Adriatica

OUR PATH TO
THE FUTURE

PRODUCT
CATALOGUE
2023

OUR PATH TO THE FUTURE

Every day, for more than 50 years, we have been committed to win a challenge: nourish the world in a sustainable way.

We are constantly in contact with the agricultural community, whose needs we discuss and acknowledge to develop new, effective and sustainable solutions to provide for the nutrition and health of plants and crops.

This is at the basis of the vast range of solutions that K-Adriatica offers to farmers in order to win complex market challenges.

This is our path to the future.

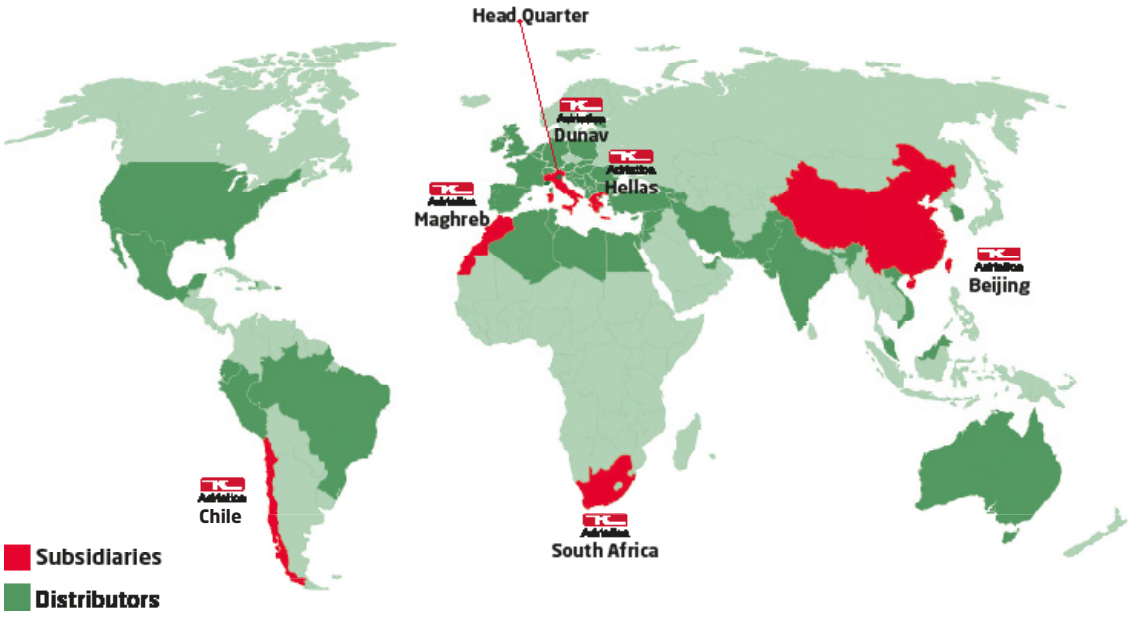
OUR HISTORY

In 1968, Kappa S.p.A., a wholly Italian owned company, was established in Cologna Veneta, in the north-eastern province of Verona and started production of NPK fertilizers.

In 2000 Kappa S.p.A. becomes K-Adriatica and relocates to Loreo, on the Po delta, where the newly opened factory specialized in the production of complex solid fertilizers by physical compaction.

Thanks to an on-going growth process started in 2010 and successful acquisitions in the biostimulant industry, K-Adriatica expanded its knowledge and improved its expertise positioning itself on the front line in research and development of new agricultural solutions.

Thanks to this growth process the company succeeded in achieving a global footprint with 4 production plants (3 in Italy and 1 in Croatia), 6 subsidiaries (Croatia, Morocco, Greece, Chile, South Africa, China) and distributors in more than 70 countries.



4 Production plants

6 Branches around the world

>70 Countries where we are present with a commercial and distribution network

>250 Employees

Adriatica

OUR MISSION

K-Adriatica is committed to finding an answer to ever demanding farmers' needs with solutions that originate when plant physiology, main metabolic process biochemistry, raw materials chemistry, soil and farm agronomic management complement one another.

Our team of researchers, formulators and agronomists turn their knowledge into technical information which, together with a deep understanding of the crops in the field, is processed by the KTS unit (Kappa Technical Service) and converted into a highly qualified technical support service.

The quality of our products is guaranteed by the **MCFP®** system, a rigid protocol based on:

Raw materials: we use only high-quality raw materials.

Composition: we formulate our products optimizing the synergy of all components.

Formulation: we apply unique productive processes through a constant monitoring of physical chemical parameters.

Positioning: every product is tested on different crops and in different areas as we implement the best application protocols.

CATEGORY CONTENTS

Adriatica

NUTRITIONAL SOLUTIONS

This is a range of products with unique formulations created by K-Adriatica to win the most demanding challenges posed by modern agriculture to farmers.
Thanks to the work of the Research and Development Unit, which sees the collaboration of experts in chemistry, biochemistry, microbiology, molecular biology, plant physiology and agronomics, the products of the NUTRITIONAL SOLUTIONS line offer farmers an effective tool to:

- Solve the most important physiological and nutritional disorders
- Reduce the impact of excessive salinity on crops
- Prevent and reduce the incidence of cracking
- Improve fruit color and sugar content
- Reduce the impact of abiotic and physiological stress on crops

To summarize, the PROBLEM-SOLUTION approach recommended by K-Adriatica is as follows:

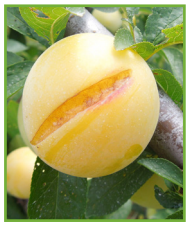
PROBLEM	SOLUTION
Physiological plant disorders	**KAMAB 26**
Fruit cracking and shelf-life	**DRY-K 30**
Color and brix	**PHARMAMIN-M**
Salinity and osmotic stress	**HENDOSAR**
Cold damage	**NOFROST**
Stress of physiological nature	**SKICC**

PHYSIOLOGICAL PLANT DISORDERS

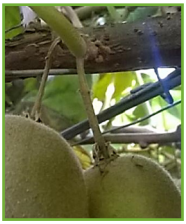
Physiological plant disorders are alterations of the normal plant metabolism which are caused by causal agents of non-infective and non-parasitic nature. They are physiological and the causes are an unbalanced relation between the plant and its environment (climate and soil), adverse atmospheric phenomena or an incorrect agronomic management; the latter is the cause farmers can directly act on.
When it comes to agronomic management, the main cause of physiological plant disorders is an unbalanced fertilization that can cause disorders on the plants, which can show signs of desiccation, necrosis, cracks and darkening tissues.


Fruit texture


Bracts darkening


Fruit cracking


Fruit collapse


Peduncle necrosis


Rachis necrosis


Bitter pit


Black heart


Tip burn


Hollow stem


Apical rot


Shelf-life

The main nutritional (physiological) plant disorders are related to unbalanced cation-exchange capacity, in particular between calcium (Ca^{2+}), magnesium (Mg^{2+}), potassium (K^{+}), ammonium (NH^{4+}) and sodium (Na^{+}) that are present in the soil and the plant. A balanced fertilization is essential to avoid nutritional disorders. What is needed is not the absolute quantity of supplied elements but rather the right ratio between the different elements.
Both nutritional deficiency and excess symptoms are often caused not by the absence of the element, but by either an adverse combination of elements in the soil, or in the plant or in both. Calcium nutrition is particularly affected by this imbalance. The lack of calcium can bethe result of the element absence either in the nutritive solution or in the soil (ex.: acidic soils) but it can also be the result of the excessive presence of other nutritional elements (Mg^{2+}, K^{+}, NH^{4+}, Na^{+}). Balancing the cation-exchange capacity in the soil and the plant is fundamental for a calcic nutrition.

KAMAB 26 is K-Adriatica's solution to correct the nutritional imbalance and ensure production quality

Adriatica

KAMAB 26

CORRECTS NUTRITIONAL IMBALANCE
IMPROVES FRUIT TEXTURE
EXTENDS SHELF-LIFE

KAMAB 26 is Adriatica's solution to correct plant physiological disorders attributed to calcium, magnesium and potassium nutritional imbalances.

Thanks to its balanced ratio, **KAMAB 26** can solve nutritional imbalances related to physiological plant disorders such as stem necrosis, apical rot, tip burn, bitter pit, fruit cracking and all other nutritional disorders caused by an unbalanced ratio of those three elements. Moreover **KAMAB 26** regulates nitrogen absorption processes, limits ammonium accumulation in plant tissues and neutralizes the organic acids in excess. Its rapid absorption by the plant allows excellent results both in preventing and controlling nutritional physiological plant disorders.

The use of **KAMAB 26** in the initial fruit growing phases leads to an improved fruit texture. Its unique formulation favors the production of calcium pectates, which are fundamental to have more resisting cell walls, and it favors the homogeneous calcium distribution within the fruit, which ultimately brings to improved texture and longer shelf-life.

CROP	NUTRITIONAL DISORDER	APPLICATION TIME	DOSE/HECTARE*
Grapes	Stem necrosis, grape berry drop	Preventative: 3-4 applications from fruit set to veraison (change of color); if needed, repeat the application 10-15 days before harvesting or upon the occurrence of predisposing conditions Curative: at the appearance of the first symptoms; to be repeated every 7-10 days until the symptoms disappear	Preventative: 4 kg/ha Curative: 6 kg/ha
Pome fruits (apple, pear, quince)	Bitter pit, post-harvest rotting, superficial scald	2-3 applications every 10-12 days, from fruit set to fruit diameter up to 40 mm	4-6 Kg
Kiwifruit	Fruit softening, shelf-life	3-4 applications every 10-12 days, from flowering to fruit diameter up to 40 mm	4-6 Kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	Internal flesh browning, superficial scald, shelf-life	2-3 applications, from fruit-set to veraison (change of color)	4-6 Kg
Strawberries	Tip burn, calix necrosis, shelf life	2-3 applications from fruit-set, every 10-12 days	4-6 Kg
Mango, avocado	Flower drop, fruit drop	3-4 applications: before flowering, beginning of flowering, full flowering, when fruits are at 10% of the final dimension	4-6 Kg
Small fruits (blueberry, raspberry, blackberry, currant)	IInternal flesh browning, superficial scald, shelf-life	3-4 applications, from pre-flowering every 10-12 days	4-6 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Apical rot	2-3 applications, from pre-flowering every 10-15 days	4-6 Kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach, broccoli)	Tip burn	3 applications: 1° application: 7 days after transplanting 2° application: 7-10 days after the previous one 3° application: 8 days before harvest	4-6 Kg
All crops	Fruit texture, shelf-life, fruit cracking	2-3 applications, every 10-12 days, from fruit-set to fruit diameter up to 40 mm	4-6 Kg
All crops	Better flowering	1-2 applications, pre-flowering	4-6 Kg

COMPOSITION		
Total nitrogen (N)		10%
Nitric nitrogen (N)		10%
Potassium oxide (K_2O)	Soluble in water	5%
Calcium oxide (CaO)	Soluble in water	10%
Magnesium oxide (MgO)	Soluble in water	2%
Boron (B)	Soluble in water	0,1%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	7,36
Conductivity E.C. µS/cm (1‰)	1210
Density (g/cm³)	1,5
WAY OF USE	
	FOLIAR

PACKAGING: 6 - 12 Kg

WARNING: Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels it is necessary to add an acidifier before using fertilizers containing calcium.

The product can be mixed with other products exception made for those containing copper, sulfur, mineral oil and emulsions.
It is always advisable to carry out small tests before proceeding with mixing.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

FRUIT CRACKING AND SHELF-LIFE

Fruit cracking, or breaking, is a physiological plant disorder that normally affects fruit at development and maturity, when higher quantities of water and sugar accumulate in the fruit together with the weakening of the peel elasticity.

Cracking is a complex phenomenon which is caused by various factors:

LIGHT
the fruits growing on the exposed surface show less cracking than those grown on the internal part of the plant

VARIETY/ROOTSTOCK

TEMPERATURE AND HUMIDITY

EXCESSIVE FRUIT SIZE
caused by an excessive use of plant hormones

MINERAL NUTRITION
lack or imbalance can cause developmental and metabolic alterations

MECHANIC PROPERTIES OF THE EPIDERMIS AND CELL WALL STRUCTURE

WATER MANAGEMENT
sudden changes in the cell turgor due to excessive water absorption

IMPROPER USE OF PLANT HORMONES

This physiological plant disorder leads to product depreciation and sometimes to the product being rejected by the market. In the worst cases rotting agents settle inside the cracks making it impossible for the grower to sell it to processing industries.

By limiting the effects that various concurrent causes have on cracking, it is possible to obtain the reduction of the cracking incidence.

From the nutritional stand point, calcium has a fundamental role: as one of the key components in the structure of the cell walls it increases the mechanical resistance of the tissues and contributes to reduce fruit cracking.

DRY-K 30 is K-Adriatica's solution to prevent and reduce the incidence of cracking and for a longer shelf life

Adriatica

DRY-K 30

INCREASES TISSUES MECHANICAL RESISTANCE
REDUCES THE INCIDENCE OF CRACKING
IMPROVES PLANT WOUND CICATRIZATION
HELPS TO PROLONG SHELF-LIFE

DRY-K 30 is a high purity and readily assimilable product. It determines the strengthening of the cell walls conferring a higher mechanical resistance to damages caused by biotic and abiotic agents.

Regular applications of **DRY-K 30** are recommended to prevent "fruit cracking", which can happen in case of water excess (abundant rainfall in particular), temperature changes and an improper use of plant growth regulators. Its peculiar composition confers a high cicatrizing power in case of possible microinjuries, which can be both the starting point of cracking and growth of pathogenic agents. The presence of polyglucosamines in the formulation can activate the natural defences of the plant and allows the formation of a protective biofilm on the treated parts which reduces the incidence of fungal/bacterial infections, both in the field and, particularly, in post-harvest phases.
Its application in the pre-harvest phase prevents weight loss, regulates the evapo-transpiration processes and improves preservation, which is particularly important for products subject to refrigeration.
DRY-K 30 improves fruit organoleptic parameters (increase of dry matter and Brix) in value and time (longer shelf-life).

CROP	APPLICATION TIME	DOSE/ HECTARE*
Table grapes ++	3 applications: bunch pre-closure, veraison (change of color), 10-15 days before harvest	6 kg
Wine grapes	1 application: 10-15 days before harvest	4-6 Kg
Stone fruits (peach, nectarine, apricot, cherry, plum)++	2 applications: veraison (change of color), 10-15 days before harvest	4-6 Kg
Kiwifruit	3 applications: fruit development , veraison (change of color), 15-20 days before harvest	4-6 Kg
Pome fruits (apple, pear, quince)++	1 application: 10-15 days before harvest	4-6 Kg
Citrus (orange, lemon, tangerine, clementine, bergamot) ++	2 applications: veraison (change of color), 10-15 days before harvest	4-6 Kg
Strawberries	7 days before harvest, to be repeated every 7-10 days in accordance with the progress of maturity.	4-6 Kg
Small fruits (blueberry, raspberry, blackberry, currant)	7 days before harvest, to be repeated every 7-10 days in accordance with the progress of maturity.	4-6 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin) ++	1 application: veraison (change of color)	4-6 Kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach, broccoli)	1 application: 5-7 days before harvest	4-6 Kg

COMPOSITION		
Total nitrogen (N)		10%
Nitric nitrogen (N)		10%
Potassium oxide (K_2O)	Soluble in water	8%
Calcium oxide (CaO)	Soluble in water	12%
Total sulfuric trioxide (SO_3)		5%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	6,85
Conductivity E.C. µS/cm (1‰)	1450
WAY OF USE	
	FOLIAR

PACKAGING: 2 Kg

NOTE: It is recommended to use a maximum of 300 L of water per hectare per treatment.
*++ To prevent and reduce the incidence of cracking, it is highly recommended to use **KAMAB 26** in the fruit growing phases.*

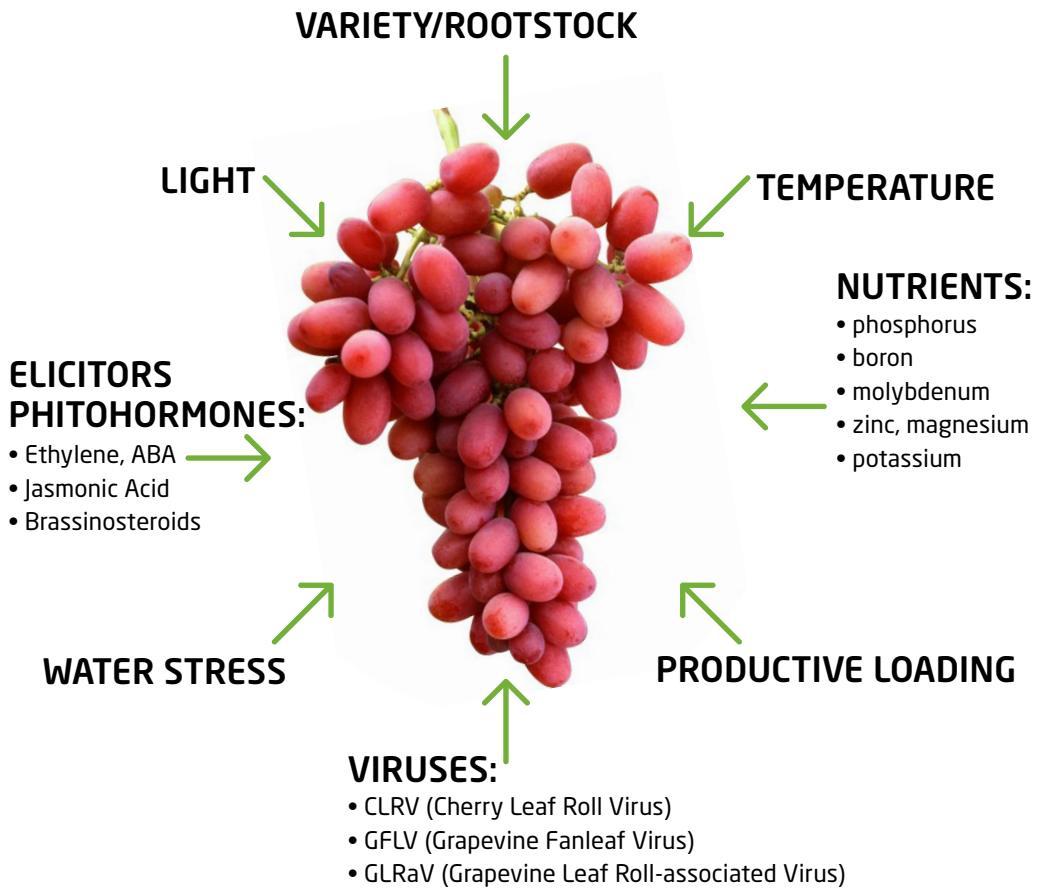
WARNING: Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels it is necessary to add an acidifier before using fertilizers containing calcium.
The product can be mixed with other products exception made for those containing copper, sulfur, mineral oil and emulsions.
It is always advisable to carry out small tests before proceeding with mixing.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

COLORING AND BRIX

Adriatica

Color, sweetness and crispness are the characteristics required by consumers for quality production. While sweetness and crispness can be achieved thanks to a careful agronomic management, color improvement is difficult to attain.
This challenge gets even harder if the new proposed varieties are not always suitable for cultivated areas. Moreover, the effects of climate change, through a progressive rise in temperature, makes the target – a uniform and intense coloring – even tougher to accomplish.
There are numerous factors influencing the color development in the fruit and some of them cannot even be measured.



A careful agronomic management can help reduce the effects of environmental conditions on the color development. From a nutritional standpoint, the use of inducers of ripening can actually improve coloring, thus improving production's quality standards.

PHARMAMIN-M is K-Adriatica's solution to stimulate ripening, to improve coloring and to increase the BRIX degree

Adriatica

PHARMAMIN-M

IMPROVES RIPENING
PROMOTES COLOR UNIFORMITY
INCREASES BRIX LEVELS

PHARMAMIN-M promotes the ripening process. Thanks to its high purity and immediate uptake, PHARMAMIN-M rebalances the normal physiological processes in the plant cell and stimulates the natural mechanisms that are involved in ripening. Its formulation, enriched with specific ripening precursors, not only favors uniform coloring and the rise of fruit sugar content (BRIX), but also has a direct effect in solving the main nutritional physiological plant disorders.

PHARMAMIN-M improves fruit coloring by supplying anthocyanins and flavonoids biosynthesis precursors (the coloring pigments). It gives fruit a better taste and fragrance and does not alter the pulp texture and shelf-life.

PHARMAMIN-M composition aims at obtaining the following agronomic results:

- Fruit coloring and rise of sugar level (thanks to some specific amino acids)
- Improved taste and aroma and more uniform fruit size
- Higher resistance of the fruits to manipulation, storage and transportation

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	2 applications every 7-10 days starting from pre-veraison (change of color)	6-8 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	2 applications every 7-10 days starting from pre-veraison (change of color)	6-8 kg
Pome fruits (apple, pear, quince)	2 applications every 7-10 days starting from pre-veraison (change of color)	6-8 kg
Kiwifruit	2 applications every 7-10 days starting from pre-veraison (change of color)	6-8 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	2 applications every 7-10 days starting from pre-veraison (change of color)	6-8 kg
Strawberries e Small fruits (blueberry, raspberry, blackberry, currant)	2 applications every 7-10 days starting from pre-veraison (change of color)	4-6 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	2 applications: fruit enlargement and pre-veraison (change of color)	4-6 kg

COMPOSITION		
Calcium oxide (CaO)	Soluble in water	8,4%
Magnesium oxide (MgO)	Soluble in water	1,6%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	3,84
Conductivity E.C. µS/cm (1‰)	901
Density (g/cm³)	1,4
WAY OF USE	FOLIAR

PACKAGING: 6 - 12 Kg

NOTE: *The activity of* ***PHARMAMIN-M*** *is enhanced by its combination with* ***RA.AN 13156****.*

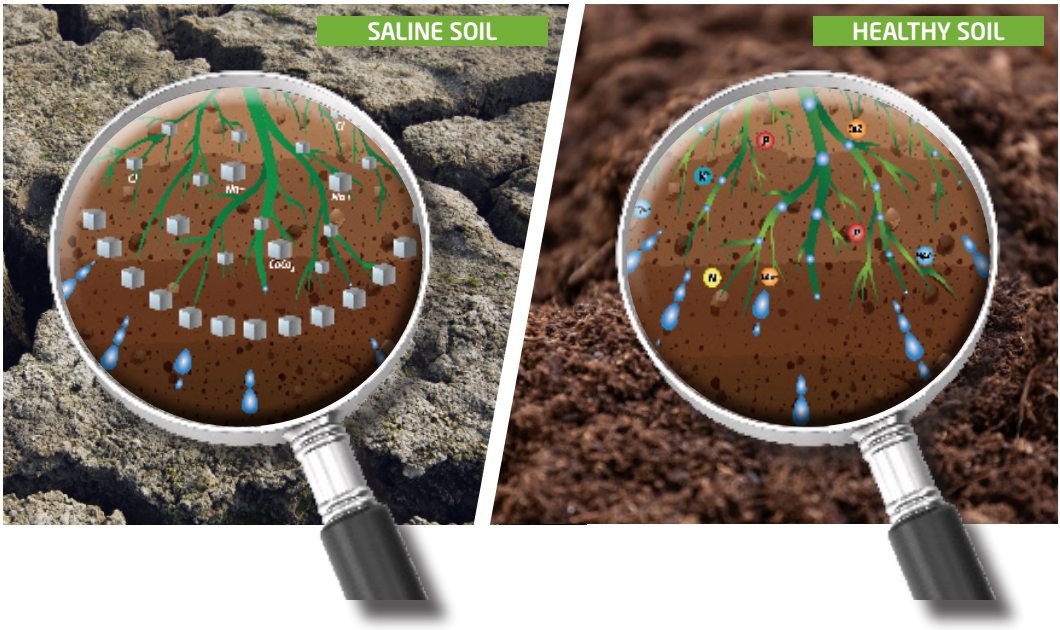
WARNING: Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels it is necessary to add an acidifier before using fertilizers containing calcium.
The product can be mixed with other products exception made for those containing copper, sulfur, mineral oil and emulsions.
It is always advisable to carry out small tests before proceeding with mixing.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

SALINITY EXCESS AND OSMOTIC STRESS

Salinity excess in the soil causes severe damage to the crops.

An excessive salinity can slow down the root uptake of water and of the nutrients dissolved in it, which causes nutritional imbalances that pave the way to various physiological plant disorders. Moreover, salinity excess is often accompanied by an insufficient soil structure and an insufficient ability of the soil to retain the water, which in turn leads to an excessive accumulation of sodium (Na^+), chlorides (Cl^-) and carbonates (CO_3^{2-}). Roots slow their growth and reduce nutrient uptake capability leading to deficiencies, most notably calcium-magnesium, which result in lower photosynthetic activity.



HENDOSAR is K-Adriatica's solution to secure production by reducing the impact of osmotic stress associated with excessive salinity

Adriatica

HENDOSAR

IMPROVES PLANT TOLERANCE TO SALINITY
IMPROVES SOIL STRUCTURE

HENDOSAR is specifically created to manage and reduce the effects of excessive salinity in the soil and in the plants. Acting rapidly on the soil-root-plant system, **HENDOSAR** creates an highly favorable environment on all crops allowing its use in any phenological phase, even under the harshest agronomic conditions.

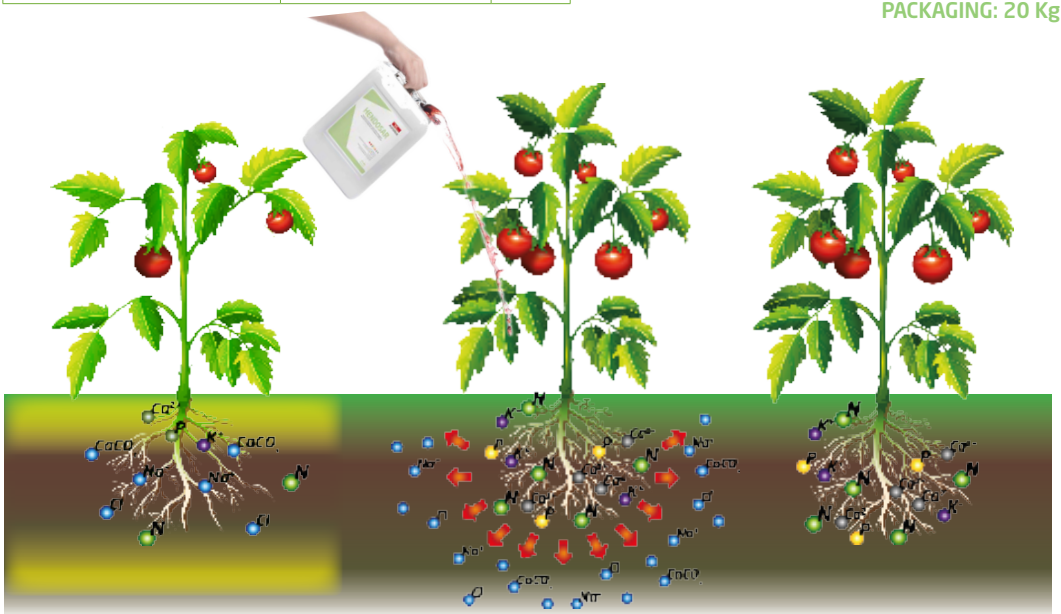
HENDOSAR improves soil structure thanks to a specific formulation that provides an optimal calcium and magnesium ratio (4-6 parts of calcium for 1 part of magnesium). Calcium and magnesium replace sodium in the exchange complex (argillaceous colloids), so that sodium becomes soluble and can be washed away. This creates a favourable environment in the rhizosphere that "protects" the roots and sustains its nutrients uptake, even in case of high salinity. This allows the plant to overcome the interruptions in the vegetative growth that are linked to salinity excess, to rebalance the nutritional disorders and to improve the photosynthetic activity securing production and quality.

CROP	APPLICATION TIME	DOSE/HECTARE*
All crops	Sandy soils: 2-3 applications	20-40 Kg
	Clay soils: 2 applications	40-60 Kg

COMPOSITION		
Total nitrogen (N)		9%
Nitric nitrogen (N)		9%
Potassium oxide (K_2O)	Soluble in water	6%
Calcium oxide (CaO)	Soluble in water	10%
Magnesium oxide (MgO)	Soluble in water	2%
Manganese (Mn)	Chelated with EDTA	0,015%
Zinc (Zn)	Chelated with EDTA	0,015%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	7,1
Conductivity E.C. µS/cm (1‰)	1120
Density (g/cm³)	1,53
WAY OF USE	
	FERTIGATION

PACKAGING: 20 Kg



WARNING: Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels it is necessary to add an acidifier before using fertilizers containing calcium.

The product can be mixed with other products exception made for those containing copper, sulfur, mineral oil and emulsions.
It is always advisable to carry out small tests before proceeding with mixing.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

LATE FROST AND COLD-RELATED DAMAGE

The rise in average temperature caused by climate change brings agriculture another challenge: late frost or returns of cold weather.
A late frost can cause damage of various extent according to different factors:
- Phenological phase of the plant (i.e.: dormancy, flowering ..)
- Species and plant variety (early or late)
- Nutritional state, higher concentration of nitrates leads to higher sensibility to cold weather
- Prolonged persistence of freezing temperatures

The damage is caused by necrosis and death of herbaceous tissues, which are in turn caused by cell collapse after being exposed to negative temperatures for a sufficiently long period. The length of time varies according to the target organs (buds, flowers and inflorescence, fruitlets in increasing sensibility order).

NOFROST is K-Adriatica's solution to reduce damage from late frost and cold weather returns

Adriatica

NOFROST

REDUCES COLD WEATHER RETURN-RELATED DAMAGE
REDUCES LATE FROST-RELATED DAMAGE

The **NOFROST** formulation is designed to prevent and reduce damage related to sudden drops in temperature. Late frost often cause serious damage to buds, to early developed leaves and to flowers. With temperatures dropping to -3°C/-4°C, the damage can be seen on nearly 90% of flowers if it happens between inflorescence emergence and the end of flowering.

With its specific antifreeze activity, **NOFROST** helps the plant to limit the damage caused by cold weather. Its particular formulation combines a cryoprotectant with a mix of microelements conveyed by an organic matrix, thus increasing the resistance threshold by lowering the sap freezing point. This prevents the formation of ice crystals within the cells. The presence of colloid compounds favours the formation of a thin protective layer which improves the protection of the treated parts.

CROP	APPLICATION TIME	DOSE/HECTARE*
All crops	In anticipation of drop in temperature: 2-3 applications, to be REPEATED every 2-3 days, with 3 kg/ha Right before the temperature drop: ONLY ONE application, 18-20 hours before the drop of temperature, with 6 kg/ha	3-6 kg to be applied with 600-1000 L of water/ha

COMPOSITION		
Magnesium oxide (MgO)	Soluble in water	2%
Boron (B)	Soluble in water	0,3%
Iron (Fe)	Soluble in water	2%
Zinc (Zn)	Soluble in water	0,8%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	3,1
Conductivity E.C. µS/cm (1‰)	390
Density (g/cm³)	1,16
WAY OF USE	FOLIAR

PACKAGING: 6-25 Kg

Recorded minimum temperature: -2,7° C/ Dose: 6 kg on 1000 litres

Recorded minimum temperature: -2° C/ Dose: 6 kg on 1000 litres

***NOTE:** In the days following a late frost, apply **SKICC + RA.AN L 13186** to help the plant overcome the stress and reactivate the metabolic pathways.*

WARNING: The efficacy of the product is influenced by the length of time at low temperatures. Temperatures as low as -4°C to -6° C for a short period of time (1 hour max) can be easily managed by plants which have been preventatively treated. Periods of 4-6 hours at temperatures close to freezing (-2° C) can be damaging even on treated plants.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

STRESS OF PHYSIOLOGICAL NATURE

STRESS FROM TRANSPLANTING

PHYTOTOXICITY FROM HERBICIDE TREATMENT

DROUGHT STRESS

PHYSIOLOGICAL STRESS

In addition to biotic and abiotic stress, a crop potential productivity is often reduced by some agronomic practises that aggrieve the stressing conditions, from transplanting, when seedlings experience strong temperature and drought stress due to drastic environmental changes (transplanting-related stress), to herbicide and pesticide applications. Herbicides in particular, in spite of being selective, always have a negative impact on the crop by either momentarily slowing down its development or by creating stressful conditions, resulting in reduced productivity.

