



**Information & Interactive Guide**



Developed in BC Canada



Manufactured in Australia



GreenPlanet Nutrients were developed and validated in thousands of North American licensed cannabis cultivation facilities. These real world trials form the basis of our unrivaled nutrient feeding programs.

Follow the program. Get the results.





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# GreenPlanet

“We’re not growing buds anymore, we’re growing trichomes.”

“GreenPlanet Nutrients is a British Columbia based company specialising in the manufacture of quality fertilisers for commercial & medicinal indoor gardening, hydroponic, and hobby greenhouse market, now serving some of the biggest medicinal & commercial growers in the world.

With over 30 years experience in the hydroponics industry we are now leveraging those years to save growers both time and money. This experience allows us to have our finger on the pulse of the market place, ensuring our products fill the needs of the consumer.

GreenPlanet Wholesale Ltd. is dedicated to manufacturing only reputable tested products that display purpose and results. Our mission and vision is to reduce the amount of products the consumer has to use to achieve optimum desired results. By taking this moral high road, confidence can be instilled with the retailer and consumer. Trust is a huge component of any marketplace and our aim is to earn yours with the quality and purpose of our products.

GreenPlanet are dedicated to manufacturing only reputable tested products that display purpose and results.

In a politically unstable industry where companies try to find safe footing in cannabis, the GreenPlanet team continues to have the full support of the cannabis medical community throughout North America, UK, Australia and beyond.

Along with the tools for success (the worlds best medicinal fertilisers), GreenPlanet also gives growers the support they need. Whether growing under one light or 10,000, GreenPlanet offers specialist technical support and laboratory analysis wherever required. From strain-specific needs to troubleshooting tips and tricks for every situation, GreenPlanet wants to help growers succeed.”

Justin Cooper, Co-owner - GreenPlanet Nutrients



# GETTING STARTED IS AS EASY AS



Our 'Easy As 1, 2, 3, 4' feeding program consistently outperforms all other nutrient programs with less than half the number of products. If you are using a Deep Water Culture or Run to Waste system it really is as easy as 1, 2, 3, 4.

## LET'S GET GROWING!

## DUAL FUEL - Easy Feed Program

2 Part Nutrient System			Dual Fuel 1	Dual Fuel 2	Rezin	Massive	EC
			Base Nutrient		Additives		
Growth	Week 1	Seedlings	0.8 mL	0.8 mL	–	–	0.6
	Week 2	Mild Vegetative	2.1 mL	2.1 mL	–	–	1.6
	Week 3	Aggressive Vegetative	2.4 mL	2.4 mL	1 mL	–	1.9

All measurements are based on mL per Litre of water for LED lighting

Bloom	Week 1	Transition Bloom	2.4 mL	2.4 mL	1 mL	–	1.9
	Week 2	Early Bloom	2.2 mL	2.2 mL	1 mL	5 mL	2.0
	Week 3		2.2 mL	2.2 mL	2 mL	5 mL	2.0
	Week 4	Mid Bloom	2.4 mL	2.4 mL	2 mL	5 mL	2.2
	Week 5		2.4 mL	2.4 mL	2 mL	5 mL	2.2
	Week 6	Late Bloom	2.2 mL	2.2 mL	2 mL	5 mL	2.0
	Week 7	Ripen	2.2 mL	2.2 mL	2 mL	5 mL	2.0
	Week 8	Flush	–	–	2 mL	–	0.1

For additional weeks of bloom repeat week 7 - For best results, flush for the last 7 days with water & Rezin.

## Tips For Success

EC is used in this chart. Refer to page 20 for a TDS/PPM conversion table.

The recommended EC has been calculated using RO water. Tap water quality can vary and will raise the stated EC. Reduce the nutrient dose (mL/L) to match the suggested EC.

Plants vary in their nutritional requirements. Plants should be closely monitored for any sign of deficiency such as leaf discolouring, twisting, necrosis or tip burn.

High intensity LED with CO<sub>2</sub> grow rooms can use up to 30% higher EC than listed. Refer to the online interactive feed chart link on page 28.

Maintain the nutrient solution pH between 5.8 - 6.3 at all times. Keep the nutrient solution temperature between 18 - 22° C.

