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green
growing green ideas

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The Company

Green Ravenna was established in 1999, specializing its activities in Turf & Lawn care. Few years later, the Company enhanced its product portfolio, including products for Professional Farmers as well as Non-Professional Users.

Green Ravenna is part of an industrial group, entirely dedicated to the agribusiness, leading-edge in production and industrial research of Plant Protection Products aimed to introduce on the market new sustainable products for the crops.

Green Ravenna headquarters are located in the city centre of Ravenna, while its operative offices, including Administration, Logistic, Sales & Marketing and Research, are in Cotignola (Ravenna). The linear structure strenghten more and more the collaboration between different business areas.

Green Ravenna is active all around Italy, with more than 40 sale agents and 3 line managers, working day by day to match accurately and professionally our customers technical and commercial needs.

Beyond Italy, **Green Ravenna** distributes its products all over Europe, through a strong network of selected partners.



The Products

Green Ravenna markets a wide range of products both for the nutrition and protection of crops, plants and turf, covering the needs for both profesional and amateur users.

Before launching the products on the market, Green Ravenna Technicians test them in the fields to assess efficacy, efficiency and the different application techniques, in order to deliver the best possible products to our customers.

Green Ravenna respects the Nature and the Environment, developing environmental-friendly new products, suitable for both Conventional and Organic farming, taking care of users and people in the area.

Research & Development

Green Ravenna invests every resources for R&D. Every employee in the Company is dedicated to the study of farmers and market needs, through field trials and technical advices, in order to collect as much information as possible to develop new sustainable solutions.

Green Ravenna organization includes a Technical area that, in addition to the development of new products, supports the application through technical teaching to farmers, trying to obtain the best performances from all products.

Further to the internal development, **Green Ravenna** collaborates with internationally-recognized Universities, Research Centers and Companies to provide a wider portfolio of environmental-friendly solutions to our farmers.



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Meda line

Meda line products are natural nutrients for foliar applications, which have been conceived and developed to integrate roots' fertilizers supply and guarantee a balanced nutrition to the crops.

Meda line is recommended in case of specific stressful events, such as *cold, drought, hail*, or when plants' nutrition is lacking nutrients such as *Calcium, Magnesium, Iron and Zinc*.

Moreover, **Meda line** products prevent and cure crops physiological disorders, as leaf fall, rots and bitter pit, eventually, increasing yield quality (fruits' size, color, pulp texture, conservation properties, etc.).



MEDA LINE ADVANTAGES

The different formulations allow to operate at various phenological stages, bringing to plants the correct balanced amount of nutrients needed at each stage.

Nutrients are chelated in order to prevent their dispersion in the Environment, increasing fertilizers' efficiency, or to avoid the association with unwanted elements that could cause phytotoxicity.

In addition, because of their organic origin, Meda line products prevent mineral salts from crystallizing, ensuring a prolonged absorption and the development of supple and viable leaves.



F1



F1

EC FERTILIZER - NPK fertilizer solution Boron (B), Copper (Cu), Iron (Fe), Manganese (Mn), Zinc (Zn) 12-12-6

F1 is a liquid fertilizer, highly efficient and effective, due to the content in the formulation of wetting and carrying substances, which ensure an optimal and prolonged nutrients absorption, including *Phosphorus*, known to be barely assimilable via foliar applications.

F1 is particularly fit for the first stages of plant growth as well as when the plants are subject to stresses that limit the roots' absorption, enabling an optimal vegetative growth restart, thanks to the high and balanced content of *Nitrogen* and *Phosphorus*.

F1 is characterized by:

- *Wetting and carrying substances*, which ensure complete and prolonged nutrients absorption, even at low temperatures.
- *Buffering substances*, which improve water quality, correcting pH and hardness.
- *Lack of nitrates*, which often cause strength excess, unbalancing plants.
- *Lack of chlorides*, threat for some vegetables and flowers.



ADVANTAGES

Improvement in fruits development and growth.

Induction of a better coloring in plant tissues.

Increase in yield.

Physiological disorders in Citrus prevention and cure.