The cause of losses are:

- Reduction of photosynthesis
- Early foliar senescence
- Appearance of physiological plant disorders (chlorosis, necrosis, rotten parts)
- Predisposition to parasite attacks

The only way to reduce the impact of this physiological stress on crop productivity is to stimulate a fast recovery from the stress by acting on plant metabolism.

HEAT STRESS

STRESS FROM MECHANICAL DAMAGE

STRESS FROM MECHANICAL DAMAGE

ROOT ASPHYXIA

SKICC is K-Adriatica's solution to improve plant tolerance to physiological stress

Adriatica

SKICC

PREVENTS GROWTH INTERRUPTION DUE TO HERBICIDE AND OTHER CROP PROTECTION TREATMENTS
HELPS OVERCOMING TRANSPLANTING-RELATED STRESS
HELPS PLANTS AND CROPS TO OVERCOME STRESS-RELATED CONDITIONS

SKICC is the nutritional solution that offers support and protection to extensive, industrial and horticultural crops under stress conditions. Its formulation, developed to activate the plant natural defences, preserves the cellular balance (homeostasis) thanks to its activity at a molecular level. This allows the immediate restoration of metabolic activities warranting the crop harvest.

SKICC is immediately absorbed by the plant (two hours after application) and, thanks to the absence of chlorides, sulfates and carbonates, is not phytotoxic.

When applied under stressful conditions and at all phenological phases, SKICC increases the resistance level of the crop. **SKICC** reduces phytotoxicity when applied in combination with herbicides and crop protection products.
SKICC is the answer to the need to limit the negative effects caused by stress conditions on crop production.

CROP	APPLICATION TIME	DOSE/HECTARE*
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Post-transplanting, pre-flowering, veraison (change of color), combined with phytosanitary applications	4-6 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Post-transplanting and during vegetative development combined with phytosanitary applications	4-6 kg
Other vegetables (broccoli, cabbage, cauliflower, onion, garlic, leek, fennel, carrot, potato)	Post-transplanting and during vegetative development combined with phytosanitary applications	6-8 kg
Corn, sunflower	3-6 leaf combined with post-emergence herbicide applications	4-6 kg
Rice, wheat, barley	Stem elongation combined with post-emergence herbicide treatment, booting phase combined with fungicide applications	4-6 kg
Rapeseed	Pre-flowering and fruit set combined with insecticide applications	6-8 kg
Beets	Leaf canopy meets between the rows, combined with post-emergence herbicide applications	6-8 kg
Sugarcane	Post-transplanting and during vegetative development combined with phytosanitary applications	6-8 kg
Soybeans	Vegetative development combined with post-emergence herbicide applications	4-6 kg
Industrial tomato	Post-transplanting, pre-flowering, veraison (change of color), combined with phytosanitary applications	4-6 kg
Potato	Pre-flowering until tuber formation combined with fungicide applications	4-6 kg
Cotton	Post-emergence and pre- flowering combined with post-emergence/herbicide/fungicide applications	4-6 kg

COMPOSITION		
Total nitrogen (N)		9%
Nitric nitrogen (N)		9%
Potassium oxide (K_2O)	Soluble in water	6%
Calcium oxide (CaO)	Soluble in water	10%
Boron (B)	Soluble in water	0,1%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	7,2
Conductivity E.C. µS/cm (1‰)	1150
Density (g/cm³)	1,5
WAY OF USE	FOLIAR

PACKAGING: 6 - 25 Kg - COMBO PACK

NOTE: *The activity of **SKICC** is enhanced when combined with **RA.AN L 13186**. A Combo Pack with the 2 products together is now available.*

WARNING: Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels it is necessary to add an acidifier before using fertilizers containing calcium.
The product can be mixed with other products exception made for those containing copper, sulfur, mineral oil and emulsions.
It is always advisable to carry out small tests before proceeding with mixing.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

PHYSIOLOGICAL ACTIVATORS

Adriatica

This line of products helps to increase crop PRODUCTIVITY and harvest QUALITY.
The physiological activators are based on protein hydrolysates, seaweed extracts and humic substances. Not only are they a source of important nutritional elements, but they also promote various cellular processes and stimulate the plant's metabolism.

At foliar level physiological activators:

- increase the photosynthetic activity and the production of dry matter, also under lower light intensity
- are involved in and also regulate the metabolic processes, thanks to their auxin-like activity
- improve product organoleptic characteristics, such as color, sugar content, aroma and consistency
- induce a higher disease resistance
- guarantee higher yields

When applied to the soil physiological activators:
- improve the chemical, physical and microbiological characteristics
- improve plant root development and activity
- regenerate the treated soils and reduce their salinity
- guarantee a better balance between vegetative and reproductive phases
- capture and channel the nutritional elements already present in the soil, thus improving root uptake

K-Adriatica's line of PHYSIOLOGICAL ACTIVATORS includes:

ACTIMOL 80
ENA 19989
RA.AN L 13186
RA.AN 13156
ERGON
eK-Ion MAX
GOLD DUST
GOLD DUST 10-10-10
NUTRI BIO
EMOFILL L
HUMIFILL L
HUMIFILL PS
RADICURE L
SCUDO K
LEAF-FALL

THE ROLE OF AMINO ACIDS IN PLANT PHYSIOLOGY

Protein hydrolysates, among the key constituents of K-Adriatica physiological activators, are an important category of biostimulants capable of increasing plant growth and crop yield, especially in environmentally stressed conditions.
They are a mix of either animal or plant or both amino acids and soluble peptides, which are generally obtained with either chemical or enzymatic or mixed hydrolysis.
The stronger the hydrolysis, the greater the quantity of amino acids obtained compared to the peptides (and oligopeptides) which, although characterized by a greater biostimulant activity, are less assimilable than amino acids.
Therefore, a greater quantity of amino acids - compared to other components - is equivalent to higher quality of protein hydrolysate. Amino acids are indeed more efficient in regulating plants' physiological processes. The chart shows the role of amino acids in plant physiology.

PHYSIOLOGICAL PROCESS	AMINO ACIDS INVOLVED
Photosynthesis stimulation	Alanine, Glutamic Acid, Glycine, Lysine, Proline
Stomata opening	Alanine, Glutamic Acid, Methionine, Lysine, Proline
Anti-oxidant activity	Cysteine, Histidine, Lysine, Methionine, Tryptophan
Complexing activity	Aspartic Acid, Glutamic Acid, Glycine
Pollen germination	Glutamic Acid, Proline
Aroma precursors	Alanine, Isoleucine, Leucine, Valine
Hormone precursors	Methionine, Tryptophan
Color precursors	Phenylalanine
Taste precursors	Alanine, Arginine, Glycine, Proline
Osmosis regulation	Proline
Stress resistance	Glutamic Acid, Cysteine, Lysine, Proline, Serine, Valine
Nitrogen supply	Aspartic Acid, Glutamic Acid, Arginine, Proline, Asparagine
Root development	Arginine, Methionine
DNA synthesis	Glutamine, Aspartic Acid
Protein synthesis	Glutamine

ACTIMOL 80

Adriatica

FAVORS VEGETATIVE RESTART
IMPROVES FLOWERING AND FRUIT SET
IMPROVES NITROGEN'S ABSORPTION
REDUCES NITRATES' CONTENT

ACTIMOL 80 is a high energy nutritional solution, to be used when support to plants is most needed. **ACTIMOL 80**'s organic complex is made of plant extracts (20%), protein hydrolysates (20%) and polysaccharides (16%). **ACTIMOL 80** contains natural growth factors, vitamins, amino acids and alginates.

This organic complex brings:

- Molybdenum, a fundamental element of the nitrate reductase enzyme, which acts as a catalyst for the first step of conversion of nitric nitrogen into nitrogen compounds, useful for the plant. This accelerates the transformation of nitric nitrogen into organic products (amino acids and proteins) which in turn translates into plant growth and abundant flowering. In addition, Mo as a cofactor is essential in case of oxidative stress: under conditions of high lighting and/or excessive light absorption (photoinhibition, photooxidation), nitrate reduction in leaves can not only use excess energy, but also alleviate the high light stress. And it is the key enzyme to catalyze the final step of abscisic acid (ABA) biosynthesis in plants

- Iron (DTPA chelated) and magnesium, which improve photosynthesis and keep the plant green and active

- Boron, which has a positive effect on cell growth and cell division, on sprouting, on pollen germination hence on the fruit set. Boron is also involved in the production of nucleic acids and hormones, in sugar storage and translocation within the plant, in carbohydrates metabolism and in nutrients' uptake (nitrogen, potassium and calcium in particular).

Foliar applications of **ACTIMOL 80** translate into fast vegetative restart, more intense flowering, improved fruit set and rapid fruit growth.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Kiwifruit and Citrus (orange, lemon, tangerine, clementine, bergamot)	From budding to post-fruit set 2-3 applications every of 8-10 days	1-2 kg
Strawberries	From pre-flowering to post-fruit set 2-3 applications every 7-8 days	1-2 kg
Walnut and Hazelnut	From vegetative restart to fruit enlargement 2 applications every 10-12 days	1-2 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-flowering to post-fruit set 2-3 applications every 7-8 days	1-2 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Starting 20 days before harvest 2 applications every 7-10 days	1-2 kg

COMPOSITION		
Magnesium oxide (MgO)	Soluble in water	5%
Boron (B)	Soluble in water	0,2%
Iron (Fe)	Soluble in water	0,3%
Iron (Fe)	DTPA chelated	0,3%
Molybdenum (Mo)	Soluble in water	8%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	6,8
Conductivity E.C. µS/cm (1‰)	680
WAY OF USE	
	FOLIAR

PACKAGING: 1 Kg

***NOTE: ACTIMOL 80** can be also successfully used in fertigation, during the phases described in the chart, with a 300-500 g/100 m² dose.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

ENA 19989

STIMULATES PLANT GROWTH
PROMOTES FLOWERING
IMPROVES FRUIT-SET

ENA 19989 is a bioactivator made of natural compounds that stimulate plants energy metabolism, with beneficial effects on all growth processes.
The AATC (N-acetyl-thiazolidine-4-carboxilic acid) content in the product in particular increases the amount of proline (an important counter-stress molecule) and cysteine (an efficient metabolic activator) in the plant tissues. This triggers the use of all plants' biochemical supplies, stimulating vital processes and helping to overcome critical development phases Throughout the whole crop cycle.
Iron, molybdenum and most notably zinc are present in the formula. Iron and molybdenum influence the photosynthetic process and nitrogen's absorption respectively, while zinc enhances cellular growth and division. Ascophyllum nodosum seaweed derived alginates, carbohydrates and amino acids make **ENA 19989** a formulation with a strong anti-stress activity.

When regularly applied from the early phases of the crop cycle, **ENA 19989** facilitates a uniform sprouting, tissue elongation, abundant flowering and fruit set and a balanced fruit development. Thanks to its stimulating activity on cellular division and multiplication, ENA 19989 applications favour rachis' elongation on compacted bunch grape varieties.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	From inflorescence clearly visible to post-fruit set 2-3 applications every 10-15 days	0,5-1Kg
Kiwifruit	From pre-flowering to fruit about 20% of final size 2-3 applications every 10-15 days	0,5-1Kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From pre-flowering to fruit diameter up to 40 mm 3-4 applications every 10-12 days	0,5-1Kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From vegetative restart to fruit enlargement 3-4 applications every 10-12 days	1Kg
Walnut and Hazelnut	From vegetative restart to fruit enlargement 2 applications every 10-12 days	0,5-1Kg
Strawberries	At post-transplanting, pre-flowering, flowering and post-fruit set	0,5-1Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-transplanting to flowering-fruit set 2-3 applications every 10-15 days.	0,5-1Kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	From post-transplanting or post-emergence 2-3 applications every 8-10 days	0,5-1Kg
Artichoke	From the emission of the flower heads 2-3 applications every 8-10 days	0,5-1Kg
Flowers and Ornamentals	At transplanting and pre-flowering	0,5-1Kg

COMPOSITION		
Iron (Fe)	Soluble in water	0,5%
Iron (Fe)	DTPA chelated	0,5%
Molybdenum (Mo)	Soluble in water	0,3%
Zinc (Zn)	Soluble in water	1,5%
Zinc (Zn)	Chelated with EDTA	1,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	5,5
Conductivity E.C. µS/cm (1‰)	266
Density (g/cm³)	1,2
WAY OF USE	
	FOLIAR

PACKAGING: 1 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

RA.AN L 13186

Adriatica

BALANCES PLANT GROWTH
IMPROVES NUTRIENTS' UPTAKE
OPTIMIZES FLOWERING AND FRUIT SET
REDUCES STRESS NEGATIVE EFFECTS

RA.AN L 13186 is a Ascophyllum nodosum seaweed extract nutritional solution rich in nutrients, vitamins, polysaccharides and natural growth promoters. All these compounds are not deteriorated by the cold extraction process to which the seaweed is subject and are combined with hydrolyzed malt rootlets which bring a unique composition in amino acids, peptides, enzymes, proteins, oligosaccharides and nucleic acids. This organic complex increases the natural biostimulating effects of seaweed and assures high yield and superior quality even under stressed conditions.

RA.AN L 13186, being a 100% origin seaweed product, with an acidic pH value, ideal for foliar uptake, is the best solution to promote:

- plant hormone and nutritional balance
- reduction of post-transplanting stress and activation of all growth mechanisms
- improved flowering and fruit-set
- increase in size, earlier ripening, longer shelf-life
- improved sugar content and quality parameters
- improved crop resistance to abiotic stresses

Moreover, regular **RA.AN L 13186** applications:

- trigger elicitors' production
- protect the plant thanks to a persistent layer of product which acts as a protectant film
- repel sucking pests

CROP	APPLICATION TIME	DOSE/ HECTARE*
Grapes and Kiwifruit	2-3 applications from vegetative restart to fruit enlargement, every 8-10 days. Repeat 1-2 applications at post-harvest. Whenever it's necessary to overcome a stressful period.	1-2 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	At vegetative restart, pre- and post-flowering, veraison (change of color). Whenever it's necessary to overcome a stressful period.	1-2 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	2-3 applications from vegetative restart to fruit enlargement, every 8-10 days. Repeat 1-2 applications at post-harvest. Whenever it's necessary to overcome a stressful period.	1-2 kg
Olive, Walnut, Hazelnut	2-3 applications from vegetative restart to fruit enlargement, every 10-12 days. Repeat 1-2 applications at post-harvest. Whenever it's necessary to overcome a stressful period.	1-2 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At vegetative restart, pre- and post-flowering and at veraison (change of color). Whenever it's necessary to overcome a stressful period.	1-2 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At post-transplanting, pre- and post-flowering, pre-veraison (change of color). Whenever it's necessary to overcome a stressful period.	1-2 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	At early vegetative phases or whenever a prompt vegetative restart is required.	1-2 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or whenever a prompt vegetative restart is required.	1-2 kg
Flowers and Ornamentals	After transplanting, applications every 2-3 weeks	1-2 kg
Seedbeds and Nurseries	From early vegetative phases to crop cycle completion	1 kg

COMPOSITION	
Total nitrogen (N)	1%
Organic soluble nitrogen (N)	1%
Organic Carbon (C), biological origin	10%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	4,2
Conductivity E.C. µS/cm (1‰)	105
Density (g/cm³)	1,09
WAY OF USE	FOLIAR

PACKAGING: 1 - 5 - 10 kg - COMBO PACK

NOTE: *The anti-stress activity of* ***RA.AN L 13186*** *is enhanced by its combination with* ***SKICC.*** *A Combo Pack with the 2 products together is now available.*
RA.AN L 13186 *can be also used in fertigation with the 10-12 kg/ha dose, to be repeated every 10-15 days .*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

RA.AN 13156

ANTI-STRESS ACTIVITY
BIOSTIMULATING ACTIVITY
IMPROVES COLOUR AND SUGAR CONTENT

RA.AN 13156 is a 100% brown (*Ascophyllum nodosum*) seaweed concentrate, obtained with a COLD EXTRACTION process and subsequent condensation of the extracted liquid. With this particular extracting process **RA.AN 13156** preserves all the seaweed bioactive components (amino acids, carbohydrates, vitamins, hormone-like natural substances).

Regular **RA.AN 13156** applications:

- Improve crop hormone balance and nutritional balance
- Improve photosynthetic efficiency for greater yield
- Enable a stronger balance between the vegetative and the reproductive phases
- Have a direct effect on fruit size and uniformity, impacting productivity
- Improve products' quality parameters (sugar content, colour, firmness, shelf-life)

Moreover, the high mannitol and Betainescontents trigger crop resistance to biotic and abiotic adversities. Regular applications of **RA.AN 13156** throughout the crop cycle improve qualitative and quantitative results.

Here the most important **RA.AN 13156**'s components:

- Amino acids > 1,3 %
- Alginic acid > 10%
- Mannitol 4.7%
- Gibberellins and Cytokinins >300 ppm

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Grapes and Kiwifruit	Budding, inflorescence clearly visible, pre-flowering, fruit set, berry/fruit enlargement, veraison (change of color), post-harvest. Whenever it's necessary to overcome a stressful period.	0,5-1 kg	5-10 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	Pre-flowering, post-fruit set, fruit enlargement, veraison (change of color). Whenever it's necessary to overcome a stressful period.	0,5-1 kg	5-10 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	Budding, fruit enlargement, post-harvest. Whenever it's necessary to overcome a stressful period.	0,5-1 kg	5-10 kg
Olive, Walnut, Hazelnut	Pre-flowering, post-fruit set, fruit enlargement, post-harvest. Whenever it's necessary to overcome a stressful period.	0,5-1 kg	5-10 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	Post-transplanting/vegetative restart, pre- and post-flowering, veraison (change of color).	0,5-1 kg	5-10 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Post-transplanting, pre- and post-flowering, pre-veraison (change of color). Whenever it's necessary to overcome a stressful period.	0,5-1 kg	5-10 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	From 4th true leaf to pre-harvest, every two weeks.	0,5-1 kg	5-10 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases. Whenever a prompt vegetative restart is required.	0,5-1 kg	5-10 kg
Flowers and Ornamentals	After transplanting, every 2-3 weeks.	0,5-1 kg	5-10 kg
Seedbeds and Nurseries	From early vegetative phases to crop cycle completion.	0,5 kg	5 kg

COMPOSITION	
Potassium oxide (K_2O)	19%
Organic nitrogen (N)	1%
Betaines	0,1%
Mannitol	4%
Organic Carbon (C), biological origin	20%

PHYSICO-CHEMICAL CHARACTERISTICS		
FLAKES		
pH (sol 1%)		9,4
Conductivity E.C. µS/cm (1‰)		700
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 1 - 5 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

ERGON

bioagricert INPUTS

Adriatica

IMPROVES RESISTANCE TO STRESS
IMPROVES PHOTOSYNTHETIC EFFICIENCY

ERGON is a solution that combines:
- the biostimulating activity of Ascophyllum nodosum seaweed extract, thanks to its content of vitamins, polysaccharides and natural growth promoters
- the energizing activity of the free amino acids derived from epithelium's enzymatic hydrolysis
- the greening activity of iron that being a key element in chlorophyll bio-synthesis, improves also the photosynthetic process

ERGON, readily absorbed thanks to its acidic pH, keeps all the biochemical pathways active. It is therefore recommended on all crops going through either delays or interruptions in vegetative growth caused by stress conditions and whenever the crop is under stress due to high production targets.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days	2-3 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days	2-3 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days	2-3 kg
Strawberries	3-4 applications from the beginning of flowering, every 10-15 days	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	3-4 applications from the beginning of flowering, every 10-15 days	2-3 kg
Flowers and Ornamentals	3 applications from the beginning of flowering, every 10-15 days	2-3 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	At early vegetative phases or whenever a prompt vegetative restart is required	3 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	At early vegetative phases in combination with herbicide/pesticide treatments	3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or whenever a prompt vegetative restart is required	3 kg

COMPOSITION		
Organic nitrogen (N)		4%
Organic soluble nitrogen (N)		3,6%
Organic Carbon (C), biological origin		12%
Iron (Fe)	Soluble in water	3%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	2,9
Conductivity E.C. µS/cm (1‰)	505
Density (g/cm³)	1,1
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 - 25 Kg

***NOTE: ERGON** can be also used in fertigation, with a 1,5-3 kg/1000 m² dose and every 10-12 days.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

NEW

eK-Ion MAX

IMPROVES FRUIT SIZE
STIMULATES ROOT DEVELOPMENT
PROMOTES A BALANCED PLANT GROWTH
IMPROVES COLOUR AND SUGAR CONTENT

eK-Ion MAX is an extract obtained exclusively from a mixture of brown algae.
Thanks to the cold extraction process, which preserves all its bioactive compounds, **eK-Ion MAX** can favorably regulate the plant main physiological processes. **eK-Ion MAX** is indeed a source of polysaccharides, alginates, phlorotannins, polyamines and plant growth regulators that trigger, in the treated plants, tissue growth, more intense flowering, fertilization and fruit set and it can elicit plant natural defences.
Regular applications of **eK-Ion MAX** promote a balanced plant growth, improve fruit size, colour and sugar content, and extend the shelf-life. Moreover, **eK-Ion MAX** stimulates the development of the root system, improving plant nutrients' uptake and resistance against water stress conditions.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Grapes	3 applications: buds of 5-10 cm, pre-flowering, grape of 4-6 mm diameter	3-4 kg	8-10 kg
Kiwifruit	3-4 applications: from pre-flowering, to be repeated every 15 days	3-4 kg	8-10 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	3-4 applications: from pre-flowering, to be repeated every 10-14 days	3-4 kg	8-10 kg
Pome fruits (apple, pear, quince)	Pre-flowering, petals' fall, fruit enlargement starting from 20 mm diameter: applications every 10-15 days	3-4 kg	8-10 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	4-6 applications: from flowering to veraison	3-4 kg	8-10 kg
Strawberries	Soak the seedlings in a 1: 100 solution before transplanting From the beginning of flowering: 2-3 applications at intervals of 15-20 days	3 kg	8-10 kg
Small fruits (blueberry, raspberry, blackberry, currant)	From pre-flowering, 3-4 applications to be repeated every 7-10 days	2-3 kg	6-8 kg
Nut fruits	From flowering of the female inflorescence: 3-5 applications every 15 days	3-4 kg	8-10 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	In the nursery: apply on the seedlings once a week for 2-3 times; soak the seedling tray in a 1:100 solution before transplanting. In the field: starting from 15 days after the transplanting, 2-4 applications at intervals of 15 days	2-3 kg	8-10 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	In the nursery: apply on the seedlings once a week for 2-3 times; soak the seedling tray in a 1:100 solution before transplanting. In the field: starting from 15 days after the transplanting, 2-4 applications at intervals of 15 days	2-3 kg	6-8 kg
Other vegetables (broccoli, cabbage, cauliflower, onion, garlic, leek, fennel, carrot, potato)	In the nursery: apply on the seedlings once a week for 2-3 times; soak the seedling tray in a 1:100 solution before transplanting. In the field: starting from 15 days after the transplanting, 2-4 applications at intervals of 15 days	2-3 kg	6-8 kg
Bean, lentil, pea, soybeans	4 applications: 3 to 5 leaves, pre-flowering, full flowering and at pod's development	2-3 kg	6-8 kg

COMPOSITION	
Organic Carbon (C)	5%
Mannitol	2 g/L

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		6,00
Conductivity E.C. µS/cm (1‰)		15
Density (g/cm³)		1 (±0,05)
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 5 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

GOLD DUST

Adriatica

BIOSTIMULATING EFFECT
ANTI-STRESS EFFECT
CARRIER EFFECT

GOLD DUST is a physiological activator of animal origin characterized by a high free amino acids content and a high presence of short-chain peptides, which are easily absorbed by plants. It activates the plant's main metabolic pathways, it improves the most important physiological processes (flower pollination and fertilization, fruit set, fruit growing and ripening) and it increases the plant's defences against the main stresses of abiotic nature (extreme temperatures, salinity, water stresses, hailstorms, treatment-related phytotoxicities).

GOLD DUST, with its high content in organic nitrogen and free amino acids, promotes and supports a vigorous and harmonious plant's development. When applied from the very first crop phases, **GOLD DUST** supports the cultivation and brings excellent results even in stressful situations.

CROP	APPLICATION TIME	DOSE/ HECTARE*
Grapes and Kiwifruit	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days Repeat 1-2 applications at post-harvest	2-3 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days Repeat 1-2 applications at post-harvest	2-3 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days Repeat 1-2 applications at post-harvest	2-3 kg
Strawberries	Post-transplanting, beginning of flowering, post-fruit set, fruit enlargement	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	3-4 applications from beginning of flowering, every 10-15 days	2-3 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	At early vegetative phases or whenever a prompt vegetative restart is required	3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases in combination with post-emergence treatments, or whenever a prompt vegetative restart is required	3 kg
Flowers and Ornamentals	At vegetative restart and after the summer stasis	2-3 kg
Seedbeds and Nurseries	2-3 applications at the beginning of the crop cycle	2 kg

COMPOSITION	
Total nitrogen (N)	15%
Organic nitrogen (N)	15%
Organic Carbon (C), biological origin	43%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	6,25
Conductivity E.C. µS/cm (1‰)	518
WAY OF USE	FOLIAR

PACKAGING: 3 - 10 Kg

NOTE: GOLD DUST *can be used in fertigation too, in the above-mentioned moments and with a 15-20 kg/ha dose.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

GOLD DUST 10-10-10

SUPPORTS CROP IN THE GROWTH PHASE
HELPS TO OVERCOME TRANSPLANTING STRESS
EXCELLENT IN CASE OF STRESS-RELATED GROWTH DISRUPTION

GOLD DUST 10-10-10 is an organo-mineral NPK fertilizer characterized by a balanced ratio between the fertilizing elements. In its formulation the mineral fraction is combined with the organic one, derived from animal hydrolyzed epithelium, which makes it particularly effective in supporting crops in the first phase of their vegetative cycle.

For this reason, **GOLD DUST 10-10-10 i**s the ideal choice for fertilization of grapes and all fruit trees in the early phases and at the end (post-harvest) of the crop cycle. It is also ideal for fertilization of horticultural crops starting just after the transplanting.

Furthermore, **GOLD DUST 10-10-10** is usefully applied whenever crops face a growth disruption or delay due to adverse environmental conditions.

CROP	APPLICATION TIME	DOSE/ HECTARE*
Grapes and Kiwifruit	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days Repeat 1-2 applications at post-harvest	2-4 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days Repeat 1-2 applications at post-harvest	2-4 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	2-3 applications from vegetative restart to fruit enlargement, every 10-15 days Repeat 1-2 applications at post-harvest	2-4 kg
Strawberries	Post-transplanting, beginning of flowering, post-fruit set, fruit enlargement	2-4 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	3-4 applications from the beginning of flowering every 10-15 days.	2-4 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	At early vegetative phases or whenever a prompt vegetative restart is required	4 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases in combination with post-emergence treatments, or whenever a prompt vegetative restart is required	4 kg
Flowers and Ornamentals	At vegetative restart and after the summer stasis	2-4 kg
Seedbeds and Nurseries	2-3 applications at the beginning of the crop cycle	2 Kg

COMPOSITION		
Total nitrogen (N)		10%
Organic nitrogen (N)		10%
Phosphoric anhydride (P_2O_5)	Soluble in water	10%
Potassium oxide (K_2O)	Soluble in water	10%
Organic Carbon (C), biological origin		28%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	6,84
Conductivity E.C. µS/cm (1‰)	718
WAY OF USE	FOLIAR

PACKAGING: 2 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

NUTRI BIO

IMPROVES PLANT NUTRITIONAL CONDITIONS
IMPROVES SOIL BIOLOGICAL CHARACTERISTICS
HELPS PLANTS TO OVERCOME ABIOTIC STRESS

NUTRI BIO is a liquid fertilizer of natural origin. It is a balanced and optimized mix of peptides and free amino acids and is characterized by a rapid absorption and systemic transfer in all the parts of the plant. The product is used throughout the whole developing cycle of the crops and particularly in the most delicate phenological phases. It is effective against stresses of abiotic nature and positively affects nutrients' absorption, productive performance and fruit quality. If applied in fertigation this product stimulates an intense precocious activity that can help overcome the post-transplanting stress and wherever a fast vegetative recovery is needed. **NUTRI BIO** improves the soil's biological characteristics as it favours the development of beneficial microflora and microfauna.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Grapes	From vegetative restart to flowering and from fruit set to pea-sized berries, every 8-10 days	3-4 kg	25-30 kg
Kiwifruit	From vegetative restart to flowering, and from fruit set to fruit enlargement, every 10-12 days	3-4 kg	25-30 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From vegetative restart to fruit enlargement, 2-3 applications every 10-15 days	3-4 kg	25-30 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From vegetative restart to fruit enlargement, 2-3 applications every 10-15 days	3-4 kg	25-30 kg
Strawberries	From vegetative restart to fruit enlargement, every 10-15 days	3-4 kg	25-30 kg
Walnut and Hazelnut	From vegetative restart to fruit enlargement, 2-3 applications every 10-15 days	3-4 kg	25-30 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-transplanting to fruit set, 2-3 applications every 10-15 days	3-4 kg	25-30 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	From post-transplanting to harvest, every 10-15 days	3-4 kg	25-30 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	In early vegetative phases, or whenever a prompt vegetative restart is required	3-4 kg	25-30 kg
Flowers and Ornamentals	In early vegetative phases every 10-15 days, or whenever a prompt vegetative restart is required	3-4 kg	25-30 kg
Seedbeds and Nurseries	In early vegetative phases	3 kg	25 kg

COMPOSITION	
Total nitrogen (N)	8%
Organic nitrogen (N)	8%
Organic Carbon (C), biological origin	25%

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		6,85
Conductivity E.C. µS/cm (1‰)		325
Density (g/cm³)		1,22
WAY OF USE	**FOLIAR**	**FERTIGATION**

PACKAGING: 6 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

bioagricert INPUTS

EMOFILL L

IMPROVES ROOT MICROBIAL ENVIRONMENT
STIMULATES ROOT GROWTH
ENHANCES PLANT RESPONSE TO ABIOTIC STRESS

EMOFILL L is a liquid organic fertilizer characterized by the presence of animal haemoglobin, which is produced in slaughterhouses according to strict sanitary protocols. The high content of both readily absorbable organic nitrogen and iron in the haemoglobin confer **EMOFILL L** strong anti-stress properties, making it useful in the first vegetative phases. The amino acids and proteins stimulate metabolic activities in the plants, resulting in pronounced tissue growth. **EMOFILL L**, applied through the root system, improves soil vitality and favours the growth of new roots.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Grapes	From vegetative restart to flowering, and from fruit set to pea-sized grape	3-4 kg	25-50 kg
Kiwifruit	From vegetative restart to flowering, and from fruit set to fruit enlargement	3-4 kg	25-50 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	At vegetative restart	3-4 kg	25-50 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From vegetative restart to flowering, and from post-fruit set to fruit enlargement	3-4 kg	25-50 kg
Strawberries	From early vegetative phases to fruit enlargement, every 10-15 days, or whenever a prompt vegetative restart is required	3-4 kg	25-50 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-transplanting to fruit set, and during fruit enlargement	3-4 kg	25-50 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Throughout the whole crop cycle from post-transplanting, every 10-15 days	3-4 kg	25-50 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	In early vegetative phases, or whenever a prompt vegetative restart is required	3-4 kg	25-50 kg
Flowers and Ornamentals	In early vegetative phases, every 10-15 days, or whenever a prompt vegetative restart is required	3-4 kg	25-50 kg
Seedbeds and Nurseries	In early vegetative phases, or whenever a prompt vegetative restart is required	2 kg	20 Kg

COMPOSITION	
Total nitrogen (N)	5%
Organic nitrogen (N)	5%
Organic Carbon (C), biological origin	15%

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		6,6
Conductivity E.C. µS/cm (1‰)		175
Density (g/cm³)		1,12
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 6 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

HUMIFILL L

Adriatica

IMPROVES NUTRIENT UPTAKE
BOOSTS CROP DEVELOPMENT
ENHANCES SOIL FERTILITY

HUMIFILL L is a highly concentrated suspension of active humic substances, consisting of a humo-proteic complex. The appropriate presence of humic and fulvic acids, in a balanced ratio, makes **HUMIFILL L** an efficient formulation both at foliar and root level.

