



## BIO-ORGANIC HUMATIC ALLROUND FERTILISER

- Concentrated liquid fertiliser with biologic organic features for cultures on soils.
- Used for growth in vegative stages of plants life cycle and evergreen plants.
- Used as basic fertiliser in the entire plant life cycle, combined with supplemental fertilisers and adjusted to the plant nutrient needs in the various stages.

Bio OH Allround is a complex blend and composed of digestates from vegetable sources and combined with non-degradable humus to form a substral nutrition unit. The humic nutrition unit supplies the plant long-term nutrition elements and also sideways quickly available via mineralization. All nutrients are bound to non-degradable humic particles which serve as anchors to soil particles and do not flush out nutrients

Bio OH Allround increases EOS (Effective-Organic-Substance) and acts as soil enhancer. Supplied to soil available for the plant are macro elements in the NPK ratio specific for vegetative phase, contain sub-macro elements Calcium (Ca) and Magnesium (Mg), all essential micro elements in amino-chelate form, fatty acids, vitamins and saccharides.

### Mechanisms & Use

Bio OH Allround is buffers nutrients in soils. Even with large withdrawals of nutrients by fast growth sufficient nutrients remain in the soil before supplementation at the end of a weekly cycle.

Bio OH Allround contain EOS ( Effective Organic Substances) with precursor nutrients, Humic Acids, Fulvic Acids, free amino Acids that maintain soil condition and Soil-Nutrient-Plant interactions.

The rate of mineralisation of elements and electrolytes thus absorptions by the plant depends on the amount of water supplies. Growth can therefore be adjusted by more or less irrigation of plain water.

All nutrient elements are chelated by amino acids attached to a humic control unit or freely migrating in soil. The humic unit can thus stock and release nutrients. Elements or ions remain mobile in soil and there is no competition or antagonism in absorption.

Bio OH Allround contain sufficient nutrients for energy maintenance in the Light-photosynthesis reactions and precursing nutrients to built up saccharides in "Dark reactions"

#### Usage

- Dilute Bio Allround to 1: 500 (2 ml./ liter of water).
  - EC measurements are not relevant
  - Apply once per 7 days as fertigate
  - Interim irrigation with only water
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## Advantages

- **Hardly any risk in nutrition management and easy in use**
    - Overdose not possible
    - No competition in elements or compounds
    - Fast plant reactions thus easy to monitor
    - No complex measurements
    - No risk of fertiliser salt stockages
  - **High quality growth**
    - All essential nutrients available for the plant, sufficient macro- and micro elements, precursing organic compounds such as amino acids, saccharides, fatty acids and vitamins.
  - **High immunity against parasites and plant diseases**
    - Healthy plants are less sensitive for parasites and show a fast immune response by various mechanisms ( hormonal, physical barriers, saponine productions etc.)
  - **High efficiency and low costs**
    - Organic humatic fertilisers such as Bio Allround require only one dose weekly of 0,4 liter Bio Allround diluted in 200 liter irrigation water per 10 square meters.  
*Hydroponic mineral fertilisers require about same dosage but daily!*  
This means that Bioquant organic humatic fertilisers are seven times more efficient then hydroponic fertilisers.
  
    - Organic humatic fertilisers are the latest generation fertilisers that meet biologic standards and therefore authorised in organic productions.  
The kinetics in the plant(cells) and growth dynamics are optimal without quality loss such as occur in the use of hydroponic fertilisers.
  - **Environmental friendly**
    - Organic humatic fertilisers do not harm the environment
  - **Characteristics**
    - Liquid concentrate
    - Completely water-soluble
    - Non toxic
    - Free from pathogens
    - Free from heavy metals
    - Safe for environment
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## CONTENT

Nutrient Profile			L-Amino Acid Profile	
Nitrate (NO <sub>3</sub> -N)	2.8	%	Alanine	0.63 %
Ammonium(NH <sub>4</sub> -N)	5.9	%	Arginine	0.46 %
Amino(N)	9.3	%	Aspartic Acid	0.13 %
Fosphate(P <sub>2</sub> O <sub>5</sub> )	19.1	%	Cystine	0.04 %
Potassium(K <sub>2</sub> O)	19,8	%	Glutamine	0.39 %
Calcium(CaO)	3.1	%	Glycine	0.35 %
Magnesium(MgO)	3.3	%	Histidine	0.17 %
Natrium(N <sub>2</sub> O)	0.2	%	Hydroxyproline	0.03 %
Sulphur(SO <sub>3</sub> )	4.10	%	Isoleucine	0.25 %
Borion(B)	0.04	%	Leucine	0.24 %
Copper(Cu)	0.05	%	Lysine	0.41 %
Iron(Fe)	0.24	%	Methionine	0.23 %
Molybdene(Mo)	0.02	%	Phenylalanine	0.25 %
Mangane(Mn)	0.07	%	Proline	0.21 %
Zinc(Zn)	0.02	%	Serine	0.26 %
Sulphur(S)	0.10	%	Taurine	0.09 %
Clorid(Cl)	0.074	%	Tryptophan	0.18 %
			Valine	0.18 %
Dry Substance (DS)			75,3 %	
Organic Substance (Os)			39,8 %	
Residual Ash (RA)			35,5 %	
Standard Packages			1 liter, 5 liter, 10 liter	