COMPOSITION

Total Nitrogen (N)	12%
- Ammoniacal Nitrogen (N)	2%
- Ureic Nitrogen (N)	10%
Phosphorus pentoxide (P₂O₅) soluble in water	12%
Potassium oxide (K₂O) soluble in water	6%
Boron (B) soluble in water	0,05%
Copper (Cu) chelated with DTPA	0,02%
Iron (Fe) chelated with DTPA	0,03%
Manganese (Mn) chelated with DTPA	0,02%
Zinc (Zn) chelated with DTPA	0,01%



PHYS-CHEM PARAMETERS

Density	1,27 kg/L
pH (sol. 10%)	7,8
Chelating Agent	DTPA
Optimal pH for stability of the Chelated fraction	4-8



PACKAGE

Bottle	12x1 kg (= 12x0,79 L)
Can	4x5 kg (= 4x3,94 L)

F1



APPLICATION RATES

CROPS	APPLICATION
FOLIAR SPRAY: 200-300 mL/hL for standard water volumes, 1 L/hL for low volume spray.	
Orchards	Apply on Stone fruits and Pome fruits during the first stages of vegetative growth restart, to allow a good nutrients uptake during flowering and fruits setting stages, usually characterized by low temperatures, frosts and water stagnation that prevent a regular roots uptake.
Grape	Apply on grapes especially in nurseries and vine cutting , when roots are not completely developed yet. On already established plants, applications favor shoots development during pre-flowering stages, on frozen and poor soils. Apply 2-4 times.
Industrial crops (Tomato, Beets, Potato, Green peas, Corn, Cereals)	F1 increases crops' development and lushness, thanks to nutrients' uptake. Furthermore, if applied together with fungicides, insecticides and herbicides, F1 enables a higher pesticide efficacy thanks to its sticking and wetting properties.
Vegetables and Flowers	The nitrates absence is really important in vegetables production as residues can jeopardize consumers' health. The balanced composition between micro- and macro-elements allows a harmonic and luxuriant plants growth, combining yield quality and quantity. For some vegetables and flowers, the absence of chlorides is essential. It is suggested to apply 300-400 mL/10 L of water, every 10-15 days, starting 1 week after transplanting , in order to obtain a good growth and long-lasting flowering.
Citrus and Olive Tree	Apply together with pesticides to pass water stresses and increase their efficacy.
Turf and Lawn	F1, applied together with the standard treatments for turf, improving their efficacy, has a fortifying effect on the lawn and, thanks to the organic matter, feeds the soil microbiota, contrasting diseases development.



TECHNICAL NOTES

Do not mix with Acid or Alkaline-reaction products.



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F2



F2

Fertilizer based on chelated microelements (Fe-Mn-Zn) + Calcium and Magnesium (Ca-Mg) (4-8)

F2 is specifically designed to correct K/Ca and K/(Ca+Mg) ratios, which can cause physiological disorders in plants if not correctly balanced.

F2 is characterized by:

- *Wetting and carrying substances*, which prevent elements from crystallizing and ensure a complete and prolonged nutrients absorption.
- High amount of *sugars*, used as source of energy.



ADVANTAGES

Grapes Cluster-Tip Wilting and Apple Bitter Pit prevention.

Increase in Yield qualitative and quantitative parameters.



COMPOSITION

Calcium Oxide (CaO) <i>soluble in water</i>	4%
Magnesium oxide (MgO) <i>soluble in water</i>	8%
Iron (Fe) <i>chelated with DTPA</i>	0,7%
Manganese (Mn) <i>chelated with DTPA</i>	1%
Zinc (Zn) <i>chelated with DTPA</i>	0,5%



PHYS-CHEM PARAMETERS

Density	1,42 kg/L
pH <i>(sol. 10%)</i>	5,8
Chelating Agent	DTPA
Optimal pH <i>for stability of the Chelated fraction</i>	4-8



PACKAGE

Bottle	12x1 kg (= 12x0,70 L)
Can	4x5 kg (= 4x3,52 L)