It has a direct nutritive function at foliar level, thanks to its readily available organic nutrients, and an indirect activity that is expressed by increased cell membranes' permeability, which facilitates the epigean absorption of macro- and microelements. At root level **HUMIFILL L** stimulates new growth on roots and triggers the Cation-Exchange Capacity (CEC) with improved micro elements' availability, especially iron and phosphorus.

HUMIFILL L can be applied to limit disorders that might originate from pest control and herbicide applications; in this case the combination with **RA.AN L 13186** is recommended.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Grapes, Citrus (orange, lemon, tangerine, clementine, bergamot), Olive and Kiwifruit	Pre- and post-flowering, fruit enlargement	3-5 kg	25-50 kg
Strawberries	At vegetative restart, fruit enlargement	3-5 kg	25-50 kg
Walnut and Hazelnut	From vegetative restart to fruit enlargement	3-5 kg	25-50 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-emergence or post-transplanting, every 8-10 days	3-5 kg	25-50 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	From post-emergence or post-transplanting to harvest, every 10-15 days	3-5 kg	25-50 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From early vegetative phases	3-5 kg	25-50 kg
Flowers and Ornamentals	From transplanting or emergence, every 8-10 days	3-5 kg	25-50 kg

COMPOSITION	
Organic matter on wet basis	13%
Organic matter on dry matter	61%
Humified organic matter on organic matter	82%
Organic nitrogen (N)	0,7%
C/N ratio	43,5%
Extracting agent: KOH	

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		8,3
Conductivity E.C. µS/cm (1‰)		133
Density (g/cm³)		1,1
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 5 - 25 Kg

***NOTE: HUMIFILL L** can be used for seed treatment on rice, soybeans, potatoes, corn and wheat.*
- Small seeds: 0,8-1 kg/100 kg of seeds
- Large seeds: 0,4-0,5 kg/100 kg of seeds

***HUMIFILL L** can be applied on crop residues (corn stalks, wheat and soybeans stubble, beets leaves and crowns) to foster rapid humification of the organic matter. The dose rate is 8-10 kg/ha, to be uniformly applied on previously chopped residues and before ploughing.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

HUMIFILL PS

PROVIDES ORGANIC MATTER
PROTECTS AND FAVORS SOIL FERTILITY
STIMULATES ROOT UPTAKE

HUMIFLL PS is a 100% highest purity humic extracts formulation. It is recommended for tank mixes with microelements, in particular iron and manganese, as HUMIFILL PS facilitates their availability and root uptake. **HUMIFLL PS**, when added to nutritive solutions, gives good results in hydroponics too. It is also recommended to use in a mix with ordinary fertigation products. In case of transplanting roots, together with the "soil cake", must be soaked in the product mixed in water, with seedlings to be shaken before being planted to eliminate the excess of product. When applied to the soil, either on open field or small plots, it improves the Cation-Exchange Capacity (CEC) and the uptake of available elements, it affects the soil physico-chemical properties by triggering the formation of stable soil aggregates and it favors soil microorganisms' proliferation

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From vegetative restart to flowering and post-fruit set, to favor fruit growth and size	1-2 kg	10-20 kg
Grapes	Vegetative restart, flowering	1-2 kg	10-20 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	Vegetative restart	1-2 kg	10-20 kg
Kiwifruit	Vegetative restart, flowering	1-2 kg	10-20 kg
Strawberries	From early vegetative phases, every 10-15 days, or whenever a prompt vegetative recovery is required	1-2 kg	10-20 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Post-transplanting, pre- and post-flowering, pre-veraison (change of color)	1-2 kg	10-20 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Post-transplanting	1-2 kg	10-20 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	In early vegetative phases	1-2 kg	10-20 kg
Flowers and Ornamentals	From early vegetative phases, or whenever a prompt vegetative recovery is required	1-2 kg	10-20 kg

COMPOSITION	
Organic matter on wet basis	75%
Organic matter on dry matter	85%
Humified organic matter on organic matter	93%
Organic nitrogen (N)	0,9%
C/N ratio	47,2%
Extracting agent: KOH	

PHYSICO-CHEMICAL CHARACTERISTICS		
SOLUBLE POWDER		
pH (sol 1%)		9,3
Conductivity E.C. µS/cm (1‰)		207
WAY OF USE		
	FOLIAR	FERTIGATION

PACKAGING: 1 - 10 Kg

NOTE: HUMIFILL PS *can be used for seed treatment on rice, soybeans, potato, corn and wheat.*
- Small seeds: 200-300 g/100 kg seeds, diluted in given water volume.
- Large seeds: 100-150 g/100 kg seeds, diluted in given water volume.

HUMIFILL PS *can be applied on crop residues (corn stalks, wheat and soybeans stubble, beets leaves and crowns) to foster rapid humification of the organic matter. The dose rate is 2-2,5 kg/ha diluted in 500/1000 litres of water to be uniformly applied on previously chopped residues and before ploughing.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

RADICURE L

FOSTERS ROOT GROWTH AND DEVELOPMENT

Adriatica

NEW

RADICURE L is a product with outstanding biocatalyst activity. The formulation is a specific mix of microelements conceived to promote fast and abundant root production immediately after transplanting or sowing once seeds start to germinate.

In **RADICURE L** the single trace elements are tied to a particular organic complex of exclusively vegetal origin, which is able to stimulate the root development and to reduce post-transplanting stress.
Plant extracts and laevorotatory amino acids (free and combined) have a specific role in protein synthesis, improving the functionality of every single cell which affects and accelerates growth.
The presence of alginates, auxin-like organic compounds, natural cytokinins, pentosans and other polysaccharides in particular strengthen cell metabolism, boost important enzymatic processes and stimulate rhizotaxis favoring abundant rooting.
Moreover, the presence of betaine and microelements, allows plants to overcome stress coming from adverse climate conditions (thermal, drought, saline).

CROP	APPLICATION TIME	DOSE /HECTARE*
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	One application at transplanting In any phenological phase, one application whenever a prompt and abundant root emission is required	25 kg
Flowers and Ornamentals	One application at transplanting In any phenological phase, one application whenever a prompt and abundant root emission is required	25 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	One application at transplanting In any phenological phase, one application whenever a prompt and abundant root emission is required	25 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	One application at transplanting In any phenological phase, one application whenever a prompt and abundant root emission is required	25 kg
Seedbeds and Nurseries	Seedlings' rooting: dip trays Cuttings' rooting: wet after transplanting, repeat after 15 days	200-300 g/hectolitre

COMPOSITION		
Boron (B)	Soluble in water	0,3%
Copper (Cu)	Soluble in water	0,5%
Molybdenum (Mo)	Soluble in water	0,4%
Zinc (Zn)	Soluble in water	0,8%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	4,8
Conductivity E.C. µS/cm (1‰)	136
Density (g/cm³)	1,13
WAY OF USE	FERTIGATION

PACKAGING: 1 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

NEW

SCUDO K

PROTECTS AGAINST SCORCHING AND RUSSETING
MODERATES HEAT-RELATED STRESS
REPELS INSECTS
IMPROVES PRODUCTION QUALITY

SCUDO K is an oligoelement-based product. It exerts both a nutritive activity, due to the presence of boron, manganese and molybdenum, and a protective one on wounds caused by high temperatures coupled with an intense solar radiation.
Its exclusive formulation is based on a specific complex that is 60% bound to a Kaolin support, which enhances the nutritional properties of the single microelements. Boron in particular, when chemically attached to calcium, favors the thickening of cell wall membranes, improving their protection against scorching. Manganese, thanks to its complex oxidative activity, contributes to immobilize free radicals. Molybdenum, in addition to having antioxidant properties, has a role in the change of color (veraison) and ripening physiological processes, with a positive effect on coloring.

Thanks to the presence of specific physical filters such as zinc oxide and kaolin, **SCUDO K** has a strong covering ability that physically reflects sun rays. The resulting lower temperature of the fruit outer surface protects from oxidative stress and other degradative phenomena such as scorching, cracking, russeting in many horticultural and fruit crops. Moreover, the presence of Silicon oxide, together with its typical deposit on the treated surfaces as a thin protective film, prevents pest damage and reduces egg laying by insects.

SCUDO K is finely micronized, avoiding possible abrasions to the equipment. It is therefore good for all kinds of atomizers and can be mixed with most pesticides used in agriculture. The combined use of copper-based products is not recommended, since it reduces shielding.

CROP	APPLICATION TIME	DOSE/HECTARE*
Industrial tomato	From 10-15 mm berry to ripening, 4-6 applications every 6-8 days	4-5 kg
Pome fruits (apple, pear, quince) and pomegranate	From fruit enlargement to pre-harvest, 5-6 applications every 7-8 days	4-5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	From fruit enlargement to pre-harvest, 5-6 applications every 7-8 days	4-5 kg
Olive	From fruit enlargement to pre-harvest, 5-6 applications every 7-8 days	4-5 kg
Pepper, cucumber, melon	Pre-harvest, 2-3 applications every 7-8 days	4-5 kg
Onion	One application after harvesting	10-12 kg
Grapes, Fruit crop and Horticultural crops	In view of warmer days, 2-3 applications every 7-8 days	4-5 kg

COMPOSITION		
Boron (B) total		4,2%
Boron (B)	Soluble in water	1%
Manganese (Mn)	Soluble in water	1,5%
Zinc (Zn) total		1%
Molybdenum (Mo)		0,02%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	7,3
Conductivity E.C. µS/cm (1‰)	95
WAY OF USE	FOLIAR

PACKAGING: 10 Kg

NOTE: *The use of 400-500 L water volume per hectare for the treatment is recommended.*
SCUDO K *can be also used with much higher doses (2-5 kg/100 L water) but with a reduced number of applications (2-3 treatments).*
SCUDO K' *s frequent applications at doses not higher than 1 kg/100 L of water provides an optimal protection to fruits and leaves, thus granting a total and uniform coverage throughout the whole critical period, when burnings due to excessive solar radiation may occur.*
The product can be washed away; the treatment must be repeated in case of rainfall.

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

LEAF-FALL

PROMOTES A UNIFORM LEAF-FALL
PROMOTES MATURITY OF WOODEN PARTS
PROMPTS FAST AND UNIFORM PLANT RECOVERY

LEAF-FALL is a liquid formulation product recommended to induce an early leaf fall in the orchards causing a sudden stop to their vegetative phase. The elements in the formulationfavor a rapid maturity of the wooden parts, preparing plants for the vegetative rest.
This way plants prove to be more resistant to early or untimely temperature drops. When copper and manganese are in their chelated form, they are also absorbed by the wooden parts through the lenticels. The use of this formulation, coupled with adequate nutrition in the post-harvest phase, makes plants ready for a rapid vegetative post-dormancy recovery

LEAF-FALL is applied in plant-nurseries for the defoliation of young grafted trees. This practice is useful to avoid both mechanical injuries on foliage when explanting and foliar transpiration which, without root water uptake, causes dehydration of the young branches.

CROP	APPLICATION TIME	DOSE/ HECTARE*
Fruit crops	At post-harvest; application to be repeated 10-15 days later	6-12 Kg
Nurseries	1-2 applications starting from the first ten days of October every 8-10 days	3-6 kg

COMPOSITION		
Copper (Cu)	Soluble in water	6%
Copper (Cu)	Chelated with EDTA	6%
Manganese (Mn)	Soluble in water	2%
Manganese (Mn)	Chelated with EDTA	2%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6,25
Conductivity E.C. µS/cm (1‰)	260
Density (g/cm³)	1,37
WAY OF USE	FOLIAR

PACKAGING: 6 - 25 Kg

WARNING: *In case of rainfall, repeat the treatment within 8 hours from first application. Apply the product only after harvest is completed.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

NATURAL RESISTANCE INDUCERS

From a sustainable agriculture's perspective, natural inducers are a fundamental tool in biological, integrated and in traditional agricultural management, which aims at reducing the number of treatments and residue levels at harvest. By making plants more reactive to external stimuli, resistance inducers give crops stronger tolerance to (abiotic and biotic) stress. Resistance inducers make it possible to employ more environmentally friendly spraying programs with reduced applications of conventional chemical products and keeping the treated quantity of copper and sulphur within allowed limits.
Resistance inducers are "substances" that either activate or increase resistance (or defence) gene expression in the cells of the various plant tissues. These "substances" are called "ELICITORS" and stimulate those processes which plants naturally employ to defend themselves from pathogens and environmental stress.
These defence mechanisms can be either physical or biochemical or both. Physical protection is manifested by the thickening of tissues and cell walls, with the objective to stop the spread of infections. Biochemical protection is given by the production of compounds with antifungal and antibacterial properties (such as Phytoalexins and hydrolytic enzymes) and by the activation of specific genes inducing a defence reaction known as systemic acquired resistance (SAR).
There are various kinds of resistance inducers: non-pathogenic microorganisms that can colonise the surface of roots and plants, microorganisms used as microbial opponents, various chemicals (both synthetic and natural) that simulate the presence of a pathogen or are similar to cell signalling molecules that activate resistance. Among all resistance inducers, Chitosan stands out thanks to its natural origin and complete biodegradability.

K-Adriatica's line of NATURAL RESISTANCE INDUCERS includes:

CHITO K 500
HENDOPHYT PS
KODENS LINE
KODENS Cu
KODENS Cu 12-6
KODENS Cu Gel formulation

CHITOSAN

Chitosan is an organic polymer derived from chitin, a major constituent of the exoskeleton of many arthropods such as insects and crustaceans but also present in the cell walls of fungi
Different types of chitosan are available and they differ from one another in molecular mass (MM), deacetylation degree (DD) and viscosity.

These are the most common chitosan products available, differing from one another based on the weight of the polysaccharide chain:

- High Molecular Mass Chitosan: 375-310 kDa; GD >75%; cP 800-2000
- Medium Molecular Mass Chitosan: 310-190 kDa; GD >75-85%; cP 200-800
- Low Molecular Mass Chitosan: 190-50 kDa; GD >85%; cP 20-300

These structural differences are important in determining chitosan's physico-chemical and biological properties.
It has been proved that Low Molecular Mass Chitosan has high biological properties.

All K-Adriatica NATURAL RESISTENCE INDUCERS are based on Low Molecular Mass Chitosan.

CHITO K 500

RESISTANCE INDUCER
IMPROVES PLANT VITALITY
INCREASES CROP PERFORMANCE

Adriatica

NEW

CHITO K 500 is a 5% chitosan-based formulation. Chitosan's application triggers plant endogenous defence reactions. It activates both physical and biochemical protection mechanisms, through the release of phytoalexins and the induction of Systemic Acquired Resistance (SAR). Moreover, chitosan triggers a priming effect, a physiological state that enables plants to respond more rapidly and more robustly after exposure to fungal infections.

The regular application of **CHITO K 500** forms a protective layer on the treated part that reduces evapo-transpiration, especially at high temperatures, and increases cell turgidity with greater resistance to humidity and rain-related damage.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Fruit crops	4-8 applications, every 2 weeks	2-4 L
Horticultural crops	4-8 applications, every 2 weeks	1-2 L
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	4-8 applications, every 2 weeks	2-4 L
Spices and Aromatic herbs	4-8 applications, every 2 weeks	1-2 L
Fodder and forage crops (alfalfa, clover, grass)	4-8 applications, every 2 weeks	1-2 L
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale), Potato	Seed treatment	1-2 L/hectolitre
Beets	Seed treatment	1-4 L/hectolitre

COMPOSITION
5% Chitosan solution

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	3,1
Conductivity E.C. µS/cm (1‰)	30
Density (g/cm³)	1
WAY OF USE	
	FOLIAR

PACKAGING: 6-10-25 Kg

NOTE: *A water quantity in the amount of 200/400 L per hectare is recommended.*
CHITO K 500 *can be also used in fertigation with a 10-15 kg/ha dose, with 2-week interval applications, to improve root development and to increase plant resistance to nematodes, bacteria and fungi.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

HENDOPHYT PS

ACTIVATES THE NATURAL RESISTANCE MECHANISMS
IMPROVES END PRODUCT QUALITY
FAVORS HEALING
PROMPTS LONGER SHELF-LIFE

HENDOPHYT PS is a totally soluble wettable powder product with a high concentration of polyglucosamines, which are responsible for the activation of plants' natural defences.
When dissolved in water, thanks to its high viscosity **HENDOPHYT PS** deposits a thin layer of product or biofilm (a transpiring biodegradable layer) on the treated part that causes:
- a reduction of evapo-trasnpiration, especially when the air temperature is high
- plants to be more resistant to humidity- or rain-related damages
- resistance to cracking in sensitive varieties, particularly under heavy rainfall
- reduction of physiological oxidation
- increase of tissue turgidity

HENDOPHYT PS has a role in inducing Callose deposition and Lignin synthesis, which makes the product particularly indicated to treat plants and trees that have been injured during pruning or that bear other mechanical injuries, with the biofilm protecting against external agents.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	10-15 days before harvest. If necessary repeat after 2 weeks.	1-1,5 kg
Kiwifruit	1 application at pre-flowering, to be repeated at flowering. When leaves fall, 1 application every 30 days until the end of winter.	1-1,5 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	10-15 days before harvest. If necessary repeat after 2 weeks.	1-1,5 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	At vegetative restart, 1 application every 20 days until harvest. When leaves fall, 1 application every 30-40 days until the end of winter.	1-1,5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	10-15 days before harvest. If necessary repeat after 2 weeks.	1-1,5 kg
Walnut	At vegetative restart, 1 application every 20 days until harvest. When leaves fall, 1 application every 30-40 days until the end of winter.	1-1,5 kg

COMPOSITION	
Polysaccharides	60%
Amino acid complex	2%
Citric Acid	6%
Organic Carbon (C)	35%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	4,61
Conductivity E.C. µS/cm (1‰)	420
WAY OF USE	
	FOLIAR

PACKAGING: 0,5 Kg

NOTE: *It is recommended to use a water volume of 200-400 L per hectare.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

KODENS LINE

Adriatica

ACTIVATES NATURAL RESISTANCE MECHANISMS
STRENGHTENS PLANT NATURAL DEFENCES
IMPROVES CROP PHYSIOLOGICAL CONDITIONS
PROTECTS WITH REDUCED COPPER DOSE RATES

The **KODENS LINE** of products is made of nutritional specialities that target the crops' general conditions and their balanced growth. It contains Gluconic Acid, a natural complexing agent that speeds nutrients' uptake and translocation through the sap with the effect to stimulate photosynthesis, acting as a powerful plant anti-stress.

In all formulations, copper, sulfur and boron ions are strengthened by the presence of biopolymers. The product forms a thin layer on the treated parts (biodegradable transpiring film) warranting highest efficacy even in the toughest agronomic and pedoclimatic conditions.

The systematic use of the product stimulates production of endogenous secondary metabolites, which trigger the crop's natural resistance to the development of fungi, bacteria and viruses.

The **KODENS LINE** includes:

KODENS Cu
KODENS Cu 12-6
KODENS Cu Gel formulation

Adriatica

KODENS Cu

ACTIVATES NATURAL DEFENCE MECHANISMS
TRIGGERS HEALING PROCESSES
IMPROVES RESISTANCE TO DISEASES AND ENVIRONMENTAL ADVERSITIES
PROTECTS WITH REDUCED COPPER DOSE RATES

KODENS Cu is a nutritional specialty that target the crops' general conditions and activates their natural resistance mechanisms.
It contains copper complexed by gluconic acid, which is a natural complexing agent that speeds nutrients' uptake and translocation through the sap with the effect to stimulate photosynthesis, acting as a powerful plant anti-stress. This allows you to maximize results already at low dosages.

KODENS Cu contains also boron that determines a greater lignification of the tissues and a greater strengthening of the stem, thus increasing the mechanical resistance to damages caused by biotic and abiotic agents.
The formula is completed by the presence of a high amount of natural biopolymers that stimulates production of endogenous secondary metabolites, triggering the crop's natural resistance to the development of fungi, bacteria and viruses and also forms a thin layer on the treated parts (biodegradable transpiring film) warranting highest efficacy even in the toughest agronomic and pedoclimatic conditions.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Walnut and Hazelnut	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Strawberries	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Flowers and Ornamentals	Throughout the whole crop cycle, every 15-20 days	1-1,5 kg
Seedbeds and Nurseries	Throughout the whole crop cycle	1-1,5 kg

COMPOSITION		
Boron (B)	Soluble in water	0,2%
Copper (Cu)	Soluble in water	5,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	5,3
Conductivity E.C. µS/cm (1‰)	402
WAY OF USE	FOLIAR

PACKAGING: 1 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

KODENS Cu 12-6

STRENGHTENS PLANT NATURAL DEFENCES
IMPROVES CROP PHYSIOLOGICAL CONDITIONS
PROTECTS WITH REDUCED COPPER DOSE RATES

KODENS Cu 12-6 is a nutritional specialty that target the crops' general conditions and improves their response to environmental stress.

It contains copper complexed by gluconic acid. This is a natural complexing agent that speeds nutrients' uptake and translocation through the sap with the effect to stimulate photosynthesis, acting as a powerful plant anti-stress. This allows you to maximize results already at low dosages.

KODENS Cu 12-6 contains also boron and sulfur. Boron, causing a greater lignification of the tissues and a greater strengthening of the stem, increases the mechanical resistance to damages caused by biotic and abiotic agents. Sulfur in turn strengthens the plant and improves its resistance against fungal diseases.

The formula is completed by the presence of a natural biopolymers that stimulates production of endogenous secondary metabolites, which trigger the crop's natural resistance to the development of fungi, bacteria and viruses and also forms a thin layer on the treated parts (biodegradable transpiring film) warranting highest efficacy even in the toughest agronomic and pedoclimatic conditions.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	From fruit growth to harvest, 2-3 applications every 15-20 days. When leaves fall, 2 applications every 15-20 days.	1-1,5 kg
Kiwifruit	From sprouting to fruit diameter up to 40 mm, 2-3 applications every 15 days. When leaves fall, 2 applications every 15-20 days.	1-1,5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	Throughout the whole crop cycle.	1-1,5 kg
Pome fruits (apple, pear, quince)	From fruit growth to harvest, 2-3 applications every 15-20 days. When leaves fall, 2 applications every 15-20 days.	1-1,5 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	From sprouting to pit hardening, 2-3 applications every 15 days. When leaves fall, 2 applications every 15-20 days.	1-1,5 kg
Strawberries	Throughout the whole crop cycle.	1-1,5 kg
Walnut and Hazelnut	Throughout the whole crop cycle.	1-1,5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Throughout the whole crop cycle.	1-1,5 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Throughout the whole crop cycle.	1-1,5 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane) (pomodoro, tabacco, soia, girasole, cotone, Beets)	Throughout the whole crop cycle.	1-1,5 kg
Flowers and Ornamentals	Throughout the whole crop cycle.	1-1,5 kg

COMPOSITION		
Sulfuric anhydride (SO_3)	Soluble in water	6%
Boron (B)	Soluble in water	0,3%
Copper (Cu)	Soluble in water	12%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	5,02
Conductivity E.C. µS/cm (1‰)	348
WAY OF USE	FOLIAR

PACKAGING: 1 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

KODENS Cu Gel formulation

IMPROVES CROP PHYSIOLOGICAL CONDITIONS
INCREASES RESISTANCE TO DISEASES AND ENVIRONMENTAL ADVERSITIES
HIGH EFFICACY WITH REDUCED COPPER DOSE RATES

KODENS Cu Gel formulation is a nutritional specialty that target the crops' general conditions and their balanced growth.

It contains copper complexed by gluconic acid. This is a natural complexing agent that speeds nutrients' uptake and translocation through the sap with the effect to stimulate photosynthesis, acting as a powerful plant anti-stress. This allows you to maximize results already at low dosages.
The anti-stress action is enhanced by the presence of boron, which causes a greater lignification of the tissues and a strengthening of the stem, thus increasing plant mechanical resistance to damages caused by biotic and abiotic agents.

Its gel formulation makes **KODENS Cu Gel formulation** a product with high wettability, adhesiveness and assimilation through the cuticle. Thanks to its activity, selectivity and resistance to leaching, it ensures a better and prompt nutrient assimilation by the plant. The uniqueness of the formulation allows to obtain a rapid availability of the active principle associated with a continuous and gradual release of copper ions. Therefore, by combining promptness and persistence of action, the highest efficacy of the treatment is guaranteed even in the toughest agronomic and pedoclimatic conditions.
The systematic use of the product induces a marked elicitor action (endogenous production of secondary metabolites), which triggers the crop's natural resistance to the development of fungi, bacteria and viruses.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	Throughout the whole crop cycle	2-3 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	Throughout the whole crop cycle	2-3 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	Throughout the whole crop cycle	2-3 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	Throughout the whole crop cycle	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Throughout the whole crop cycle	2-3 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Throughout the whole crop cycle	2-3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Throughout the whole crop cycle	2-3 kg
Flowers and Ornamentals	Throughout the whole crop cycle	2-3 kg
Protected crops (Fruit crops, Horticultural crops, Flowers, Ornamentals)	Throughout the whole crop cycle	2-3 kg
Seedbeds and Nurseries	Throughout the whole crop cycle	2 Kg

COMPOSITION		
Boron (B)	Soluble in water	0,2%
Copper (Cu)	Soluble in water	6%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	4,82
Conductivity E.C. µS/cm (1‰)	340
Density (g/cm³)	1,4
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MANAGEMENT OF THE RHIZOSPHERE

Adriatica

Wrong agricultural practices and local effects of climate change are some of the factors that may activate a severe soil degradation process leading to a partial or even complete loss of its properties the extent of which becomes evident when the process is either irreversible or in such an advanced state to require huge efforts in terms of money and time to be reversed. According to FAO, 33% of soils are degraded and with salinity, compactness, acidification and lack of nutrients problems. The direct consequence on the agricultural system is a progressive loss of crops' productivity.

A more rational and eco-friendly soil management, with beneficial effects on the rooting system, is necessary to guarantee optimal productive levels.
With this in mind K-Adriatica has developed solutions where polyphenols and organic acids, coupled with an accurate selection of mycorrhiza and bacteria, allow the improvement of the soil's structure, the acidification of soils with a high pH, the reduction of damage due to salinity excesses and the restoration of a proper soil-plant balance.

K-Adriatica's recommendations to keeping the rhizosphere active are:

GEOSAN LINE

GEOSAN MICRO NP 6,5-24,5
GEOSAN L NPK 8-6-6
GEOSAN L
GEOSAN PS NPK 4 0 8

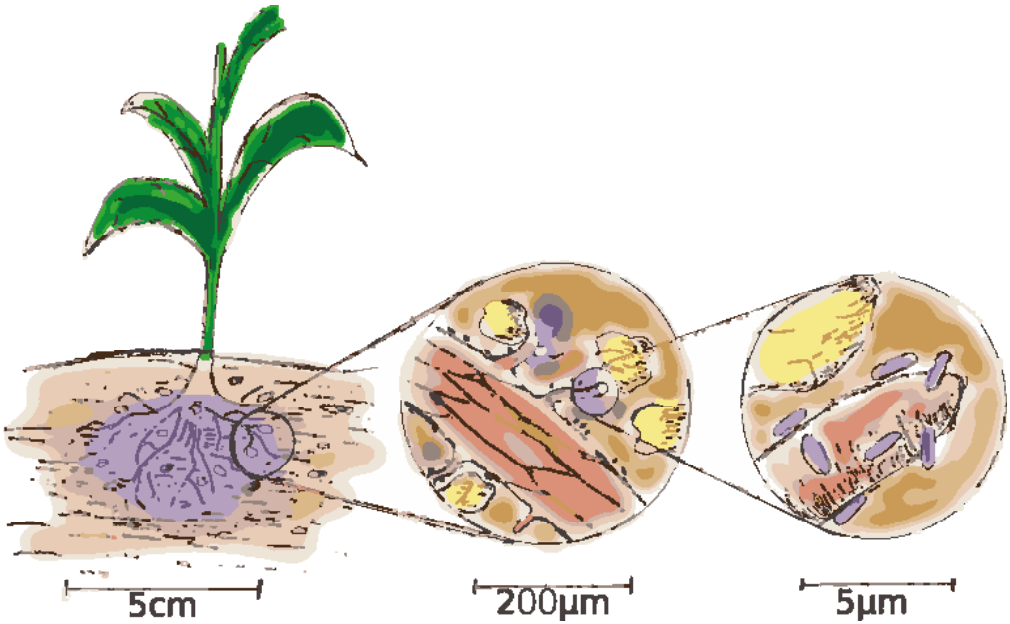
BIOACTIVATED LINE

NEMASPOR GR 1036
MICOPLAS GR SOIA

IN-DEPTH ANALYSIS

RHIZOSPHERE

The term "rhizosphere" is used to describe an enclosed soil area surrounding the roots and that is actively influenced by the plant. The rhizosphere can be defined as a real "complex system", whose physico-chemical characteristics are substantially different from those of other parts of the soil. The rhizosphere is that part of the soil where the interactions between the plant roots, microorganisms and the substances in the soil's particles occur. It is fundamental for these parts to keep a right balance, so that the targeted production goals are met. An alteration of this balance is indeed associated with an alteration of the soil's structure, to a reduction of the microbial activity and to nutrients' depletion. This translates into a stunted growth, reduced flowering and fruit set and to a delayed production, resulting in lower harvest quantity and quality.



GEOSAN LINE

Adriatica

IMPROVES THE ROOTING SYSTEM
CONTRASTS THE EFFECTS OF SOIL EXHAUSTION
REDUCES THE DAMAGES CAUSED BY ROOT PARASITES

The **GEOSAN LINE** is a range of products characterized by a nutritive and bio-strengthening activity in the rhizosphere.

The mineral component, made of single elements, works together with the organic one, which is made of chestnut tannin-rich selected polyphenols. This particular formulation maximises the polyphenol complexing properties with the effect to promote root growth and nutrient uptake, also in soils affected by exhaustion.
Moreover the polyphenolic complex improves soil's structure, the acidification of soils with excessive pH and prevents salinity-related damages.

Thanks to the stimulating activity on the development of the useful microflora (microbic antagonists), the products of the **GEOSAN LINE** limit the proliferation of damaging pathogenic agents and contribute to limit the development and multiplication of (phytophagous) nematodes, which are responsible for plant root damage. Regular applications improve soil's vitality and promote crop development.

The **GEOSAN LINE** includes:

GEOSAN MICRO NP 6,5-24,5
GEOSAN L NPK 8-6-6
GEOSAN L
N GEOSAN PS NPK 4 0 8

GEOSAN MICRO NP 6,5-24,5

PROMOTES RHIZOGENESIS
STIMULATES ROOT DEVELOPMENT
IMPROVES MINERAL ELEMENTS UPTAKE
REDUCES DAMAGE DUE TO ROOT PARASITES

GEOSAN MICRO NP 6,5-24,5 is a microgranular fertilizer with "starter" effect based on nitrogen, phosphorus, zinc and boron, characterized by a nutritive and bio-strengthening activity in the rhizosphere.

