

Crop Services International Sustainable Garden/Landscape Program



(Note: Gardens include flowers, vegetables, fruit, berries, in ground, containers or raised beds)

CSI's goal is to grow high energy, nutrient dense foods. Whether from sustainable (beneficial to soil, micro-organisms & plant) or organic sources, mineral and microbe levels are key. Our approach is to supply and balance soil minerals while inoculating and stimulating microbes - both in the soil and on the leaf – multiple times throughout the growing season. Soil testing identifies mineral needs/imbalances. CSI recommends products with food sources fish, kelp, molasses - that have proven results in a vast array of growing operations, crops and climates.

(1000 sq. ft. = 20 rows 2 ft. wide and 25 ft. long (or similar) – roots grow 12 inches or more out all sides)

Growth Stage	Product	Amount/1000 sq. ft.	Application Method
Base Liquid Application	Fish, Kelp, Molasses	1 cup. 1 tsp, 1 cup	Broadcast/Side Dress ⁽¹⁾
-		½ cup, 1 tsp, ½ cup	Side Dress ⁽¹⁾ /Foliar ⁽²⁾
Prior to Planting	Complete	2 Tbsp.	Broadcast/Side Dress ⁽¹⁾
(Spring or Fall)	Mineral Amendments	Per Test Recommendations	
Seed Starting Or Transplanting	Premium Seed Treatment	Enough to coat seeds	Dusting
	Companion®	5 oz.	Dip Root Ball ⁽¹⁾
	Essential®	1 oz.	
Planting	Companion® & Essential®	5 oz. of each	Side Dress (in-row)(1)
Growth	Companion® & Essential®	1 oz. of each	Side Dress ⁽¹⁾
(2 weeks after transplant)	Palm Pro	2-5 oz.	
(foliar feed every 14 days)	1 oz. of each above		Foliar Feed ⁽²⁾
Mid-Summer	Companion® & Essential®	1 oz. of each	Side Dress ⁽¹⁾
(plants beginning to blossom)	Bloomtastic	3-5oz.	(Repeat in 30 days)
(foliar feed only twice)	1 oz. of each above		Foliar Feed ⁽²⁾
Late Summer	Companion® & Essential®	1 oz. of each	Foliar Feed ⁽²⁾
(plants are filling fruit)	Palm Pro	2 oz.	
(1) Mix with 4-5 gallons of water with fish	keln and molasses	_	_

(1) Mix with 4-5 gallons of water with fish, kelp and molasses

(2) Mix with 1-2 gallons of water (or amounts necessary to get adequate coverage) with fish, kelp and molasses

Lawn Suggestion: NEW OR ESTABLISHED LAWNS per 1000 sq. ft. (apply 4 - 6 times throughout the growing season)

Companion, Essential, Palm Pro **Bloomtastic (for new seeding)**

2 oz. /gal water sprayer setting 2 oz. /gal water sprayer setting **Soil Drench**

Soil Drench

See back for product and mixing instructions.

NOTE: The above programs should work well for most soils. Essential® is certified organic, Bloomtastic, Companion, and Palm Pro are high quality sustainable products.

PRODUCTS:

Items listed below are mineral and/or microbe products offered through CSI

Companion® 1-0-1 – a liquid microbial product to protect against pathogens and strengthen the plant

Essential® 1-0-1 – a complex plant/microbe stimulating liquid with kelp, yucca, humic acid, and trace minerals

Bloomtastic 8-32-5 – a liquid fertilizer applied to the soil to establish roots, and on the foliage to enhance blossoming

Palm Pro 12-4-12 – a liquid fertilizer with micronutrients to enhance growth and fill fruit

Complete – a dynamic biological product with a full range of microbes, plus Calcium, Phosphorus, Potassium and Sulfur Intended to be liquefied and applied to the soil and/or to the plant as a foliar

Premium Seed Treatment – a dry biological product used on seeds to promote healthy germination

Organo Fish 4-1-1 – a liquid fish product consisting of whole ocean fish

Fish Alive 10-2-1 – a dry soluble product consisting of micronized fish and crab meal

Soluble Kelp – dry soluble product consisting of micronized kelp

Icelandic Kelp – liquid pure kelp (not an extract) with yucca

Molasses – use only unsulfured blackstrap molasses (source locally)



EXPLANATION OF TERMS:

Broadcast - spread over entire soil surface, liquid and/or dry. **Side Dress (In-row)** - spray or water in along the seed or plant row.

Broadcast gives general coverage; In-row gives more specific coverage. **Soil Drench** - apply liberally either broadcast or in-row with lots of water to wash down to the roots.

Dip Root Ball - dip the entire root ball in solution prior to transplanting. **2-5 oz.** - increase amount of products as plants grow (they need more food).

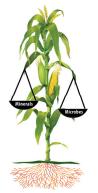
Foliar Feed - apply by sprinkling or spraying a nutrient and/or microbe solution directly on the foliage (leaves, fruit, stalk) for immediate plant uptake. Apply liberally to both sides of the leaf. Early morning or late afternoon **during cooler temperatures is best.**

MIXING INSTRUCTIONS:

- 1. For best results: fill sprayer, or bucket with water until ½ full. Add fish, kelp, molasses and recommended products. Shake, or stir until mixed. Add more water until tank is full and shake again to thoroughly mix.
- 2. If using a sprayer to apply liquid, remove any filters to prevent clogging.
- 3. Thoroughly rinse out mixer, spray tanks, watering cans when finished.

Liquid applications of minerals and microbes are a very efficient method of providing plants good mineral nutrition. If you love being in your garden, then these liquids are a good excuse to be there!





For questions, concerns or comments contact us at:

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