

# AMINA-SOIL

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**AMINA-SOIL** is an organic, totally water soluble fertilizer produced by the hydrolysis of natural plant proteins. This production process guarantees the conservation of the necessary amino acids and a high rate of nitrogen (>16%).

## THE IMPORTANCE OF AMINO ACIDS

- Amino acids are organic compounds that are the main ingredients of proteins.
- Amino acids assist in the formation of chlorophyll which is vital for photosynthesis.
- Amino acids are precursors or activators of phytohormones and plant growth substances.
- Amino acids fortify plants against stress and activate their natural defense mechanisms.
- Amino acids chelate micronutrients. When amino acids are applied along with micronutrients, the assimilation and translocation of micronutrients inside the plant is easier.
- Amino acids are required during pollination. They increase pollen germination and the length of the pollen tube.
- Amino acids increase root volume.

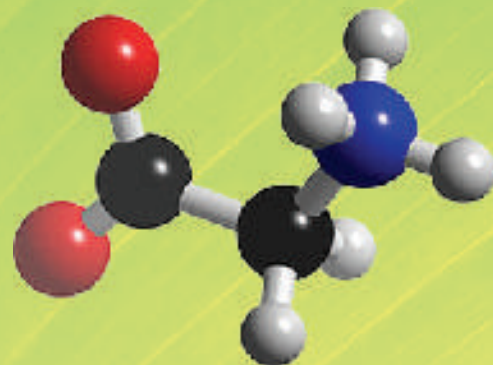
## THE ROLE OF NITROGEN

- ➔ Nitrogen is essential for the growth and reproduction of plants since it is involved in various fundamental functions.
- ➔ It is involved in the amino acid and protein synthesis.
- ➔ It is an essential constituent of the bases which form nucleic acids (DNA, RNA).
- ➔ It is required in plants in amounts larger than any other nutrient.
- ➔ It improves the seed formation.
- ➔ It stimulates the early growth and vigour of seedlings.
- ➔ It is involved in the chlorophyll synthesis.
- ➔ It is a component of many coenzymes and hormones.

<u>SYNTHESIS</u>	<u>(% w/w)</u>
Nitrogen (N) .....	16.0
Amino acids .....	45.0

## PROPERTIES

- Increases the yield and the quality of crops.
- Provides nitrogen readily available to the plants.
- Fortifies plants resistance against stress.
- Accelerates the biochemical processes that take place inside the plant (photosynthesis, sugar formation).
- Promotes fruit growth.



## USES

- AMINA-SOIL** can be used in all crops as an:
- ⊙ Organic nitrogen fertilizer for applications in the soil.
  - ⊙ Recovery biostimulant after periods of intense stress caused by biotic and climatic factors due to the high rate of the contained amino acids.
  - ⊙ Stimulator for the improvement of the qualitative and the quantitative characteristics of the crop.
  - ⊙ Micronutrient chelating agent (Fe, Zn, Mn, Cu) since amino acids improve the uptake of metal micronutrients by the roots of the plants.
  - ⊙ Food source for the soil beneficial micro organisms.

## APPLICATION - APPLICATION RATES

**AMINA-SOIL** can be applied in the soil through any fertigation/irrigation system at the following application rates

CROP	APPLICATIONS	APPLICATION RATE
Strawberry	Every 10-15 days from the beginning of growth until harvest	10-15 kg/ha
Fruit vegetables (Tomato, Pepper, Eggplant, Cucumber, Squash, etc)	Every 8-12 days from transplanting until mid harvest	10-15 kg/ha
Leafy vegetables	Every 7-10 days starting when the first leaves emerge	5-10 kg/ha
Horticulture (watermelon, melon, etc)	Every 7-12 days starting after transplanting until the fruits are fully grown	5-10 kg/ha
Potato	Every 10-14 days starting from the tuber formation until the initiation of flowering	10-15 kg/ha
Carrot, Onion, Red beet	Every 10-15 days starting from the 2nd-3rd week after the emergence up to the root enlargement	10-15 kg/ha
Trees (citrus, stone fruits, olives, etc)	Every 10-15 days starting prior to flowering until the beginning of maturity	10-15 kg/ha
Kiwi	Every 10-15 days starting prior to flowering until the beginning of maturity	10 kg/ha
Ornamental plants, Forest shrubs	Every 7-12 days from transplanting and after	5-10 kg/ha
Turf, Urban green	Every 10-15 days	10-15 kg/ha
Cereals	At the 10-20 cm growth stage	5 kg/ha dilution 1:2 (g/l)
Fodders	Every 8-12 days starting early in the spring and repeating after each cutting	5-10 kg/ha dilution 1:2 (g/l)
Cotton	At the beginning of flowering and 7-12 days later	10-15 kg/ha
Corn	At the 15-20 cm, at the 25-35 cm growth stage and prior to tasseling	5-10 kg/ha dilution 1:2 (g/l)