F2



APPLICATION RATES

CROPS	EFFECT	RATE & APPLICATION
FOLIAR SPRAY		
Grape	<ul style="list-style-type: none"> - Yield qualitative and quantitative improvement. - Grapes Cluster-Tip Wilting prevention. 	300-500 mL/hL. Applied together with standard pesticides from flowering , F2 allows a qualitative and quantitative yield improvement both on table- and wine-grape, avoiding Grapes Cluster-Tip Wilting.
Apple	<ul style="list-style-type: none"> - Yield qualitative and quantitative improvement. - Reduction of Apple Bitter Pit and storage diseases. - Reduction of leaves fall on Golden Delicious. 	350 mL/hL. For areas where Apple Bitter Pit attacks are: <ul style="list-style-type: none"> - medium-low: 3-4 applications from beginning of June; - medium-high: 2-3 applications from after fruits setting. Treated apples are characterized by higher amount of healthy and no disordered fruits. Several trials and farmers applications showed efficacy also in controlling leaves fall , phylloptosis, especially on Golden Delicious variety .
Pear	<ul style="list-style-type: none"> - Decana: increase in fruits setting and sizes. - Conference: improvement in vegetative growth and fruits sizes. - Abate: favors fruits setting. 	300-400 mL/hL for normal spray and 1 L/hL in low volume applications. F2 should be applied together with pesticides from flowering stage .
Peach	<ul style="list-style-type: none"> - Fruits color and size improvement. 	Applied at 300-400 mL/hL from pink petal stage, F2 increases fruits colors and sizes.
Tomato	<ul style="list-style-type: none"> - Tomato End Rot prevention. 	Applied at 300 mL/hL, 3-5 times from the first color change, F2 prevents Tomato End Rot.



TECHNICAL NOTES

Do not mix with Acid or Alkaline-reaction products.

Do not mix with products which promote leaves fall.



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F3



WARNING
H-PHRASES:
H319

F3



EC FERTILIZER - Boron (B), Iron (Fe), Manganese (Mn), Zinc (Zn) Calcium chloride solution

F3 is a liquid fertilizer for foliar applications, with high content of promptly available *Calcium* and micro-elements, for the optimal plant nutrition.

Calcium is essential for vegetal structures' growth, correlated to a longer and better fruits storage and tolerance to physiological disorders.

Boron, Manganese, Zinc and *Iron* strengthen vegetative growth and improve fruits setting.

F3 is essential to prevent and cure Calcium-deficiency physiological disorders as *Apple Bitter Pit, Tomato End Rot* and *Grapes Cluster-Tip Wilting*.

The corrective effect does not depend on Calcium amount but on plants' ability to uptake the nutrient and store in the fruits, thanks to the special formulation, which optimize Calcium intake and translocation.

F3 is characterized by:

- *Wetting and carrying substances*, which ensures a complete and prolonged nutrients absorption.
- *Chloride-based CaO* content, particularly active against *Apple Bitter Pit*.
- *Lack of nitrates*.



ADVANTAGES

Grapes Cluster-Tip Wilting, Tomato End Rot and Apple Bitter Pit prevention.

Increase in fruits sizes and consistency.

No rustiness formation on Pome fruits.



COMPOSITION

Calcium Oxide (CaO) soluble in water	15%
Boron (B) soluble in water	0,05%
Iron (Fe) chelated with DTPA	0,04%
Manganese (Mn) chelated with DTPA	0,1%
Zinc (Zn) chelated with DTPA	0,01%



PHYS-CHEM PARAMETERS

Density	1,35 kg/L
pH (sol. 10%)	6
Chelating Agent	DTPA
Optimal pH for stability of the Chelated fraction	4-8



PACKAGE

Bottle	30x500 g (= 30x0,37 L)
Bottle	12x1 kg (= 12x0,74 L)
Can	4x5 kg (= 4x3,70 L)

F3



APPLICATION RATES

CROPS	APPLICATION
FOLIAR SPRAY	
Pome fruits	<p>For the best prevention and cure, F2 and F3 should be used alternatively. The number and rates of treatments depend on plant sensitivity to Bitter Pit and pressure in the area:</p> <p>Medium-Low</p> <ul style="list-style-type: none"> - F2: 3-4 treatments at 350 mL/hL from beginning of June. - F3: 3-4 treatments at 300 mL/hL from beginning of July to pre-harvest. <p>Medium-high</p> <ul style="list-style-type: none"> - F2: 2-3 treatments at 300 mL/hL from after fruits' setting. - F3: 5-6 treatments at 300 mL/hL from mid of June to harvest <p>No rustiness problem.</p>
Tomato	3-5 applications at 300 mL/hL , starting when the first fruits start to change color, to prevent Blossom End Rot.
Vegetables and Flowers	200-300 mL/hL , to obtain well-developed plants and luxuriant and prolonged flowering.



TECHNICAL NOTES

Do not mix with Acid or Alkaline-reaction products.

F2 and F3 can be mixed with all the pesticides standardly used in the above-mentioned application stages.



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F4



F4

EC FERTILIZER - Mixtures of micro-nutrient Copper (Cu) (DTPA), Manganese (Mn), Zinc (Zn)

F4 is a liquid fertilizer for foliar applications containing *Manganese* and *Zinc*. The applications should start in Spring time, when cold and asphyxial soils, in combination with limited root development, prevent the optimal nutrients uptake.

