Biomin

CHELATED MICRONUTRIENTS

Presents

JH Biotech, Inc.

Innovation for a Greener Earth

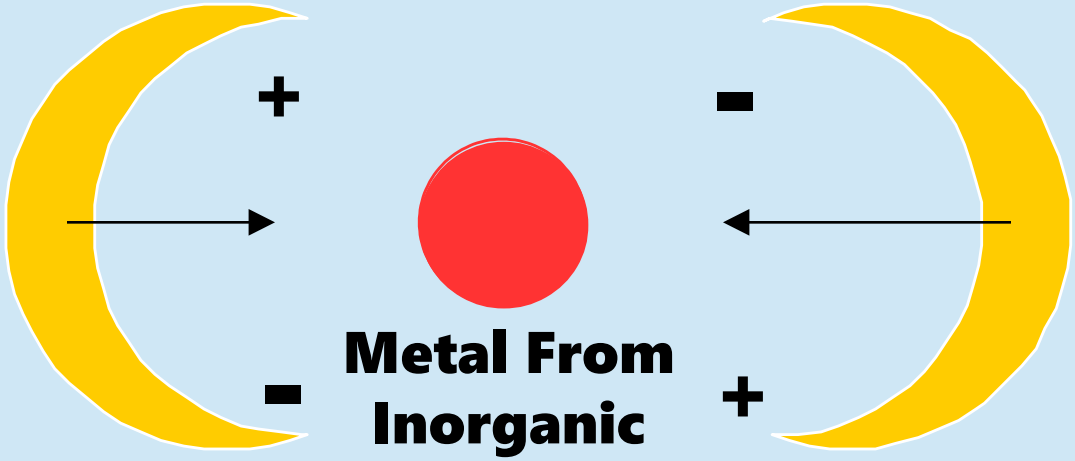
Biomin - Amino Acid Chelates

- Designed to prevent and correct micronutrient deficiencies to boost crops during critical or fast growing periods.
- Biomins are chelated micronutrients resulting form the chelation of hydrolyzed protein and organic acids.
- This results in a chelate which is better utilized by the plant.

Biomin – The Chelated Structure

- Chelation is the process of attaching a specific organic molecule called a ligand (amino acid) to a metal ion (Ca, Mg, Fe, Zn, Mn, Cu) at two or more sites to form a ring structure.
- This process is patented by JH Biotech (No. 5504055)

Chelation Process

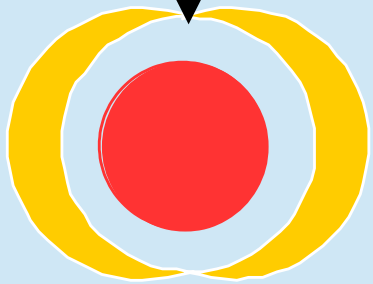


Metal From Inorganic Salt

Ca, Fe, Mg, Mn, Zn

Amino Acid Ligand

Amino Acid Ligand



Chelate (Biomin)

Biomin – How Does It Work

Plants make their proteins by synthesizing them from amino acids, which are produced by complex biochemical processes starting with the elements Nitrogen (N), Carbon (C), Oxygen (O) and Hydrogen (H).

This process consumes biological and biochemical energy. Biomins give the plants amino acids, organic acids, peptides, and metals that they require for plants to make proteins and grow, thereby saving biological/biochemical energy.

Biomin – Properties

- Organic certified by CDFA, OMRI and WSDA
- Specifically formulated for better absorption and translocation in plants
- Buffer solutions with great stability under physiological pH
- Chelation process enables the nutrients to be better utilized by plants
- Bio-available active ingredients
- Very safe to any crop – low risk of phytotoxicity
- Used in both soil and foliar applications
- Balance the nutrients in a short time

Biomin - Properties

- Raw materials are of natural and organic origin
- Final product is completely free from hazardous chemicals and toxic substances.
- Chemical composition of Biomin is similar to the products used for animal feed.
- Compatible with most fertilizers and pesticides

Biomin – Effects of Its Use

- Yield Increase
- Homogeneous ripening with more flavoring and high quality fruit
- Higher sugar content
- Better fruit-setting and less fruitlets dropping
- May help reduce frost, viral and fungal diseases
- Reduction of the effects of drought, saline soils, water deficiency and weather conditions

Biomin – Varieties

Product	Guaranteed Analysis (%)								
	B	Ca	Cu	Fe	K_2O	Mg	Mn	Mo	Zn
SINGLE MINERAL BIOMIN®									
+ BIOMIN Boron	3.0	--	--	--	--	--	--	--	--
+ BIOMIN Cal-Boro	1.0	5.0	--	--	--	--	--	--	--
+ BIOMIN Cal-Boro Light	0.5	5.0	--	--	--	--	--	--	--
+ BIOMIN Calcium	--	5.0	--	--	--	--	--	--	--
+ BIOMIN Copper	--	--	4.0	--	--	--	--	--	--
+ BIOMIN Iron	--	--	--	5.0	--	--	--	--	--
+ BIOMIN Magnesium	--	--	--	--	--	3.0	--	--	--
+ BIOMIN Manganese	--	--	--	--	--	--	5.0	--	--
BIOMIN Molybdenum	--	--	--	--	--	--	--	3.0	--
BIOMIN Potassium	--	--	--	--	25	--	--	--	--
+ BIOMIN Zinc	--	--	--	--	--	--	--	--	7.0
BIOMIN® BOOSTERS (MULTIMINERAL COMBINATIONS)									
+ BIOMIN BOOSTER 11	--	1.0	0.5	0.5	--	1.0	0.5	--	0.5
+ BIOMIN BOOSTER 126	0.025	--	0.1	0.5	--	0.8	1.0	--	3.0
+ BIOMIN BOOSTER 153	0.025	--	0.1	0.5	--	0.8	2.5	--	1.5
BIOMIN BOOSTER 212	0.1	--	0.5	2.0	--	0.5	1.0	--	2.0
+ BIOMIN BOOSTER 221	0.025	--	0.5	2.0	--	0.5	2.0	--	1.0
+ BIOMIN BOOSTER 235	0.025	--	0.5	1.0	--	0.5	1.5	--	2.5
BIOMIN STARTER	0.025	--	0.1	0.5	--	0.8	2.5	--	1.5

Biomin – Application Rates

Product	Composition	Application Rate
Biomin Calcium	5% Ca	1-3 quarts / Acre
Biomin Magnesium	3% Mg	1-3 quarts / Acre
Biomin Iron	5% Fe	1-4 pints / Acre
Biomin Zinc	7% Zn	1-4 pints / Acre
Biomin Manganese	5% Mn	1-4 pints / Acre
Biomin Copper	4% Cu	1-4 pints / Acre
Biomin Boron	3% B	1-4 pints / Acre
Biomin Molybdenum	3% Mo	1-4 pints / Acre
Biomin Booster	--	1-4 pints / Acre
Biomin Potassium	25% K2O	2-4 quarts / Acre

THANK YOU

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www. Jhbiotech.com