

Beneficial Input for Substrates and Soils



## **Composition**

- Amorphous Volcanic Ash
- Plant Available Silicon
- Needed Beneficial Nutrients
- Unique source of Trace and Ultra Trace Elements for optimum plant growth.

### **Chemical Analysis**

Total Available Silicon (SiO <sub>2</sub> )	76%
Other Beneficial Nutrients	
Potassium (K <sub>2</sub> O)	5.00%
Iron (Fe <sub>2</sub> O <sub>3</sub> )	1.00%
Calcium (CaO)	0.40%
Magnesium (MgO)	0.20%
Manganese (MnO)	0.02%
Molybdenum (Mo)	0.02%
* Minimum Guaranteed analysis	

# **Application Rates**

#### **Bulk Blending**

Blend 5 to 20% MontanaGrow into soils and substrates to enhance mediums with plant available silicon and beneficial trace minerals.

### Container Gardening

Enhance growing mediums by blending 1/4 cup MontanaGrow per gal. of soil or substrate. Rates may vary depending on soil health and the type of plants being grown.

### **Physical Properties**

**Available Sizes** 

- -10 Mesh
- -1/2" Chip

Hardness

3.5 Mohs

**Bulk Density Average** 

74 /cu.ft.











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#### **Plant Available Silicon**

## **Natural Source**

AAPFCO lists volcanic ash as a natural source of nutrients and beneficial substances including plant available silicon.

MontanaGrow is mined from a deposit of silicon rich, non-crystalline, amorphous volcanic ash formed by an ancient pyroclastic flow over 30 million years ago.

MontanaGrow reacts dynamically with other minerals and nutrients addressing plant deficiencies to help revitalize and improve plant health.

MontanaGrow is an environmentally friendly, beneficial nutrient that provides carbon sequestration, enhances soil health, and improves crop productivity.

## **Silicon Increases:**

- Phosphate and nitrogen availability
- High and low temperature tolerance
- Regulation of heavy metal uptake
- Drought and salt tolerance
- Plant cell wall strength
- Disease resistance
- Photosynthesis

### Created by a Pyroclastic Flow

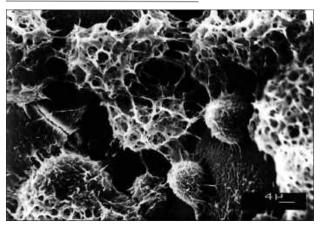


Sourced from a deposit of silicon rich volcanic ash deposited over 30 million years ago.

#### **Blend with Substrates and Fertilizers**



### **Under the Microscope**



An immense surface area is the result of a unique non-crystalline and amorphous structure.









### CONTACT

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