This particular formulation maximises the polyphenol complexing properties with the effect to promote root growth and nutrient uptake, also in soils affected by exhaustion. Moreover the polyphenolic complex improves soil's structure, the acidification of soils with excessive pH and prevents salinity-related damages.

Thanks to the stimulating activity on the development of the useful microflora (microbic antagonists), **GEOSAN MICRO NP 6,5-24,5** limits the proliferation of damaging pathogenic agents and contributes to limit the development and multiplication of (phytophagous) nematodes, which are responsible for plant root damage. Regular applications improve soil's vitality and promote crop development.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	At transplanting or at vegetative restart	50 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At transplanting or at vegetative restart	50 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Localized at transplant	50 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Localized at transplant	50 kg
Flowers and Ornamentals	Localized at transplant	50 kg

COMPOSITION	
Total nitrogen (N)	6,5%
Organic nitrogen (N)	1%
Ammoniacal nitrogen (N)	5,5%
Phosphoric anhydride (P_2O_5) Total	24,5%
Phosphoric anhydride (P_2O_5) Soluble in neutral ammonium citrate and water	24,5%
Phosphoric anhydride (P_2O_5) Soluble in water	22%
Boron (B)	0,1%
Molybdenum (Mo)	0,002%
Zinc (Zn)	0,8%
Organic Carbon (C), biological origin , activated with 1% humic extracts	7,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
MICROGRANULAR	
pH (sol 10%)	3,4
Conductivity E.C. µS/cm (1‰)	490
Specific weight	0,77
Granulometry	0,8-1,2 mm
WAY OF USE	
	SOIL

PACKAGING: 15 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

GEOSAN L NPK 8-6-6

Adriatica

IMPROVES ROOT DEVELOPMENT
CONTRASTS SOIL'S EXHAUSTION
REDUCES DAMAGE CAUSED BY ROOT PARASITES

GEOSAN L NPK 8-6-6 is a liquid NPK fertilizer, suitable for fertigation, characterized by a nutritive and bio-strengthening activity in the rhizosphere. This particular formulation maximises the polyphenol complexing properties with the effect to promote root growth and nutrient uptake, also in soils affected by exhaustion. Moreover the polyphenolic complex improves soil's structure, the acidification of soils with excessive pH and prevents salinity-related damages.

Thanks to the stimulating activity on the development of the useful microflora (microbic antagonists), **GEOSAN L NPK 8-6-6** limits the proliferation of damaging pathogenic agents and contributes to limit the development and multiplication of (phytophagous) nematodes, which are responsible for plant root damage. Regular applications improve soil's vitality and promote crop development.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	From vegetative restart every 20 days	1st application: 80 kg From 2nd application: 40 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From vegetative restart every 20 days	1st application: 80 kg From 2nd application: 40 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-transplanting every 20 days	1st application: 80 kg From 2nd application: 40 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From post-transplanting every 20 days	1st application: 80 kg From 2nd application: 40 kg
Flowers and Ornamentals	From post-transplanting every 20 days	1st application: 80 kg From 2nd application: 40 kg

COMPOSITION		
Total nitrogen (N)		8%
Nitric nitrogen (N)		1,1%
Urea nitrogen (N)		6,9%
Phosphoric anhydride (P_2O_5)Total		6%
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammonium citrate and in water	6%
Potassium oxide (K_2O)	Soluble in water	6%
Sulfuric anhydride (SO_3)	Soluble in water	5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 10%)	7
Conductivity E.C. µS/cm (1‰)	870
Density (g/cm³)	1,25
WAY OF USE	
	FERTIGATION

PACKAGING: 20Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

GEOSAN L

IMPROVES ROOT SYSTEM DEVELOPMENT
PREVENTS ISSUES RELATED TO HIGH SALINITY
IMPROVES RESISTANCE TO ROOT PARASITES

GEOSAN L is a liquid fertilizer, suitable for fertigation, characterized by a nutritive and bio-strengthening activity in the rhizosphere. This particular formulation maximises the polyphenol complexing properties with the effect to promote root growth and nutrient uptake, also in soils affected by exhaustion. Moreover the polyphenolic complex improves soil's structure, the acidification of soils with excessive pH and prevents salinity-related damages.

Thanks to the stimulating activity on the development of the useful microflora (microbic antagonists), **GEOSAN L** limits the proliferation of damaging pathogenic agents and contributes to limit the development and multiplication of (phytophagous) nematodes, which are responsible for plant root damage. Thanks to the contribution in calcium and magnesium, regular applications of **GEOSAN L** throughout the crop cycle improve soil vitality and promote a vigorous development of the crop, even in saline soils.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	From pre-flowering every 20 days	1st application: 80 kg From 2nd application: 40 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From pre-flowering every 20 days	1st application: 80 kg From 2nd application: 40 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-flowering every 20 days	1st application: 80 kg From 2nd application: 40 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From pre-flowering every 20 days	1st application: 80 kg From 2nd application: 40 kg
Flowers and Ornamentals	From post-transplanting every 20 days	1st application: 80 kg From 2nd application: 40 kg

COMPOSITION		
Calcium oxide (CaO)	Soluble in water	8,5%
Magnesium oxide (MgO)	Soluble in water	1,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 10%)	3,5
Conductivity E.C. µS/cm (1‰)	960
Density (g/cm³)	1,41
WAY OF USE	
	FERTIGATION

PACKAGING: 20Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

GEOSAN PS NPK 4 0 8

IMPROVES ROOT SYSTEM DEVELOPMENT
CONTRASTS SOIL EXHAUSTION
IMPROVES RESISTANCE TO ROOT PARASITES

NEW

GEOSAN PS NPK 4 0 8 is a powder soluble fertilizer, suitable for fertigation, characterized by a nutritive and bio-strengthening activity in the rhizosphere. This particular formulation maximises the polyphenol complexing properties with the effect to promote root growth and nutrient uptake, also in soils affected by exhaustion. Moreover the polyphenolic complex improves soil's structure, the acidification of soils with excessive pH and prevents salinity-related damages.

Thanks to the stimulating activity on the development of the useful microflora (microbic antagonists), **GEOSAN PS NPK 4 0 8** limits the proliferation of damaging pathogenic agents and contributes to limit the development and multiplication of (phytophagous) nematodes, which are responsible for plant root damage. Regular applications improve soil's vitality and promote crop development.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	From vegetative restart every 20 days	1st application: 50 kg From 2nd application: 25 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From vegetative restart every 20 days	1st application: 50 kg From 2nd application: 25 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-transplanting every 20 days	1st application: 50 kg From 2nd application: 25 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From post-transplanting every 20 days	1st application: 50 kg From 2nd application: 25 kg
Flowers and Ornamentals	From post-transplanting every 20 days	1st application: 50 kg From 2nd application: 25 kg

COMPOSITION		
Total nitrogen (N)		4%
Organic nitrogen (N)		4%
Potassium oxide (K_2O)	Soluble in water	8%
Organic Carbon (C), biological origin		12%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	4,6
Conductivity E.C. µS/cm (1‰)	365
WAY OF USE	
	FERTIGATION

PACKAGING: 10 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

BIOACTIVATED LINE

Adriatica

This is a range of products that groups together *Mycorrhiza*, soil bacteria and *Trichoderma*, in a microgranular formulation (created to support the plant in its growing phases), which increases the plant's nutrients and water uptake capacity and triggers the production of phytostimulating compounds that have an antagonist activity against various pathogens.

The synergistic activity of the various microorganisms determines:

- Greater volume of soil reached by the roots
- Better solubilization of nutritive compounds
- Immediate availability of nutritive substances
- Increase in vegetative lushness
- Improved absorption capacity of mineral elements
- Higher plant resistance to abiotic stress (drought, high and low temperatures)
- Tolerance to soil and climate unfavorable conditions
- Colonization of ecological niches before the arrival of potentially unwanted microorganisms

The products of the BIOACTIVATED LINE are fundamental for the maintenance and regeneration of soil microbiological biodiversity balances.

The BIOACTIVATED LINE includes:

NEMASPOR GR 1036
MICOPLAS GR SOIA

Adriatica

NEMASPOR GR 1036

ENRICHES THE MICROBIAL POPULATION OF THE RHIZOSPHERE
PROMOTES THE SOLUBILIZATION OF THE ELEMENTS
PROVIDES NUTRIENTS TO THE SOIL
PROMOTES RHIZOGENESIS AND ROOT ABSORPTION
SUPPORTS PLANT DEVELOPMENT IN ADVERSE CONDITIONS

NEMASPOR GR 1036 is a bioactivated microgranular fertilizer containing a consortium of microorganisms composed of:

- endomycorrhizal fungi of the genus *Glomus*, capable of establishing a symbiotic relationship with the plant in the rhizosphere;
- antagonistic fungi of the genus *Trichoderma*, capable of producing antibiotics and acting as disturbing agents against the growth of other pathogens;
- rhizosphere bacteria of the genus *Bacillus*, which stimulate the growth of the root system, as well as inhibiting the development of some phytopathogens.

Thanks to the synergistic action of the various microorganisms and their presence in large quantities, **NEMASPOR GR 1036** acts as a "bioactivator" of the rhizosphere, increasing its microbial activity and improving the availability of nutrients. This promotes root development and improves plant's nutrient and water uptake efficiency, with a consequent increase in vegetative lushness and a general stimulation of growth.

The beneficial effects of **NEMASPOR GR 1036** application and rhizosphere "bioactivation" also affect the endogenous resistance levels of the plants, which are more tolerant to abiotic stress or to unfavorable climatic and/or soil conditions.

The application of **NEMASPOR GR 1036** allows to maintain and regenerate soil microbiological biodiversity balances.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	At transplanting or at vegetative restart	50 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At transplanting or at vegetative restart	50 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Localized at transplanting/sowing	50 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Localized at transplanting/sowing	50 kg
Flowers and Ornamentals	Localized at transplanting/sowing	50 kg
Extensive crops	Localized at planting/transplantation	50 kg

COMPOSITION	
Glomus spp.	0,02% p/p
Bacillus spp.	2x10e^6 ufc/g
Bacillus megaterium	
Bacillus pumilus	
Bacillus subtilis/methylotrophycus	
Trichoderma harzianum	1x10e^5 ufc/g

PHYSICO-CHEMICAL CHARACTERISTICS	
MICROGRANULAR	
pH (sol 1%)	5,7
Conductivity E.C. µS/cm (1‰)	655
Specific weight	0,88
Granulometry	0,8-1,2 mm
WAY OF USE	
	SOIL

PACKAGING: 15 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MICOPLAS GR SOIA

Adriatica

IMMEDIATE STARTER EFFECT
SUPPORTS RHIZOGENESIS AND ROOT ABSORPTION
PROMOTES THE FORMATION OF ABUNDANT ROOT NODULES
FAVORS A BALANCED DEVELOPMENT OF THE CROP

MICOPLAS GR SOIA is a microgranular fertilizer created to support soybeans from the early stages of seed germination. Characterized by a high content of readily usable phosphorus and the presence of zinc, **MICOPLAS GR SOIA** has an immediate "starter" effect, favoring the formation of an abundant root system.

The presence of an inoculum of Rizobium spp. promotes the formation of abundant root nodules. Molybdenum, then, promotes the synthesis of nitrogenase and stimulates the activity of the bacteria, significantly improving crop absorption of atmospheric nitrogen.

The application of **MICOPLAS GR SOIA** at sowing, creates an optimal environment at the seed level for root development and for abundant nodules formation that will support the plant throughout the cycle, preparing it for high yields.

CROP	APPLICATION TIME	DOSE/HECTARE*
Soybeans	Localized at sowing	30-60 kg

COMPOSITION	
Glomus spp.	0,004% p/p
Rhizobium spp.	4x10e^{7} ufc/g
Trichoderma harzianum	1x10e^{6} ufc/g

PHYSICO-CHEMICAL CHARACTERISTICS	
MICROGRANULAR	
pH (sol 1%)	5,7
Conductivity E.C. µS/cm (1‰)	655
Specific weight	0,88
Granulometry	0,8-1,2 mm
WAY OF USE	
	SOIL

PACKAGING: 15 Kg

Soybean plants and nodules with nitrogen-fixing bacteria (*Rhizobium spp.)*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

RIPENING INDUCERS

Adriatica

Ripening is a particularly delicate phase for fruits. At this phase the activation of complex metabolic processes sets off the changes in taste and compactness, thus making the fruit edible.
This moment is characterized by high energetic needs and requires a right balance between the vegetative and reproductive apparatuses to obtain the utmost, in terms of quality. At this phase the plant must be supported with specific products.

K-Adriatica's RIPENING INDUCERS line includes a range of products for both foliar application and fertigation. Thanks to the high potassium content, alone or in combination with different rates of phosphorus (1:1,3; 1:10) and with or without microelements, these products promote the plant's balanced and robust development without incurring in excessive vigour. They improve output quality parameters such as: color, taste, sugar content, aroma, shelf-life and precocity.

K-Adriatica's RIPENING INDUCERS line include:

BIO-BRIX
HYDRO KOMBY 40
POLIFILL PK ALPHA 21-27
FILL PK PLUS
FILL BRIX SPECIAL PK 6-60
FILL K 40 + 4MgO

THE ROLE OF POTASSIUM IN FRUIT RIPENING

Potassium is absorbed by the plants in significant quantities, sometimes even higher than nitrogen. It performs a fundamental role in carbohydrates' synthesis and translocation, in regulating the tissues' turgor and in transpiration. It can also be found in high quantity in meristematic tissues where it exerts its role in cell division activity.

Potassium plays another fundamental role in the fruits' final quality. During the last ripening phases potassium boosts photosynthesis with a direct effect on the increase of sugar content and, indirectly, protein. Harvested fruit has better taste and improved texture, thus allowing for prolonged shelf-life in post-harvest when important product losses occur, especially on peaches and apricots. Its beneficial effects are particularly appreciated on stone fruits, kiwifruit and grapes. Kiwifruit in particular, when given the right amount of potassium, produce thick textured and more resisting fruits with excellent sugar and organoleptic quality levels suitable to satisfy demanding market expectations. On wine grapes , the metabolic processes enhanced by potassium maximize sugar content and a multitude of substances that make wines more appreciated.

BIO-BRIX

Adriatica

FAVORS THE ACCUMULATION OF SUGAR IN THE FRUITS
INCREASES THE CONTENT OF DRY MATTER
PREPARES THE PLANT FOR ITS VEGETATIVE REST

BIO-BRIX is the ORGANIC solution that is formulated to improve the fruits' ripening process and to prepare the plant to its vegetative rest. **BIO-BRIX**, which must be applied at the crop's final phase, promotes sugar accumulation in the fruits, thus increasing its dry matter and its shelf-life. Its organic component, together with the important magnesium content, supports photosynthesis through to the crops' final phases, favoring the accumulation of reserve substances. Moreover, the high potassium content improves the lignification process of the branches and protects the vegetative and floral tips from returns of cold weather.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	From pre-veraison (change of color) to ripening	4-5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From pre-veraison (change of color) to ripening	4-5 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From pre-veraison (change of color) to ripening	4-5 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From pre-veraison (change of color) to ripening	4-5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-veraison (change of color) to ripening	4-5 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From pre-veraison (change of color) to ripening	4-5 kg

COMPOSITION		
Total nitrogen (N)		3%
Organic nitrogen (N)		3%
Organic Carbon (C), biological origin		7,5%
Potassium oxide (K_2O)	Soluble in water	33%
Magnesium oxide (MgO)	Soluble in water	3%
Sulfuric anhydride (SO_3)	Soluble in water	33%
Manganese (Mn)	Soluble in water	0,1%
Molybdenum (Mo)	Soluble in water	0,05%
Zinc (Zn)	Soluble in water	0,3%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	4
Conductivity E.C. µS/cm (1‰)	1430
WAY OF USE	FOLIAR

PACKAGING: 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

HYDRO KOMBY 40

IMPROVES FRUIT UNIFORMITY AND SIZE
IMPROVES BRIX DEGREE LEVELS
REDUCES VEGETATIVE VIGOUR

HYDRO KOMBY 40 is the nutritional solution that is applied to the roots to improve product quality parameters like: uniformity, color, taste, sugar level, aromas, shelf-life and precocity.
The specific phosphorus and potassium ratio and the presence of chelated microelements (to prevent damaging deficiencies that could undermine production) make **HYDRO KOMBY 40** the ideal product to guide and support the crops' development and production targets, from fruit-set to ripening. It is necessary even when excessive development must be checked or when growth must be forcibly blocked.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	To improve size: 2 applications from fruit enlargement, every 10-15 days interval To improve ripening: 2 applications from pre-veraison (change of color), every 10-15 days	25-50 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	2-3 applications from fruit enlargement, every 10-15 days	25-50 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	To improve size: 2 applications from fruit enlargement, every 10-15 days interval To improve ripening: 2 applications from pre-veraison (change of color), every 10-15 days	25-50 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From pre-veraison (change of color), every 10-15 days	25-50 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-veraison (change of color), every 10-15 days	25-50 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From pre-veraison (change of color), every 10-15 days	25-50 kg

COMPOSITION		
Phosphoric Anyhidride (P_2O_5)	Soluble in neutral ammonium citrate and in water	18%
Potassium oxide (K_2O)	Soluble in water	22%
Iron (Fe)	Soluble in water	0,02%
Iron (Fe)	Chelated with EDTA	0,02%
Manganese (Mn)	Soluble in water	0,02%
Manganese (Mn)	Chelated with EDTA	0,02%
Zinc (Zn)	Soluble in water	0,01%
Zinc (Zn)	Chelated with EDTA	0,01%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	9,14
Conductivity E.C. µS/cm (1‰)	798
Density (g/cm³)	1,33
WAY OF USE	FERTIGATION

PACKAGING: 25 Kg

NOTE: *To improve fruit texture it is advisable to apply **HYDRO KOMBY 40** together with **KAMAB 26** during the fruit growing phases.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

POLIFILL PK ALPHA 21-27

Adriatica

PROMOTES A UNIFORM RIPENING
INCREASES BRIX AND IMPROVES FRUIT COLORING
FAVORS THE PLANT'S LIGNIFICATION PROCESS

POLIFILL PK ALPHA 21-27 is a nutritional solution containing potassium, phosphorus and chelated microelements to be applied as foliar applications; it stimulates the fruits' enlargement and creates the perfect conditions for the enhancement of their organoleptic properties (color, taste, aroma)

By slowing down the main biochemical mechanism that causes vegetative vigour, **POLIFILL PK ALPHA 21-27** favors the lignification process and prepares the plant for its winter rest.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	From post-fruit set to pre-veraison (change of color)	3-6 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From post-fruit set to pre-veraison (change of color)	3-6 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From post-fruit set to pre-veraison (change of color)	3-6 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At fruit enlargement	3-6 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From fruit enlargement to pre-veraison (change of color)	3-6 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From fruit enlargement to pre-veraison (change of color)	3-6 kg

COMPOSITION		
Phosphoric Anyhidride (P_2O_5)	Soluble in neutral ammonium citrate and water	21%
Potassium oxide (K_2O)	Soluble in water	27%
Boron (B)	Soluble in water	0,1%
Iron (Fe)	Soluble in water	0,02%
Iron (Fe)	Chelated with EDTA	0,02%
Manganese (Mn)	Soluble in water	0,02%
Manganese (Mn)	Chelated with EDTA	0,02%
Zinc (Zn)	Soluble in water	0,1%
Zinc (Zn)	Chelated with EDTA	0,1%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	8,27
Conductivity E.C. µS/cm (1‰)	950
Density (g/cm³)	1,5
WAY OF USE	FOLIAR

PACKAGING: 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

FILL PK PLUS

IMPROVES FRUIT QUALITY
CONTAINS VEGETATION LUSHNESS
PREPARES PLANTS FOR THE WINTER REST

With its specific PK 1:1,3 ratio, **FILL PK PLUS** is formulated to favor fruit and wood ripening, to contain the vegetation development and to prevent undesired early sprouting. Its application during the final phases of the crop cycle prepares the plant to produce and accumulate dry matter in order for fruit bearing plants to be ready for winter rest.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	From pre-veraison (change of color) to ripening	4-5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From pre-veraison (change of color) to ripening	4-5 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From pre-veraison (change of color) to ripening	4-5 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At the fruit enlargement phase	4-5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From fruit development to pre-veraison (change of color)	4-5 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From fruit development to pre-veraison (change of color)	4-5 kg

COMPOSITION		
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammonium citrate and water	40%
Potassium oxide (K_2O)	Soluble in water	52%
Low chlorine content		

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	9
Conductivity E.C. µS/cm (1‰)	1200
WAY OF USE	FOLIAR

PACKAGING: 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

FILL BRIX SPECIAL PK 6-60

Adriatica

IMPROVES FRUIT QUALITY
CONTROLS EXCESSIVE VEGETATIVE GROWTH
STRENGTHENS THE PLANT

FILL BRIX SPECIAL PK 6-60 is a high content potassium formulation. When applied at the right phenological phase, it prevents excessive vegetative lushness and it improves the qualitative parameters (sugar content and color) in fruit and vegetable production. On fruit trees it improves the lignification process, conferring strength and resistance to stress.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	2-3 applications from fruit development to harvest	4-5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	2-3 applications from fruit development to harvest	4-5 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	2-3 applications from fruit development to harvest	4-5 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	2-3 applications from fruit development to harvest	4-5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	3-4 applications from fruit development to harvest	4-5 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	3-4 applications from fruit development to harvest	4-5 kg

COMPOSITION		
Phosphoric Anyhidride (P_2O_5)	Soluble in neutral ammonium citrate and water	6%
Potassium oxide (K_2O)	Soluble in water	60%
Molybdenum (Mo)	Soluble in water	0,1%
Zinc (Zn)	Soluble in water	0,05%
Zinc (Zn)	Chelated with EDTA	0,05%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	10,7
Conductivity E.C. µS/cm (1‰)	1625
WAY OF USE	
	FOLIAR

PACKAGING: 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

FILL K 40 + 4 MgO

FAVORS A BALANCED RIPENING
PREVENTS UNDESIRED VEGETATIVE DISRUPTION

FILL K 40 + 4 MgO is the recommended choice when both ripening and vegetative growth are needed at the same time. When applied at the cycle's final phases, the high potassium content favors ripening and improves fruit quality.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes and Kiwifruit	From pre-veraison (change of color) to ripening	4-5 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From pre-veraison (change of color) to ripening	4-5 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From pre-veraison (change of color) to ripening	4-5 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From pre-veraison (change of color) to ripening	4-5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-veraison (change of color) to ripening	4-5 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From pre-veraison (change of color) to ripening	4-5 kg

COMPOSITION		
Total nitrogen (N)		3%
Nitric nitrogen (N)		3%
Potassium oxide (K_2O)	Soluble in water	40%
Magnesium oxide (MgO)	Soluble in water	4%
Boron (B)	Soluble in water	0,01%
Copper (Cu)	Soluble in water	0,01%
Copper (Cu)	Chelated with EDTA	0,01%
Manganese (Mn)	Soluble in water	0,01%
Manganese (Mn)	Chelated with EDTA	0,01%
Molybdenum (Mo)	Soluble in water	0,004%
Zinc (Zn)	Soluble in water	0,01%
Zinc (Zn)	Chelated with EDTA	0,01%
Low chlorine content		

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	3,1
Conductivity E.C. µS/cm (1‰)	1520
WAY OF USE	FOLIAR

PACKAGING: 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MESO AND MICROELEMENTS

Adriatica

MESOELEMENTS (SECONDARY PLANT NUTRIENTS)

Calcium, magnesium and sulfur are nutrients that plants need in quantities in between those of trace and primary nutrients (also known as macronutrients). The products of the MESOELEMENTS LINE are formulated to provide for those elements which are considered secondary but necessary to the plant's harmonic development. In case one of those elements is either missing or in an unbalanced ratio with other elements, plants show deficiency symptoms on fruit and flowers.
In this group of products, mesoelements are available both singularly or combined with one another, so that they can provide a more complete support to the plant.

NOTE: The products of the MESOELEMENTS LINE satisfy all the calcium and magnesium requirements.
Sulfur is present as a raw material in many compounds. A standard nutritional program can therefore cover the sulfur needs in most crops.

MICROELEMENTS (TRACE NUTRIENTS)

Microelements are essential for the plant's harmonic growth even in the smallest quantities. They are involved in all the physiological processes whose correct functioning is important to obtain from the crop the highest productivity and the best quality. Their deficiency can lead to severe physiological disorders. This can be attributed to either a lack of the nutrient in the soil (direct or primary physiological disorder) or to a little availability of the nutrient in the soil (soil's pH and antagonism between the elements) that might be made unavailable due to the soil pH (indirect or conditioned physiological disorder). In both cases early treatments guarantee the best results.
The main trace nutrients are: manganese, zinc, molybdenum, boron, copper and iron. In the MICROELEMENTS LINE, microelements are available both singularly or combined with one another, so that they can provide a more complete support to the plant.

K-Adriatica's **MESO- and MICROELEMENTS LINE** include:

MESOELEMENTS	**Calcium**	**BUTTERFILL S 33%** **BUTTERMIX Ca Mg** **ZINCAL Mo Ca** **NITROCAL L** **IDROCAL Mg**
	Magnesium	**AGROMAG 16 COMPLEX**
MICROELEMENTS	**Manganese**	**AGROMAN 6 L**
	Zinc	**AGROZIN 6 L**
	Molybdenum	**AGROMOL 5 L**
	Boron	**AGROBOR 11 L** **BORAMIN Mo**
	Copper	**AGRORAM 16 COMPLEX**
	Iron	**SEQUIFILL 6.0 T SS** **KOLFER** **CLOROFILLA K** **K-FERRO**
MICROELEMENT BLENDS		**AGROVIT LS** **GREEN MIX Z**

INTERACTIONS BETWEEN NUTRIENTS

Some deficiencies (or excesses in some cases) can be caused not by the lack of a single element, but rather by the wrong combination of other nutrient substances in the soil or in the plant or both.

Knowing how meso- and micronutrients and micro- and macronutrients affect one another's behaviour in terms of antagonism, synergism, inhibition and precipitation, can be helpful.

Relations between micro-and macro nutrients

	N	P	K	Ca	Mg	S	Fe	Mo	Cl	Na	B	Mn	Cu	Zn
N		S	A		S	S		S	A		A		A	
P	S		A	I			P						A	I
K	A	A		A	A	S	S			A	A	S		
Ca		I	A		A		A			A	I	I		I
Mg	S		A	A						A				
S	S		S						A			S	S	
Fe		P	S	A								A	A	A
Mo	S												A	
Cl	A					A								
Na			A	A	A									
B	A		A	I										
Mn			S	I		S	A						A	A
Cu	A	A				S	A	A				A		
Zn		I		I			A					A		

A= Antagonism I= Inhibition P= Precipitation S= Synergy or positive interaction

CALCIUM

Adriatica

Its role in the plant:
Calcium is an essential element of plants' cell walls and is directly responsible for the consistency of vegetative and reproductive tissues (flowers and fruits) thickness. Calcium increases tissues' mechanical resistance at ripening, during manipulation, transport and storage.

Deficiency causes:
In spite of Calcium being present in most soils, plants can't really find all the Calcium they need. Insufficient supply of calcium in the (sandy and unstable) soil, too acidic pH levels and excessive sulfur and/or phosphorus content that bind calcium to form insoluble compounds (calcium sulphate and dicalcium or tricalcium phosphate) are among the main causes of calcium deficiency. Other causes of calcium deficiency could be linked to the presence of Nitrogen in the form of Ammoniacal ion (NH^{4+}), Potassium in the form of ion (K^{+}) and Magnesium (Mg^{2+}).

Deficiency symptoms:
Calcium deficiency symptoms appear on young leaves and on terminal shoots as it is a little mobile element in the plant. It must be periodically applied at every new vegetative emission, at every flowering and at every fruit-set in fruiting horticultural species.

On orchards the physiological plant disorders caused by calcium deficiency (bitter pit in pome fruits, lenticellosis, vitrescence, stem necrosis in some grape varieties, lettuce "tip burn", poinsettia edge) can be seen on plants which are unbalanced with excessive vegetative vigour and scant production.

K-Adriatica recommends:

BUTTERFILL S 33%
BUTTERMIX Ca Mg
ZINCAL Mo Ca
NITROCAL L
IDROCAL Mg

Adriatica

BUTTERFILL S 33%

BUTTERFILL S 33% is a high purity concentrated calcium chloride solution. The immediate and complete foliar uptake represents a valid prevention and treatment to all common calcium-related physiological plant disorders such as: bitter pit of apple tree, grape stem necrosis, tomato apical rot and the internal browning of nectarines.

CROP	APPLICATION TIME	DOSE/ HECTARE*
Grapes	At flowers fading, 2 applications every 10-15 days Repeat 15-20 days before veraison (change of color)	4-6 kg
Pome fruits (apple, pear, quince)	From fruit diameter up to 20 mm to veraison (change of color), 5-8 applications every 10-12 days	4-6 kg
Kiwifruit	From fruit diameter up to 40 mm, 4-5 applications every 10-15 days	4-6 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	From flowers fading, 3-5 applications every 10-15 days	4-6 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-flowering, 3-4 applications every 10-12 dayss	4-6 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Starting 8-10 days after transplanting, 3-4 applications every 10-12 days	4-6 kg
Other vegetables (broccoli, cabbage, cauliflower, onion, garlic, leek, fennel, carrot, potato)	From developed plant, 3-4 applications every 10-12 days	4-6 kg

COMPOSITION		
Calcium oxide (CaO)	Soluble in water	16,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	3,85
Conductivity E.C. µS/cm (1‰)	900
Density (g/cm³)	1,33
WAY OF USE	FOLIAR

PACKAGING: 12 - 25 Kg

WARNING: *Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels, it is necessary to add an acidifier before using fertilizers containing calcium.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

BUTTERMIX Ca Mg

Adriatica

BUTTERMIX Ca Mg is a concentrated solution of high purity calcium and magnesium, whose specific action is synergized by the presence of an organic matrix containing amino acids and trace elements.

BUTTERMIX Ca Mg is the formulation that prevents and cures the main calcium and magnesium deficiency-related physiological disorders.

Such disorders happen at fruit crucial development phases and are characterized by desiccation, necrosis, cracking and darkening. These hit both horticultural crops such as tomato, melon, watermelon, lettuce, celery and carrot and fruit plants such as pome fruits and stone fruits, grapes and kiwifruit.

The regular application of **BUTTERMIX Ca Mg** is the most effective method to prevent and overcome the appearance of symptoms induced by these physiological plant disorders.

Its regular use allows for improved production quality and prolonged shelf-life.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	At flowers fading, 2 applications every 10-15 days Repeat 10-15 days before veraison (change of color)	4-6 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From fruit diameter up to 20mm to veraison (change of color), applications every 10-12 days	4-6 kg
Kiwifruit	At post-fruit set, 4-5 applications every 10-15 days	4-6 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At post-fruit set, 2-3 applications every 10-12 days	4-6 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-flowering, 3-4 applications every 10-12 days	4-6 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	Starting 8-10 days after transplanting, 3-4 applications every 10-12 days	4-6 kg
Other vegetables (broccoli, cabbage, cauliflower, onion, garlic, leek, fennel, carrot, potato)	From developed plant, 3-4 applications every 10-12 days	4-6 kg
Poinsettia	From bracts formation, 2-3 applications every 8-10 days	2-4 kg

COMPOSITION		
Organic nitrogen (N)		3,4%
Organic soluble nitrogen (N)		3%
Organic Carbon (C), biological origin		10%
Calcium oxide (CaO)	Soluble in water	10%
Magnesium oxide (MgO)	Soluble in water	2%
Boron (B)	Soluble in water	0,05%
Iron (Fe)	Soluble in water	0,2%
Iron (Fe)	Chelated with EDTA	0,2%
Molybdenum (Mo)	Soluble in water	0,005%
Zinc (Zn)	Soluble in water	0,05%
Zinc (Zn)	Chelated with EDTA	0,05%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6,6
Conductivity E.C. µS/cm (1‰)	790
Density (g/cm³)	1,34
WAY OF USE	FOLIAR

PACKAGING: 6 - 12 - 25 Kg

WARNING: *Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels, it is necessary to add an acidifier before using fertilizers containing calcium.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

ZINCAL Mo Ca

ZINCAL Mo Ca is a formulation that promotes an intense and balanced vegetative recovery.

