L/Ha and week. Full production / Mar-Jun) 3-4 L/Ha and week.	Washing Dose: 25-50 lite
FRUIT TREES 75-125 L / Ha divided between three irrigations.	
INDUSTRIALS 20-30 L / Ha divided into several irrigations from the fourth leaf.	KELOM Sal is completely
ORNAMENTAL AND 40-60 L / Ha divided between 3-5 irrigations.	in water, so it can be a
HORTICULTURAL	through irrigation systems
BANANA 40-60 L / Ha to 2-3 applications during the growing season.	pivot, etc) on crops that n
TOMATO Plantation 1-1.5 cc/plant. Preflowering-Beginning harvest 4-7 L/Ha and week. Full production 3-5 L/Ha and week	vegetables, fruit, ornamenta
VID AND GRAPE 30-50 L / Ha, 3-5 applications util the color change	
COMPATIBILITY	
KELOMSal it is compatible with insecticides, nematicides, fungicides and herbicides edaphological use	<u>.</u>
KELOM Scil it is compatible with most fertilizers used in agriculture except fertilizers rich in phosphates, KELOM Scil can not be used with mixtures of herbicides based trifluralin	phosphoric acids.



COMPOSITION

Complexed Calcium oxide (CaO)	10,0
Water soluble Calcium (CaO)	10,0
Total Nitrogen (N)	4,0

%w/w



SHING

led at (First salts. ers / ha

soluble pplied drip, eed it: citrus, ls, etc..



SEAWEED BIOSTIMULANTS





ALGEX `



ALGEX

KININS

Trans-zeatin Dihydro-zeatin Dihydro-zeatin riboside Trans-zeatin riboside Isopenttyladenosine Isopentyladenoside



ALGEX

SEAWEED EFFECTS ON PLANTS

- ABIOTIC STRESS TOLERANCE
- 1- Salinity and drought tolerance
- 2- Freezing tolerance
- 3- High temperature, flooding and pollution

POST-HARVEST

1- Improved shelf life

- 2- Improved storage quality
- 3- Enhanced nutritional value

GROWTH RESPONSE

1- Improved Shoots & Root growth 2- Higher flowering and fruit set 3- Better vield

BIOTIC STRESS RESISTENCE

1- Resistance to fungal 2- Resistance to insect pest

ENHANCED NUTRITIONAL QUALITY

1-Incorporation of marine Bio-Products 2-Soil Drenching 3-Addition of extracts to hydroponics

BENEFITS 1-Reduced soil born pathogens 2- Higher root nodulation 3-Increased soil fertility 4- Greater number of lateral roots 5-Enhanced mycorrhizal associations

SEAWEED CONTAINS: Micronutrients Soluble sugars such as mannitol Alginate and oligosaccharide residues Amino acids, peptides, fatty acids, etc Plant growth hormones:



icatio









%w/v

SEAWEED EXTRACT. BIOSTIMULANT ASCOPHYLLUM NODOSUM

CHARACTERISTICS

Algex is a natural stimulant that is capable of intensifying the vegetal metabolism and the efficiency of the crops.

Algex is a proper phytofortifier for all types of crops, especially CITRUS, STRAWBERRIES, FRUIT TREES, OLIVE TREES, ORNAMENTALS and VINE. It is recommended during the phases of greater vegetative activity (transplantation, flowering, fruit setting and fruit growth) or under unfavourable conditions (frosts, drought, hail, pests, diseases, etc.).

SEAWEED EFFECTS ON PLANTS

ABIOTIC STRESS TOLERANCE

1-Salinity and drought tolerance 2-Freezing tolerance 3-High temperature, flooding and pollution

POST-HARVEST

1-Improved shelf life 2-Improved storage quality 3-Enhanced nutritional value

GROWTH RESPONSE

1-Improved Shoot&Root growth 2-Higher flowering and fruit set 3-Better yield

BIOTIC STRESS RESISTENCE

1-Resistance to fungi 2-Resistance to insect pest.

DOSES AND APPLICATIONS

CROP	Fertirrigation L/Ha	Foliar Spray ml/100L water	APPLICATION & INTERVAL
Flowers and Ornamentals	4	100	Before transplanting, before flowering
Horticulture	5-6	100 - 150	After the transplanting, before flowering
Nursery	2	50-80	In case of etiolation
Industrial crops	10-20	100-150	After transplanting, before flowering
Orchards, Vineyards and Cit	rus 15-30	150-200	Before flowering, at the fruit set and before ripening.

