



BIOSTIMULANTS and ORGANIC LIQUID FERTILIZERS

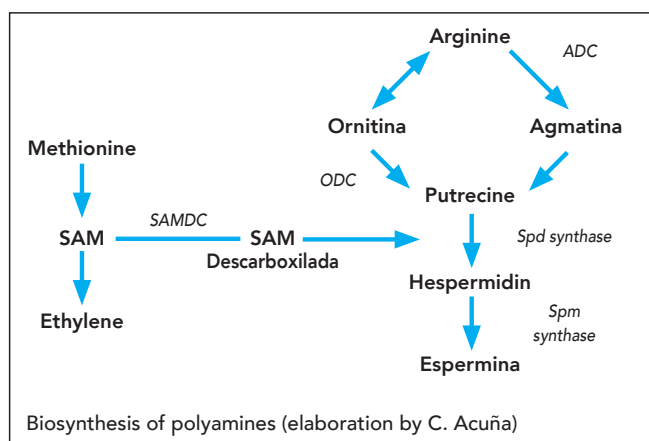
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GRENA BIOSTIMULANTS ARE BASED ON LIQUID EXTRACT OF POLYAMINES

The polyamines are essential molecules for plant development, **but what is the origin of polyamines?**

They are molecules biosynthesized from amino acids: when an amino acid is broken down, the resulting molecules are polyamines.

In IDROGRENA Universal and Energy MicroMix contain polyamines derived from the amino acids contained in the organic Grena Matrix including spermine, a polyamine essential for cell multiplication.



WHY ARE POLYAMINES SO IMPORTANT?



An increased presence of polyamines gives better resistance to stress caused by drought, water stress and especially in soils with high salinity.

They are excellent in cases of post-transplanting stress and also in case of adverse climatic conditions (radical asphyxia, frost, hail, and weeding).



Play a key role in the correct development of the structure of the flower promoting cell division, growth and maturation of the reproductive organs as well as of the fruit.



Increase flower attractiveness to pollinators.



Discourage crop raiding by wildlife.



Increase the natural production of phytoalexins, the true immune system of the plant against pathogen attacks.



Improve photosynthetic activity of the plant.



Reduce the negative effects of oxidative stress while keeping the plant healthy and vital.



IDROGRENA Universal

ORGANIC LIQUID NITROGEN BIOSTIMULANT



Available packaging:

5 kg - 25 kg - 200 kg - 1000 kg

IDROGRENA is a liquid organic biostimulant **rich in polyamines (2-Phe and spermine)**. The efficacy of the product is linked to the rapid availability of organic compounds that can be immediately absorbed by the plant and by useful microorganisms at root and soil level. **The polyamines present in IDROGRENA, once they come into contact with the roots, promote cell reproduction and the emission of many secondary roots.**

IDROGRENA is used as a carrier in weeding, anticipates the times and allows for better final control of the most resistant species. IDROGRENA is an activator of soil microorganisms. It is ideal for fertigation or foliar use.

Through repeated small applications, IDROGRENA ensures constant and balanced nutrition for crops throughout the vegetative-productive period. If used preventively, IDROGRENA stimulates the plant immune system with a greater production of phytoalexins by the plant with **anti-stress effects** post-transplant and water.



CROP	TIMING*	DOSAGE/HA per application*
All the crops	pre-flowering to harvest every 20 days (min. 3/4 applications)	5,5-6,5 kg/ha 10,5-12,5 kg/ha
Hydroponic and substrate cultures	pre-flowering throughout the entire production cycle	10,5-12,5 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.

ENERGY MicroMix

FLUID ORGANIC BIOSTIMULANT ENRICHED WITH MICRO-ELEMENTS



Available packaging:

5 kg - 25 kg - 200 kg - 1000 kg

ENERGY is a liquid extract with polyamines, enriched with EDTA microelements Iron, Manganese, Boron and Zinc.

These are microelements that are essential for development, which combined with the biostimulating action, are able to activate fundamental metabolic processes at the basis of plant well-being.

The use of polyamines and microelements create an optimal synergy for the plant so that ENERGY can be used in all phenological stages of crops, in particular as a **prevention of nutritional deficiencies and uniformity of size.**

It guarantees the improvement of pollen fertility and reduces drop.



CROP	TIMING*	DOSAGE/HA per application*
All the crops	alongside protection treatments	3 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.