ZINCAL Mo Ca must be applied during the first phases at the end of dormancy and, thanks to the synergy between calcium and zinc, it stimulates bud growth.

The zinc supplied with the product triggers the synthesis of tryptophan and, as a consequence, it naturally increases the auxins levels. The latter, in addition to promoting fruit and buds' growth, favors the xylem lignification, thus improving calcium uptake with an increase in tissue mechanical resistance and of the quantity of calcium translocated to the developing fruits.

Molybdenum, finally, improves the absorption process and the use of nitrogen and it enables the optimisation of the photosynthetic process.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Citrus (orange, lemon, tangerine, clementine, bergamot)	At vegetative restart, at pre-flowering and pre-veraison (change of color)	4-6 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From sprouting to pre-flowering; to be repeated from fruit diameter up to 20 mm to veraison (change of color)	4-6 kg
Kiwifruit	From sprouting to pre-flowering; to be repeated from fruit diameter up to 20 mm to veraison (change of color)	4-6 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From post-fruit set, 2-3 applications every 10-12 days	4-6 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At post-emergence or at transplanting, to be repeated at pre- and post-flowering and at pre-harvest	4-6 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or at the appearance of deficiency symptoms	4-6 kg
Flowers and Ornamentals	At transplanting or repotting and at pre-flowering	4-6 kg

COMPOSITION		
Calcium oxide (CaO)	Soluble in water	10%
Molybdenum (Mo)	Soluble in water	0,05%
Zinc (Zn)	Soluble in water	5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6,8
Conductivity E.C. µS/cm (1‰)	820
Density (g/cm³)	1,41
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

WARNING: *Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels, it is necessary to add an acidifier before using fertilizers containing calcium.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

NITROCAL L

Adriatica

With **NITROCAL L** we aim at preventing and curing those physiological plant disorders affecting some horticultural and fruit crops that are related to thermo-water imbalances which influence the calcium uptake.

NITROCAL L has a curative and a preventative efficacy against calcium deficiencies that are manifested by edge necrosis, apical necrosis, cracking and browning that are typical of some horticultural and fruit crops. This formulation brings calcium readily available both through the roots and through the leaves.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	At flowers fading, 2 applications every 10-15 days To be repeated 15-20 days before veraison (change of color)	4-5 kg
Pome fruits (apple, pear, quince)	From fruit diameter up to 20 mm to veraison (change of color), 5-8 applications every 10-12 days	4-5 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	From flowers fading to veraison (change of color), 3-5 applications every 10-12 days	4-5 kg
Kiwifruit	From post-fruit set, 4-5 applications every 10-15 days	4-5 kg
Strawberries	At pre-flowering; to be repeated from post-fruit set every 10-12 days	4-5 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From pre-flowering, 3-4 applications every 10-12 days	4-5 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	From 8-10 days after transplanting, 3-4 applications every 10-12 days	4-5 kg
Other vegetables (broccoli, cabbage, cauliflower, onion, garlic, leek, fennel, carrot, potato)	From developed plant, 3-4 applications every 10-12 days	4-5 kg

COMPOSITION		
Total nitrogen (N)		8%
Nitric nitrogen (N)		8%
Calcium oxide (CaO)	Soluble in water	16%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	5,3
Conductivity E.C. µS/cm (1‰)	860
Density (g/cm³)	1,48
WAY OF USE	FOLIAR

PACKAGING: 6 - 15 - 25 Kg

WARNING: *Never mix in the same tank fertilizers containing phosphorus and/or sulfates with fertilizers containing calcium. In presence of irrigation water containing high phosphorus levels, it is necessary to add an acidifier before using fertilizers containing calcium.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

IDROCAL Mg

IDROCAL Mg is a calcium and magnesium salts' complex with low-molecular-weight organic acids. The product is a liquid formulation with a curative and a preventative activity on physiological plant disorders associated to the scarce availability of those two meso-elements. The organic acids contained therein stimulate root production and, at the same time, they give the "root capillice" a better adaptability to high salinity levels.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Grapes	From pea-sized berries to pre-veraison (change of color), 3 applications or more every 15/20 days	3-5 kg	25-30 kg
Pome fruits (apple, pear, quince)	From fruit diameter up to 20 mm to veraison (change of color), 3-4 applications every 10-15 days	3-5 kg	25-30 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	From post-fruit set to pre-veraison (change of color)	3-5 kg	25-30 kg
Kiwifruit	From post-fruit set, 3-5 applications every 15-20 days	3-5 kg	25-30 kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	From developed fruit to pre-veraison (change of color), 3 applications or more every 15-20 days	3-5 kg	25-30 kg
Strawberries	At first fruits appearance, 2-3 applications every 10-15 days	3-5 kg	25-30 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From post-fruit set to veraison (change of color), 3-5 applications every 10-15 days	3-5 kg	25-30 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	From 8-10 days after transplanting, 2-5 applications every 10-15 days	3-5 kg	25-30 kg

COMPOSITION		
Calcium oxide (CaO)	Soluble in water	12%
Magnesium oxide (MgO)	Soluble in water	3%

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		5,7
Conductivity E.C. µS/cm (1‰)		730
Density (g/cm³)		1,29
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 6 -25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MAGNESIUM

Its role in the plant:
Magnesium is the key constituent of the chlorophyll molecule, hence playing a fundamental role in photosynthesis. It also presides over the formation of carbohydrates, proteins, lipids and vitamins. It carries phosphorus inside the plant (they are synergic) and it is an antagonist of potassium and calcium.

Deficiency causes:
A good part of magnesium in the soil can be found in the non-exchangeable fraction (primary and secondary minerals). Its mobility depends on the original parent material (mineral) containing its salts and has a varying intensity according to the different factors influencing the disintegration and degradation processes of the parent material. The common crops cultivated in Italy do not normally show particular signs of magnesium deficiency, as most soils provide the amount requested by the majority of crops.
The cases of deficiency are often related to an excess of either potassium or calcium or both, which affect magnesium uptake at the plant level.

Deficiency symptoms:
Magnesium deficiency symptoms are normally seen on the lower leaves, with a whitening of the interveinal space while the veins remain green. Given its central role in photosynthesis, a potential deficiency of magnesium reduces the photosynthetic activity and negatively affects the plant's metabolism and growth.

K-Adriatica recommends:

AGROMAG 16 COMPLEX

AGROMAG 16 COMPLEX

AGROMAG 16 COMPLEX is a wettable powder formulation with a high magnesium content, to be used in foliar applications and in fertigation.

In **AGROMAG 16 COMPLEX** magnesium, copper, manganese and zinc are bound to one another by a particular organic complex facilitating its rapid and complete absorption, thus preventing and curing magnesium-related physiological plant disorders and potential micro-nutritional deficiencies or imbalances.

AGROMAG 16 COMPLEX favors photosynthesis, intensifies leaves and fruit color and improves production.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	From flowers fading, 2 applications every 10-15 days; to be repeated 15-20 days before veraison (change of color)	6-8 kg
Pome fruits (apple, pear, quince)	From vegetative restart to fruit diameter up to 40 mm	3-6 kg
Stone fruits (peach, nectarine, apricot, cherry, plum)	From vegetative restart to fruit diameter up to 40 mm	3-6 kg
Kiwifruit, Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From vegetative restart to fruit diameter up to 40 mm	4-6 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At post-emergence or at transplanting, to be repeated at pre- and post-flowering	3-6 kg
Leafy vegetables (lettuce, escarole, chicory, radicchio, rocket, celery, spinach)	At early vegetative phases or at the appearance of first deficiency symptoms	3-6 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Combined with post-emergence weeding treatment	6-8 kg
Fodder and forage crops (alfalfa, clover, grass)	At early vegetative phases or at the appearance of first deficiency symptoms	6-8 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or at the appearance of first deficiency symptoms	3-6 kg
Flowers and Ornamentals	At post-emergence or post-transplanting, to be repeated at pre-flowering	3-6 kg

COMPOSITION		
Magnesium oxide (MgO)	Soluble in water	16%
Sulfuric anhydride (SO_3)	Soluble in water	30%
Copper (Cu)	Soluble in water	0,5%
Manganese (Mn)	Soluble in water	1,5%
Zinc (Zn)	Soluble in water	1%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	5,5
Conductivity E.C. µS/cm (1‰)	980
WAY OF USE	FOLIAR

PACKAGING: 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MANGANESE

Its role in the plant:
Being an important enzymatic co-factor, manganese is involved in the photosynthetic process reaction in which the molecule of water is split into oxygen and hydrogen, and in the final phase of nitrates' reduction. It also plays a role on cell elongation.

Deficiency causes:
Calcareous soils or soils with a pH level higher than 6,5, high iron availability, low nitrogen concentration, compact and dry soils and high supplies of organic matter are the main environmental factors favoring the outbreak of manganese deficiency.

Deficiency symptoms:
Main manganese deficiency symptoms: upward posture of buds and leaves, marginal and interveinal foliar chlorosis in mid-lower leaves, also with necrotic spots and downward curling of foliar edges.

K-Adriatica recommends:

AGROMAN 6 L

Adriatica

AGROMAN 6 L

AGROMAN 6 L is a specific product whose use is aimed at the prevention and the cure of plant physiological disorders related to manganese deficiency. Manganese is a catalyser of oxidative processes in the plant. It is involved in respiration, photosynthesis and it has a role in controlling auxin metabolism together with other microelements. It also favors buds fertility, fruit-set and it increases resistance to cold.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	At pre-flowering and pea-sized berries, 1-2 applications every 8-10 days	2-3 Kg
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Kiwifruit	At early vegetative phases, at pre-flowering or at the appearance of first deficiency symptoms, 2-3 applications every 8-10 days	2-3 Kg
Olive	At vegetative restart, 2 applications every 8-10 days	2-3 Kg
Citrus (orange, lemon, tangerine, clementine, bergamot)	At pre-flowering or at the appearance of first deficiency symptoms	2-3 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From early vegetative phases or at the appearance of first deficiency symptoms	2-3 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	From early vegetative phases or at the appearance of first deficiency symptoms	2-3 Kg
Beets	At vegetative restart and when leaf canopy meets between the rows, 2 applications every 8-10 days	2-3 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From early vegetative phases or at the appearance of first deficiency symptoms	2-3 Kg
Flowers and Ornamentals	At post-emergence or post-transplanting, to be repeated at pre-flowering	2-3 Kg

COMPOSITION		
Manganese (Mn)	Soluble in water	6%
Manganese (Mn)	Chelated with EDTA	6%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6
Conductivity E.C. µS/cm (1‰)	192
Density (g/cm³)	1,26
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

ZINC

Adriatica

Its role in the plant:
Zinc is an essential enzymatic co-factor for plant growth and development metabolism. It has an important role in the synthesis of chlorophyll and it is involved in the synthesis of tryptophan, the latter being an important compound in the synthesis of auxins.

Deficiency causes:
An elevated pH, an excessive presence of bicarbonate, scarce availability of organic matter, high availability of calcium, magnesium and phosphorus and low availability of nitrogen are the main environmental factors leading to zinc deficiency.

Deficiency symptoms:
Shortening of the internodes, small leaves grouped in bunches, scarce fruit set, spotted foliar chlorosis extending to the veins with bronze shades are the main symptoms of zinc deficiency.

K-Adriatica recommends:

AGROZIN 6 L

Adriatica

AGROZIN 6 L

AGROZIN 6 L is a specific product with curative and preventative activity on physiological plant disorders associated to zinc deficiency. This micro-element plays several fundamental roles in plant development. It is involved in the synthesis of chlorophyll and tryptophan (which in turn triggers auxins synthesis), it stimulates the seed maturation process and it regulates respiration.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	At early vegetative phases or at the appearance of first deficiency symptoms	1-2 Kg
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Kiwifruit	At early vegetative phases, at pre-flowering, at post-fruit set or at the appearance of first deficiency symptoms, 2-3 applications every 8-10 days	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At vegetative restart or at the appearance of first deficiency symptoms	1-2 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	At vegetative restart or at the appearance of first deficiency symptoms	1-2 Kg
Beets, Tobacco	At vegetative restart or at the appearance of first deficiency symptoms	1-2 Kg
Industrial crops (tomato, soybeans, sunflower, cotton, sugarcane)	At vegetative restart or at the appearance of first deficiency symptoms	1-2 Kg
Flowers and Ornamentals	At post-emergence or post-transplanting, to be repeated at pre-flowering	1-2 Kg

COMPOSITION		
Zinc (Zn)	Soluble in water	6%
Zinc (Zn)	Chelated with EDTA	6%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6,55
Conductivity E.C. µS/cm (1‰)	166
Density (g/cm³)	1,22
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MOLYBDENUM

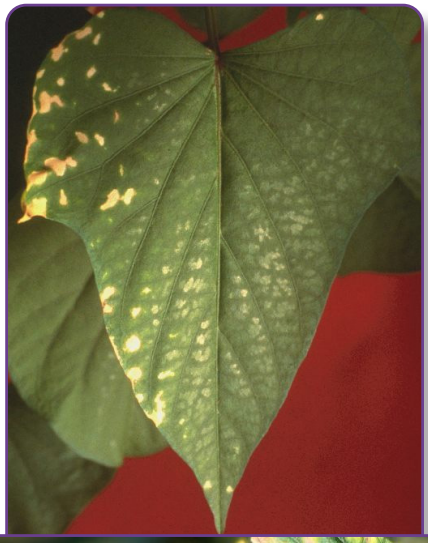
Its role in the plant:
Molybdenum is a fundamental element for nitrogen fixating symbiotic bacteria in many leguminous species. It is also an enzymatic co-factor, which plays a major role in the plant nitrogen metabolism which becomes critical at breeding as it affects pollen quantity and germinability. In some species, i.e.: soybeans, it improves yield of fruits and seeds.

Deficiency causes:
A pH lower than 5 and excessively drained soils are the main environmental factors leading to molybdenum deficiency.

Deficiency symptoms:
Leaves turning pale green or yellow, marginal and interveinal chlorosis, marginal necrosis and marginal curling are the main symptoms of molybdenum deficiency.

K-Adriatica recommends:

AGROMOL 5 L



Adriatica

AGROMOL 5 L

AGROMOL 5 L is a liquid formulation of highly concentrated molybdenum, which is completely absorbed by the crops. Molybdenum plays a fundamental role in plant metabolism as it takes part in the nitrogen's uptake process by acting as co-factor for the nitrate reductase. It also stimulates root development, promotes cell division and it improves flowering and fruit-set. In leguminous species, molybdenum is a critical element in the activity of symbiotic bacteria.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From the early vegetative phases or at the appearance of the first deficiency symptoms	1-2 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Beets, Tobacco	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Flowers and Ornamentals	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg

COMPOSITION		
Molybdenum (Mo)	Soluble in water	5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6,8
Conductivity E.C. µS/cm (1‰)	280
Density (g/cm³)	1,1
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

BORON

Its role in the plant:
Boron plays a key role in reproduction and in particular on pollen germination and flower bud differentiation. It affects the cell wall lignification process by conferring stability and elasticity. It also stimulates the absorption of other cations, such as calcium, potassium and magnesium.

Deficiency causes:
A lower than 5,5 or higher than 7 soil pH, sandy and dry soils with low organic matter, a scarce nitrogen availability and an excessive presence of (natural or added) bicarbonate are the main environmental conditions causing boron deficiency.

Deficiency symptoms:
A thickening of the leaves that may become puckered, interveinal chlorosis, root tip and buds' necrosis, shortened internodes, leaves clustered in bunches, a scarce fruit set, fruit deformation and heart rot (beets) are the main symptoms of boron deficiency.

K-Adriatica recommends:

AGROBOR 11 L
BORAMIN Mo

AGROBOR 11 L

AGROBOR 11 L is an ethanolamine boron-based formulation. This product favors a rapid and complete absorption of the element and its rapid migration inside the plant's tissues.

AGROBOR 11 L has both a preventative and a curative activity on physiological disorders associated to a deficiency of boron, such as grape millerandage, apple suberose, beets empty heart, sunflower capitulum deformation, tobacco stunt growth and lower fruit set.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes	Against grapes millerandage, flowers fading and to increase sugar content. 3 applications: 2 at pre-flowering, 1 or more at post-flowering	1-2 Kg
Stone fruits (peach, nectarine, apricot, cherry, plum), Pome fruits (apple, pear, quince), Olive and Citrus (orange, lemon, tangerine, clementine, bergamot)	At pre- and post-flowering or at the appearance of the first deficiency symptoms: 2-3 applications every 8-10 days	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At early vegetative phases, at pre- and post-flowering or at the appearance of the first deficiency symptoms: 2-3 applications every 8-10 days	1-2 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	At pre-flowering or at the appearance of the first deficiency symptoms: 2 applications every 8-10 days	1-2 Kg
Beets	Against "hollow heart", starting from 4 true leaves or at the appearance of the first deficiency symptoms: 2-3 applications every 8-10 days	1-2 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, sugarcane)	At pre- and post-flowering or at the appearance of the first deficiency symptoms: 2-3 applications every 8-10 days	1-2 Kg
Flowers and Ornamentals	At early vegetative phases, at pre- and post-flowering or at the appearance of the first deficiency symptoms: 2-3 applications every 8-10 days	1-2 Kg

COMPOSITION		
Boron (B)	Soluble in water	11%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	9,25
Conductivity E.C. µS/cm (1‰)	275
Density (g/cm³)	1,38
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

BORAMIN Mo

BORAMIN Mo is a liquid formulation whose specific characteristics make it particularly suitable to prevent and remedy the effects that boron and molybdenum deficiency might have on the crop's quality and productivity. Since both elements are bound to a particular organic complex that improves their absorption and translocation, boron and molybdenum work together to improve vegetative growth, stimulate flowering, increase pollen's fertility and fruit set, promote sugar production and subsequent migration even under critical environmental conditions (thermal excursions, water stress, parasitic attacks, etc.).

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	At vegetative restart or at the appearance of the first deficiency symptoms	2-3 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At early vegetative phases or at the appearance of the first deficiency symptoms	2-3 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	At early vegetative phases or at the appearance of the first deficiency symptoms	2-3 Kg
Beets	At early vegetative phases or at the appearance of the first deficiency symptoms	2-3 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or at the appearance of the first deficiency symptoms	2-3 Kg
Flowers and Ornamentals	At early vegetative phases or at the appearance of the first deficiency symptoms	2-3 Kg

COMPOSITION		
Boron (B)	Soluble in water	5%
Molybdenum (Mo)	Soluble in water	0,3%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	9
Conductivity E.C. µS/cm (1‰)	310
Density (g/cm³)	1,27
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

COPPER

Its role in the plant:
Copper, being an element that can change its electrical charge, is used as a source of cellular redox potentials.

Deficiency causes:
A high soil pH, nitrogen deficiency, compact soils and excessive availability of organic matter are the main environmental causes of copper deficiency.

Deficiency symptoms:
Stunting or no growth, chlorosis with whitened foliar tips and loss of turgor in leaves and young stalks are the main symptoms associated to copper deficiency.

K-Adriatica recommends:

AGRORAM 16 COMPLEX

AGRORAM 16 COMPLEX

The copper present in **AGRORAM 16 COMPLEX** is bound to a particular organic complex that enhances its activity, favoring its absorption. Moreover the presence of other oligoelements increases its efficacy and makes it particularly useful in solving very common deficiency conditions during the first vegetative phases.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms. To be repeated 2-3 times every 8-10 days.	1-2 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Beets, Tobacco	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms. To be repeated 2-3 times every 8-10 days.	1-2 Kg
Industrial crops (tomato, soybeans, sunflower, cotton, sugarcane)	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms	1-2 Kg
Flowers and Ornamentals (geranium and chrysanthemum in particular)	At early vegetative phases, at pre-flowering or at the appearance of the first deficiency symptoms. To be repeated 2-3 times every 8-10 days.	1-2 Kg

COMPOSITION		
Copper (Cu)	Soluble in water	16%
Manganese (Mn)	Soluble in water	2%
Molybdenum (Mo)	Soluble in water	0,02%
Zinc (Zn)	Soluble in water	1%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	4
Conductivity E.C. µS/cm (1‰)	1060
WAY OF USE	FOLIAR

PACKAGING: 5 -25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

IRON

Its role in the plant:
Iron is a fundamental structural component of some enzymes (haemoproteins) and of iron-sulfur proteins.
It acts as an enzymatic co-factor and plays a role in the synthesis of protein, chlorophyll and anthocyanin pigments.
It is involved in the chloroplasts' stabilisation structure, with a direct effect on photosynthesis activity and efficiency and on the green coloring of plants.

Deficiency causes:
A high soil pH, excessive presence of bicarbonates, low availability of organic matter, high availability of phosphorus and/or nitrates, excess of zinc, copper, manganese or other heavy metals are the main environmental factors causing iron deficiency.

Deficiency symptoms:
A reduced growth, interveinal foliar chlorosis with a coloration from pale green to yellow or whitening in case of advanced deficiency and fruits with an intense coloring are the main symptoms of iron deficiency.

NOTE: The administration of iron chelates is the most effective way to prevent and treat iron chlorosis.
Iron chelates are made of organic compounds containing iron, which are soluble in water and can be absorbed both by the roots and by the tissues of young branches and leaves. Iron chelates can have a more or less high efficacy, based on the chelating molecule being used and to some environmental factors. The various iron chelates have temporary stabilities according to the light and their pH levels.
Some chelates (Fe-EDDHMA, Fe-EDDHSA and Fe-EDDHA) can be easily degraded if exposed to sunlight, while others (Fe-DTPA, Fe-EDTA and Fe-HEDTA) are less photodegradable.
At the same time some chelates (Fe-DTPA, Fe-EDTA and Fe-HEDTA) are "short lived" if they are applied to soils with too high alkaline levels (near 8), while others (Fe-EDDHMA, Fe-EDDHSA and Fe-EDHHA) are stable even at pH levels higher than 10.
The fertilizers containing Fe-DTPA, Fe-EDTA and Fe-HEDTA are recommended for foliar fertilization, while those with Fe-EDDHMA, Fe-EDDHSA and Fe-EDDHA are more suitable for soil treatments.

K-Adriatica recommends:

SEQUIFILL 6.0 T SS
KOLFER
CLOROFILLA K
K-FERRO

SEQUIFILL 6.0 T SS

SEQUIFILL 6.0 T SS is a Fe-EDDHA-based product formulation with an optimal ratio between the iron bound fraction in the ortho-ortho position (4%) and in the ortho-para position (2%) for immediate and long-lasting efficacy.

In Fe-EDDHA's ortho-ortho position the iron ion is stable, highly soluble and time lasting thanks to its 6 chemical bonds. The ortho-para fraction , thanks to its 5 chemical bonds, tends to surrender its iron ion rapidly making it available to the plant, but at the same time maintaining its stability in the soil.

SEQUIFILL 6.0 T SS can be applied in all soils, in particular those where high pH values are often coupled with excessive availability of activated limestone.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit	Preventative and maintenance applications from bud development to fruit set. To be repeated before leaf-fall.	10-20 Kg
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum)	Preventative and maintenance applications from bud development to fruit set. To be repeated before leaf-fall.	10-20 Kg
Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	Preventative and maintenance applications from bud development to fruit set. To be repeated before leaf-fall.	10-20 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Preventative and maintenance applications from early vegetative phases	10-20 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Preventative and maintenance applications from early vegetative phases	10-20 Kg
Flowers and Ornamentals (geranium and chrysanthemum in particular)	Preventative and maintenance applications from early vegetative phases	10-20 Kg

COMPOSITION		
Iron (Fe)	Soluble in water	6%
Iron (Fe)	chelato con o/o EDDHA	4%
Iron (Fe)	chelato con o/p EDDHA	2%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	7,8
Conductivity E.C. µS/cm (1‰)	570
WAY OF USE	
	FERTIGATION

PACKAGING: 1 - 5 - 20 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

KOLFER

Adriatica

KOLFER is a DTPA-chelated iron-based product. It is specific for foliar applications and its particular formulation makes translocation rapid and easy; as a result, it can efficiently and promptly prevent ferric chlorosis. Moreover, the high quantity of iron accelerates the chlorophyll photosynthesis process and contributes to the improvement of quality and quantity parameters.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	1-2 Kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	1-2 Kg
Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	1-2 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	1-2 Kg
Flowers and Ornamentals (geranium and chrysanthemum in particular)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	1-2 Kg

COMPOSITION		
Iron (Fe)	Soluble in water	6%
Iron (Fe)	DTPA chelated	6%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	7,88
Conductivity E.C. µS/cm (1‰)	556
Density (g/cm³)	1,25
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

NEW

CLOROFILLA K

CLOROFILLA K is an organo-mineral formulationwith a high presence of iron and potassium. Iron is bound to a particular organic complex that can be easily absorbed and translocated in the plant, thus preventing and treating potential ferric chlorosis. When applied to any crop either through the roots or through the leaves, it stimulates a rapid and greening activity.

CLOROFILLA K stimulates the synthesis of chlorophyll, it enhances photosynthesis and respiration, it promotes the synthesis of organic compounds, it triggers redox reactions and it acts synergistically with molybdenum in reducing the amounts of nitrates.

Thanks to its content in specific amino acids, **CLOROFILLA K** organic matrix stimulates the plant to an important osmo-protective activity as a reaction to abiotic stress (due to excessive salinity, water shortage, high temperature) and keeps the cells' metabolic functions active. When applied through the roots, **CLOROFILLA K** positively affects the activity and the development of the rhizosphere microorganisms, further improving iron absorption. The acidic pH and the low conductivity are such that both toxicity and incompatibility can be excluded.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
Grapes, Kiwifruit	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	2-4 Kg	20-40 Kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	2-4 Kg	20-40 Kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	2-4 Kg	20-40 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	2-4 Kg	20-40 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	2-4 Kg	20-40 Kg
Flowers and Ornamentals (geranium and chrysanthemum in particular)	From early vegetative phases, preventative applications preferably at pre- and post-flowering, or curative applications at the appearance of iron-deficiency chlorosis. 2-3 applications every 8-10 days	2-4 Kg	20-40 Kg

COMPOSITION		
Total nitrogen (N)		3%
Organic nitrogen (N)		3%
Potassium oxide (K_2O)	Soluble in water	7%
Iron (Fe)	Soluble in water	6%
Organic Carbon (C), biological origin		8,5%

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		1,5
Conductivity E.C. µS/cm (1‰)		850
Density (g/cm³)		1,29
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 1 - 5 - 20 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

K-FERRO

K-FERRO is a product that combines acidifying and greening properties.

Thanks to its high iron content, it has a preventative and curative activity against chlorosis. Its use favors a rapid coloring of the leaves, whose intensity confers lushness and better looks. The magnesium therein present together with iron, contributes to the intense coloring of the vegetative tissues. Sulfur, with its acidifying action, improves the availability of nutritive elements in the soil.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes , Kiwifruit	Autumn and spring fertilization	150-300 Kg
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum)	Autumn and spring fertilization	150-300 Kg
Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	Autumn and spring fertilization	150-300 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	Pre-transplanting, pre-sowing	150-300 Kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Pre-transplanting, pre-sowing	150-300 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Pre-transplanting, pre-sowing	150-300 Kg
Flowers and Ornamentals	Pre-transplanting, pre-sowing	150-300 Kg

COMPOSITION		
Magnesium oxide (MgO) Total		5%
Magnesium oxide (MgO)	Soluble in water	3%
Sulfuric anhydride (SO_3)	Soluble in water	34%
Iron (Fe)	Soluble in water	12%
Manganese (Mn)	Soluble in water	0,6%

PHYSICO-CHEMICAL CHARACTERISTICS			
GRANULAR			
GRANULOMETRY			1,5 mm
Specific weight			1,19
WAY OF USE	PRE-TRANSPLANTING/ SOWING FERTILIZATION	POST-TRANSPLANTING/ SOWING FERTILIZATION	LOCALIZED FERTILIZATION

PACKAGING: 25 - 600 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MICROELEMENT BLENDS

AGROVIT LS

AGROVIT LS is a stable complex of microelements, which are formulated in the form of chelating salts. Its applications prevent and treat the most common microdeficiency-related physiological disorders and, at a vegetative level, stimulate plant metabolic activities. This turns into a qualitative and quantitative yield improvement and into a higher plant resistance to abiotic stress.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit, Citrus (orange, lemon, tangerine, clementine, bergamot), Olive, Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum)	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	2-3 Kg
Flowers and Ornamentalse	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	2-3 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	2-3 Kg

COMPOSITION		
Boron (B)	Soluble in water	0,6%
Copper (Cu)	Soluble in water	0,2%
Copper (Cu)	Chelated with EDTA	0,2%
Iron (Fe)	Soluble in water	0,5%
Iron (Fe)	chelato con o/o EDDHA	0,17%
Iron (Fe)	chelato con o/p EDDHA	0,33%
Manganese (Mn)	Soluble in water	2,1%
Manganese (Mn)	Chelated with EDTA	2,1%
Molybdenum (Mo)	Soluble in water	0,2%
Zinc (Zn)	Soluble in water	1,5%
Zinc (Zn)	Chelated with EDTA	1,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	8,5
Conductivity E.C. µS/cm (1‰)	205
Density (g/cm³)	1,26
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 - 12 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

bioagricert INPUTS

GREEN MIX Z

GREEN MIX Z is a 100% water soluble microlements mix, specifically formulated for those crops with high demands for zinc. It fosters a proper growth and lushness and helps to ensure optimal yield in crop production.

GREEN MIX Z is suitable for foliar applications on fruit trees and horticultural crops. It can be used in transplanting substrate fertilization and fertigation.

CROP	APPLICATION TIME	DOSE/HECTARE*
Citrus (orange, lemon, tangerine, clementine, bergamot), Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum), Grapes, Kiwifruit, Olive	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	1-2 Kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	1-2 Kg
Flowers and Ornamentals	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	1-2 Kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases or at the appearance of the first deficiency symptoms: 3 applications every 10-12 days	1-2 Kg

COMPOSITION		
Iron (Fe)	Soluble in water	8%
Iron (Fe)	Chelated with EDTA	8%
Manganese (Mn)	Soluble in water	3,5%
Manganese (Mn)	Chelated with EDTA	3,5%
Molybdenum (Mo)	Soluble in water	0,2%
Zinc (Zn)	Soluble in water	1,5%
Zinc (Zn)	Chelated with EDTA	1,5%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	5,8
Conductivity E.C. µS/cm (1‰)	380
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 5 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

FOLIAR FERTILIZERS

Foliar fertilization entails the application of very diluted liquid solutions of nutritive elements on the plants' epigeal organs (leaves and/or trunks) which are later absorbed by the cuticle and the foliar stomata.
Once the solution is evenly distributed on the leaf surface, the elements therein contained enter inside the leaf either through the foliar veins (translaminar penetration) or under the cuticle layer (cytotropic penetration) and from there they rapidly reach the plant's conductive system which delivers them to the cells.
In this way the use of the nutritive elements is almost immediate, unlike traditional soil fertilization where they have to overcome other elements' antagonism, unsuitable pH and environment and various other constraints.
For a correct foliar fertilization we recommend:
- Applications should be done early in the morning or late in the evening to better exploit the high humidity and leaf turgor
- Applications should be done with almost complete absence of wind, especially when atomizers are used
- Make sure the crop is not stressed by drought conditions (it is recommended to irrigate the day before the application)
- A solution with sub-acidic pH promotes foliar absorption being optimal for foliar applications
- The use of an adequate moisturizer or surfactant agent reduces the superficial tension of the nebulized drops, it improves the foliar fertilizer distribution and absorption, it increases the wet surface and it lowers the risk of leaf-burnings and darkening
- Choose a water volume and application pressure suitable for each crop (use the correct nebulization volume to grant the plant's full coverage)
- Do not apply the product before a rainfall (or a drip irrigation) so that the fertilizer won't be washed away.