Manganese and *Zinc* play a crucial role in cell division processes; thus, their deficiencies appear as limited leaf development and plants inability to prepare their reproduction organs, reducing the amount of fruits set and harvested.



WARNING
H-PHRASES:
H318 - H411



ADVANTAGES

Increase in fruits setting.

Reduction in fruits fall.



COMPOSITION

Zinc (Zn) soluble in water	4%
- Zinc (Zn) chelated with DTPA	0,2%
Manganese (Mn) soluble in water	2%
- Manganese (Mn) chelated with DTPA	2%
Copper (Cu) soluble in water	0,1%
- Copper (Cu) chelated with DTPA	0,1%



PHYS-CHEM PARAMETERS

Density	1,2 kg/L
pH (sol. 10%)	5,5
Chelating Agent	DTPA
Optimal pH for stability of the Chelated fraction	4-8



PACKAGE

Bottle	30x500 g (= 30x0,42 L)
Bottle	12x1 kg (= 12x0,83 L)
Can	4x5 kg (= 4x4,17 L)

F4



APPLICATION RATES

CROPS	APPLICATION
FOLIAR SPRAY: 300-400 mL/hL for standard water volumes, 1 L/hL for low volume spray.	
Pome fruits (Apple, Pear, etc.)	<p>The deficiencies show up as new leaves undersized development and elongated. The leaves tend to form weak rosettes, unable to nourish both the flowers and the small fruits.</p> <p>2-3 applications, at 300-400 mL/hL, from mouse-ear stage to flowering. If needed, apply together with F1. In case of low volume spray, do not exceed 1 L/ha.</p> <p>In case of strong elements deficiencies, it is advised to start applying in Summer-Autumn, to prepare plants for the coming Spring.</p>
Stone fruits (Peach, Apricot, Plums, etc.)	<p>Strong deficiencies 3-4 applications, at 300 mL/hL, starting about 3 weeks after flowering. In case of low volume spray, do not exceed 1 L/ha.</p> <p>Medium deficiencies Alternate F4 and F2 applications grant an optimal vegetative growth and well-developed fruits.</p>
Citrus	<p>Citruses are quite sensible to Manganese and Zinc deficiencies, specially during growth and vegetation renewal stages.</p> <p>3-4 applications, every 15 days, at 300 mL/hL.</p>
Industrial crops (Corn, etc.)	<p>Corn is particularly sensitive to Manganese and Zinc deficiencies, especially for anticipated seedlings.</p> <p>1 application, at 300 mL/hL, along with post-emergence herbicides.</p> <p>As F4 is rich in organic-hygroscopic matter and softening substances, its application favor the development of soft, resilient and greener leaves. Fruits are consistent and well-colored.</p>



TECHNICAL NOTES

Do not mix with Acid or Alkaline-reaction products.



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F5



F5



EC FERTILIZER - Boron ethanol amine

F5 is a liquid fertilizer, specific to prevent and cure Boron-deficiencies pathologies, which usually appears during the first vegetative stages. *Boron* is extremely soluble and hardly bonded to soil colloids, thus a foliar application is favorable.

F5 applications *before orchards flowering* favor *pollen production, pollination, pollen tube growth and fertilization*, increasing the amount of fruits set and consequently yield.

F5 applications *during fruits development and maturation stages* enhance sugars accumulation processes and colored substances synthesis.

F5 formulation enables Boron fast assimilation and reduced dosages.

F5 is characterized by:

- *High content in Organic matter*, which ensures the optimal absorption, even with reduces leaves surface and adverse weather conditions.
- *Lack of Sodium and heavy metals*, which interfere with Boron translocation and speed in the plant.



ADVANTAGES

Increase in pollen fertility, thanks to Boron.

Increase in the amount of prime quality fruits set.

Increase in crop yield.

Cells multiplications, proteins formation and Nitrogen metabolism promotion.