Ensure a minimum 10% nutrient runoff for run to waste systems.

Always measure EC of the runoff or the feed tank. If the EC is higher than recommended, either add water to the feed tank or flush the medium with a 1/3 strength nutrient solution.

For plants growing in Coco substrates adding ProCal to this feed program is highly recommended. Use at 1.25 mL/L.

# DUAL FUEL COMPLETE FORMULA 2 PART NUTRIENT SYSTEM



## GROW EXACTLY LIKE A PROFESSIONAL FACILITY

### WHY?

Dual Fuel has been engineered for commercial and medicinal gardens. Simple and easy to use throughout your plant's life cycle, it's the most effective and complete 2-Part Nutrient System on the market. Dual Fuel is used and trusted by more Licensed Producers in North America than any other nutrient. With a maximum rate of only 2.4 mL/L, Dual Fuel is economically viable for both commercial gardening applications and hobbyists alike. Dual Fuel is grower approved and suitable for all hydroponic growing systems.

### HOW?

Dual Fuel has been developed and thoroughly trialed in thousands of North American licensed cannabis cultivation facilities. These real world trials form the basis of our unrivalled nutrient feeding programs. Dual Fuel contains no carbonates or synthetic dyes. The colours are naturally derived and are light, heat and acid stable. All of the ingredients are 100% water soluble and are immediately available to your plants.

### USE:

Using equal parts throughout all stages of growth and bloom, there's no fumbling around with different measurements. Refer to the feed charts in this product guide for general use.

### PRO TIP:

Relax! Dual Fuel 1 & 2 are the only base nutrients required for the entire growth & bloom cycles. It's easy to grow like a true professional.



Suitable for Hydroponic Substrates

# GP3

GROW MICRO BLOOM

3 PART NUTRIENT SYSTEM



## FLEXIBILITY IS THE KEY TO ABSOLUTE SUCCESS

### WHY?

GP3 provides greater flexibility than a 2-part nutrient. Grow, Bloom & Micro formulae are blended with water in specific ratios during the various transitional stages of growth & flower. This method delivers true craftsmanship results and can be dialled in for pheno specific nutritional requirements or climatic variables.

### HOW?

GP3 contains no carbonates or synthetic dyes. The colours are naturally derived and are light, heat and acid stable. All of the ingredients are 100% water soluble and are immediately available to your plants. GP3 provides 100% chelated micronutrients with 3 unique sources of iron designed for a broad range of pH environments. GP3 will not leave a heavy salt residue and is used seamlessly in commercial dosing machines.

### USE:

Refer to the feed chart in this product guide for general use.

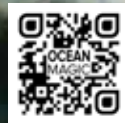
### PRO TIP:

Plant species vary in their nutritional requirements. Check with your genetics supplier for plant specific nutrient requirements. Plants should be closely monitored for any sign of deficiency such as leaf discolouring, twisting, necrosis or tip burn.



Suitable for Hydroponic Substrates

# OCEAN MAGIC



## BOOST ROOT GROWTH

### WHY?

Ocean Magic is an organic Norwegian Sea Kelp extract (*Ascophyllum nodosum*) and harvested from the unpolluted waters of the northern Atlantic Ocean. Our kelp is cold pressed to ensure the complete retention of all vital compounds. It contains 96 different micronutrients, amino acids, bio stimulants and enzymes. If your plant is deficient in any of them it will fill that gap rapidly and effectively.

### HOW?

**Root Drench:** Ocean Magic is used throughout vegetative stage and early bloom stage to boost the growth and vigour of your plants. When applied as a root feed, Ocean Magic will directly benefit the development of the root zone. It will also work to improve nutrient uptake & plant vigour, as well as boost the plant's resistance from pests and diseases. Ocean Magic is suitable for all hydroponic systems.

**Foliar Spray:** The naturally occurring Cytokinin's specific to *Ascophyllum nodosum* promote rapid cell division and explosive growth throughout the vegetative and early flowering stages. When applied as a foliar spray twice weekly to plants within a healthy environment your plants will bulk rapidly. The results are both visual and prolific.

