

*Beneficial results during all phases of plant growth.*

**FOR BEST RESULTS USE WITH BOTANICARE® PLANT NUTRIENTS.  
SWEET ALSO WORKS WELL WITH OTHER NUTRIENTS AND SUPPLEMENTS.**

*Sweet Application Rates*

Amounts in ml/gallon (3.78 L)    1 teaspoon=5 ml    1 tablespoon=15 ml    1 ounce=30 ml

PLANT PHASE	WEEK	SWEET	WATER
Clones / Seedlings		0	
Vegetative	Week 1	0	
	Week 2	0	
Transition	Week 3	10 ml	3.78 L (1 Gallon)
Fruiting / Flowering	Week 4	10 ml	3.78 L (1 Gallon)
	Week 5	10 ml	3.78 L (1 Gallon)
	Week 6	10 - 15 ml	3.78 L (1 Gallon)
	Week 7	10 - 15 ml	3.78 L (1 Gallon)
	Week 8	10 - 15 ml	3.78 L (1 Gallon)
	Week 9	10 - 15 ml	3.78 L (1 Gallon)
	Week 10	10 ml	3.78 L (1 Gallon)
Pre-Harvest 2-3 Days		0	

Derived From: Magnesium sulfate. Standard Strength Dilution (10 ml nutrient per 3.78 L water) will achieve: Mg 38, S 51

*Give your plants a Sweet Treat*



**ALL NATURAL MINERAL SUPPLEMENT**

*Sweet Flavors    Sweet Aromas    Sweet Ingredients*



*Original Berry*

*New Raw*

*Grape*

*Citrus*

*Give your plants a Sweet™ Treat*

# Sweet smelling, Sweet tasting plants!

## Sweet Raw, Berry, Citrus and Grape

### ALL NATURAL MINERAL SUPPLEMENTS

Sweet meets the metabolic demands of your plants throughout their life cycle by providing vital compounds when the plants need them most. All Sweet flavors are scientifically formulated with: carbohydrates, organic acids, vitamins, and amino acids. This ensures healthy leaf growth in the vegetative stage and a stress-free transition to the fruiting/flowering stage with hearty, fruitful crops. Sweet Berry, Citrus and Grape also provide aroma and flavor enhancing bioactive esters to give you sweet smelling and tasting plants, while New Sweet Raw helps enhance your plants' natural flavors and aromas.

Sweet helps plants maintain optimum metabolism and proper balance between photosynthesis and respiration. Plant physiologists have stated that low phosphorous to nitrogen (P/N) ratios favor vegetative growth, while high P/N ratios favor fruit development. Common practice is to reduce nitrogen for the final stage and increase carbon dioxide concentrations, temperatures, and light intensity during fruiting/flowering. These practices cause metabolic imbalance and decreased photosynthesis, resulting in soft, yellow-leaved plants. Sweet helps plants recover and flourish despite this sudden change. With Sweet, you'll see sturdy stems with shorter internodes and an abundance of buds, flowers and fruits.



low phosphorous to nitrogen (P/N) ratios favor vegetative growth



high phosphorous to nitrogen (P/N) ratios favor fruit development

## 3 Flavors + New Raw CITRUS, GRAPE, BERRY



# Hearty, Fruitful Crops!

## Sweet Ingredients

**SWEET CONTAINS A UNIQUE COMBINATION OF ORGANIC COMPOUNDS AND ESSENTIAL ELEMENTS DIRECTLY INVOLVED IN PLANT PHOTOSYNTHESIS AND RESPIRATION :**

**Carbohydrates:** Optimal concentrations of glucose, fructose and sucrose. Carbohydrates are the end product of photosynthesis, broken down during respiration to release energy for biosynthetic reactions.

**Organic acids:** Citric acid and ascorbic acid (vitamin C). Organic acids are formed during respiration as a consequence of the oxidation of pyruvic acid via the well-known Krebs cycle.

**Vitamins:** Thiamine, riboflavin, pyridoxine, niacin, and other B-complex vitamins from fermented yeast extracts. Vitamins are involved in carbohydrate metabolism and the biosynthesis of proteins and nucleic acids.

**Amino acids:** Glycine, alanine, valine, leucine, isoleucine, serine, threonine, aspartic acid, glutamic acid, asparagine, glutamine, lysine, arginine, histidine, cysteine, cystine, methionine, proline, phenylalanine, tyrosine and tryptophan. Amino acids serve as building blocks for proteins, including structural proteins and enzymes, and they are involved in RNA and DNA synthesis.

**Esters:** Formed by linking organic acids and alcohols. Esters act as flavor and aroma enhancers in plant products. Sweet Grape, Berry and Citrus contain esters derived from natural sources.

**Polyphenolic Compounds:** Act as antioxidants and help slow the aging process for more vigorous, healthy growth. Polyphenolic compounds work with esters to enhance flavors and aromas.

**Essential secondary and trace elements:** Magnesium, sulfur, iron, boron, manganese, zinc, copper and molybdenum. These elements are cofactors for some enzymes involved in photosynthesis and respiration.

### Benefits of using Sweet:

- + STURDY STEMS AND HEALTHY LEAVES.
- + SEAMLESS TRANSITIONS BETWEEN GROWTH PHASES.
- + MAINTAINS BALANCED METABOLISM.
- + HELPS BALANCE RESPIRATION AND PHOTOSYNTHESIS.
- + ENHANCED FLAVORS AND AROMAS.
- + HARDY PLANTS WITH SHORTER INTERNODES.

### References:

1. Benson, A.A., and Calvin, M., "Carbon Dioxide-Fixation by Green Plants." Ann. Rev. Plant Physiol., 1:25, 1950.
2. Clayton, R.K., "Photosynthesis: Physical Mechanisms and Chemical Patterns." London: Cambridge University Press: 1980.
3. Krebs, H.A., and Johnson, W.A., "The Role of Citric Acid in the Intermediate Metabolism in Animal Tissue." Enzymologia 4: 1489-156, 1937.
4. Roehrig, K.L., Carbohydrate Biochemistry and Metabolism. Westport, CT: Avi Publ. Co. 1984.