BIOSTIMULANT

RICH IN POLYAMINES

SOURCE
Polyamine
liquid extract

Specific weight:
1.032 g/l

Density: watery fluid
Colour: brown



ORGANIC POLYAMINES

6,6 mg/kg

MESO- AND MICRO-ELEMENTS NATURALLY PRESENT IN THE LIQUID MATRIX

Boron (B)	0,1 mg/kg
Calcium (Ca)	24,2 mg/kg
Iron (Fe)	22,5 mg/kg
Magnesium (Mg)	4,9 mg/kg
Manganese (Mn)	0,1 mg/kg
Cooper (Cu)	0,1 mg/kg
Zinc (Zn)	1,5 mg/kg

**FREE FROM PHOSPHITES,
HEAVY METALS and CHROMIUM VI**

BIOSTIMULANT

**REDUCE
DEFICIENCIES WITH
MICROELEMENTS**

SOURCE
Polyamine
liquid extract
and micro-elements

Specific weight:
1.120 g/l

Density: watery fluid
Colour: dark red



ORGANIC POLYAMINES

6,6 mg/kg

CONCENTRAZIONE DI MICRO-ELEMENTI PRESENTI

Iron (Fe)	0,20 %
Manganese (Mn)	0,15 %
Boron (B)	0,05 %
Zinc (Zn)	0,20 %

**FREE FROM PHOSPHITES,
HEAVY METALS and CHROMIUM VI**

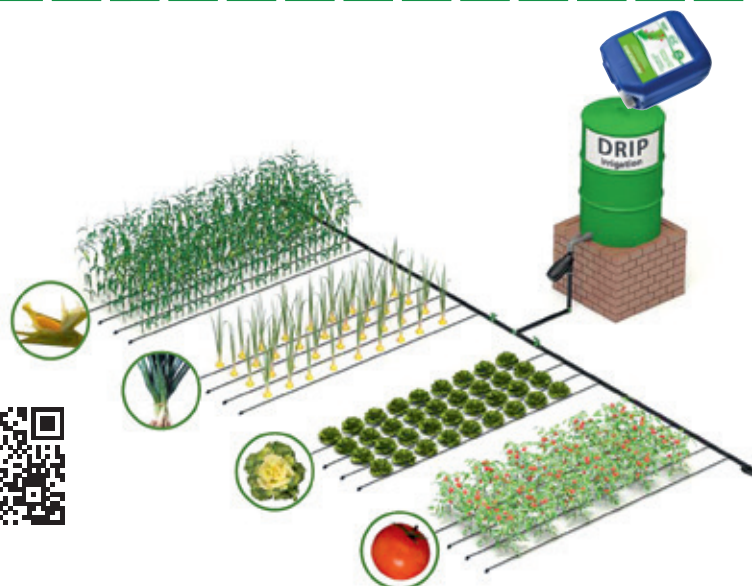
GRENA FLUIDS

Grena liquid products can be easily used for fertigation, hose and foliar fertilization, depending on the crops, nutritional needs, deficiencies or stress.



Watch the video on our Youtube channel GRENA FERTILIZZANTI

<https://youtu.be/zvWV6bgRMa8>



GRENA liquid products are great for any nutritional deficiency or stress, but they also help plants to face climate changes.

Find the most suitable fertilizer for your crop and...

IMPROVE YOUR HARVEST

A HELP FOR THE

TRANSPLANTING

FLOWERING

FRUIT SETTING

PROTECTION

GREATER RESISTANCE AGAINST

WATER STRESS

THERMAL SHOCK

RISK OF ROOT ASPHYXIA

FROST or HAIL

+ Healthy and uniformity

+ Brix

+ Pollination

+ Colour

+ Fruit setting

Anti-stress: thermal water and thermal shock



BOOSTER

Idrogrena Plus

ORGANO-MINERAL NITROGEN LIQUID FERTILIZER
WITH POLYAMINES



Available packaging:
5 kg - 25 kg - 200 kg - 1000 kg

BOOSTER Idrogrena Plus rich in ureic nitrogen stimulates the development of plant cells, especially in the growth phases.

IDROGREN A has polyamines naturally which together with Nitrogen makes it a suitable **product for the production of flowering plants and cut flowers**, the polyamines guarantees a longer duration of flowering.

Booster is suitable for all crops such as vineyards and orchards. In the spring phase BOOSTER is an excellent ally against spring frosts, if used as a preventative, it can lower the freezing point by about 3-4°C and together with other systems used such as anti-frost or raising temperatures with fire, it can preserve crops from more serious damage.