### USE:

Use at 0.2 mL / L for fresh clones, cuttings, and seedlings. Add 0.5 mL / L to any base nutrient program from established cuttings and seedlings through to the third week of flower. For foliar feeding: Use up to 5 mL / L of water twice a week. Start spraying plants in weeks 2 to 4 of the grow stage and then once weekly for the next 2 to 3 weeks.

### PRO TIP:

Use at 0.5 mL / L of water as a seed soak to help increase germination rates. Shake well before use.



Suitable for Both Soil and Hydroponic Substrates

# ROOT BUILDER



## SUBSTRATE AMENDMENT & INNOCULANT

### WHY?

Root Builder is formulated with two very specific and extremely active beneficial organisms that deliver an abundance of benefits to your plant's root zone. *Bacillus licheniformis* and *Bacillus subtilis*. Together, these organisms perform as a microbial soil and substrate amendment, which improves the conversion of organic and inorganic fertilisers into plant available forms. Adding these beneficial bacteria will lead to an improved soil structure, better moisture retention, increased resistance against pathogens and will help treat pH related issues in the grow media. All these benefits ensure that your plant absorbs the essential nutrients it needs to expend its energy on other important plant functions, such as producing big, beautiful flowers.

### HOW?

*Bacillus licheniformis* rapidly breaks down fertiliser elements. It also produces a plethora of antagonistic compounds that exhibit strong antimicrobial activity and defends against a broad range of bad bacteria.

*Bacillus subtilis* is a strong beneficial bacterium that focuses on boosting natural defences. It will also produce molecules called iturins which are a family of lipopeptides. These amphiphilic compounds are characterized by a peptide ring of seven amino acid residues. They exhibit strong antifungal activities against a wide variety of pathogenic yeasts and fungi. Iturins specifically target the harmful microorganisms in your plants rhizosphere and eliminate them.

### USE:

Apply at a rate of 1.25 mL / litre of water, in conjunction with your nutrient solution.



Suitable for Both Soil and Hydroponic Substrates

# PLANT GUARD

POTASSIUM SILICATE



## FORTIFY YOUR PLANTS

### WHY?

Plant Guard is a Potassium Silicate supplement which can increase the rigidity of plant cell walls and strengthen branches to better support massive flowers. The thicker cell walls provide protection against sap sucking insects such as spider mites or aphids. Plants express increased resistance to various pathogenic fungi such as grey mould and powdery mildew.

### HOW?

Plant Guard is like liquid carbon fibre for your plants, virtually fortifying cells from the inside out. Cells are the building blocks of the plant's framework. Strengthening the cell walls helps the plant build strong stems and branches that supports the weight of the large flowers associated with modern plant genetics. Stronger cells form thicker stems. The thicker cell walls create bigger stalks with bigger pathways that uptake and transport more water and more nutrient. This fortifying and multiplying effect facilitates bigger plants and faster growth.

### USE:

Add Plant Guard at 0.5 mL/L prior to adding nutrients. Discontinue Plant Guard two weeks prior to harvest.

### PRO TIP:

CAUTION! Always add Plant Guard first. Allow to diffuse in the nutrient tank before adding any other nutrients or additives.



Suitable for Hydroponic Substrates

# VITATHRIVE

## VITAMIN BOOSTER



## HELP PLANTS THRIVE

### WHY?

Vitathrive is a comprehensive blend of carefully selected vitamins and minerals designed to reduce plant stress while supporting essential functions. Based on years of commercial horticultural experience, Vitathrive was developed to increase vegetative and floral production. Vitathrive reduces the time from planting to harvest, increasing flower yields, improving plant health and vitality.

### HOW?

Vitathrive contains a broad spectrum of naturally occurring vitamins, micronutrients, auxins, plant hormones and growth promoting agents that help reduce environmental stress and/or transplant shock. Plant derived hormones increase both lateral root development and branching resulting in hardier plants with stronger foundations and a larger canopy.

### USE:

Use with ANY nutrient regime from seedling/rooted cutting stage through to week 2 of flower at 1-2 mL/L.

### PRO TIP:

Apply at 0.5 mL/L to freshly cut clones & sprouted seedlings. Use as a root drench at 2 mL/L when transplanting or repotting.