COMPATIBILITY: Good compatibility with all phytosanitary products. With products based on trace elements, reduce the dose and make a test.



www.aspeagro.com

COMPOSITION

Ascophylum Nodossum sp	25
Total Organic Matter	37,5
Fulvic Acids	21,8
Potassium (K ₂ O)	5,25
Manitol	1,75
Organic Acid	3
Equivalent Citocinetic Activity	ppm 250



Algex Solid

SEAWEED EXTRACT. BIOSTIMULANT ASCOPHYLLUM NODOSUM

CHARACTERISTICS

Algex Solid is a spray-dried, microgranular powder-based growth biostimulant, manufactured from Ascophyllum nodosum which improves the coloring of crops.

INCORPORATES:

- Natural Phytohormones (auxins, cytokinins, betaines and gibberellins)
- Plant Aminoacids
- Humic and fulvic acids

Algex Solid contains natural substances that act as growth promoters, which increase the yield and vigor of crops and improves their color.

The product can be applied throughout the growing season to achieve higher growth and vegetative development.

COMPOSITION

Seaweed Extract Manitol Alginic Acid Humic Extracts Humic Acids Eulvic Acids	50,0 2,0 5,0 40,0 32,5 7,5
Fulvic Acids	7,5

%w/w





BENEFITS

- Improves root growth and plant developement
- Improves plant nutritional health
- Increases desirable yield
- Improves plant vigor
- Maximizes crop potential during periods of stress

DOSE AND MODE OF APPLICATION:

Fill half of the spray tank, add the product and finish filling.

Apples, Banana, Beans, Broccoli, Cabbage, Capsicum, Carrots, Cauliflower, Citrus, Cocoa, Coffee, Corn, Cucumbers, Eggplant, Fruit trees, Grapes, Lettuce, Olive, Onions, Pears, Peas, Pineapple, Potatoes, Rice, Soyabean, Stone fruit, Strawberries, Tomatoes...

SOIL 1-2 H	(g/Ha (max. 1 Kg/100L)
FOLIAR	60-80 gr/100L

Algex Solid can be mixed with all common formulations, except for products with alkaline reaction, oils, based on and sulfur, mineral oils and emulsions.



Algex Kelp



%w/v

CHARACTERISTICS

Algex Kelp is a natural metabolic biostimulant and root promoter, obtained by natural extraction from seaweed Ecklonia maxima KELP.

Algex Kelp contains a high auxin-cytokinin ratio, generating a strong stimulus to the formation of new growth points in the roots of the treated plants. These new root hairs cause, naturally, an increase of cytokinins in plants, which are synthesized in the root tips. The Endogenous cytokinins stimulates the plant's air growth and fruit size, and in turn, the application of exogenous auxins stimulates the movement of Ca to the fruit. Improving the firmness and post-harvesting life.

- INCREASES ROOT MASS
- REDUCES POST-TRANSPLANT SHOCK
- INCREASES THE NUMBER OF FRUITS, SIZE, COLOR AND SUGAR
- **© PROMOTES WATER AND NUTRIENTS UPTAKE**
- TOLERANCE FOR GREATER STRESS SITUATIONS : WATER, NUTRITION, SALINITY, NEMATODE ATTACK, SOIL DISEASES, ETC ...

DOSES AND APPLICATIONS

ECKLONIA	MAXIMA

SEAWEED EXTRACT. BIOSTIMULANT

COMPOSITION

Seaweed Kelp ex	tract	30,0
Auxines		0,45
Cytokines		1,20
Folic acid		0,10
Density	1,05	
pH (10% solution)	4,4	



CROP	DOSES/ APPLICATIONS	1 ST APPLICATION	2 ND APPLICATION
Citrus	300-500 cc/Ha	At the beginning of sprouting	Fruit fattening
Corn, Soybeans, cereal	150-200 cc/Ha	Apply 20 to 25 days after emergence.	
Potato	150-250 cc/Ha	6 to 10 leaves of the plant, tubering starting	15 days after the 1st application
Rice	250-300 cc/Ha	1st application at the time of the godson, to increase grain production	
Strawberries	300 cc/Ha	Flowering	Flowering/ fruit fattening
Stone fruits, Table grapes	300-400 cc/Ha	Pre-flowering	Fruit fattening
Sugar beet, cotton and other industrial crops	150-250 cc/Ha	1 application in pre-flowering or in stages of 6 to 10	leaves of the plants
Sun Flower	300 cc/Ha	1 application for 4-6 leafs	
Tobacco	200 cc/Ha	1st application at transplantation	2nd foliar application 15 days after the fist application.
Tomato (Long-Life)	300 cc/Ha	At the beginning of Flowering Period	When 20-30% Fruit setting. Optional 3rd Application after 2-3 weeks
Tomato (Industrial)	400 cc/Ha	When 20-30% of Flowers	
Pepper, cucumber, eggplant, melon, water melon	300-400cc/Ha	10-15% of open flowers	2-3 weeks after first application
Tropical Fruits (Banana, Bineannle)	300-400cc/Ha	Flowering	Fruit fattening

