

### **ION-DEW VEG & GROW, FLOWER AND BLOOM FINISHER Instructions for Use:**

Always use high quality filtered water or RO water. Recommended pH range of 5.8 pH to 7.0 pH for use in most natural soils or potting soil mixes. Source organic soils without animal product additives for a pure BIO-VEGANIC grow.

Not recommended for use in hydroponic soilless media.

**MIXING:** For nutrient batch sizes larger than 20 gallons it is recommended to hand or power mix a concentrate in a smaller mixing container in order to get a well dissolved pre-mix. Then mix into the full amount of water required to water the area or number of plants. This will ease the mixing of larger sumps.

**Example:** You need 500 gallons to feed the number of plants per feeding. You want to feed ION-DEW FLOWER at 800ppm. On above **Table of PPM**, it takes 5.6 grams of ION-DEW FLOWER per gallon at 800ppm x 500 = 2,800 grams. Slowly mix 2,800 grams ION-DEW FLOWER into 10 gallons of water by hand until well dissolved, then mix the 10-gallon concentrate into 490 gallons of water. You now have 500 gallons of ION-DEW FLOWER at 800ppm ready to water into your plants. *TIP: A power mixer like a paint mixer sized for 10 to 50 gallons, in an open top 30-gallon drum works well for most larger sump applications, use a transfer pump to move to main tank, mix sump with recirculating pump prior to watering.*

**FOLIAR SPRAY:** It is very advantageous to foliar feed with Bio-Veganic ION-DEW plant foods as they are absorbed very quickly by the plants. A spray can act as a tonic at key times or times of stress. A spray of 400ppm of ION-DEW BLOOM FINISHER at transition from veg phase to early flower phase can speed up onset of blooming. A spray of 400ppm of ION-DEW VEG & GRO in mid bloom cycle can act as a fast acting green up tonic for heavier flowers. An aggressive foliar feeding program is highly recommended and is a secret for high yields and fewer pest problems. Foliar feed 1x to 2x per week.

### **Bio-Veganic ROOT & MICROBE Instructions for Use:**

**ROOT & MICROBE (R&M)** is the **key formula** in the BIO-VEGANIC plants foods lineup. R&M is used in every phase of growth from propagation to harvest. R&M contains a wide diversity of beneficial soil microbes, 20 different strains of Beneficial Bacteria, 11 kinds of Mycorrhizal Fungi and 7 types of Trichoderma. R&M is fortified with growth factors and nutrients to feed and grow out large populations of beneficial microbes when brewed aerobically. The blend will double their populations every 20 minutes in a simple aeriated container such as a compost tea brewer, therefore efficiently and economically produce tremendous concentrations of these wonderful nature's helpers. A brew time of only 24 hours will be all you need to make the Stock Solution for all the following purposes. Be sure to treat all plants 1 x per week, use on nursery stock, parent plants, all veg and flowering plants.

**Instructions for Brewing ROOT & MICROBE Stock Solution. Use only pure chlorine free water.**

- ½ Teaspoon or 5 ml R&M per 1-gallon brew water. (Will treat up to 15 plants)
- 1 Tablespoon or 15 ml R&M per 5-gallons brew water. (Will treat up to 45 plants)
- 1/2 cup R&M per 100-gallons brew water. (Will treat up to 4500 plants when mixed with enough delivery water)

Mix into an aeriated container such as a compost tea brewer and aerate brew for 24 hours. The concentrated brew may need to be diluted with enough water to carry the microbes into the root area, normally the amount of water needed for regular watering will be the amount to use as the delivery water to treat all plants, this is the Stock Solution. *Tip: During the Flowering Phase it is beneficial to brew the Stock Solution for 36 hours. This will allow the slower growing Mycorrhizal Fungi to build larger colonies, as they are very helpful during the later growth and Flowering Phase.*

**Do not mix more than will be used in 12 hours after brewing, do not try to store leftovers, just use it, you can't use too much R&M, it's very safe to use.**

**PROPAGATION:** It is recommended the mother plants that you are propagating from, be grown with the BIO-VEGANIC growing system and have some special treatments to prepare them prior to taking cuttings. Maintain the mother plants by root feeding and foliar feeding with ION-DEW VEG & GRO and ROOT & MICROBE. Take care to foliar spray with ROOT & MICROBE 24 hours before taking a batch of cuttings. To make chemical free, robust rooted cuttings. Make a 24 hour aerated brew of 1 Tablespoon R&M per 5-gallons water. Start by collecting the first cuttings off the parent plant and immediately immersing them into a small container of the R&M Solution, finish collecting as many as you need. This will act as initial soak, this will hold them until you trim them to stick. Once trimmed and ready to stick, place the trimmed end down, back into the solution for 10 minutes, then stick them into the rooting media, cubes, plug or soil that has been completely soaked in the R&M Solution. Now the cutting and the rooting media have been inoculated to root vigorous healthy clones. Root as normal in your domed trays, spray with R&M Solution to keep tray moist as needed.