Suitable for both Soil and Hydroponic Substrates

# REZIN

AROMA & FLAVOUR ENHANCER



## TERPENES & FLAVONOIDS

### WHY?

Rezin is an aroma and flavour enhancer that was formulated to increase the naturally occurring processes of flowering plants. Rezin accentuates the plants original flavonoid and terpene profiles rather than overriding them like a number of similarly aimed products. Rezin helps to regularly enhance those traits to levels usually found in only the most unique examples of each phenotype. Rezin improves trichome size and crystal production which results in sticky, resin laden flowers, better extractions and increased bag appeal.

### HOW?

Rezin is made from a combination of Ascorbic, Citric, Gluconic and Lactic Acids created through our fermentation process. What makes Rezin different is that it contains no PGR's (Plant Growth Regulators) or restricted bio simulators. Rezin does not effect your EC levels. This allows you to use Rezin at full strength while other products will require you to back-off on the necessary base nutrients that your plants require for optimal growth. Producing a cup winning strain has never been easier.

### USE:

For best results add 1 mL/L during the last two weeks of the vegetative cycle. Continue at 1 mL/L up until the third week of flower. Add 2 mL/L after week 3 of flower until harvest.

### PRO TIP:

Dry flowers slowly in a cool, dark & dry environment for maximum terpene retention.



Suitable for both Soil and Hydroponic Substrates



*Best  
Flavour*  
**ENHANCER**



*Best  
Nutrients &  
Biostimulants*  
**PRODUCT**

# PROCAL

CALCIUM, MAGNESIUM & IRON



## SUBSTRATE BUFFER & AMENDMENT

### WHY?

ProCal is a valuable source of Calcium, Magnesium and Iron. Calcium is crucial for healthy cell division, plant formation and vital in activating specific enzymes. Magnesium is directly responsible for chlorophyll production and assists the transport of key nutrients like Phosphorus and Iron. Iron is essential for chlorophyll production and some enzyme functions. ProCal is the ultimate substrate buffering and flushing solution. ProCal improves the CEC (Cation Exchange Capacity) of substrates for faster nutrient uptake. The result is vibrant plants with healthy, green foliage.

### HOW?

Flushing Coco with water does not remove salt build up. It is a chemical bond that must be broken. Coco is made up of negatively charged cation exchange sites that attract excessive amounts of positively charged molecules such as Potassium and Sodium via their single positive bonds. Both are toxic to plants in high concentrations. These bonds can be broken by minerals with double positive bonds such as Calcium and Magnesium. This process replaces Sodium with essential Cal/Mag, correcting the substrate nutrient balance for explosive plant growth.

### USE:

Use ProCal at 1.25 mL/L with any nutrient program until 1 week prior to harvest.

### PRO TIP:

Add Procal to your feed program when using RO water or rainwater. Use ProCal when growing in Coco Coir. Re-buffer Coco substrate by using a 1/3 strength nutrient solution and ProCal at 2 mL/L.



Suitable for Hydroponic Substrates

# PK SPIKE

## 0-14-15



## MINERAL BLOOM ENHANCER

### WHY?

PK Spike is formulated to provide the perfect ratio of Phosphorus and Potassium for your flowering plants. PK Spike increases flower formation and crop quality. A correctly timed dose of PK Spike will signal the plant to direct energy to the ends of the stems, orchestrating a precise spike in flower production.

### HOW?

Phosphorus aids with energy transfer in the flowering stage and strengthens cell formation. As a result, it improves quality and increases flower size, weight and potency. Phosphate deficient plants take longer to initiate flowering with fewer flower sites and restricted flower size.

Potassium helps with the regulation of every phase of plant growth and multiple plant functions including starch and carbohydrate synthesis which is essential in the development of large and healthy leaf tissue. Potassium deficient plants will never meet their full potential.

### USE:

Use at 1 mL/L with any nutrient program. Add mid flowering for outstanding results (week 3, 4 & 5).

### PRO TIP:

Begin PK Spike application on week 3 for short flowering plants (65 days or less) or week 4 for plants with longer flowering cycles. Where sterile practices are required PK Spike replaces Massive.