Do not tank mix with cytokinin products as this will negate the benefit of auxin stimulation. Do not tank mix with copper based fungicides. The spray tank should be filled with half of the required water. After shaking the container, measure the required amount of **Algex Kelp** and add to the tank whilst maintaining constant agitation. Add the remaining water to correct dilution and spray.





%w/w

Algex Amyn SEAWEED EXTRACT WITH AG. BIOSTIMULANT. ASCOPHYLLUM NODOSUM

CHARACTERISTICS

Algex Amyn is a product that combines in a balanced way the action of the L- α amino acids of vegetable origin and the Seaweed Extract of Ascophyllum Nodosum, obtaining a complete biostimulant.

Due to the synergy between amino acids of vegetal origin (deriving from enzymatic hydrolysis, a process that does not alter their structure and functionality) and seaweed (rich in natural growth promoters), **Algex Amyn:**

PROMOTES ENERGY SAVING AND METABOLIC **ACTIVITY**

- PROMOTES THE SYNTHESIS OF PROTEINS AND NATURAL SUBSTANCES
- STIMULATES ROOT DEVELOPMENT, GERMINATION AND FLOWERING.
- IMPROVES FRUIT SETTING, RIPENING AND FRUIT COLOR, INCREASING QUALITY AND QUANTITY.
- HELPS PLANTS TO OVERCOME STRESS CONDITIONS AND IN THE MOST CRITICAL TIMES OF THE GROWING SEASON.

COMPOSITION

Seaweed extract	40
(Ascophyllun Nodosum) Free Aminoacids	10



DOSES AND APPLICATIONS

CROP

PERIOD OF APPLICATION

FOLIAR DOSES

Horticultural	One week after transplantation. Four applications every 10 days.	100-250 cc/hl
Citrus, fruit trees, olive, banana, vine	In preflowering, fruit set and fruit development in times of stress.	250-300 cc/hl
Cereals	1-2 uses between stem elongation and spike initiation	100-250 cc/hl
Maize	1 application with plants 25-50 cm	100-150 cc/hl
Cotton	After removing the plastic, early flowering and a month later	250-300 cc/hl
Ornamental and green houses	During growth and development	250 cc/hl
Grass and turf	At the beginning of vegetation and after each cut	100-250 cc/hl

FERTIRRIGATION DOSES For all crops a dose of 2,5-5 L/ha per applications is recomended

Avoid mixtures of **Algex Amyn** with copper or mineral oil products. Doses are approximate and may vary depending of the area characteristics and crops needs.





SILICON





Silicon (Si)

Specially developed silicon formulations to improve plant growth, biomass.

INCREASES GROWTH AND YIELD

Resistance to Disease and Pest

Si deposition in the epidermis tissues provides a physical barrier to pathogens and insects, allowing for a reduction in the frequency of chemical applications

Cell Structure

Si accumulated in the epidermal tissues increases the mechanical estability of the plant. Reduces the incident of lodging

Photosynthetic Activity

The improved structure produces stronger stems with more erect leaves, increasing its ability to capture light

Uptake of Nutrients

Particularly Nitrogen, Phosphorous, Potassium and Micronutrients

Resistance to Environmental Stress

 \cdot Reduced drought and heat stress. The deposition of Si in the plant tissues reduces transpiration rates.

• Reduce salt stress by inhibiting Sodium uptake.





6 KEYS TO ACHIEVE GROWTH AND YIELD SILICON INCREASE

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5

Resistance to Environmental Stresses

- · Reduced drought and heat stress. The deposition of Si in the plant tissues reduces transpiration rates.
- · Reduce salt stress by inhibiting Sodium uptake.
- · Alleviate toxicity of heavy metals: Iron, Manganese, Cadmiun, Aluminium, and Zinc by regulating plant uptake

Post Harvest Life

Si can associate with cell wall proteins where it might exert an active production of defence compounds.







Silic specially developed silicon and potassium formulation to improve plant growth, biomass.