COMPOSITION

Boron (B) soluble in water 8%



PHYS-CHEM PARAMETERS

Density 1,29 kg/L

pH (sol. 10%) 8,4



PACKAGE

Bottle 30x500 g (= 30x0,39 L)

Bottle 12x1 kg (= 12x0,78 L)

Can 4x5 kg (= 4x3,88 L)

F5



APPLICATION RATES

CROPS	EFFECT	RATE & APPLICATION
FOLIAR SPRAY		
Olive tree	<ul style="list-style-type: none"> - Pesticides activity enhancement. - Water stress overcome. 	<p>Apply along with pesticides to enhance their efficacy and help the plant to pass water stress.</p> <p>Apply 200-300 mL/hL, in pre-flowering and after fruits settings.</p>
Vegetables and Flowers	<ul style="list-style-type: none"> - Pollen maturation improvement. - Cells multiplication, protein formation and Nitrogen metabolism stimulation. - Increase in high quality fruits setting and development. 	<p>2-3 applications, at 200-300 mL/hL, from pre-flowering to harvest.</p>
Grape	<ul style="list-style-type: none"> - Boron-deficiencies prevention and cure. 	<p>Sensitivity to Boron deficiency differs according to variety and weather conditions. Usually the deficiency shows up with difficult Spring growth and berries with different size.</p> <p>Apply, along with Downy Mildew treatments, 2-3 times every 10-15 days at 200-300 mL/hL in pre-flowering stage.</p>
Sugar beet, Cauliflower	<ul style="list-style-type: none"> - "Heart Rot of Beets" prevention and cure. 	<p>This crop family is very sensitive to Boron deficiency, which is typically shown with the "Heart rot of beets". The deficiency takes usually place in high pH soils together with intense rains or droughts and causes terminal tissues death.</p> <p>2 applications, at 1,5-2 L/ha, are sufficient to prevent the disorder.</p> <p>If mixed with post-emergence Herbicides or Fungicides, do not pass 1 L/ha.</p>
Alfalfa	<ul style="list-style-type: none"> - Boron-deficiencies prevention and cure. - Increase in yield quality and quantity. 	<p>This crop is particularly sensible to Boron-deficiency, which is shown by plants' apical part yellowing. 2 applications at 1,5-2 L/ha during first growth stages, increase yield quantity and quality.</p>



TECHNICAL NOTES

Do not mix with Acid or Alkaline-reaction products.



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F6



F6

EC FERTILIZER - Iron fertilizer solution (DTPA)

F6 is a fertilizer, made up of *Magnesium* and *Iron*, essential elements for chlorophyll formation and photosynthesis, chelated and suspended in an organic solution to grant an optimal absorption.

F6 prevents and cures every *ferric chlorosis*.

F6 is characterized by:

- *High content in hygroscopic-organic solution*, which stimulates nutrients absorption and translocation.
- *Ammonium* content, whose role in translocation is crucial.
- *Lack of Sodium*.



ADVANTAGES

Iron-deficiencies prevention and cure.

Plants affected by Iron-deficiencies fast recovery.

Foliar applications when soil/root applications are not possible.



COMPOSITION

Iron (Fe) soluble in water	4%
Iron (Fe) chelated with DTPA	4%



PHYS-CHEM PARAMETERS

Density	1,28 kg/L
pH (sol. 10%)	6,5
Chelating Agent	DTPA
Optimal pH for stability of the Chelated fraction	4-8



PACKAGE

Bottle	12x1 kg (= 12x0,78 L)
Can	4x5 kg (= 4x3,91 L)

F6



APPLICATION RATES

CROPS	APPLICATION
FOLIAR SPRAY	
Orchards (Apple, Pear, Peach and other fruit trees)	Apply at 200-300 mL/hL , when first symptoms show up, for at least 2-3 applications, every 10-15 days . On varieties sensible to rustiness, do not apply during the most sensible stages.
Grape	Start the application along with pesticides to control Downy Mildew. 3-4 applications at 300 mL/hL, every 10-15 days , are sufficient to cure the deficiency. Avoid application during flowering and after flowering, which are very sensible stages.
Actinidia	3-4 applications at 300 mL/hL , starting from the 3rd-4th leaves stage , and then every 10-15 days , allow to reach the flowering stage with well-nourished plants and able to grant a good fruits setting and development.
Vegetables and Flowers	Apply along with pesticides at 300 mL/hL . Start the applications when first symptoms show up. Apply in the freshest hours of the day. Avoid applications during flowering on flowers with delicate petals.
Golf Courses and Turf	F6 has a strengthening and greening effect. Preventive applications: 300-400 mL/hL Curative applications: 500-600 mL/hL . Avoid contact with sidewalks, stones and concrete.



TECHNICAL NOTES

Do not mix with Acid or Alkaline-reaction products.



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