Suitable for Hydroponic Substrates

# MASSIVE BLOOM FORMULATION



## ORGANIC BLOOM ENHANCER

### WHY?

Massive is more than just a mineral based PK booster (Potassium & Phosphorus). Massive contains large quantities of organic plant stimulants including Triacontanol. The components in Massive work aggressively to produce and transport vital fluids and cell building materials to the flower sites. This in turn creates truly Massive stacked flower clusters full of aromatic essential oils.

### HOW?

Massive carefully blends L-form Amino Acids, Vitamins and Triacontanol in the perfect ratio for plant uptake. Naturally occurring Gibberellins further increase internodal spacing in the plant. This allows more room for the flower to mature and swell to its full potential. In conjunction with Triacontanol, the rate of photosynthesis and CO<sub>2</sub> utilisation increases dramatically. Triacontanol enhances the physiological efficiency of plant cells and exploits the genetic potential of your plants. Triacontanol enhances terpene production, flavonoid production, flowering sites, flower size and most importantly flower MASS.

### USE:

Add 5 mL/L to any base hydroponic nutrient program beginning week 2 of bloom. Discontinue Massive one week prior to harvest. Where organic practices are favoured Massive replaces PK Spike.

### PRO TIP:

Massive is the perfect soil amendment and enhancer. Use Massive once a week at 10 mL/L. Apply approximately 10 L per plant as flowers begin to form. Repeat weekly until two weeks before harvest.



Suitable for Both Soil and Hydroponic Substrates

# LIQUID WEIGHT



## CARBOHYDRATE LOADER

### WHY?

Liquid Weight works by providing a blend of carbohydrates that the plant can utilise as a food source. Flowering plants expend enormous amounts of energy producing floral sites. By supplying a readily available food source the plant has the ability to create more flower sites with larger flowers and increased yield.

### HOW?

For plants to absorb carbohydrates efficiently they require the presence of plant hormones such as humic acid that allow for rapid assimilation. Humic Acid has a chelating effect on essential elements and provide easy transport into the plant tissue. Liquid Weight uses both simple and complex forms of carbohydrates assuring the plant always has a steady supply. Liquid Weight also provides a carbon source for beneficial microbes that in turn enhance the ability of the roots to absorb nutrients and other substances by up to 500%. Increased transport of vital fluids directly translates to increased yields both in mass and quality. When used with MASSIVE the added triacontanol allows the plant to assimilate more carbon dioxide, speed up photosynthesis, increase cell density and put on considerable size.

### USE:

Add 1mL/L to any nutrient program for the last four weeks of flower.

### PRO TIP:

Liquid Weight. Liquid Weight is also a fantastic soil microbial enhancer. Use Liquid Weight once a week at 2 mL/L. Apply approximately 10 L per plant as flowers begin to form. Repeat weekly until two weeks before harvest.



Suitable for Both Soil and Hydroponic Substrates

## DUAL FUEL - Professional Feeding Program



## Tips For Success

EC is used in this chart. Refer to page 20 for a TDS/PPM conversion table.

The recommended EC has been calculated using RO water. Tap water quality can vary and will raise the stated EC. Reduce the nutrient dose (mL/L) to match the suggested EC.

Plants vary in their nutritional requirements. Plants should be closely monitored for any sign of deficiency such as leaf discoloring, twisting, necrosis or tip burn.

High intensity LED with CO<sub>2</sub> grow rooms can use up to 30% higher EC than listed. Refer to the online interactive feed chart link on page 28.

Maintain the nutrient solution pH between 5.8 - 6.3 at all times. Keep the nutrient solution temperature between 18 - 22° C.

Ensure a minimum 10% nutrient runoff for run to waste systems.

Always measure EC of the runoff or the feed tank. If the EC is higher than recommended, either add water to the feed tank or flush the medium with a 1/3 strength nutrient solution.

For plants growing in Coco substrates adding ProCal to this feed program is highly recommended. Use at 1.25 mL/L.