**TRANSPLANTING:** To transplant rooted clones or rooted seedlings, pre-soak soil or media with the Stock Solution, place the cutting into the soil media and water in with more R&M. You may use pure water or R&M to water the first week or so before using any plant food. Start feeding very slowly with 400 ppm of BIO-VEGANIC ION-DEW VEG & GRO. For older nursery stock water in a 50/50 mix of Stock Solution and the BIO-VEGANIC Plant Food at each transplanting.

**VEG-GROWTH and FLOWER PHASES:** It is important to water plants with the R&M Solution at least **1x weekly**. It may be mixed with any of BIO-VEGANIC Plant Foods at all phases of growth or watered separately between feeding. Use 1 x weekly from Start to Harvest.

**FOLIAR TREATMENTS:** During the Vegetative and early Flowering phases of growth spraying the R&M Solution with a low-pressure sprayer can be very beneficial to overall plant health and pest resistance. Dilute the Stock Solution 50/50 with pure water. Spray to cover top and bottom of foliage. Spray 1 x weekly or 2 x monthly. May be sprayed in combination with plant foods to feed as well as inoculate in one application. Dilute Stock Solution with Bio-Veganic ION-DEW VEG & GRO or ION-DEW FLOWER that has been mixed to 400ppm. **End Foliar Treatments after flowers start forming.** Spray R&M Solution at the first sign of any pest or disease issues, many times the powerful action of the microbes are all that will be needed.



**COMPLETE CANNABIS GROWING SYSTEM**

# FEEDING CHART & INSTRUCTIONS

Designed for Hi-Purity Medical Grows, No Animal Products, No Synthetic Nitrogen's, Proven High Yield Producer, Indoor, Outdoor, Greenhouses. Environmentally friendly. Easy to use.

Listed as Grams per gallon & resulting PPM in RO water.	Vegetative Cycle				Bloom Cycle								
	Week 1	Week 2	Week 3	Week 4	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	
<b>VEG &amp; GRO</b>	2.6 grams 400ppm	4.2 grams 600ppm	5.6 grams 800ppm	5.6 grams 800ppm	2.6 grams 400ppm								
<b>FLOWER</b>					2.6 grams 400ppm	4.2 grams 600ppm	5.6 grams 800ppm	5.6 grams 800ppm	4.2 grams 600ppm				
<b>BLOOM FINISHER</b>						4 grams			4 grams	10 grams	12 grams	12 grams	
<b>ROOT &amp; MICROBE</b>	Water in <b>ROOT &amp; MICROBE</b> one time each week, with or without feeding. Follow complete instructions below.												

The Feeding Chart above is an example to be used as guideline only and is highly flexible, it may be extended out as many weeks as a given strain may require. Some strains may be lighter or heavier feeders and use less or more ppm at a given time.

**Table of PPM Rates for mixing:** Listed as per gallon.

<b>VEG &amp; GRO</b>	2.6 gm 400ppm	4.2 gm 600ppm	5.6 gm 800ppm	8 gm 1000ppm	9.6 gm 1200ppm	11.2 gm 1400ppm	2.5 gm = 1 Tsp	7.5 gm = 1 TBLS
<b>FLOWER</b>	2.6 gm 400ppm	4.2 gm 600ppm	5.6 gm 800ppm	8 gm 1000ppm	9.6 gm 1200ppm	11.2 gm 1400ppm	2.5 gm = 1 Tsp	7.5 gm = 1 TBLS
<b>BLOOM FINISHER</b>	4 gm 400ppm	6 gm 600ppm	8 gm 800ppm	10 gm 1000ppm	12 gm 1200ppm	14 gm 1400ppm	4.5 gm = 1 Tsp	13.5 gm = 1 TBLS