BIOGENESIS

Biogenesis is a liquid organic biostimulator and soil amendment that comes from natural bioactive raw materials. Its main active ingredients are natural plant growth regulators (cytokinins, auxins, gibberellins), amino acids, carbohydrates, humic and fulvic acids and macro- and micro- nutrients K, N, Fe. Mn, Cu, Mg, Zn, Ca, B, S.

AMINO ACIDS - CARBOHYDRATES

Amino acids are the raw material for the protein biosynthesis. They contribute to the formation of chlorophyll and as a result plants achieve a higher degree of photosynthetic activity. As a consequence plants produce more carbohydrates that have either structural or energy storage and source role. Furthermore, amino acids help plants tolerate stress induced by drought, frost, lack of humidity and other unfavourable weather conditions.

PLANT GROWTH REGULATORS

Biogenesis contains cytokinins which stimulate cell division, flowering initiation and fruit set. The contained in the product auxins promote cell expansion and differentiation, they stimulate root growth and delay senescence of the leaves and of the plant in total. **Biogenesis** also contains gibberellins which affect various plant functions such as shoot elongation, germination, dormancy, flowering, enzyme production and senescence of leaves and fruits.

HUMIC - FULVIC ACIDS

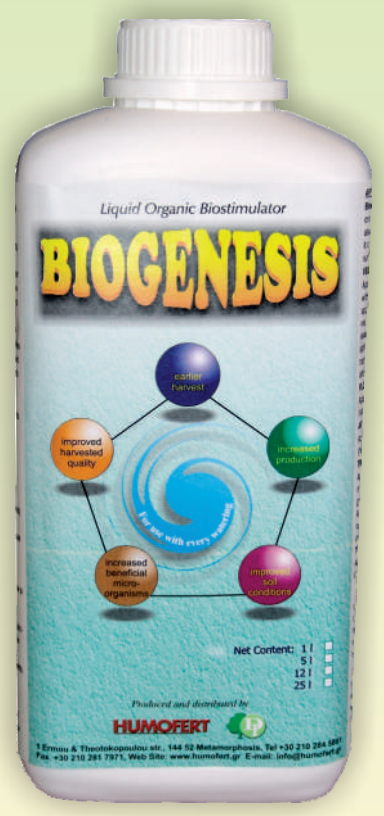
Biogenesis contains humic and fulvic acids which are formed by the degradation of the organic matter.

Humic acids improve the structure of all kinds of soil. They also neutralize both acid and alkaline soils. Consequently nutrients that were inactivated due to the acid or alkaline soil conditions become now available to the plants. Last but not least, humic acids increase the Cation Exchange Capacity (CEC) in the soil improving in this way the nutrient uptake.

Fulvic acids are smaller in molecular size than humic acids and for that reason they can easily penetrate the roots, the stems and the leaves. Fulvic acids can increase the permeability of the cellular membranes, so when fulvic acids are applied foliarly they can transfer nutrients inside the plants. Fulvic acids also act as chelating agents converting nutrients into compounds that can be assimilated by plants and as a result nutrients become available to the roots and the leaves.

PROPERTIES

- Achieves earlier harvest (3-10 days).
- Increases the populations of the soil beneficial microorganisms (e.g. *Bacillus sp., Pseudomonas sp.*, *Actinomycetes sp.* etc) which assist in the plant growth and compete with many soil pathogens.
- Improves soil conditions which allow a better aeration of the soil and penetration of the roots.
- Creates complex organic compounds in the soil which maintain the mineral nutrients of the soil, reducing their leaching and increasing their availability to the plants.
- Increases the tolerance of the plants against frost and drought.
- Increases significantly the production and the quality of the harvest leading to an increased profit for the farmer.



BIOGENESIS

earlier harvest

improved quality of harvest

increased crop yield

CROPS	APPLICATIONS
Vegetables, Greenhouse	Apply with every watering along with fertilizer or individually. At least 2 applications are required for optimum results at the beginning of the growing season at an application rate 5 l/ha per application (1st application: 1 week after transplanting, 2nd application: 15 - 20 days after the 1st application).
Trees & Vineyard	Apply 5 - 10 l/ha along with fertilizers or individually every 15 days during the growing season. Alternatively apply foliarly at an application rate 10 - 15 l/ha before blooming, during fruit set and during maturing.
Flowers, Ornamentals	Apply along with fertilizers or individually at an application rate 2-3 l/ha once or twice a week.
Arable crops	Apply 10-15 l/ha foliarly 1 month after sowing.
Fodders, Pastures & Turfs	Apply 10-20 l/ha foliarly 1-2 times a week.

increased beneficial micro-organisms

improved soil conditions

HUMOFERT

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