CROPS	TIMING*	DOSAGE/HA per application*
All the crops	for through the entire production cycle	3 kg/ha
Culture orticole/floricole in serra	for through the entire production cycle	5 kg/ha 9 kg/ha
Adverse weather conditions (frost, hailstorm etc.)	a few days before or immediately after the atmospheric event	6-8,5 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.

MATURA

IdroKGrena

ORGANO-MINERAL NK LIQUID FERTILIZER



Available packaging:
1 kg - 5 kg - 25 kg
200 kg - 1000 kg

MATURA Idro K Grena is a product that combines the biostimulant properties of polyamines with the nutritional properties of Potassium.

Its application is permitted on all crops, both in conventional and organic agriculture.

Potassium with polyamines plays a primary role in the formation of proteins, in flowering, during the ripening processes, increasing quality, taste, color and consistency and in the **responses of plants against environmental stress**.

For these reasons, MATURA is an important product that can be used in many phenological phases.

The effectiveness of the product is closely linked to the organic compounds immediately available and to the osmoregulation of the stomata.

CROPS	TIMING*	DOSAGE/HA per application*
All the crops	from flowering to start maturation (2 or 4 application)	4-6 kg/ha
Cereal crops	from mid-cycle to maturation (1 or 2 application)	9 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.



ANTISTRESS

VEGETATIVE
RECOVERY
SUPPORT

SOURCE

Polyamine
liquid extract and
urea

Specific weight:
1.036 g/l

Density: watery fluid
Colour: black



ORGANIC POLYAMINES

30 mg/kg

COMPOSITION

Total nitrogen (N)	8 %
Organic nitrogen (N)	0,3 %
Ureic nitrogen (N)	7,7 %
Organic carbon (C)	3 %

FREE FROM PHOSPHITES,
HEAVY METALS and CHROMIUM VI

WITH 7% K₂O
MATURATION
SUPPORT

SOURCE

Meatmeal
and potassium

Specific weight:
1.120 g/l

Density: watery fluid
Colour: cloudy



ORGANIC POLYAMINES

11 mg/kg

COMPOSITION

Total nitrogen (N)	3 %
Organic nitrogen (N)	3 %
Potassium oxide (K ₂ O) soluble in water with low chlorine content	7 %
Organic carbon (C)	3 %
Sulphuric anhydride (SO ₃) soluble in water	6 %

FREE FROM PHOSPHITES,
HEAVY METALS and CHROMIUM VI

CORRECTIVE ORGANIC NITROGEN FERTILIZERS

AN GREAT SUPPORTER IN AGRICULTURE

Thanks to the high percentage of free L-amino acids, Grena organo-mineral nitrogen fertilizers stimulate plant metabolism, promoting rapid vegetative recovery and preventive action in conditions of biotic and abiotic stress. The high organic nitrogen content given by the presence of free amino acids supports the optimal development of fruits, improving their final qualitative characteristics, such as size, pigmentation and dry matter.

The enrichment with meso and microelements allows for continuous nutritional correction, preventing potential nutritional deficiencies.

The range of Grena liquid organic fertilizers, applied by foliar application, is particularly effective in critical phenological phases. Although foliar fertilization does not completely replace soil fertilization, it represents a fundamental enrichment.

NUTRITIONAL DEFICIENCIES



PREVENT DEFICIENCIES



IDRO MAG Grena +Mg 2%

ORGANIC NITROGEN FERTILIZER



Available packaging:
1 kg - 5 kg - 25 kg

IDRO MAG Grena +Mg 2% is a liquid organic fertilizer based on amino acids (Glutamic Acid, Glycine, etc.), enriched with **natural magnesium sulphate**.

Thanks to its advanced formula, this product promotes increased photosynthesis, improves flowering, stimulates bud formation and enhances root development. It also brings benefits in terms of:

- Increase photosynthesis and plant metabolism. Magnesium, as an essential component of chlorophyll, increases photosynthetic efficiency, optimizing the production of carbohydrates and the transport of sugars within the plant
- Increase in Brix Degree (°Bx), i.e. the concentration of soluble sugars in the fruit, improves the taste and organoleptic qualities, contributing to a better colour and uniform ripening



IMPROVE THE PLANT'S PHOTOSYNTHETIC ACTIVITY

SOURCE
Meatmeal, magnesium sulphate of natural origin

Specific weight:
1.112 g/l

Density: watery fluid
Colour: brown



TOTAL AMINO ACIDS

15 mg/kg

TOTAL POLYAMINES

4 mg/kg

COMPOSITION

Organic nitrogen (N)	3 %
Organic nitrogen (N) soluble	2,7 %
Magnesium oxyde (MgO) soluble in water	2 %
Organic carbon (C)	10 %

CROPS	TIMING*	DOSAGE/HA per application*
All the crops	From pre-flowering to maturation (3-4 application)	 3,5 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.