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DOSAGE AND APPLICATION

COMPOSITION	
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Silicon (SiO₂)

Potassium (K,O)

%**w/w** 30,0 10,0



Crops		Details		
Annuals: Vegetables, cut flowers, nursery, strawberries, sugarcane, wheat	1-2L/Ha or 200-400 ml/100L	Foliar. Apply in a minimum of 600 L water. Apply every 10-15 days from first visible leaf onwards. For best results apply first sprays before leaf hardening of crop. Apply to sugarcane during the lead-up to the dryer months		
Perennials: tree crops, vines, bananas, turf	1-2L/Ha or 200-400 ml/100L	Foliar. Apply in a minimum of 600 L water. Apply during leaf flush and after fruit set and every 10-14 days during disease events		
Soil&Drip or hydroponic nutrient solution	200ml/1000L	6-8 time sper crop cycle. Maximum of 8 L/Ha		
Packing	20L 200 I	Allowed in ecological agriculture. Regl. CE 834/2007 y 889/2008		





Silic[®]Ca Flow is a fortifier of plant tissues for foliar and soil use whose purpose is to increase the tolerance of the crop to the attack of pathogens, increasing the life of the fruit and increasing the resistance of the plant and the fruit to the physical damages caused by friction, manipulation, etc.

Calcium is a key element in all stages of a plant's cycle. It is essential for growing reaching from germination up to ripeningof the fruits. **Calcium** makes vegetal tissues more resistant.



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DOSAGE AND APPLICATION

Crops	Doses (L/ha/application)		
	SOIL	FOLIAR	
Garlic and onion	5-10	1-4	
Banana		0.5-1	
Berries	7-15	1-4	
Crucifers	5-10	1-3	
Cucurbitaceae	5-10	1-4	
Fruit trees			
Gramineae	5-10	2-4	
Lettuce		1-4	
Legumes		1-4	
Ornamental	7-15	2-6	
Рарауа	5-10	1-6	
Grass	10-40		
Solanaceous	5-10	1-4	
Carrot	5-10	1-3	



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%w/w

18

CALCIUM & MAGNESIUM SILICATE. FOLIAR FERTILIZER

CHARACTERISTICS

Silic^{OD} Ca Mg Flow is used as a source of Calcium

and Magnesium in plant nutrition programs. The application of this product prevents and corrects Calcium deficiencies aggravated by slight deficiencies of Magnesium and Boron. Regular foliar application of **silic**[©]Ca Mg Flow prevents the effect of calcium deficiencies (apical necrosis, fruit cracking and early maduration) and Magnesium deficiencies (photosyntheticc activity reduction). Crops treated with **Silic Ca Mg Flow** have better vegetative growth and higher harvest yield.

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DOSAGE AND APPLICATION

20L

200 L

COMPOSITION Silicon (SiO)

Calcium (CaO)	13,5
Magnesium (MgO)	5,5
Density	1,3
pH	5-6



Crops	Dose (Foliar cc/100L)	Application
Horticultural	300-400	Apply 3-4 times at 2 weeks intervals since 15 days post-transplantation
Grapevine and Kiwi	200-300	Apply since 20 cm buds every 15 days (min. 3 applications)
Pome and Stone fruit	200-300	Apply since newly formed fruits until colour change
Pome fruits	250-350	Start applications in newly formed fruits, applying at 15 days intervals
Citrics	300	Apply during bud growth during spring and fall
Berries	200-300	Apply since budding until harvest at 15 days intervals
Potato	300-400	Start applications 30 days after emergence to improve photosynthesis

Packing

1L

5L

Allowed in ecological agriculture. Regl. CE 834/2007 y 889/2008





SOLAR PROTECTORS





What causes sunburn fruit?

The energy of sunlight can cause damage to the sunexposed surface layers of fruit. Sunburn is more due to radiative force of the sun than air temperature.

Types of apple sunburn

- 1. Sunburn necrosis
- 2. Sunburn browning
- 3. Photo-oxidative sunburn (or bleaching)



What are spray-on sun protection products?

Leaves and fruit of agricultural crops can be sprayed with suspension of tiny, white mineral particles (clay or calcium carbonate) or with wax emulsions to create a film that provides some protection from the damaging effects of sunlight.

PROTECTED WITH SUNSCREEN



UNPROTECTED



How do they work?

The mineral particles form a white ÿlm that blocks and re°ec ts some of the direct sunlight to reduce the fruit's surface temperature and the probability of sunburn.

