Manage AGRICULTURE APPLICATIONS				
CROPS	METHOD OF APPLICATION	APPLICATION RATE (US / Metric)		
Berries and Small Fruits: Blackberries, Blueberries, Currants, Elderberries, Gooseberries, Huckleberries, Loganberries, Raspberries, Strawberries, Grapes	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g $-$ 1544 g in 132 to 189 L of water per ha to allow soil saturation.		
	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.		
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha every two to four weeks through growing season.		
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
Bulb Vegetables: Garlic, Leeks, Onions, Shallots, Ornamental Bulbs	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g – 1544 g in 132 to 189 L of water per ha to allow soil saturation.		
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.		
Cereal Grains: Buckwheat, Corn (grain, seed, sweet corn, silage, popcorn, high oil), Rye,	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g $-$ 1544 g in 132 to 189 L of water per ha to allow soil saturation.		
Wheat, Sorghum, Millet, Oats, Alfalfa	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
Citrus Fruits: Citrus Hybrids, Grapefruit, Kumquat, Limes, Oranges, Pummelos	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.		
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha monthly through drip or microjet.		
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.		
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.		
Conifer Tree Seedlings, Conifer Trees:	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.		
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.		
Cucurbit Vegetables: Cucumbers, Melons, Musk Melons, Gourds, Pumpkins, Squash	Pre-plant Application	For application when preparing seed bed – Inject 10 oz - 20 oz of product per acre / 772 g – 1544 g of product per ha through drip or with pre-plant herbicide.		
	At-plant Application	Apply 10 oz of product per acre / 772 g per ha with transplant water		
	Fertigation	Apply 4 oz – 8 oz of product per acre / 309 g – 618 g of product per ha through drip.		
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		
	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha		

Fruiting Vegetables: Eggplant, Sweet and Hot Peppers, Tomatillos, Tomatoes	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g $-$ 1544 g in 132 to 189 L of water per ha to allow soil saturation.
	At-plant Application	Apply 10 oz of product per acre / 772 g per ha with transplant water
	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
Herbs, Spices, and Mints:	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
Hydroponic Crops:	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Substrate Mix	Mix 8 oz per cubic yard / 250 g per cubic meter of substrate
Leafy and Brassica (Cole) Leafy Vegetables: Arugula, Celery, Chervil, Endive, Fennel,	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g – 1544 g in 132 to 189 L of water per ha to allow soil saturation.
Lettuce (head and leaf), Parsley, Radicchio, Rhubarb, Spinach, Swiss Chard, Broccoli,	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Brussels Sprouts, Cabbage, Cauliflower,	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Collards, Kale, Kohlrabi, Mustard Greens	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Asparagus	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
Legume Vegetables (Succulent or Dried): Beans (soybean, snap, dry), Lentils, Peas	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g – 1544 g in 132 to 189 L of water per ha to allow soil saturation.
	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Oilseed Crops: Cotton, Canola, Safflower, Sunflower	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g – 1544 g in 132 to 189 L of water per ha to allow soil saturation.
	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Peanuts:	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g – 1544 g in 132 to 189 L of water per ha to allow soil saturation.
	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha

Pome Fruits: Pears, Quince, Apples	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.
Root and Tuber Vegetables: Beets, Sugar Beets, Carrots, Celeriac, Chicory, Horseradish,	Pre-plant Application	10 oz - 20 oz in 35 to 50 gals of water per acre / 772 g – 1544 g in 132 to 189 L of water per ha to allow soil saturation.
Parsnip, Radish, Salsify, Turnips Potatoes, Sweet Potatoes, Yams, Jerusalem Artichoke,	In-Furrow	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Cassava, Ginger	Banded	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Shadehouse and Outdoor Nursery Crops: Deciduous trees (Maple, Oak, ect.),	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
Ornamentals, Grapes, Citrus, Pine	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.
Stone Fruits: Apricots, Cherries, Nectarines, Peaches, Plums, Prunes	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.
Tree Nuts: Almonds, Beech Nuts, Brazil Nuts, Butternuts, Cashews, Chestnuts, Filberts,	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
Hickory Nuts, Macadamia Nuts, Pecans,	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
Pistachios, Walnuts	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.

Tropical Fruits: Avocado, Mango, Papaya, Pineapple, Bananas, Plantains	Cuttings and Bare Root	10 oz - 20 oz in 50 gals of water / 772 g – 1544 g in 189 L of water for dipping.
	Fertigation	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Tank Spray Mix	Apply 4 oz – 20 oz of product per acre / 309 g – 1544 g of product per ha
	Greenhouse and Nursery	Pre-mix 8 oz to 10 oz in 5 to 8 gals of warm water and agitate well – inject @ 1:100 dilution per 20,000 sq. ft. / 618 g to 772 g in 19 L to 30 L of warm water and agitate well – inject @ 1:100 dilution per 1,858 sq. m and apply through drip or spray monthly.
	Transplant Drench	Dissolve 8 oz in 50 gals of water / 618 g in 189 L of water and soak root ball prior to backfilling hole. Utilize 1 quart (32 oz) of finished product to 5 gals of plant material / 946 mL of finished product to 19 L plant material.

Amendment Application:	Method of Application:	
Improves poor soil conditions, preparing the soil for plant development; Apply where soils have traditional pH issues, where soils have low CEC, where soils lack organic matter; where soils have lack of percolation, where soils have lack of water holding capacity.	 Tank Mix – Mechanically Applied Fertigation Substrate Mix 	
At Planting Application:	Method of Application:	
Populates the beneficial microbes in the rhizosphere where the root is first exposed to its growth environment. The environment where the critical plant – microbe symbiotic relationship is established; triggering germination; promotes faster and stronger rooting.	 Cutting and Bare Root In Furrow Banded Transplant Drench Greenhouse and Nursery Application 	
Foundation Application:	Method of Application:	
Apply at critical growth stages, supporting microbial growth patterns and populations allowing the beneficial microbial functions to continue to colonize the roots, improving root architecture, and rejuvenating soil structure.	 Tank Mix – Mechanically Applied Fertigation Greenhouse and Nursery Application 	
Maintenance Applications:	Method of Application:	
A continuation of supporting early stage applications; improve soil conditions, mineralize and hold nutrients, reinforcing the plant - microbial symbiotic relationship all the way through harvest.	 Tank Mix – Mechanically Applied Fertigation Greenhouse and Nursery Application 	