K-Adriatica's **FOLIAR FERTILIZERS** line includes:

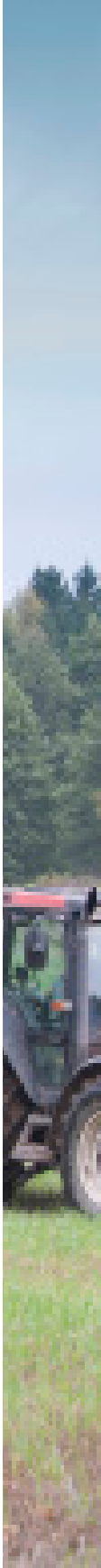
FILL NPK 21-21-21
FILL NPK 31-11-11
FILL NPK 25-20-15
POLIFILL NPK 5-20-5
POLIFILL MAGNISOL N20 Mo Zn

HOW TO POUR THE PRODUCTS IN A TANK: THE CORRECT SEQUENCE

Pouring the products in a tank in the correct order is a fundamental step.
To obtain the best results from treatments the solution must be carefully prepared .
If the products do not mix properly, they may precipitate with unwanted consequences on production.

Products must be poured in a tank in the following order:

1. pH regulators
2. Water-soluble bags (WSB)
3. Microgranular products (WG-SG)
4. Wettable powders (WP)
5. Suspensions concentrates and oil dispersions (SC-OD)
6. Suspoemulsions (SE)
7. Emulsions in water / microemulsions (EW/ME)
8. Emulsifiable concentrates (EC)
9. Soluble concentrates (SL)
10. Wetting agents, oil, fertilizers, anti-drift adjuvants



FILL NPK 21-21-21

Adriatica

Balanced

FILL NPK 21-21-21 is a fertilizer for foliar applications. Its balanced ratio between nitrogen, phosphorus and potassium (1:1:1) makes it ideal for treating all the crops and throughout the whole productive cycle.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit	Throughout the whole crop cycle	2-3 kg
Citrus (orange, lemon, tangerine, clementine, bergamot), Olive	Throughout the whole crop cycle	2-3 kg
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum)	Throughout the whole crop cycle	2-3 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From early vegetative phases to harvest	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From early vegetative phases to harvest	2-3 kg
Flowers and Ornamentals	From early vegetative phases to harvest	2-3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	From early vegetative phases to harvest	2-3 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Combined with post-emergence herbicide and phyto-sanitary treatments	4-6 kg
Fodder and forage crops (alfalfa, clover, grass)	At crop harvest	3-4 kg
Shrubs and arboreal crops (both open air and nursery)	From early vegetative phases	5-6 Kg
Protected crops (Fruit crops, Horticultural crops, Flowers, Ornamentals)	From early vegetative phases	1-2 Kg

COMPOSITION		
Total nitrogen (N)		21%
Nitric nitrogen (N)		3%
Ammoniacalcal nitrogen (N)		1%
Urea nitrogen (N)		17%
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammonium citrate and water	21%
Phosphoric anhydride (P_2O_5)	Soluble in water	21%
Potassium oxide (K_2O)	Soluble in water	21%
Iron (Fe)	Soluble in water	0,03%
Iron (Fe)	Chelated with EDTA	0,03%
Manganese (Mn)	Soluble in water	0,01%
Manganese (Mn)	Chelated with EDTA	0,01%
Zinc (Zn)	Soluble in water	0,01%
Zinc (Zn)	Chelated with EDTA	0,01%
Low chlorine content		

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	6,74
Conductivity E.C. µS/cm (1‰)	886
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

FILL NPK 31-11-11

VEGETATIVE GROWTH PHASES

FILL NPK 31-11-11 is a fertilizer for foliar applications whose ratio between nitrogen, phosphorus and potassium (3:1:1) makes it ideal for treatments on all herbaceous crops at the first vegetative phases and at the cycle restart in fruit-bearing plants.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit	From vegetative restart to pre-flowering	3-4 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From vegetative restart to pre-flowering	3-4 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From vegetative restart to pre-flowering	3-4 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	From early vegetative phases to flowering	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	From early vegetative phases to flowering	2-3 kg
Flowers and Ornamentals	From early vegetative phases to bud formation	2-3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases	3-4 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Combined with post-emergence herbicide and phytosanitary treatments	5-6 kg
Fodder and forage crops (alfalfa, clover, grass)	At crop harvest	3-4 kg
Shrubs and arboreal crops (both open air and nursery)	At early vegetative phases	5-6 Kg
Protected crops (Fruit crops, Horticultural crops, Flowers, Ornamentals)	At early vegetative phases	1-2 Kg

COMPOSITION		
Total nitrogen (N)		31%
Nitric nitrogen (N)		3%
Ammoniacal nitrogen (N)		2%
Urea nitrogen (N)		26%
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammonium citrate and water	11%
Phosphoric anhydride (P_2O_5)	Soluble in water	11%
Potassium oxide (K_2O)	Soluble in water	11%
Boron (B)	Soluble in water	0,01%
Iron (Fe)	Soluble in water	0,05%
Iron (Fe)	Chelated with EDTA	0,05%
Manganese (Mn)	Soluble in water	0,04%
Manganese (Mn)	Chelated with EDTA	0,04%
Zinc (Zn)	Soluble in water	0,02%
Zinc (Zn)	Chelated with EDTA	0,02%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	7,05
Conductivity E.C. µS/cm (1‰)	892
WAY OF USE	FOLIAR

PACKAGING: 1 - 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

FILL NPK 25-20-15

Adriatica

VEGETATIVE GROWTH PHASES

FILL NPK 25-20-15 is a fertilizer for foliar applications. Its ratio between nitrogen and phosphorus makes it ideal for treatments in all the fruit crops from the early growth phases until fruits start to develop and for pre- and post-flowering treatments, both on horticultural and industrial crops.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit	At pre-flowering and post-flowering until fruit development	3-4 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	At pre-flowering and post-flowering until fruit development	3-4 kg
Pome fruits (apple, pear, quince), Stone fruits (peach, nectarine, apricot, cherry, plum)	At pre-flowering and post-flowering until fruit development	3-4 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	At early vegetative phases, pre-flowering and post-flowering	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	At early vegetative phases, pre-flowering and post-flowering	2-3 kg
Flowers and Ornamentals	At early vegetative phases	2-3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	At early vegetative phases, pre-flowering and post-flowering	3-4 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Combined with post-emergence herbicide and phytosanitary treatments	5-6 kg
Fodder and forage crops (alfalfa, clover, grass)	At vegetative restart and at crop harvest	3-4 kg
Shrubs and arboreal crops (both open air and nursery)	After transplanting or from vegetative restart	5-6 Kg
Protected crops (Fruit crops, Horticultural crops, Flowers, Ornamentals)	At early vegetative phases, pre-flowering and post-flowering	1-2 Kg

COMPOSITION		
Total nitrogen (N)		25%
Nitric nitrogen (N)		1,6%
Ammoniacal nitrogen (N)		1,5%
Urea nitrogen (N)		21,9%
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammonium citrate and water	20%
Phosphoric anhydride (P_2O_5)	Soluble in water	20%
Potassium oxide (K_2O)	Soluble in water	15%
Boron (B)	Soluble in water	0,02%
Copper (Cu)	Soluble in water	0,03%
Copper (Cu)	Chelated with EDTA	0,03%
Iron (Fe)	Soluble in water	0,1%
Iron (Fe)	Chelated with EDTA	0,1%
Manganese (Mn)	Soluble in water	0,02%
Manganese (Mn)	Chelated with EDTA	0,02%
Molybdenum (Mo)	Soluble in water	0,01%
Zinc (Zn)	Soluble in water	0,05%
Zinc (Zn)	Chelated with EDTA	0,05%
Low chlorine content		

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	5,25
Conductivity E.C. µS/cm (1‰)	530
WAY OF USE	
	FOLIAR

PACKAGING: 1 - 5 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

POLIFILL NPK 5-20-5

POST-TRANSPLANTING AND PRE-FLOWERING PHASES

POLIFILL NPK 5-20-5 is a fertilizer for foliar application whose high phosphorus content makes it ideal for post-dormancy recovery treatments, to stimulate growth, to promote rhizogenesis in post-transplanting root cuttings and to improve flowering and fruit-set in pre-flowering and full flowering applications. It is ideal for all types of crops.

CROP	APPLICATION TIME	DOSE/HECTARE*
Grapes, Kiwifruit	From pre-flowering to fruit-set	3-4 kg
Citrus (orange, lemon, tangerine, clementine, bergamot) and Olive	From pre-flowering to fruit-set	3-4 kg
Pome fruits (apple, pear, quince) and Stone fruits (peach, nectarine, apricot, cherry, plum)	From pre-flowering to fruit-set	3-4 kg
Strawberries and Small fruits (blueberry, raspberry, blackberry, currant)	During early vegetative phases	2-3 kg
Fruiting vegetables (tomato, pepper, eggplant, melon, watermelon, cucumber, zucchini, pumpkin)	After transplanting to reduce stress and promote rhizogenesis. At pre- and post-flowering to promote flowering and fruit-set	2-3 kg
Flowers and Ornamentals	After transplanting to reduce stress and promote rhizogenesis. At pre-flowering to promote flowering	2-3 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	During early vegetative phases	3-4 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Combined with phitosanitary treatments	5-6 kg
Fodder and forage crops (alfalfa, clover, grass)	At crop harvest	5-6 kg
Shrubs and arboreal crops (both open air and nursery)	At transplanting and vegetative restart	4-5 Kg
Protected crops (Fruit crops, Horticultural crops, Flowers, Ornamentals)	At early vegetative phases	1-2 Kg

COMPOSITION		
Total nitrogen (N)		5%
Urea nitrogen (N)		5%
Phosphoric anhydride (P_2O_5)	Soluble in water	20%
Potassium oxide (K_2O)	Soluble in water	5%
Boron (B)	Soluble in water	0,02%
Copper (Cu)	Soluble in water	0,01%
Copper (Cu)	Chelated with EDTA	0,01%
Iron (Fe)	Soluble in water	0,03%
Iron (Fe)	Chelated with EDTA	0,03%
Manganese (Mn)	Soluble in water	0,02%
Manganese (Mn)	Chelated with EDTA	0,02%
Molybdenum (Mo)	Soluble in water	0,001%
Zinc (Zn)	Soluble in water	0,03%
Zinc (Zn)	Chelated with EDTA	0,03%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	2
Conductivity E.C. µS/cm (1‰)	670
Density (g/cm³)	1,29
WAY OF USE	FOLIAR

PACKAGING: 1 - 6 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

POLIFILL MAGNISOL N20 Mo Zn

IMPROVES THE QUALITY OF CEREAL PRODUCTIONS
IMPROVES THE QUALITY OF THE MUST
IN COMBINATION WITH HERBICIDES AND PHYTOSANITARY TREATMENTS FOR CEREAL AND EXTENSIVE CROPS

POLIFILL MAGNISOL N20 Mo Zn is a fertilizer for foliar applications that groups together nitrogen, sulfur and magnesium in balanced proportions to improve yield performance and quality of industrial and cereal crops.

The marked plastic activity, linked to the particular ratio existing between these elements, supports the plant during the phenological phases in which the quantitative and qualitative yield of the crop are determined. Sulfur, in synergy with nitrogen, supports the formation of high-energy protein compounds, thus improving the quality of production. Magnesium, in synergy with nitrogen, actively participates in the photosynthetic process and is essential to keep leaf functionality, consequently improving the productive characteristics of the crops.

Thanks to its balanced nutrients' supply, **POLIFILL MAGNISOL N20 Mo Zn** applied in the late growing phases in wine grapes (starting from veraison) is effective in increasing the Readily Assimilable Nitrogen (APA) and the acidity and aroma of musts.

CROP	APPLICATION TIME	DOSE/HECTARE*
Wine grapes	From veraison (change of color) 2 applications every 10-15 days	25 kg
Cereal crops (wheat, rice, corn, barley, sorghum, oats, rye, triticale)	Combined with post-emergence herbicide and phytosanitary treatments	25 kg
Industrial crops (tomato, tobacco, soybeans, sunflower, cotton, beets, sugarcane)	Combined with post-emergence herbicide and phytosanitary treatments	25 kg

COMPOSITION		
Total nitrogen (N)		20%
Urea nitrogen (N)		20%
Magnesium oxide (MgO)	Soluble in water	5%
Sulfuric anhydride (SO_3)	Soluble in water	10%
Molybdenum (Mo)	Soluble in water	0,002%
Zinc (Zn)	Soluble in water	0,1%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	6,7
Conductivity E.C. µS/cm (1‰)	350
Density (g/cm³)	1,32
WAY OF USE	FOLIAR

PACKAGING: 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

WATER SOLUBLE FERTILIZERS

Adriatica

Fertigation is the technique by which fertilizers are distributed through the irrigation water. The distribution of fertilizers in water improves the nutrients' absorption by the plant and optimizes the use of water. This technique has the following advantages:

- low labour-intensive
- less soil compacting
- improved distribution of nitrogen fertilizers
- more efficient uptake of fertilizers, as these are applied to the soil area where the roots are actually present
- no loss of water and nutrients
- possibility to fertilize also when crops are not accessible to spraying devices

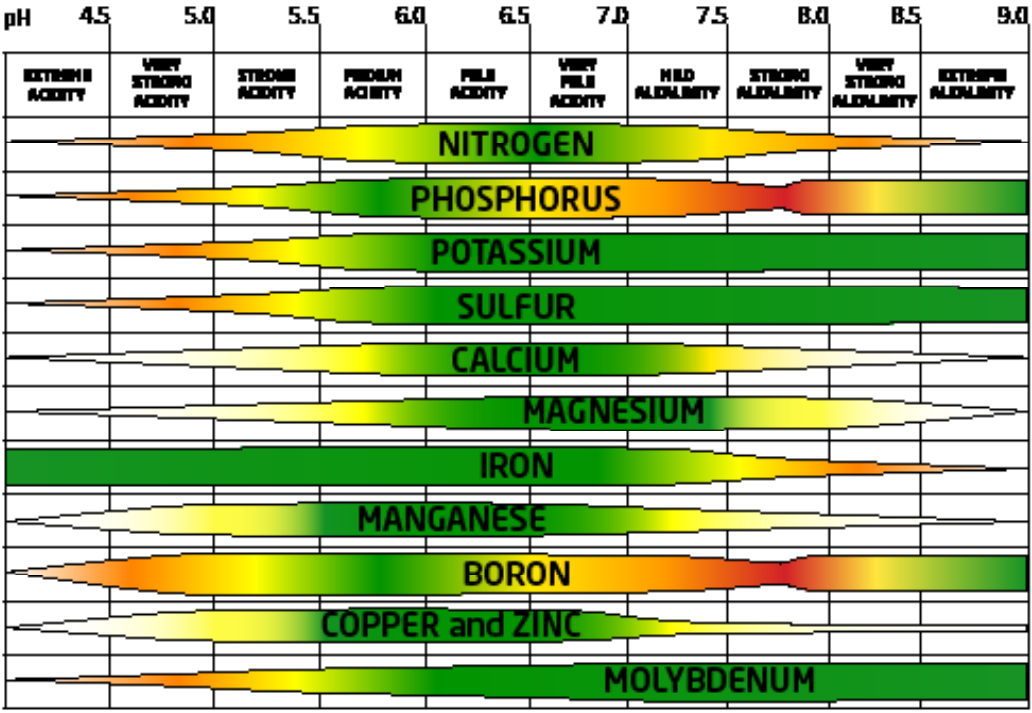
The **WATER SOLUBLE FERTILIZERS** line has a wide range of hydrosoluble, mineral and organo-mineral fertilizers specifically formulated for fertigation. This line comprises NPK formulations (nitrogen, phosphorus and potassium), some enriched with microelements, which target specific nutritional requirements that are associated to the various phenological phases.

K-Adriatica's **WATER SOLUBLE FERTILIZERS** line includes:

ACTIVE GOLD LINE
IDRON LINE
K-SOL LINE
FLU-FERT LINE
BULL LINE

THE EFFECTS OF THE SOIL OR SUBSTRATE pH ON THE PLANTS' ABILITY TO UPTAKE NUTRITIVE ELEMENTS

Soil pH strongly affects nutrients' availability and the plants' ability to absorb them.



ACTIVE GOLD LINE

Adriatica

The one-of-a-kind **ACTIVE GOLD LINE** is a combination of high quality hydrosoluble fertilizers with organic compounds of vegetal origin with strong biostimulating properties.

The regular application of the **ACTIVE GOLD LINE** products stimulate plant development and fruit growth, favoring their uniformity and size. It also fosters the development of edaphic microflora and microfauna, with beneficial effects on rhizogenesis and on the plant as a whole. The **ACTIVE GOLD LINE** is enriched with cell walls and residues of nutritional yeasts that stimulate the plants' endogenous defences which make for a faster recovery following biotic and abiotic stress.

The perfect solubility, the particular combining ratios, the significant presence of laevorotatory amino acids with low molecular weight and the integration with chelated elements make these hydrosoluble products readily absorbed and effective at any crop phase.

The products of the **ACTIVE GOLD LINE** are B.T.C. fertilizers with low chlorine content (<3%) (EU Regulation 2019/1009).

PRODUCT	PERCENTAGE COMPOSITION															
	Tot N	Org N	Nitric	Ammoniacal	Ureic	P_2O_5	K_2O	MgO	SO_3	B	Cu EDTA	Fe EDTA	Mn EDTA	Mo	Zn EDTA	Org C
ACTIVE GOLD NPK 14-7-21 B.T.C.	**14**	1,3	**4,5**		8,2	7	21	5	9,4	0,01	0,002	0,02	0,01	0,001	0,002	7,5
ACTIVE GOLD NPK 10-5-30 B.T.C.	**10**	1,3	**7**	**1,7**		5	30	2	10,5	0,01	0,002	0,02	0,01	0,001	0,002	7,5
ACTIVE GOLD NPK 17-17-17 B.T.C.	**17**	1,3	**4,5**	**3**	8,2	17	17			0,01	0,002	0,02	0,01	0,001	0,002	7,5
ACTIVE GOLD NPK 11-40-11 B.T.C.	**11**	1,3		**5,1**	4,6	40	11			0,01	0,002	0,02	0,01	0,001	0,002	7,5
ACTIVE GOLD NK 6-12 B.T.C.	**6**	6					12		7,9	0,01	0,002	0,02	0,01	0,001	0,002	33

PRODUCT	pH	CONDUCTIVITY	WAY OF USE	CROP	APPLICATION TIME
	(sol. 1%)	µS/cm (1‰)			
			FERTIGATION	All crops	
			DOSE kg/ha*		
ACTIVE GOLD NPK 14-7-21 B.T.C.	4,1	970	25-50		Balanced
ACTIVE GOLD NPK 10-5-30 B.T.C.	3,8	1390	25-50		Ripening inducer
ACTIVE GOLD NPK 17-17-17 B.T.C.	4,5	880	25-50		Balanced
ACTIVE GOLD NPK 11-40-11 B.T.C.	4,1	680	25-50		Post-transplanting / pre-flowering phase
ACTIVE GOLD NK 6-12 B.T.C.	5,6	410	25-50		Post-transplanting / pre-flowering phase

NEW N

PACKAGING: 10 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

IDRON LINE

The **IDRON LINE** has been known in fertigation for a long time. Its range of products are aimed at the fertilization of plant-nurseries and those having particular nutritional requirements.

K-Adriatica's ongoing research of solutions for the improvement of its own formulations produced a peculiar blend of elements, branded MIX K, which, added during the formulation process delivers fertigation products with improved characteristics and efficacy.

The addition of MIX K improves solubility, reduces pH and conductivity. All this turns into efficient fertigation in the field, with no sedimentation and consequent dripline clogging.

The products of the **IDRON LINE** are B.T.C. fertilizers with low chlorine content (<3%) (EU Regulation 2019/1009).

PRODUCT	PERCENTAGE COMPOSITION													
	Tot N	Nitric	Ammo-niacal	Ureic	P_2O_5	K_2O	MgO	CaO	B	Cu EDTA	Fe EDTA	Mn EDTA	Mo	Zn EDTA
IDRON (NPK) B.T.C. 9-50-9 +ME	**9**	1	8		**50**	**9**	2		0,01	0,002	0,02	0,01	0,001	0,002
IDRON (NPK) B.T.C. 12-6-36 +ME	**12**	10	2		**6**	**36**	2		0,01	0,002	0,02	0,01	0,001	0,002
IDRON (NPK) B.T.C. 14-7-21 +ME	**14**	6	8		**7**	**21**	2,5		0,01	0,002	0,02	0,01	0,001	0,002
IDRON (NPK) B.T.C. 20-20-20 +ME	**20**	5,5	3,5	11	**20**	**20**			0,01	0,002	0,02	0,01	0,001	0,002
IDRON (NPK) B.T.C. 30-10-10 +ME	**30**	1		29	**10**	**10**	2,5		0,01	0,002	0,02	0,01	0,001	0,002
IDRON Ca (NPK) B.T.C. 10-5-23 +ME	**10**	10			**5**	**23**	2	**8**	0,01	0,002	0,02	0,01	0,001	0,002

PRODUCT	pH	CONDUCTIVITY	WAY OF USE		CROP	APPLICATION TIME
	(sol. 1%)	µS/cm (1‰)	FERTIGATION	HYDROPONICS		
			DOSE kg/ha*	DOSE kg/ha*		
IDRON (NPK) B.T.C. 9-50-9 +ME	4	790	25-50		All crops	Post-transplanting / pre-flowering phase
IDRON (NPK) B.T.C. 12-6-36 +ME	3,30	1155	25-50			Ripening inducer
IDRON (NPK) B.T.C. 14-7-21 +ME	3,6	1290	25-50			Balanced
IDRON (NPK) B.T.C. 20-20-20 +ME	3,68	740	25-50			Balanced
IDRON (NPK) B.T.C. 30-10-10 +ME	3,5	375	25-50			Vegetative phase
IDRON Ca (NPK) B.T.C. 10-5-23 +ME	3,31	1020	25-50	0,5-1,5		Ripening inducer

PACKAGING: 10 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

K-SOL LINE

Adriatica

The **K-SOL LINE** is made of a wide range of highly water soluble products from which one can choose the most suitable combination of elements that best corresponds to the requirements of the single crops and to the harvest expectations.

The microelements are in a totally chelated form and help prevent and cure possible physiological disorders associated to microelements' deficiency. The **K-SOL LINE** can be used with any fertigation system.

B.T.C. formulations with low chlorine content are also available (<3%) (UE Regulation 2019/1009).

PRODUCT	PERCENTAGE COMPOSITION														
	N Tot	Nitric	Ammo-niacal	Ureic	P_2O_5	K_2O	CaO	MgO	SO_3	B	Cu EDTA	Fe EDTA	Mn EDTA	Mo	Zn EDTA
K-SOL 9-50-9 +ME	**9**		9		**50**	**9**				0,01	0,002	0,02	0,01	0,001	0,002
K-SOL 12-6-36 +ME	**12**		3,5	8,5	**6**	**36**			7	0,01	0,002	0,02	0,01	0,001	0,002
K-SOL 14-7-21 +ME	**14**		10	4	**7**	**21**			25	0,01	0,002	0,02	0,01	0,001	0,002
K-SOL 20-20-20 +ME	**20**		3	17	**20**	**20**				0,01	0,002	0,02	0,01	0,001	0,002
K-SOL 25-10-5 +ME	**25**		11	14	**10**	**5**			24	0,01	0,002	0,02	0,01	0,001	0,002
SPECIFIC PRODUCTS															
K-SOL ZEA 25-5-10 +ME	**25**		8	17	**10**				21	0,05				0,003	0,7*
K-SOL (NP) 10-50 5% MgO	**10**		10		**50**			5							
HUREM (N) 2% MgO **+ME**	**41**		1	40				2		0,05			0,1*		0,1*
BASIC PRODUCTS**															
K-SOL (NK) 13-46 B.T.C.	**13**	13				**46**									
K-SOL (MKP) 52-34					**52**	**34**									
K-SOL NP (MAP) 12-61	**12**		12		**61**										
K-SOL SA20 BIANCO	**20,6**		20,6						58						
K-SOL NITROCAL GG GR	**15,2**	14	1,2				26,6								
K-SOL BIO 51 BTC						**51**			43						
K-SOL MAGNESIO SOLFATO EPTAIDRATO								16	32						
K-SOL MAG NITRATO DI MAGNESIO	**10,8**	10,8						15,4							

PRODUCT	pH	CONDUCTIVITY	WAY OF USE	CROP	APPLICATION TIME
	(sol.1%)	µS/cm (1‰)	FERTIGATION DOSE kg/ha*		
K-SOL 9-50-9 +ME	4,45	1235	25-50	All crops	Post-transplanting/ pre-flowering phase
K-SOL 12-6-36 +ME	4,64	1565	25-50		Ripening inducer
K-SOL 14-7-21 +ME	5,6	1720	25-50		Balanced
K-SOL 20-20-20 +ME	5,3	870	25-50		Balanced
K-SOL 25-10-5 +ME	4,45	1450	25-50		Vegetative phase
K-SOL ZEA 25-5-10 +ME	4,9	1200	25-50		Vegetative phase
K-SOL (NP) 10-50 5% MgO	6,19	1240	25-50		Post-transplanting/ pre-flowering phase
HUREM (N) 2% MgO **+ME**	8,26	575	25-50		Vegetative phase
K-SOL (NK) 13-46 B.T.C.	4,5	1425	25-50		Ripening inducer
K-SOL (MKP) 52-34	5,5	830	25-50		Vegetative phase
K-SOL NP (MAP) 12-61	4,8	905	25-50		Post-transplanting/ pre-flowering phase
K-SOL SA20 BIANCO	6,5	2140	25-50		Vegetative phase
K-SOL NITROCAL GG GR	6,3	950	25-50		Vegetative phase
K-SOL BIO 51 BTC	2,85	1565	25-50		Ripening inducer
K-SOL MAGNESIO SOLFATO EPTAIDRATO	7	747	25-50		Vegetative phase
K-SOL MAG NITRATO DI MAGNESIO	6,7	900	25-50		Vegetative phase

NEW

* Not EDTA

** On LDPE Bags

PACKAGING: 10 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

FLU-FERT LINE

FLU-FERT LINE is a line of gel-formulated fertilizers containing the three main elements of plant nutrition, nitrogen, phosphorus and potassium (NPK), enriched with chelated microelements.

Its peculiar formulation grants a longer persistence of the product in the soil and a gradual release of nutritive elements to the plants' roots. The products belonging to this line are less likely of being washed away, especially on sandy and highly permeable soils and help to improve the interactions between roots, soil and nutritive compounds.

The raw materials used in the formulation have a high purity, which makes the nutrients therein contained rapidly absorbed and metabolized with almost immediate desired agronomic results, even in case of adverse pedoclimatic conditions (saline soils, high or low temperatures, etc.).

The products of the **FLU-FERT LINE** are B.T.C. fertilizers with low chlorine content (<3%) (EU Regulation 2019/1009).

PRODUCT	PERCENTAGE COMPOSITION									
	N Tot	Ureic	P_2O_5	K_2O	B	Cu EDTA	Fe EDTA	Fe DTPA	Mn EDTA	Zn EDTA
GEL										
FLU-FERT NPK 20-5-10 +ME B.T.C.	**20**	20	**5**	**10**				0,06		
FLU-FERT NPK 15-10-15 +ME B.T.C.	**15**	15	**10**	**15**	0,05	0,03			0,03	0,03
FLU-FERT NPK 10-15-20 +ME B.T.C.	**10**	10	**15**	**20**	0,05		0,03		0,03	0,03
CONCENTRATED SUSPENSIONS										
FLU-FERT NPK 0-20-30 +ME B.T.C.			**20**	**30**	0,05		0,03		0,03	0,03
FLU-FERT NPK 16-16-16 +ME B.T.C.	**16**	16	**16**	**16**	0,05	0,03	0,02		0,02	0,02

PRODUCT	pH	CONDUCTIVITY	DENSITY	WAY OF USE	CROP	APPLICATION TIME
	(sol. 1%)	µS/cm (1‰)	g/cm³	FERTIGATION		
				DOSE kg/ha*		
GEL						
FLU-FERT NPK 20-5-10 +ME B.T.C.	9,56	540	1,41	25-50		Vegetative phase
FLU-FERT NPK 15-10-15 +ME B.T.C.	9,61	725	1,4	25-50		Balanced
FLU-FERT NPK 10-15-20 +ME B.T.C.	9,55	765	1,5	25-50	All crops	Ripening inducer
CONCENTRATED SUSPENSIONS						
FLU-FERT NPK 0-20-30 +ME B.T.C.	9,55	950	1,7	25-50		Ripening inducer
FLU-FERT NPK 16-16-16 +ME B.T.C.	7,8	410	1,62	25-50		Balanced

PACKAGING: 15 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

BULL LINE

Adriatica

The **BULL LINE** is a range of liquid fertilizers made of products with particular formulations that have been studied to perform in soils with different pH levels.

The **BULL LINE** includes both simple liquid fertilizers, in which there is only one macroelement to better measure their contribution to the crop requirement, and complex liquid fertilizers, which are characterized by an excellent stability and by a very easy way to use.

B.T.C. formulations with low chlorine content are also available (<3%) (UE Regulation 2019/1009).

PRODUCT	PERCENTAGE COMPOSITION								
	N Tot	Nitric	Ammoniacal	Ureic	P_2O_5	K_2O	SO_3	B	Fe EDTA
BULL N 30-0-0 B.T.C.	**30**	7,5	7,5	15					
BULL P 0-54-0 B.T.C.					**54**				
BULL NK 3-0-12	**3**	1	2			**12**	5,5		
BULL NK 3-0-30 B.T.C.	**3**			3		**30**			
BULL N-GOOO 28 DCD B.T.C.	**28**	6,5	7,4	14,1			5		
BULL NPK 14-7-7 B.T.C.	**14**			14	**7**	**7**		0,1	0,3

PRODUCT	pH	CONDUCTIVITY	DENSITY	WAY OF USE	CROP	APPLICATION TIME
	(sol. 1%)	µS/cm (1‰)	g/cm³	FERTIGATION		
				DOSE kg/ha*		
BULL N 30-0-0 B.T.C.	6,85	855	1,32	25-30	All crops	Vegetative phase
BULL P 0-54-0 B.T.C.	1,30	2000	1,59	25-30		Post-transplanting/ pre-flowering phase
BULL NK 3-0-12	7	200	1,18	25-30		Ripening inducer
BULL NK 3-0-30 B.T.C.	11,2	950	1,49	25-30		Ripening inducer
BULL N-GOOO 28 DCD B.T.C.	6,5	875	1,32	25-30		Vegetative phase
BULL NPK 14-7-7 B.T.C.	8,18	520	1,25	25-30		

PACKAGING:
25 - 250 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

MICROGRANULES

The **MICROGRANULES** line is a range of products formulated in 0,8-3,00 mm water-soluble microgranules, which have been developed for automatized and localized sowing and transplanting.

The localized fertilization brings nutrients close to the seedling during the initial development phases, reduces losses due to adverse weather conditions and lays the foundations for a more balanced crop growth, which is key for improved output and quality.

The arguments in favor of localized fertilization are:
- more available elements close to the plants
- less soil-fertilizer contact, with consequent limited soil-binding of key elements (potassium and phosphorus)
- lower quantity of fertilizer available to weeds
- visible "starter effect", with faster rhizogenesis and initial vegetative development (nitrogen and phosphorus)

K-Adriatica's **MICROGRANULES** line includes:

GROSTART NP 8-41
MICROPHOS Mo Zn NP 10-46
MICROPHOS NPK 8-33-10 B.T.C.
GROSTART CEREALI NP 10-40
K-SPRINT COMPLEX NPK 6-26-10

IN-DEPTH ANALYSIS

A correct FERTILIZER DISTRIBUTION SYSTEM is fundamental to achieve good results

Localized fertilization at both sowing and transplanting of horticultural and other crops seedlings is performed with specific machinery (microgranulators) that lay down the microgranules near the seeds or the roots, with prearranged doses.