The wax-based product forms a ÿlm that absorbs some of the damaging UV radiation and re°ec ts a small amount of the incoming radiation.

These product must be applied several tiemes during the season to maintain a protective cover on the fruit as it. These products must be applied several times during the season to maintain a protective cover on the fruit as it increases in size.

All spray-on sun protection products must be applied before severe summer heat wave conditions occur and applications must be maintained throughout the hot season to maintain coverage on the expanding fruit.

Resellers usually recommend a minimum of three to four applications, separated by seven to 21 days. More frequent applications are likely to provide greater protection.





SunSarcan is a solar protector for fruit and vegetables based on Zinc Oxide in an excipient of Calcium Carbonate, which reduces damage by heat and sunburn stress.

SunSaccon reduces the temperature of the leaf, allowing the stomatal opening to extend for a longer time, increasing photosynthesis. The reflective action of its particles illuminates in a better way inside the tree or any other plant, improving fruit color in the darkest places.

SunSarcan is designed to be applied by any phytosanitary treatment standard equipment and also by aerial.

Contains Zinc which is absorbed by the plant, thus improving its resistance to stress conditions, including nutritionals.

DOSES AND APPLICATIONS

CROP	DOSES	REMARKS
FRUIT TREES: Apple trees, Pear trees, Lemon, Orange, Tangerine, Clementine, Grapefruit, Olives, Peaches, Nectarines, Pomegranates, Persimmons, Avocado	5-10 Kg/100 L water	Apply in aqueous solutions in a traditional way, with nebulizer. It is recommended to apply on two consecutive passes and in opposite directions. It is necessary that the tree is completely covered (homogeneous distribution) and white color. Make 3-5 applications every 7 days maximum. These applications should be initiated before the period o maximum susceptibility. Use wetting from 1500 to 3000 L / ha
VEGETABLES: Tomatoes, Peppers, Melon, Watermelon	4-7 Kg/100 L water	It's recommended to apply on a volume of 600L/ha two consecutive passes in opposite directions. Apply during periods of higher susceptibility corresponding to the start of veraisor when the fruit begins to change from green to orange.

Application time: applications should begin when temperatures exceed the thermal threshold established by the technicians of the area.

Frequency of application: every 20 to 30 days, depending on weather conditions and/or rate of growth of the fruit.

Number of applications: 3-4 applications per season and depending on weather conditions.

🖞 5Kg 🗍 10Kg 🛛

20 Kg

Packing

1 Kg

SOLAR PROTECTOR

COMPOSITION

%w/w

Calcium Carbonate Zinc: Traces 99,8





QUALITY AND HEALTH IN PRE-HARVEST

> PROTECT FROM HIGH TEMPERATURES







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SumSareen Flow is a micronized calcium carbonate liquid sunscreen and next-generation silicon, designed to provide protection to the plant and fruit during the period of growth, improving the health of the plant and eliminating sunburn.

The foliar application of SunScreen Flow at the defined dosage, allows to create an indirect protection of the plant and the fruits from sunburn and more generally from thermal stress. The homogeneous film that forms on the plant protects the crops from UV rays: reducing absorption and increasing the light diffusion.

EFFECTS

- Reduces the temperature in plants and fruits by 3 - 4 °C
- Reduces damage from sunburn
- Improvement of post-harvest quality
- Protects against water stress
- Enhances the fruit color
- Extends post-harvest life
- Reduces the attack of insects
- Prevents mildew and oidium
- Easy removal in post-harvest

DOSAGE AND APPLICATION

Sun Screen Flow can be used on many crops, such as: almonds, apples, apricots, citrus, figs, grapes, melons, nectarines, olives, peaches, pears, plums, tomatoes, walnuts and watermelons.

SOLAR PROTECTOR

COMPOSITION

Calcium (CaO₂) Silicon (CaSiO₃) %**w/v** 34,0 5,0

pH (solution 1%) 7-8

iNEW FORMULATION WITH Si!



CROP	Application per season	Amount of formulated /Ha	Amount of water /Ha
Apples	3	20-30 L/Ha	800-1000 L/Ha
Citrus	3	20 L/Ha	800-1000 L/Ha
Tomatoes	3	20 L/Ha	750 L/Ha
Melons	2	20 L/Ha	1000 L/Ha
Watermelons	2	20-30 L/Ha	1000 L/Ha
Grape	3	10-20 L/Ha	1000 L/Ha
Pomegranate	3	20 L/Ha	1000 L/Ha
Avocado	3	20 L/Ha	1000 L/Ha





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We count on you





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