



GRAN SEMINA 4.10

Organic-mineral eco-fertilizer
Permitted in organic farming



Recommended for:
Cereals and grain

AMINO ACIDS IN GRENA MATRIX

Aspartic acid	1,25	g/100 g
Glutamic acid	1,62	g/100 g
Alanine	1,02	g/100 g
Arginine	0,83	g/100 g
Phenylalanine	0,56	g/100 g
Gycine	0,95	g/100 g
Hydroxyproline	0,22	g/100 g
Isoleucine	0,62	g/100 g
Histidine	0,31	g/100 g
Leucine	1,10	g/100 g
Lysine	0,56	g/100 g
Proline	0,85	g/100 g
Serina	0,87	g/100 g
Tyrosine	0,33	g/100 g
Threonine	0,59	g/100 g
Valine	0,80	g/100 g
Cysteine and cystine	0,18	g/100 g
Methionine	0,19	g/100 g
Tryptophan	0,09	g/100 g

FREE AMINO ACIDS

Glutamic acid (free)	0,062	g/100 g
Alanine (free)	0,115	g/100 g
Leucine (free)	0,053	g/100 g

MICRO-ELEMENTS

B	2,30 mg/kg
Fe	330 mg/kg
Mn	18,6 mg/kg
Cu	2,87 mg/kg
Zn	33,6 mg/kg

COMPOSITION

Organic substance	39%
Amino acids and proteins	20%
Humic and fulvic acids	6%
Humidity	7%
Total nitrogen (N)	4%
Organic nitrogen (N)	4%
Total phosphoric anhydride (P ₂ O ₅)	10%
Organic carbon (C) of biological origin	23%
Sulphuric anhydride (SO ₃)	6%

SOURCE

Organic: Hydrolyzed proteins of animal origin by thermal hydrolysis
Mineral: soft ground rock phosphate

FEATURES

The organic GRENA MATRIX is unique because rich in levorotatory amino acids (14-56% in 100kg O.S.) including humic and fulvic acids, carboxylic acids (eg. EDTA) and organic amines, which possess an excellent bio-stimulating action.

GRAN SEMINA is an organo-mineral eco-fertilizer with 4% organic nitrogen (N) and 10% phosphorus pentoxide (P₂O₅) that reinforces the root proliferation effect, characteristic of the organic GRENA MATRIX. It also promotes some mycorrhizae, increasing the availability of phosphorus in the soil. In contrast to mineral fertilizers, with **GRAN SEMINA** the slow-release of nutrients is constant over time, nourishing the plants throughout the production cycle.

The readily available organic nitrogen translates into a "starter" effect for the crops. The high percentage of phosphorus promptly acts at the beginning of the growing phase, granting extra strength to the plants; in fact, **GRAN SEMINA** anticipates the flowering because it facilitates the processes of energy metabolism and synthesis reactions. Especially on cereals, there is an increased resistance to cold and parasitic diseases thanks to the Zinc (Zn), which supplements cereals by promoting proper cell growth and the ripening of fruits. Crops fertilized with **GRAN SEMINA** will benefit from an outer appearance of better quality.

Guaranteed totally free of weed seeds, coliform bacteria, antibiotics, pathogens.

Packaging: 25kg – 500kg bags

CROP	TIMING*	APPLICATION*	DOSAGE/HA*
Rapeseed	on second harvest	scatter the product in soil preparation	400-450 kg/ha
Wheat, rye	Autumn-winter	scatter the product in soil preparation	400-450 kg/ha
Corn (maize)	pre-sowing or pre-transplant	scatter the product in soil preparation	400-450 kg/ha

* guidelines only, for the correct use of our products, please consult a specialist. Not to be applied to edible parts of the crop.