In case of shrubs, ornamentals and fruit trees, plants are transplanted and the localized fertilization is given 50% of the total dose at the bottom of the hole where the plant will be laid and the remaining 50% is incorporated in the earth filling the hole and covering the roots of the transplanted plant.

In case of sowing (of potatoes in particular) or manual transplanting of both fruiting and leafy horticultural crops, the recommended dose of microgranules must be evenly spread at the base of the sowing/transplanting furrow, covered with earth and only then the sowing/transplanting process can start. In case of sowing, furrows must be covered with earth. Both sowing and transplanting must be followed by adequate irrigation.

MICROGRANULES LINE

K-Adriatica's **MICROGRANULES LINE** was created with the purpose to improve seed germination and seedling rooting, which both benefit from the availability of phosphorus.

To optimize the granules' distribution on the crops, three granulometries have been developed:
- 0,8 to 1,2 mm granules (microgranulometry): to be used in extensive crops seeders and in horticultural crops' transplanting machines
- 1,5 to 2,2 mm granules (medium granulometry): to be used in the sowing of grain cereals alternating, in the hopper, layers of seeds and layers of microgranular fertilizer in a proportion 5:1 (50 kg of seeds and 10 kg of fertilizer)
- 2,2 to 3 mm granules: to be localized below or laterally to the seed/seedling

B.T.C. formulations with low chlorine content are also available (<3%) (UE Regulation 2019/1009).

PRODUCT	GRANULOMETRY	SPECIFIC WEIGHT	WAY OF USE	DOSE kg/ ha*	CROP	APPLICATION TIME
GROSTART NP 8-41 0,2 B+0,04% Cu+0,5% Fe +0,5% Zn	0,8 - 1,2	0,89	Pre-trans-planting/ sowing fertilization, Post-trans-planting/ sowing fertilization	25-50	Cereal crops, Horticultural crops, Industrial crops	Localized at sowing/trans-planting
MICROPHOS Mo Zn NP 10-46 0,002% Mo + 0,8% Zn	0,8 - 1,2	0,90		30-45	Cereal crops, Horticultural crops, Industrial crops, Flowers Ornamentals	Localized at sowing/trans-planting
MICROPHOS NPK 8-33-10 B.T.C 0,002% Mo + 0,8% Zn + 2% MgO +9% SO_3	0,8 - 1,2	0,90		30-45	Cereal crops, Horticultural crops, Industrial crops	Localized at sowing/trans-planting
GROSTART CEREALI NP 10-40 0,08% Cu + 0,5% Fe + 0,1% Zn - with DCD inibitor 2,5%	1,5 - 2,2	0,90		25-50	Cereal crops	Localized at sowing
K-SPRINT COMPLEX NPK 6-26-10 4% CaO + 2% MgO + 1.2% SO_3 + 0,1 % B + 0,007% Mo + 0,6 Zn + Humic extracts Activated with fertilizer-specific product: humic and fulvic acids from leonardite	2,2 - 3	1,01		80-100	Cereal crops	Localized at sowing
				50-80	Soybeans	Localized at sowing
				100-120	Beets	Localized at sowing/trans-planting
				80-120	Horticultural crops	Localized at sowing/trans-planting

PACKAGING: 25 Kg (GROSTART) - 15 Kg (MICROPHOS, K-SPRINT COMPLEX)

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

GRANULARS

The **GRANULARS** is a line made of a wide range of products aimed at providing a solution to nutritional requirements of all crops, at all phenological phases and in all planting conditions.

K-Adriatica's compacted granular products are produced through a dry granulation process, borrowed from the pharmaceutical industry, which uses mechanical compression to obtain particles of raw material.
This process yields compacted granules without the addition of solvents necessary for the standard granulation process, which can have an impact on the product's final solubility.

The **GRANULARS** line offers a wide selection of products with the highest solubility and the highest versatility.

K-Adriaticas's **GRANULARS** line include:

N-GOOO LINE
K-SPECIAL LINE
K-BIO LINE
ORGANO-MINERALI COMPLESSI LINE
ORTOKAPPA LINE
K-FERT COMPLESSI LINE
K-FERT AZOTATI LINE

N-GOOO LINE

The products of the **N-GOOO LINE** are slow-release fertilizers, as they are formulated with the addition of dicyandiamide nitrification inhibitor (DCD). Thanks to the DCD, the ammoniacal nitrogen is captured by the colloids present in the clay fraction and gradually absorbed in the nitric form, in a period of 60-90 days from the application. Throughout this period, nitrogen is gradually made available to the plant, with reduction of losses caused by leaching and volatilization in the atmosphere. To secure utmost nutritional and environmental results, during the formulation process DCD is added to the other raw materials (nitrogen, phosphorus, potassium) in the microcrystalline phase and the whole thing is later compacted.

The use of the **N-GOOO LINE** of products offer the following advantages:

- Up to 20% reduction in the use of fertilizer, compared to traditional formulations
- Possibility to be used at all phases of the crop cycle, even in environmentally sensitive areas
- Gradual nitrogen uptake, thanks to the dicyandiamide nitrification inhibitor DCD (and the total lack of nitrogen in nitric form) being uniformly distributed within every granule
- Immediate availability of the fertilizing elements in the granules, due to their fast disintegration in soil

B.T.C. formulations with low chlorine content are also available (<3%) (UE Regulation 2019/1009).

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
N-GOOO AZOTATI			
N-GOOO 21 KRISTAL 20,6% N + 58% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	300-600	All crops
N-GOOO PRATIKO KRISTAL 20,6% N + 58% SO_3		300-600	
N-GOOO 26 26% N + 44% SO_3		300-700	
N-GOOO 30 30% N + 2% MgO + 28% SO_3		200-600	
N-GOOO 32 32% N + 32% SO_3		300-700	Cereal crops, Citrus, Horticultural crops
N-GOOO 40 40% N + 2% MgO + 5% SO_3 + 0,1% Zn		300-600	
N-GOOO COMPLEX			
N-GOOO NP 12-28	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	200-500	Cereal crops, Fruit crops, Horticultural crops
N-GOOO NP 20-10 32% SO_3		300-600	
N-GOOO NK 18-00-24 20% SO_3		400-600	
N-GOOO NPK 15-5-25 10% SO_3		300-500	Cereal crops, Horticultural crops
N-GOOO NPK 14-6-16 B.T.C. 2% MgO + 31% SO_3 + 2% CaO + 0,1 % B		300-900	Fruit crops, Horticultural crops, Olive
N-GOOO NPKn 20-05-08 2% MgO + 13% SO_3		300-900	Fruit crops, Horticultural crops, Olive , Hazelnut

PACKAGING: 25 - 500 /600 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

K-SPECIAL LINE

Adriatica

The products of the **K-SPECIAL LINE** are complex mineral fertilizers that have been developed to provide a solution to the nutritional requirements of specialised crops: orchards, olive groves, vineyards, Citrus groves, horticultural crops, hazelnut groves.

These products have been created to provide the right amount of crop specific nutritional elements and a good availability of sulfuric anhydride, calcium and microelements that should satisfy the basic nutritional requirements even of the most demanding crops. The granules rapidly dissolve in the ground allowing a fast nutrients' root uptake, making these fertilizers very efficacious.

B.T.C. formulations with low chlorine content are also available (<3%) (UE Regulation 2019/1009).

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
ORTOFRUTTA (FRUITS AND HORTICULTURE)			
NPK 6-12-22 B.T.C. 13,5% CaO + 2% MgO + 21% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	600-800	Fruit crops, Horticultural crops, Beets, Tobacco, Olive
NPK 12-12-12 18% CaO + 15% SO_3		500-900	Horticultural crops, Olive, Cereal crops
NPK 12-12-17 B.T.C. 0,9% CaO + 2% MgO + 18% SO_3 + 0,1% B		400-900	Fruit crops, Horticultural crops, Strawberries, Olive
NPK 18-8-8 B.T.C. 2% CaO + 2% MgO + 20% SO_3 + 0,1% B		300-800	Fruit crops, Horticultural crops
VIGNETO - FRUTTETO (VINEYARD - ORCHARD)			
NPK 6-8-16 B.T.C. 2% CaO + 3,5% MgO + 21% SO_3 + 0,1% B	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	400-900	Grapes, Fruit crops, Horticultural crops, Strawberries, Tobacco
NPK 10-5-15 2% CaO + 2% MgO + 22% SO_3 + 0,1% B		400-900	Grapes, Fruit crops
NPK 10-6-18 B.T.C. 2% CaO + 2% MgO + 36% SO_3 + 0,1% B		400-900	Grapes, Fruit crops, Horticultural crops, Strawberries
NPK 12-6-18 2% MgO + 24% SO_3 + 0,1% B		400-900	Grapes, Fruit crops
K-S 30 B.T.C. 30% K_2O + 8% MgO + 26% SO_3		400-800	Grapes, Citrus, Horticultural crops, Beets, Strawberries, Tobacco
K-S 50 B.T.C. 42% SO_3		400-800	Grapes, Citrus, Horticultural crops, Beets, Strawberries, Tobacco
OLIVETO – AGRUMETO (OLIVE GROVE - CITRUS GROVE)			
NPK 12-8-8 11% + 2% MgO + 21% SO_3 + 0,1% B	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	400-800	Olive, Citrus
NPK 14-10-12 7,5% + 2% MgO + 12% SO_3 + 0,1% B		400-800	
NOCCIOLETO PLUS (HAZELNUT GROVE PLUS)			
N-GOOO NPK 22-5-8 2% CaO + 2% MgO + 10% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	400-600	Hazelnut, Walnut, Nut fruits

PACKAGING: 25 - 500/600 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

K-BIO LINE

The **K-BIO LINE**, with products authorized in organic farming, was created to target more specific nutritional requirements of all crops.

These products are made of granules that rapidly dissolve in the ground making nutrients available for immediate root uptake, warranting the highest qualitative and quantitative production standards, also in organic farming.

B.T.C. formulations with low chlorine content are also available (<3%) (UE Regulation 2019/1009).

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
K-BIO PK 6 12 14% CaO + 5% MgO + 40% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	500-900	Fruit crops, Horticultural crops, Beets, Strawberries
K-BIO S14 14% K_2O + 17% CaO + 6% MgO +48% SO_3		400-800	
K-BIO S28 B.T.C. 28% K_2O + 4% CaO +6% MgO +38% SO_3		400-800	Fruit crops, Horticultural crops, Beets, Strawberries, Tobacco

PACKAGING: 25 - 500/600 Kg

ORGANO-MINERALI COMPLESSI LINE

The fertilizers of the O**RGANO-MINERALI COMPLESSI LINE** are characterized by having a significant amount of plant organic matter. The organic matrix is composed of humic and fulvic acids and of dried vinasse amino acids. The humic and fulvic acids, obtained from deposits of fossil humus, are highly diversified compounds. Dried vinasse is the result of beets by-products' processing and, in particular, of molasses used in yeast production. It is organic matter rich in amino acids of plant origin. It includes organic nitrogen, potassium present in the organic matrix and non-fermentable sugars.
Humic and fulvic acids induce an intense root growth activity, which increases the germinative capacity and the use of stored energy of the seeds and stimulate, at a later phase, the development of an abundant root capillice. The amino acids of plant origin therein contained promote specific enzymatic activity during photosynthesis, protein synthesis and respiration.

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
ORGANIKO NPK 8-6-18 3% MgO+ 8,5% SO_3 + 7,5% C. Org. Dried Vinasse	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	500-800	Fruit crops Horticultural crops
ORGANIKO NPK 6-18-9 21% CaO+7,5% C. Org. Dried Vinasse		500-800	
ORGANIKO NPK 12-5-5 11,5 % CaO + 2% MgO + 17% SO_3 + 7,5% C. Org. Dried Vinasse		500-800	
ORGANIKO NP 7-21 5% (SO_3) + 7,5% C. Org.		500-800	

PACKAGING : 25 - 500/600 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

K-FERT COMPLESSI LINE

Adriatica

The **K-FERT COMPLESSI LINE** includes a vast range of products characterized by the presence of three main macroelements (nitrogen, phosphorus, potassium) and by a moderate presence of sulfur (as sulfuric anhydride, SO_3), which is considered the fourth most important nutritive element due to its role in plant nutrition.

Complex binary fertilizers also belong to this line of products. They offer a valid solution to specific crop needs and are recommended for autumn and spring cereals fertilization, and for the fertilization of rice, beets and soybeans.

B.T.C. formulations with low chlorine content are also available (<3%)(UE Regulation 2019/1009)

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
BINARY NP COMPLEXES			
5-25 32% CaO + 2% MgO + 5% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	300-600	Cereal crops, Beets, Soybeans
10-25 37% CaO		300-600	Cereal crops
10-30 30,5% CaO		300-600	
BINARY PK COMPLEXES			
0-14-28 16% CaO + 2% MgO	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	400-700	Cereal crops, Beets, Soybeans
0-20-20 24,5% CaO		400-700	
0-24-12 31% CaO		400-700	
BINARY NK COMPLEXES			
16-0-30 15% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	200-700	Cereal crops, Fruit crops
20-0-20 2% MgO + 15% SO_3		200-700	Cereal crops
TERNARY NPK COMPLEXES			
5-15-30 16% CaO	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	300-800	Cereal crops, Beets, Soybeans
6-12-24 11% CaO + 8% SO_3		300-800	Cereal crops, Beets, Soybeans
7-14-21 14% CaO + 6% SO_3		300-800	Cereal crops, Soybeans
7-20-14 22,5% CaO + 5% SO_3		400-800	Cereal crops, Beets, Soybeans
8-16-20 13,5% CaO + 11% SO_3		300-800	Cereal crops, Beets, Soybeans
8-24-24 9% CaO		300-800	Cereal crops
13-5-20 5,5% CaO + 25% SO_3		300-800	
15-15-15 13% CaO + 5% SO_3		300-700	
20-10-10 8% CaO + 16% SO_3		300-700	Cereal crops, Fruit crops
TERNARY NPK B.T.C. COMPLEXES			
8-24-20 B.T.C. 13,5% CaO + 16% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	300-700	Horticultural crops, Fruit crops, Beets
11-22-16 B.T.C. 14% CaO + 11% SO_3		300-800	

PACKAGING: 25 - 500/600 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

K-FERT AZOTATI LINE

The **K-FERT AZOTATI LINE** is made of a wide range of products characterized by the two stable forms of nitrogen (ammonia and ureic) and by high availability of sulfuric anhydride (SO_3).

The products of this line are a valid alternative to the traditional ammonium nitrates without sulfur and Nitrogen which, in case of rainfall, are subject to considerable losses due to leaching.

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
SOLFATO AMMONICO CRISTALLINO GIALLO 20,6% N + 58% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	200-600	Cereal crops, Horticultural crops, Fruit crops
PRATIKO 20,6% N + 58% SO_3		200-600	Cereal crops, Horticultural crops, Fruit crops
UNIKO 25,5% N + 44% SO_3		200-600	Cereal crops, Horticultural crops, Citrus, Olive
ENERGIKO 33,5% N + 28% SO_3		300-700	Cereal crops

PACKAGING: 25 - 500/600 Kg

ORTOKAPPA LINE

The **ORTOKAPPA LINE** collects all K-Adriatica's professional experience and makes it available to hobbyists to offer the best nutritional solutions.

ORTFRUTKAL, present in this line of products, is particularly indicated for horticultural crops and ornamentals, which are highly demanding in calcium, magnesium and sulfuric anhydride (SO_3).

In addition to the considerable supply of macro-, meso- and microelements, these products carry out an intense acidifying activity and provide suitable quantities of calcium to the crops, preventing many calcium-related physiological disorders.

B.T.C. formulations with low chlorine content are also available (<3%)(UE Regulation 2019/1009)

PRODUCT	WAY OF USE	DOSE kg/ha*	CROP
UNIVERSALE NPK 12-12-12 18% CaO + 15% SO_3	Pre-transplanting/sowing fertilization, Post-transplanting/sowing fertilization	400-600	All crops
ORTOFRUTTA 12-12-17 B.T.C. 9% CaO + 2% MgO + 18% SO_3 + 0,1% B		400-600	Horticultural crops, Fruit crops
PRATOBELLO NPK 20-10-10 8% CaO + 16% SO_3		300-500	Flowers, Ornamentals, Horticultural crops
ORTFRUTKAL NPK 9-5-18 10% CaO, 2% MgO, 8% SO_3, 0,01% B, 0,02% Fe, 0,01% Mn, 0,002% Mo, 0,01% Zn		400-600	Fruit crops, Horticultural crops Flowers, Ornamentals

PACKAGING: 5 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

ACIDIFIERS

Adriatica

The **ACIDIFIERS** line is a range of products created by **K-Adriatica** to improve the efficacy of crop protection, weed control, phytohormones and fertilizers' applications.
Among the factors affecting the efficacy of the treatments, water pH plays an important role. Alkaline hydrolysis, which occurs at high pH levels, might be responsible for the active ingredient's molecules deactivation, resulting in a loss of efficacy against the pathogens they should control (pests – fungi – weeds).
Water acidification to reach optimal pH levels (5,5) prevents alkaline hydrolysis so that the efficacy of the actives to be used in the formulation is not impaired.
From a nutritional stand point it is important to notice that, in case of fertigation and foliar applications, a correct water pH maximizes crop nutrients' uptake, resulting in less used fertilizers and lower cost per hectare.

K-Adriatica's ACIDIFIERS line includes:

NITRACID
SYNCRON

IN-DEPTH ANALYSIS

THE ADVANTAGES OF NUTRITIVE SOLUTIONS' ACIDIFICATION

The acidification of nutritive solutions is in many ways a common and convenient practice in fertigation.
The correction of the nutritive solution's pH in fertigation offers many advantages, the two main ones being:

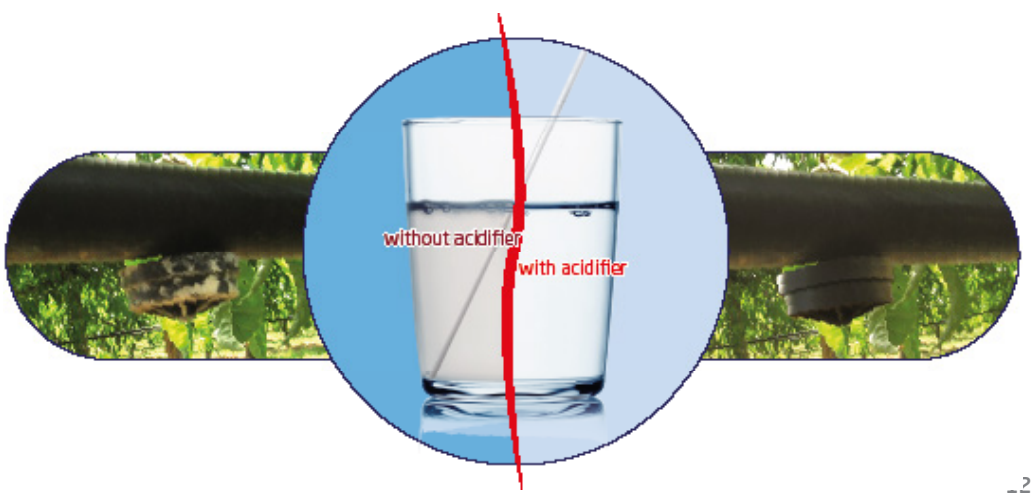
- **pH optimization for a better availability of nutritive elements**

Each essential nutritive element for the plant has a pH interval, within which there is the highest availability of its assimilable forms. This interval changes for each element, even though between pH 6,2 and pH 6,5 there is the best availability for many of them.
There are also optimal pH values for nutrients and root uptake of each species. There are plants that better thrive in low pH levels (acidophilic species) and others that, conversely, better develop with high pH levels (basophilic species).

- **Prevention and/or elimination of clogs and deposits in the irrigation system and pipes.**

Irrigation pipe clogging may happen because of three different causes:
a) physical, due to suspended solids
b) biological, due to the proliferation of bacteria and algae
c) chemical, due to the formation of precipitates

By using an acidified nutritive solution one can reduce the impact of the above inconveniences



NITRACID

Adriatica

ACIDIFIER

NITRACID is a product that has to be applied by mixing it with irrigation water. Its use is best when applied in fertigation with hydrosoluble fertilizers.

NITRACID performs an intense acidifying activity. It considerably reduces the pH values both in the irrigation water and in the soil subject to fertigation. **NITRACID** improves the availability of micro- and macroelements with positive effects on root uptake. **NITRACID** provides readily available nitrogen and magnesium, with immediate greening effect and intense vegetative growth.

The product is used for foliar fertilizer applications, especially in combination with crop protection products (fungicides, insecticides). **NITRACID** also performs a specific cleansing action against honeydew (sugary exudates) secreted by various insects such as pear psylla, aphids and the flaky citrus fly. Moreover the peculiar composition of this formulationcreates an unwanted environment for the development of the above mentioned parasites.

The use of **NITRACID** is particularly recommended on root applications of microelements, especially of iron-based formulations. Lastly, it is recommended when devices used for the application of crop protection products and fertilizers need a strong and thorough cleansing of all their parts (barrels, tanks and containers in general).

CROP	APPLICATION TIME	DOSE*	
		FOLIAR	FERTIGATION
All crops	Combined with foliar fertilizer applications	100-200 g/hectolitre	15-30 Kg/ha
All crops	Combined with crop protection applications	100-200 g/hectolitre	
All crops	Combined with hydrosoluble fertilizer applications in fertigation		2,5-4 kg/1000 m² The more frequent the applications, the lower the amount of NITRACID to be used
All crops	Root application of microelements, especially of iron-based formulations		500-600 g/hectolitre of fertilizing solution
All crops	Cleansing action on sugary exudates secreted by various insects (psylla, aphids, flaky citrus fly, whiteflies, etc.)	250-300 g/hectolitre Use abundant amounts of water and apply at the very first hours of the day	
	Devices cleansing	300-400 g/hectolitre	

COMPOSITION		
Total nitrogen (N)		15%
Nitric nitrogen (N)		9%
Ammoniacal nitrogen (N)		6%
Magnesium oxide (MgO)	Soluble in water	2%

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		1,7
Conductivity E.C. µS/cm (1‰)		1650
Density (g/cm³)		1,32
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 6 - 12 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

SYNCRON

ACIDIFYING SUPPLEMENT

SYNCRON is a nutritional specialty with an acidifying activity on the solution. Thanks to its composition, the preventative addition of **SYNCRON** in the blend leads to the following agronomic results:

- no alkaline hydrolysis on herbicides, crop protection products and any substance subject to this reaction
- physiological relief to post-chemicals application stress
- improvement of foliar uptake
- faster and more efficient nutrients' uptake (fertigation)
- the use of **SYNCRON** on all crops and at all phenological phases keeps solutions at acidic pH values, positively affecting the solubility of all products used in the mix with undeniable benefits to the farmer.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
All crops	Combined with foliar fertilizer applications	0,3 Kg	
All crops	Combined with crop protection applications	0,3 Kg	
All crops	Combined with hydrosoluble fertilizer applications in fertigation		1-2 Kg

COMPOSITION	
Citric Acid	98 %
Disaccharides	2 %

PHYSICO-CHEMICAL CHARACTERISTICS		
SOLUBLE POWDER		
pH (sol 1%)		3,68
Conductivity E.C. µS/cm (1‰)		456
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 0.3 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

COADJUVANTS

The products of the K-Adriatica's **COADJUVANTS** line are formulated to improve absorption by both ensuring a homogeneous distribution of the product on the treated surface and by facilitating penetration inside the plant, thanks to peculiar organic compounds therein contained.

K-Adriatica's **COADJUVANTS** line includes:

KOMBY
TENSIOFILL
TIOAMMON

Adriatica

KOMBY

SYNERGIST ACIDIFIER IMPROVES ABSORPTION

KOMBY is a wettable powder formulation to be added to all crop protection and fertilizer foliar applications. These products, combined with crop protection products, enhance the crop natural defences against external agents (fungi, bacteria, viruses, pests). These products are also characterized by high acidic functions, which facilitate stomata uptake and translocation inside the plant of active ingredients and therefore providing faster treatment efficacy.

CROP	APPLICATION TIME	DOSE/HECTARE*	
		FOLIAR	FERTIGATION
All crops	Combined with foliar fertilizer applications	0,3-0,5 kg/ha	
All crops	Combined with hydrosoluble fertilizer applications in fertigation		1-2 kg/ha

COMPOSITION	
Polycarboxilic acids	40 %
EDTA	20 %
Total sulfuric trioxide (SO_3)	12 %
Carbon (C)	27 %
Free amino acids	8%

PHYSICO-CHEMICAL CHARACTERISTICS		
SOLUBLE POWDER		
pH (sol 1%)		4,05
Conductivity E.C. µS/cm (1‰)		400
WAY OF USE		
	FOLIAR	FERTIGATION

PACKAGING: 0,5 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

TENSIOFILL

Adriatica

PERMEATING ADHESIVE

TENSIOFILL is a coadjuvant that favors the homogeneous distribution of the fertilizer on the treated leaves lamina. **TENSIOFILL** high permeating capability produces an increase of the contact surface between the nutritive solution and the vegetal tissue, facilitating a more efficient penetration and consequent absorption of the fertilizing elements. At the same time some formulation-specific compounds bind the fertilizer to the leaf surface.

TENSIOFILL prevents the formation and the inevitable shedding of large drops, particularly on waxy surfaced leaves. Excellent results are obtained when **TENSIOFILL** is applied in fertigation, as it appears to favor a homogeneous distribution and penetration in the soil where roots are more present.

Lastly, it is recommended in combination with all those formulations that are applied to the plant through an injecting pole.

CROP	APPLICATION TIME	DOSE*	
		FOLIAR	FERTIGATION
All crops	Combined with foliar fertilizer applications	50-100 g/hectolitre of fertilizing solution	
All crops	Combined with hydrosoluble fertilizer applications in fertigation		In the ratio of 1% of the amount of fertilizer used

COMPOSITION	
Glycol	6,5%
10% Dimethylpolysiloxane emulsion	5%

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		9
Conductivity E.C. µS/cm (1‰)		24
Density (g/cm³)		1
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 1 - 5 - 10 - 25 Kg

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

TIOAMMON

IN COMBINATION WITH SYSTEMIC HERBICIDES (PHOSPHONATES AND HYDROXYLAMINES)

TIOAMMON is a product that can be both used as a foliar fertilizer and in fertigation during the first vegetative phases. The nitrogen content favorably affects the migration process of nutritive elements.

TIOAMMON can be also used in combination with some systemic herbicides (phosphonates and hydroxylamines). The product enhances the weeds' sensitivity to the herbicides' active ingredients, allowing up to 1/3 ca. reduction in herbicide consumption.

CROP	APPLICATION TIME	DOSE*	
		FOLIAR	FERTIGATION
All crops	Combined with foliar fertilizer applications	250-300 g/hectolitre on all the crops in the first developmental phases	
All crops	Combined with hydrosoluble fertilizer applications in fertigation		5-8 Kg/1000m²
All crops	To enhance weed sensitivity to herbicides	Combined with phosphonate herbicides: 10-12 kg/ha Combined with hydroxylamines: 6 kg/ha. Do not exceed the maximum dose of 2 kg/hectoliter	

COMPOSITION	
Total nitrogen (N)	8 %
Ammoniacal nitrogen (N)	8 %
Sulfuric anhydride (SO_3) Soluble in water	22 %

PHYSICO-CHEMICAL CHARACTERISTICS		
LIQUID		
pH (sol 1%)		5,5
Conductivity E.C. µS/cm (1‰)		910
Density (g/cm³)		1,2
WAY OF USE	FOLIAR	FERTIGATION

PACKAGING: 1 - 6 - 12 - 25 Kg

***NOTE: TIOAMMON** must be added in a barrel after the preparation of the weeding solution and the mix must be distributed within few hours.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

SEED TREATMENT

SEED TREATMENT is the precise and targeted application of products to the seed that are aimed at both controlling the development of pathogenic organisms and favoring the emergence of seedlings. This makes the seedlings and the crops which will grow out of them more productive, with improved quality and more resistant to abiotic stress.
It has been proven that the use of treated seeds brings relevant productive increases compared to untreated seeds. According to some evaluations by **ASSOSEMENTI** (Italian Seeds Association), seed treatment avoids losses for up to 20% of production and increase in costs of up to 200%.
The most common seed treatments are fungicidal, which act like a barrier against infections and insecticidal, which prevent insects from feeding on seeds and seedlings. Biostimulant products are more and more used in seed treatment. These are products that can make plants more resistant to biotic stress (heat, cold, drought) and more capable of uptaking nutritional solutions.

K-Adriatica's proposal for **SEED TREATMENT** is

SEEDCURE 9 L CEREALI

SEEDCURE 9 L CEREALI

FAVORS GERMINATION
IMPROVES ROOTING
SUPPORTS SEEDLINGS IN THEIR INITIAL GROWTH PHASES

SEEDCURE 9 L CEREALI is a mix of microelements specifically formulated for seed treatment.

The oligoelements are bound to a particular organic complex that creates a film on the seed surface. The elements migrate to the seed, without causing neither phytotoxicity nor intolerance.

The individual organic components work in synergy, enhancing the achievable results. The seaweed extract containing polysaccharides, pseudo-hormonal substances, alginates and phenols, in addition to coating properties, increases the endogenous resistance of the seeds by actively protecting the delicate germination process. The humic, fulvic acids and yeasts stimulate seedling rhizogenesis, improve phosphorus and iron bio-availability and promote a decisive proliferation of helpful microorganisms around the seed.

Microelements are selected according to the positive interactions among the single elements. Boron in particular, in synergy with zinc and in direct contact with the seed, stimulates germination and favors the emission of abundant and extended secondary roots. Copper is actively involved as the catalyst in cellular respiration, seedling tissue growth and has a key role in the synthesis of chlorophyll.

Molybdenum is fundamental for the absorption of nitrogen and the processes of cell division. It is also present in the soil with high microorganisms' activity and in particular where there are symbiotic bacteria of leguminous plants.

DOSE RATE*: Based on the crop, 0,6-1,6 Kg of **SEEDCURE 9 L CEREALI** must be mixed with 100 Kg of seeds.

COMPOSITION		
Boron (B)	Soluble in water	0,3%
Copper (Cu)	Soluble in water	0,1%
Copper (Cu)	Chelated with EDTA	0,1%
Molybdenum (Mo)	Soluble in water	0,1%
Zinc (Zn)	Soluble in water	1,5%
Zinc (Zn)	Chelated with EDTA	0,81%

PHYSICO-CHEMICAL CHARACTERISTICS	
LIQUID	
pH (sol 1%)	4,5
Conductivity E.C. µS/cm (1‰)	120
Density (g/cm³)	1,06
WAY OF USE	
	SEED TREATMENT

PACKAGING: 12 Kg

***NOTE: SEEDCURE 9 L CEREALI** can be mixed with the normal industrial antiparasitic treatments of the crops.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

HYDROPONICS

The demographic growth expected in 2050, coupled with the reduction of cultivated areas and factors such as climate change, water quality and availability, call for the search of alternative farming methods in order to keep the necessary production levels and nourish the whole global population.
Among the various alternatives there is the so-called "off the ground" technique, also known as "hydroponics". With this particular type of farming, plant growth, together with its rooting system takes place above the ground, which is replaced by an inert substrate. Water and nutrients are provided by a solution where they are "scientifically" combined to bring all the needed elements to the various developing phases of the crop.
Hydroponics is a technology that stems from the application of the most innovative irrigation systems, from the management of controlled climatic factors in a protected environment, but also from a deep knowledge of plant physiology.
The main advantages of hydroponics are:
- efficient plant growth
- lower use of water (up to 95%) compared to the traditional farming systems
- possibility of installing the system also in non-cultivable lands
- reduction of parasites and soil-borne diseases
- improved crop production
- crops reach maturity much faster if compared to the traditional farming systems

K-Adriatica proposes the IDROFILL LINE for the "off the ground" crops, even though one should consider that hydroponic farming should be managed by specialized teams that can adapt the nutritional solution to the different crop phases. The products of this line are a blend of the purest low-conductivity salts, which represent an optimal basis for the most sophisticated nutritional programs.