IDRO IRON

Grena +Fe 2%

ORGANIC NITROGEN FERTILIZER WITH IRON (Fe)



Available packaging:
1 kg - 5 kg - 25 kg

IDRO IRON Grena +Fe 2% is a liquid organic fertilizer designed to support healthy and vigorous growth of plants. Thanks to the combination of amino acids (Serine, Glycine, etc.) and Iron (Fe), it offers numerous benefits:

- Correction of iron deficiencies, fights iron chlorosis, improving leaf health.
- Rapid greening, optimization of photosynthesis, promoting luxuriant growth and intense green.
- Protects plants from environmental stress such as cold and oxidation.
- Improved production, supports flowering and guarantees abundant and quality harvests.
- Rapid absorption, nutrients are absorbed quickly, ensuring a constant energy supply.

CROPS	TIMING*	DOSAGE/HA per application*
All the crops	From pre-flowering throughout the plant's production cycle, in case of nutritional deficiencies	3,5 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.

IDRO CALCIO

Grena +Ca 2%

ORGANIC NITROGEN FERTILIZER



Available packaging:
1 kg - 5 kg - 25 kg

IDRO CALCIO Grena +Ca 2% is a liquid organic fertilizer formulated with animal organic substance consisting of amino acids such as Phenylalanine and Proline, further enriched with Calcium (Ca).

The composition of the product promotes the opening of leaf stomata, thus improving the absorption of nutrients.

The addition of calcium helps to solve problems specific to its deficiency, such as:

- Prevent yellowing of leaves.
- Prevent wilting of leaf tips.
- Promote the crispy texture of leaves.
- Extend the shelf-life of products, contributing to better post-harvest conservation.

CROPS	TIMING*	DOSAGE/HA per application*
All the crops	Flowering and post-harvest (every 10 days, 3-4 application)	3,5 kg/ha

*guidelines only, for the correct use of our products, please consult a specialist.

SUPPORT AGAINST YELLOWING DUE TO CHLOROSIS

INCREASE IN OSMOTIC POTENTIAL

SOURCE
Meatmeal,
iron chelate (EDTA)

Specific weight:
1.116 g/l

Density: watery fluid
Colour: dark red



TOTAL AMINO ACIDS

15 mg/kg

TOTAL POLYAMINES

4 mg/kg

COMPOSITION

Organic (N) nitrogen	3 %
Organic nitrogen (N) soluble	2,7 %
Iron (Fe) soluble in water	2 %
Iron (Fe) chelato EDTA	2 %
Organic carbon (C)	10 %

IMPROVES THE FRUIT'S SHELF-LIFE

SOURCE
Meatmeal,
Calcium sulphate
of natural origin

Specific weight:
1.135 g/l

Density: watery fluid
Colour: brown



TOTAL AMINO ACIDS

15 mg/kg

TOTAL POLYAMINES

4 mg/kg

COMPOSITION

Organic nitrogen (N)	3 %
Organic nitrogen (N) soluble	2,7 %
Calcium oxyde (CaO) soluble in water	2 %
Organic carbon (C)	10 %



USE RECOMMENDATIONS OF BIOSTIMULANTS AND LIQUID FERTILIZERS

IDROGRENA <i>universal</i>	POLLINATION	PROTECTION TREATMENTS	POST-HARVEST
	WEEDING	CRESCITA DEL FRUTTO	
ENERGY <i>MicroMix</i>	PRE and POST-FLOWERING	FRUIT SETTING	
	NUTRITIONAL DEFICIENCIES		
BOOSTER <i>IdroGrena Plus</i>	GERMINATION		
	PRE o POST-FROST		
MATURA <i>Idro K Grena</i>		RIPENING SUPPORT	
		POTASSIUM DEFICIENCIES	
IDRO CALCIO <i>Grena +Ca 2%</i>	PRE and POST-FLOWERING		POST-HARVEST
IDRO MAG <i>Grena +Mg 2%</i>	PRE-FLOWERING	MATURATION	
IDRO IRON <i>Grena +Fe 2%</i>	PREVENTION		
	NUTRITIONAL DEFICIENCIES		

JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER