

# AminaL

bio  
Suitable  
for organic  
crops

## Liquid Organic Nitrogen Fertilizer

**AminaL** is a liquid organic fertilizer which contains polyamines. Polyamines exist naturally in all living organisms, they stimulate plant growth and are involved in many biochemical processes. **AminaL** is the product of the thermal treatment, hydrolysis and distillation of meat meal and fish meal without the addition of chemical reactants and it can be used in all crops regardless of the cultivation method (conventional, biological, integrated).

The immediate efficiency of **AminaL** resides in the amines which are rapidly absorbed both by the plants and the beneficial microorganisms of the rhizosphere.

SYNTHESIS	(% w/w)
Organic Nitrogen (N)	3.00
Organic Carbon (C)	10.00
Amines - Amino acids	20.00
2-phenethylamine	2.4mg/lt
Spermine	3.6mg/lt

**AminaL** acts as a biostimulant that promotes the plant growth by interfering in the replication, the proliferation and the differentiation of the plant cells.

### Benefits - properties

- Provides organic nitrogen readily available and therefore fortifies plant growth
- Stimulates rooting and especially the creation of lateral roots by interfering in the cellular replication and the cellular division
- Increases the content of sugars (brix) in the fruits through the regulation of the various ion channels such as the one of Potassium
- Contributes to the proliferation of the beneficial microorganisms of the soil and increases the microflora of the rhizosphere which leads to the improvement of the fertility of the soil
- Accelerates crop growth since it enhances the action of microorganisms of the soil which increase the availability of the nutrients
- Reduces the stress induced by drought and competition with the weeds
- Enhances fruit set through the attraction of insects-pollinators (bees, butterflies, larvae and beetles) which promote entomophilous pollination
- **AminaL** is safe for the crops since it does not contain any salts and does not cause phytotoxicity



**HUMOFERT**



1 Ermou & Theotokopoulou str., 144 52 Metamorphosis, Tel +30 210 284 5891  
Fax. +30 210 281 7971, Web Site: [www.humofert.gr](http://www.humofert.gr) E-mail: [info@humofert.gr](mailto:info@humofert.gr)



## **AminaL**

*stimulates plant growth  
with the power of amines*

### **Properties of amines**

- They stimulate plant growth since they provide nitrogen readily available to the plants which is one of the three main nutrients.
- They enhance rooting by interfering in the replication and the mitosis - division of the plant cells of the root.
- They transport nutrient ions such as Potassium and Calcium from the soil to the fruits and as a result the harvested fruits become more tasteful and with more vivid colors.
- They increase the population of the beneficial microorganisms of the soil which metabolize nutrients and therefore make them available to the plants. In this way soils become more fertile and the required conditions for the achievement of high yields are met.
- They reduce the incidence of nutrient deficiencies since they chelate the nutrients of the soil and convert them in forms readily available to the plants.



<b>CROP</b>	<b>FOLIAR APPLICATIONS</b>	<b>SOIL APPLICATIONS</b>
Fruit trees	10-15 l/ha In the new growth	10-20 l/ha Every 7-10 days
Citrus trees	10-15 l/ha In the new growth	20 l/ha Every 15 days
Olive trees	10-15 l/ha In the new growth	2-2.5 l/ha Every 15 days
Vineyard	6-10 l/ha When 3-4 leaves per shoot emerge	20 l/ha Every 7 days
Kiwi	6-10 l/ha When 3-4 leaves per shoot emerge	20 l/ha Every 15 days
Vegetables - Open field horticulture	2.5-5 l/ha 7 days after planting, in the emergence of the first leaves, during flowering and prior to harvest	5-10 l/ha Every 7-10 days
Vegetables - Greenhouse horticulture	2.5-5 l/ha 7 days after planting, in the emergence of the first leaves, during flowering and prior to harvest	10-15 l/ha Every 7-10 days
Field crops (Cereals, Corn, Cotton, Sunflower, Soybean, Legumes, Aromatic plants etc.)	2.5-5 l/ha During planting, in the emergence of the first leaves or when plants reach a 10-20 cm height, prior to flowering or tasseling and prior to harvest	10-15 l/ha Every 10-15 days