The **IDROFILL LINE** comprises the following products:

IDROFILL A
IDROFILL B
IDROFILL BASE

Adriatica

DID YOU KNOW THAT...

...thanks to the high quality standards related to the purity of the raw materials and the accurate production process, **our IDROFILL LINE has "landed on the Moon"** ?!!

After being positively tested by the Department for Sustainability of the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA Casaccia, Rome, Italy), the **IDROFILL LINE** has been selected as nutritive solution to be used in a self-sustained lunar plant nursery.

This will help astronauts to feed during their missions on Earth's satellite!

IDROFILL A

IDROFILL A has been studied to give "off the ground" plants an optimal combination of nutritive elements to favor a balanced development in the first growth phases.

CROP	APPLICATION TIME	DOSE*
Horticultural crops	At early vegetative phases	0,5-1,5 g/litre
Flowers and Ornamentals	At early vegetative phases	0,5-1,0 g/litre
Strawberries	At early vegetative phases	0,5-1,2 g/litre
Seedbeds	At early vegetative phases	0,5-1,0 g/litre

COMPOSITION		
Total nitrogen (N)		14%
Nitric nitrogen (N)		13%
Ammoniacal nitrogen (N)		1%
Potassium oxide (K_2O)	Soluble in water	14%
Calcium oxide (CaO)	Soluble in water	15,5%
Iron (Fe)	chelato con (o/p) EDDHA	0,22%
Iron (Fe)	chelato con (o/o) EDDHA	0,08%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	6
Conductivity E.C. µS/cm (1‰)	1390
WAY OF USE	
	HYDROPONICS

PACKAGING: 5 - 25 Kg

NOTE: *The dose of **IDROFILL A** is determined by the characteristics of the water being used, by the cultivated plant's nutritive needs and by the time of application. The inclusion of **IDROFILL A** in the nutritional plan of an "off the ground" crop is always decided by the specialised technician following the crop.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

IDROFILL B

IDROFILL B has been studied to give "off the ground" plants an optimal combination of nutritive elements to boost plant development in the second phase of the life cycle.

The high potassium content, the balance between the macroelements and the presence of microelements in their chelated form, induce an improvement of the organoleptic and commercial parameters.

It is particularly recommended for the "off the ground" cultivation of tomatoes.

CROP	APPLICATION TIME	DOSE*
Horticultural crops	At the final phases of the crop cycle	0,5-1,5 g/litre
Flowers and Ornamentals	At the final phases of the crop cycle	0,5-1,0 g/litre
Strawberries	At the final phases of the crop cycle	0,5-1,2 g/litre
Seedbeds	At the final phases of the crop cycle	0,5-1,0 g/litre

COMPOSITION		
Total nitrogen (N)		5%
Nitric nitrogen (N)		5%
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammonium citrate and water	12,5%
Phosphoric anhydride (P_2O_5)	Soluble in water	12,5%
Potassium oxide (K_2O)	Soluble in water	25,5%
Magnesium oxide (MgO)	Soluble in water	5,4%
Sulfuric anhydride (SO_3)	Soluble in water	10,4%
Boron (B)	Soluble in water	0,1%
Copper (Cu)	Soluble in water	0,01%
Copper (Cu)	Chelated with EDTA	0,01%
Manganese (Mn)	Soluble in water	0,1%
Manganese (Mn)	Chelated with EDTA	0,1%
Molybdenum (Mo)	Soluble in water	0,01
Zinc (Zn)	Soluble in water	0,05%
Zinc (Zn)	Chelated with EDTA	0,05%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	5
Conductivity E.C. µS/cm (1‰)	1140
WAY OF USE	
	HYDROPONICS

PACKAGING: 5 - 25 Kg

NOTE: *The dose of **IDROFILL B** is determined by the characteristics of the water being used, by the cultivated plant's nutritive needs and by the time of application. The inclusion of **IDROFILL B** in the nutritional plan of an "off the ground" crop is always decided by the specialised technician following the crop.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

IDROFILL BASE

IDROFILL BASE is a formulation to be generally applied on all crops, regardless of their phenological phase. The balanced ratio between the macroelements and the complete range of chelated microelements, make IDROFILL BASE a balanced formulationfor hydroponic farming so that it can provide for the crop nutritive requirements throughout the whole cycle, without causing nutritional imbalances. It is particularly indicated for leafy and fruiting vegetables and all ornamentals.

CROP	APPLICATION TIME	DOSE*
Horticultural crops	Throughout the whole crop cycle	0,5-1,5 g/litre
Flowers and Ornamentals	Throughout the whole crop cycle	0,5-1,0 g/litre
Strawberries	Throughout the whole crop cycle	0,5-1,2 g/litre
Seedbeds	Throughout the whole crop cycle	0,5-1,0 g/litre

COMPOSITION		
Total nitrogen (N)		10%
Nitric nitrogen (N)		10%
Phosphoric anhydride (P_2O_5)	Soluble in neutral ammoniacal citrate	5%
Phosphoric anhydride (P_2O_5)	Soluble in water	5%
Potassium oxide (K_2O)	Soluble in water	23%
Calcium oxide (CaO)	Soluble in water	8%
Magnesium oxide (MgO)	Soluble in water	2%
Boron (B)	Soluble in water	0,01%
Copper (Cu)	Soluble in water	0,002%
Copper (Cu)	Chelated with EDTA	0,002%
Iron (Fe)	Soluble in water	0,02%
Iron (Fe)	Chelated with EDTA	0,02%
Manganese (Mn)	Soluble in water	0,01%
Manganese (Mn)	Chelated with EDTA	0,01%
Molybdenum (Mo)	Soluble in water	0,001
Zinc (Zn)	Soluble in water	0,002%
Zinc (Zn)	Chelated with EDTA	0,002%

PHYSICO-CHEMICAL CHARACTERISTICS	
SOLUBLE POWDER	
pH (sol 1%)	3,31
Conductivity E.C. µS/cm (1‰)	1020
WAY OF USE	
	HYDROPONICS

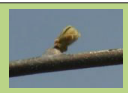
PACKAGING: 5 - 25 Kg

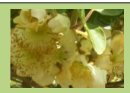
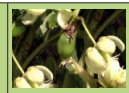
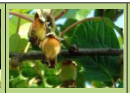
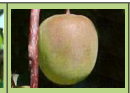
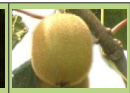
NOTE: *The dose of* **IDROFILL BASE** *is determined by the characteristics of the water being used, by the cultivated plant's nutritive needs and by the time of application.* ***IDROFILL BASE*** *can be suitably combined with* ***IDROFILL A*** *and* ***IDROFILL B*** *to optimize specific nutritional ratios.*
The inclusion of **IDROFILL BASE** *in the nutritional plan of an "off the ground" crop is always decided by the specialised technician following the crop.*

**The choice of the dose is subordinated to various factors and can be varied when necessary. All applications can be repeated in relation to the different crop needs. You can contact our Technical Service for the correct application on specific soils and under specific climate conditions.*

Adriatica

KIWIFRUIT: the Solutions of K-Adriatica

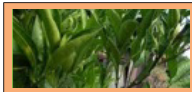
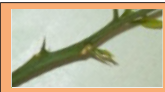




	Dormant bud	Bud burst	Shoot development	Flowering	Fruit set	Fruit deveopment	Veraison	Ripening	Post-harvest
FERTIGATION									
Boosts vegetative restart		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)							
Promotes abundant flowering		ACTIVE GOLD 11-40-11 (25-50 Kg/ha)							
Improves the rhizosphere Promotes nutrient uptake		GEOSAN L (40-80 Kg/ha)		GEOSAN L (40-80 Kg/ha)		GEOSAN L (40-80 Kg/ha)			
In case of saline/saline-sodic soils			HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		
Increases fruit size Improves size uniformity Increases Brix levels					HYDRO KOMBY (25-50 Kg/ha)				
FOLIAR APPLICATION									
Promotes an intense and balanced vegetative restart		ZINCAL Mo Ca + eK-Ion Max (2 Kg/ha + 3 Kg/ha)							
Improves photosynthetic efficiency Enhances flowering			ACTIMOL 80 + ERGON (1 Kg/ha+ 3 Kg/ha)						
Promotes fruit set and fruit development			ENA 19989 + RA.AN L 13186 (1 Kg/ha + 1 Kg/ha)						
Improves fruit size		FILL NPK 21-21-21 (2 Kg/ha)							
Prevents physiological disorders Improves fruit texture		KAMAB 26 (6 Kg/ha)			KAMAB 26 (6 Kg/ha)				
Improves fruit size Increases the Brix levels						FILL BRIX SPECIAL PK 6-60 (3 Kg/ha)			
Improves fruit color uniformity Increases Brix levels						PHARMAMIN-M + RA.AN 13156 (4 Kg/ha+1 Kg/ha)			
Reduces the incidence of cracking Improves fruit texture Prolongs shelf-life							^DRY-K 30 (6 Kg/ha)		
Favors following year vegetative restart								ERGON + RA.AN L 13186 (6 Kg/ha + 1 Kg/ha)	
Activates natural resistance inducers			^CHITO K 500 (5-10 Kg/ha)						
Improves resistance to cold, humidity and rain damage Triggers cicatrization	KODENS Cu 12-6 (1 Kg/ha)		KODENS Cu (1 Kg/ha)						KODENS Cu 12-6 (1 Kg/ha)

^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

CITRUS: the Solutions of K-Adriatica

	 Dormant bud	 Bud burst	 Shoot development	 Flowering	 Flowers fading	 Fruit set	 Fruit development	 Veraison	 Ripening
FERTIGATION									
Boosts vegetative restart		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)							
Induce un'abbondante fioritura Promotes abundant flowering		ACTIVE GOLD 11-40-11 (25-50 Kg/ha)							
Improves nutrient uptake, even under salinity or osmotic stress conditions		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)			
Increases fruit size Improves size uniformity Increases Brix levels						HYDRO KOMBY (25-50 Kg/ha)			
FOLIAR APPLICATION									
Promotes an intense and balanced vegetative restart		ZINCAL Mo Ca + eK-Ion Max (2 Kg/ha + 3 Kg/ha)							
Promotes plant growth Enhances flowering Favors fruit set			ENA 19989 + ACTIMOL 80 + RA.AN L 13186 (1 Kg/ha + 1 Kg/ha + 1 Kg/ha)						
Improves fruit size						ERGON (3 Kg/ha)			
Prevents physiological disorders Improves fruit texture				KAMAB 26 (6 Kg/ha)					
Improves fruit size Increases Brix levels								FILL BRIX SPECIAL PK 6-60 (3 Kg/ha)	
Improves fruit color uniformity Increases Brix levels								PHARMAMIN-M+ RA.AN 13156 (6 Kg/ha+ 1 Kg/ha)	
Reduces the incidence of cracking Improves fruit texture Prolongs shelf-life							^DRY-K 30 (6 Kg/ha)		
Protects against scorching						SCUDO K (3-4 Kg/ha)			
Induces natural resistance			^CHITO K 500 (5-10 Kg/ha)						

^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

Adriatica

STONE FRUITS: the Solutions of K-Adriatica

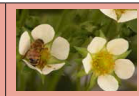
	Dormant bud	Bud swelling	Flowering	Fruit set	Fruit development	Veraison	Harvest	Post-harvest
FERTIGATION								
Promotes a balanced growth Improves soil fertility		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)						
Improves the vitality of the rhizosphere		GEOSAN L NPK 8-6-6 (40-80 Kg/ha)		GEOSAN L (40-80 Kg/ha)				
Enhances flowering		ACTIVE GOLD 11-40 11 (25-50 Kg/ha)						
Improves fruit texture Enhances nutrient absorption, even under salinity or osmotic stress conditions		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		
Improves fruit size and uniformity Increases Brix levels					HYDRO KOMBY (25-50 Kg/ha)			
FOLIAR APPLICATION								
Promotes an intense and balanced vegetative restart		ACTIMOL 80 + RA.AN L 13186 (1 Kg/ha+ 1 Kg/ha)						
Enhances flowering and boosts fruit set		ZINCAL Mo Ca + eK-Ion Max (2 Kg/ha + 3 Kg/ha)						
Promotes fruit set			ENA 19989 + RA.AN L 13186 (1 Kg/ha + 1 Kg/ha)					
Improves fruit size		FILL NPK 21-21-21 (2 Kg/ha)						
Prevents physiological disorders Improves fruit texture		KAMAB 26 (6 Kg/ha)		KAMAB 26 (6 Kg/ha)				
Induces natural resistance				^CHITO K 500 (5-10 Kg/ha)				
Improves fruit size Increases Brix levels					FILL BRIX SPECIAL PK 6-60 (3 Kg/ha)			
Improves fruit color uniformity Increases Brix levels						PHARMAMIN-M + RA.AN 13156 (4 Kg/ha + 1 Kg/ha)		
Reduces the incidence of cracking Improves fruit texture Prolongs shelf-life							^DRY-K 30 (6 Kg/ha)	
Favors following year vegetative restart								ERGON + RA.AN L 13186 (6 Kg/ha + 1 Kg/ha)

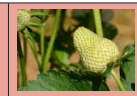
^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

STRAWBERRIES: the Solutions of K-Adriatica

Adriatica



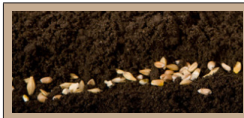





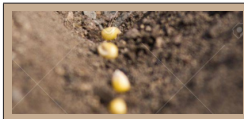
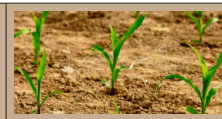
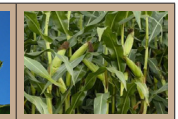

	Soil preparation	Transplanting	Vegetative development	Flowering	Fruit set	Fruit development	Ripening
MICROGRANULE							
Increases the microbial population Promotes rhizogenesis and root absorption Favors plant development in adverse conditions	NEMASPOR GR 1036 (30-40 Kg/ha)						
FERTIGATION							
Helps to overcome transplanting stress Enhances root growth		RADICURE L (25 Kg/ha)					
Promotes a balanced plant growth		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)					
Prevents physiological disorders Improves fruit texture			IDRON Ca (25-50 Kg/ha)				
Promotes intense flowering			ACTIVE GOLD 11-40-11 (25-50 Kg/ha)				
Enhances nutrient uptake, even under salinity or osmotic stress conditions		GEOSAN L (40-60 Kg/ha)		GEOSAN L (40-60 Kg/ha)		GEOSAN L (40-60 Kg/ha)	
Increases fruit size Improves size uniformity Increases Brix levels						HYDRO KOMBY (25-50 Kg/ha)	
FOLIAR APPLICATION							
Helps to overcome transplanting stress		SKICC*+ RA.AN L 13186** (5 Kg/ha + 1 Kg/ha, COMBOPACK)					
Promotes an intense and balanced vegetative development Improves flowering and enhances fruit set			ACTIMOL 80 + eK-Ion Max (1 Kg/ha + 3 Kg/ha)				
Increases fruit size		FILL NPK 21-21-21 (2 Kg/ha)					
Prevents physiological disorders Improves fruit texture				KAMAB 26 (6 Kg/ha)			
Increases fruit size Increases Brix levels					FILL BRIX SPECIAL PK 6-60 (3 Kg/ha)		
Improves fruit color uniformity Increases Brix levels							PHARMAMIN-M + RA.AN 13156 (4 Kg/ha+ 1 Kg/ha)
Improves fruit texture Prolongs shelf-life						^DRY-K 30 (6 Kg/ha)	
Induces natural resistance			^CHITO K 500 (5-10 Kg/ha)				

* SKICC (4-6 Kg/ha), when applied with crop protection products, improves their efficacy.
**RA.AN L 13186 (2 Kg/ha), throughout the crop cycle, promotes plant resistance to major biotic and abiotic adversities.
^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

SOFT AND DURUM WHEAT: the Solutions of K-Adriatica

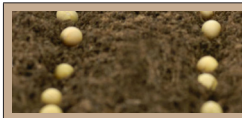
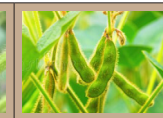
	 Sowing	 Tillering	 Stem elongation	 Heading	 Flowering	 Harvest
MICROGRANULE						
Promotes root growth Starter effect	MICROPHOS Mo Zn NP 10-46 (25-40 Kg/ha)					
FOLIAR APPLICATION						
Stimulates plant growth Enhances photosynthetic activity		ERGON (3 Kg/ha)				
Increases yield Improves grain protein and gluten content				POLIFILL MAGNISOL N20 Mo Zn (7-8 Kg/hectolitre)		

MAIS and SORGHUM: the Solutions of K-Adriatica

	 Sowing	 2nd-3rd Leaf	 5th-6th Leaf	 Pre-flowering	 Post-flowering	 Harvest
MICROGRANULE						
Promotes root growth Starter effect	MICROPHOS Zn NP 10-46 (25-40 Kg/ha)					
FOLIAR APPLICATION						
Reduces herbicides' applications stress		SKICC*+ RA.AN L 13186** (5 Kg/ha +1 Kg/ha, COMBO PACK)				
Improves yield quality and quantity			POLIFILL MAGNISOL N20 Mo Zn (7-8 Kg/hectolitre)			
Promotes fruit set				BUTTERMIX Ca Mg + RA.AN L 13186 (3 Kg/ha + 1 Kg/ha)		

* SKICC (4-6 Kg/ha), when applied with crop protection products, improves their efficacy.
**RA.AN L 13186 (2 Kg/ha), throughout the crop cycle, promotes plant resistance to major biotic and abiotic adversities.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

SOYBEANS: the Solutions of K-Adriatica

	 Sowing	 Germination - Emergence	 Trifoliolate leaves development	 Flowering	 Pod development	 Harvest
MICROGRANULE						
Stimulates abundant root nodules production	**MICOPLAS GR SOIA (25-40 Kg/ha)**					
FOLIAR APPLICATION						
Reduces stress from herbicides applications		**SKICC*+ RA.AN L 13186** (5 Kg/ha +1 Kg/ha, COMBO PACK)**				
Promotes fruit set			**BORAMIN Mo + RA.AN L 13186 (2 Kg/ha + 1 Kg/ha)**			

* SKICC (4-6 Kg/ha), when applied with crop protection products, improves their efficacy.
**RA.AN L 13186 (2 Kg/ha), throughout the crop cycle, promotes plant resistance to major biotic and abiotic adversities.

These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

OLIVE: the Solutions of K-Adriatica









	Vegetative stasis	Bud development	Inflorescence emergence	Flowering	Fruit set	Fruit development	Stone lignification	Veraison	Ripening
GRANULE									
Supports plant growth and production	OLIVETO NPK 12-8-8 (400 Kg/ha)			OLIVETO NPK 12-8-8 (400 Kg/ha)		K-BIO PK 6-12 (500 Kg/ha)			
FERTIGATION									
Triggers vegetative restart Maximize yield potential		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)			ACTIVE GOLD 14-7-21 (25-50 Kg/ha)		ACTIVE GOLD 10-5-30 (25-50 Kg/ha)		
FOLIAR APPLICATION									
Triggers vegetative restart Supports fruit growth		ERGON (3 Kg/ha)							
Uniforms flowering Promotes fruit set Reduces flower shedding Improves plant growth			AGROBOR 11 L + ENA 19989 + RA.AN L 13186** (1 Kg/ha + 1 Kg/ha + 1 Kg/ha)						
Increases fruit size Improves oil quality and yield						FILL PK PLUS 40-52 (3-5 Kg/ha)			
Helps to overcome physiological and abiotic stress					SKICC* + RA.AN L 13186** (5 Kg/ha +1 Kg/ha, COMBO PACK)				
Reduces heat stress damage Repels insects					SCUDO K (4-5 Kg/ha)				
Enhances plant vigor Strengthens plant defences	KODENS Cu 12-6 (1-1,5 Kg/ha)					KODENS Cu 12-6 (1-1,5 Kg/ha)			

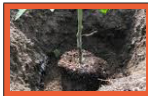
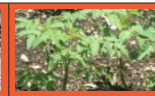
* SKICC (4-6 Kg/ha), when applied with crop protection products, improves their efficacy.
**RA.AN L 13186 (2 Kg/ha), throughout the crop cycle, promotes plant resistance to major biotic and abiotic adversities.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

LEAFY VEGETABLES: the Solutions of K-Adriatica

	 Transplanting	 Post -transplanting	 Leaf development	 Head formation	 Harvest
MICROGRANULE					
Promotes root growth Improves soil local microflora vitality Enhances rhizosphere activity and health	NEMASPOR GR 1036 (25-40 Kg/ha)				
FERTIGATION					
Favors rooting after transplanting		RADICURE L (25 Kg/ha)			
Promotes root growth		IDRON 9-50-9 (25-50 Kg/ha)			
Supports plant growth Strengthens plant tissues			ACTIVE GOLD 17-17-17 (25-50 Kg/ha)		
Prevents and cures leaf apical necrosis (tip burn) Improves plant tissues texture			IDRON Ca 10-5-23 B.T.C. (25-50 Kg/ha)		
In case of salinity excess		HENDOSAR (40-60 Kg/ha)			
FOLIAR APPLICATION					
Improves nitrogen uptake Increases photosynthetic efficiency		ACTIMOL 80 (1 Kg/ha)			
Enhances plant nutritional and abiotic stress response		SKICC*+ RA.AN L 13186** (5 Kg/ha +1 Kg/ha, COMBO PACK)			
Strengthens plant tissues Favors the photosynthetic process				FILL K 40 + 4 MgO (3 Kg/ha)	
Induces natural resistance			^CHITO K 500 (4-8 Kg/ha)		

* SKICC (4-6 Kg/ha), when applied with crop protection products, improves their efficacy
**RA.AN L 13186 (2 Kg/ha), throughout the crop cycle, promotes plant resistance to major biotic and abiotic adversities.
^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

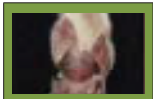
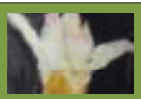
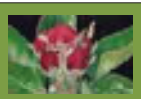
FRUITING VEGETABLES: the Solutions of K-Adriatica

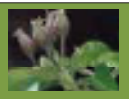
	 Transplanting	 Post-transplanting	 Flowering	 Fruit set	 Fruit development	 Veraison (change of color)	 Harvest
MICROGRANULE							
Promotes root growth Improves rhizosphere vitality Enhances soil local microflora	NEMASPOR GR 1036 (25-40 Kg/ha)						
FERTIGATION							
Promotes root growth Favors rooting after transplanting		RADICURE L (25 Kg/ha)					
Promotes a balanced growth		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)					
Improves flowering		ACTIVE GOLD 11-40-11 (25-50 Kg/ha)					
Prevents and cures apical rot and calcium-deficiency physiological disorders Improves fruit texture				IDRON Ca 10-5-23 B.T.C. (25-50 Kg/ha)			
In case of excess salinity		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)	
FOLIAR APPLICATION							
Promotes flowering and fruit set			ACTIMOL 80 (1 Kg/ha)				
Enhances plant nutritional and abiotic stress response		SKICC*+ RA.AN L 13186** (5 Kg/ha +1 Kg/ha, COMBO PACK)			SKICC*+ RA.AN L 13186** (5 Kg/ha +1 Kg/ha, COMBO PACK)		
Improves fruit color Favors sugar accumulation (Brix level) Increseas dry matter						FILL BRIX SPECIAL PK 6-60 (3 Kg/ha)	
Reduces scorching incidence					SCUDO K (3-4 Kg/ha)		
Induces natural resistance		^CHITO K 500 (4-8 Kg/ha)					

* SKICC (4-6 Kg/ha), when applied with crop protection products, improves their efficacy
**RA.AN L 13186 (2 Kg/ha), throughout the crop cycle, promotes plant resistance to major biotic and abiotic adversities.
^It is recommended to use a maximum of 200-400 litres of water per hectare per treatment.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

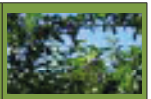
Adriatica

POME FRUITS: the Solutions of K-Adriatica



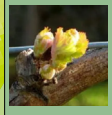




	Dormant bud	Mouse-ear stage	Pre-flowering	Flowering	Fruit set	Fruit development	Veraison	Pre-harvest	Post-harvest
FERTIGATION									
Promotes a balanced plant growth Enhances soil fertility		ACTIVE GOLD 14-7-21 (25-50 Kg/ha)							
Improves rhizosphere vitality	GEOSAN 8-6-6 (80 Kg/ha)		GEOSAN L (40 Kg/ha)				GEOSAN L (40 Kg/ha)		
Enhances flowering		ACTIVE GOLD 11-40-11 (25-50 Kg/ha)							
Increases fruit size and uniformity Increases Brix levels						HYDRO KOMBY (25-50 Kg/ha)			
In case of salinity excess			HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		HENDOSAR (40-60 Kg/ha)		
FOLIAR APPLICATION									
Prevents micronutrient deficiencies Helps the vegetative restart	AGROVIT LS + eK-Ion Max (1 Kg/ha + 3 Kg/ha)								
Promotes flowering and fruit set		ZINCAL Mo Ca + eK-Ion Max (2 kg/ha + 3 Kg/ha)							
Improves flowering and fruit set Stimulates fruit development			ACTIMOL 80 + ENA 19989 + RA.AN L 13186 (1 Kg/ha + 1 Kg/ha + 1 Kg/ha)						
Prevents physiological disorders (bitter pit, superficial scald, etc.) Improves fruit texture					KAMAB 26 (4-6 Kg/ha)		BUTTERFILL S 33% (3-5 Kg/ha)		
Increases Brix levels Improves fruit color uniformity							PHARMAMIN-M + RA.AN 13156 (4 Kg/ha + 1 Kg/ha)		
Reduces russeting and scorching incidence						SCUDO K (3-4 Kg/ha)			
Induces natural resistance		^CHITO K 500 (5-10 Kg/ha)							
Favors following year vegetative restart									ERGON + RA.AN L 13186 (6 Kg/ha + 1 Kg/ha)

^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

TABLE GRAPES: the Solutions of K-Adriatica

	 Bud burst	 Leaf development	 Inflorescence clearly visible	 Flowering	 Fruit set	 Berries pea-sized, bunches hang	 Berries beginning to touch	 Majority of berries touching	 Veraison	 Pre-harvest	 Post-harvest
FERTIGATION											
Improves rhizosphere vitality			GEOSAN L (40-80 Kg/ha)					GEOSAN L (40-80 Kg/ha)			
Enhances flowering		ACTIVE GOLD 11-40-11 (25-50 Kg/ha)									
Increases bunch size and uniformity Increases Brix levels						HYDRO KOMBY (25-50 Kg/ha)			HYDRO KOMBY (25-50 Kg/ha)		
FOLIAR APPLICATION											
Prevents micronutrient deficiencies Helps the vegetative restart	AGROVIT LS + RA.AN L 13186 (1 kg/ha +1 Kg/ha)										
Promotes flowering and fruit set		ZINCAL Mo Ca + eK-Ion Max (2 Kg/ha + 3 Kg/ha)									
Favors stem elongation			ACTIMOL 80 + ENA 19989 + RA.AN L 13186 (1 Kg/ha +1 Kg/ha+ 1 Kg/ha)								
Prevents stem necrosis and other physiological disorders Improves berries' texture		KAMAB 26 (4-6 Kg/ha)			KAMAB 26 (4-6 Kg/ha)						
Increases Brix levels Improves coloring									PHARMAMIN-M + RA.AN 13156 (4 Kg/ha + 1 Kg/ha)		
Reduces cracking and sour rot incidence Prolongs shelf-life							^DRY-K 30 (6 Kg/ha)		^DRY-K 30 (6 Kg/ha)		
Induces natural resistance		^CHITO K 500 (5-10 Kg/ha)									
Favors following year vegetative restart											ERGON + RA.AN L 13186 (6 Kg/ha + 1 Kg/ha)

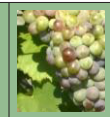
^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service

WINE GRAPES: the Solutions of K-Adriatica









	Bud burst	Leaf development	Inflorescence clearly visible	Flowering	Fruit set	Berries pea-sized, bunches hang	Berries beginning to touch	Majority of berries touching	Veraison	Pre-harvest	Post-harvest
FERTIGATION											
Improves rhizosphere vitality			GEOSAN L (40 Kg/ha)					GEOSAN L (40 Kg/ha)			
Enhances flowering		ACTIVE GOLD 11-40-11 (25-50 Kg/ha)									
Increases bunch size and uniformity Increases Brix levels						HYDRO KOMBY 40 (25-50 Kg/ha)			HYDRO KOMBY 40 (25-50 Kg/ha)		
FOLIAR APPLICATION											
Prevents micronutrient deficiencies Helps the vegetative restart	AGROVIT LS + RA.AN L 13186 (1 Kg/ha + 1 Kg/ha)										
Promotes stem elongation Reduces millerandage		BORAMIN Mo + RA.AN L 13186 (2 Kg/ha + 1 Kg/ha)	ACTIMOL 80 + ENA 19989 + RA.AN L 13186 (1 Kg/ha + 1 Kg/ha + 1 Kg/ha)								
Prevents stem necrosis Improves berries' texture					KAMAB 26 (4-6 Kg/ha)						
Increases Brix levels Improves coloring									PHARMAMIN-M + RA.AN 13156 (4 Kg/ha + 1 Kg/ha)		
Reduces sour rot incidence										^DRY-K 30 (6 Kg/ha)	
Induces natural resistance	^CHITO K 500 (5-10 Kg/ha)										
Favors following year vegetative restart											ERGON + RA.AN L 13186 (6 Kg/ha + 1 Kg/ha)

^It is recommended to use a maximum of 200-400 litres of water per hectare per application.
These are general indications that may vary according to the variety and nutritional conditions of the crop.
To define the ideal number of applications and the doses to be used, please contact the K-Adriatica Technical Service.

ALPHABETICAL INDEX

ALLOWED IN ORGANIC FARMING

Adriatica

CONTACTS

Administrative Office
Strada Dogado 300, 19/21
Loreo (RO) - Italy
T: 0039 0426 669611
E: info@k-adriatica.it

Commercial Office
T: 0039 0426 669616
E: info@k-adriatica.it

Technical Office
T: 0039 366 6540701
E: infokts@k-adriatica.it

OUR CERTIFICATIONS

QUALITÀ CERTIFICATA ASSOFERTILIZZANTI
ASSOFERTILIZZANTI FEDERCHIMICA

Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY

AGRICOLTURA BIOLOGICA
Product included in National Register of Fertilizers allowed in Organic Agriculture

VEGAN FRIENDLY
Origin product exclusively vegetable

bioagricert INPUTS
Certified product according to the IFOAM Bioagricert standard

The photos in this catalogue were taken at our customers' companies/farms

OUR PASSION AND OUR KNOWLEDGE,
YOUR RESULTS

Our commitment goes beyond agriculture.
This is why we have established **FONDAZIONE KAPPA**, a foundation with a charitable purpose to generate value also in the social and environmental context in which we carry out our business.

Fondazione

FONDAZIONE KAPPA
Strada Dogado 300/19-21
45017 Loreo (RO) Italy
T +39 0426 669611
E fondazione@k-adriatica.it

Adriatica

NOTES

NOTES

Adriatica

ADRIATICA SPA
Strada Dogado 300, 19-21
45017 Loreo (ROVIGO) ITALY
Tel. +39 0426 669611
info@k-adriatica.it

www.k-adriatica.it