## DUAL FUEL – Professional Feeding Program

2 Part Nutrient System			Dual Fuel 1	Dual Fuel 2	Ocean Magic	Root Builder	Vitathrive	Plant Guard	Rezin	Massive	Liquid Weight	EC
			Base Nutrient		Additives						Bloom Enhancer	
Growth	Week 1	Seedlings	0.7 mL	0.7 mL	0.5 mL	1.25 mL	1 mL	–	–	–	–	0.6
	Week 2	Mild Vegetative	2.0 mL	2.0 mL	0.5 mL	1.25 mL	1 mL	0.5 mL	–	–	–	1.6
	Week 3	Aggressive Vegetative	2.3 mL	2.3 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	–	–	1.9

All measurements are based on mL per Litre of water for LED lighting

Bloom	Week 1	Transition Bloom	2.3 mL	2.3 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	–	–	1.9
	Week 2	Early Bloom	2.1 mL	2.1 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	5 mL	–	2.0
	Week 3		2.3 mL	2.3 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	5 mL	–	2.2
	Week 4	Mid Bloom	2.7 mL	2.7 mL	–	1.25 mL	–	0.5 mL	2 mL	5 mL	1 mL	2.4
	Week 5		2.7 mL	2.7 mL	–	1.25 mL	–	0.5 mL	2 mL	5 mL	1 mL	2.4
	Week 6	Late Bloom	2.2 mL	2.2 mL	–	1.25 mL	–	0.5 mL	2 mL	5 mL	1 mL	2.0
	Week 7	Ripen	2.2 mL	2.2 mL	–	1.25 mL	–	–	2 mL	5 mL	1 mL	2.0
	Week 8	Flush	–	–	–	–	–	–	2 mL	–	–	0.1

\*For the hardest flowers achievable, use HortirawK in the final 3 weeks of Bloom. Follow instructions on page 25. For additional weeks of bloom repeat week 7 - For best results, flush for the last 7 days with water & Rezin. If using PK Spike instead of Massive, reduce your base nutrient to stay within the target EC.

## GP3 - Professional Feeding Program

## Tips For Success

EC is used in this chart. Refer to page 20 for a TDS/PPM conversion table.

The recommended EC has been calculated using RO water. Tap water quality can vary and will raise the stated EC. Reduce the nutrient dose (mL/L) to match the suggested EC.

Plants vary in their nutritional requirements. Plants should be closely monitored for any sign of deficiency such as leaf discolouring, twisting, necrosis or tip burn.

High intensity LED with CO<sub>2</sub> grow rooms can use up to 30% higher EC than listed. Refer to the online interactive feed chart link on page 28.

Maintain the nutrient solution pH between 5.8 - 6.3 at all times. Keep the nutrient solution temperature between 18 - 22° C.

Ensure a minimum 10% nutrient runoff for run to waste systems.

Always measure EC of the runoff or the feed tank. If the EC is higher than recommended, either add water to the feed tank or flush the medium with a 1/3 strength nutrient solution.

For plants growing in Coco substrates adding ProCal to this feed program is highly recommended. Use at 1.25 mL/L.

### Base Nutrient



### Bloom Enhancers



### Additives



### Amendment



## GP3 – Professional Feeding Program

3 Part Nutrient System			Grow	Bloom	Micro	Ocean Magic	Root Builder	Vitathrive	Plant Guard	Rezin	Massive	Liquid Weight	EC
			Base Nutrient			Additives						Bloom Enhancer	
Growth	Week 1	Seedlings	0.5 mL	0.5 mL	0.5 mL	0.5 mL	1.25 mL	1 mL	–	–	–	–	0.6
	Week 2	Mild Vegetative	1.5 mL	0.5 mL	2.0 mL	0.5 mL	1.25 mL	1 mL	0.5 mL	–	–	–	1.6
	Week 3	Aggressive Vegetative	2.2 mL	0.5 mL	2.0 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	–	–	1.9

All measurements are based on mL per Litre of water for LED lighting

Bloom	Week 1	Transition Bloom	1.7 mL	1.7 mL	1.7 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	–	–	1.9
	Week 2	Early Bloom	1.2 mL	2.1 mL	1.7 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	1 mL	5 mL	–	2.0
	Week 3		1.0 mL	2.9 mL	1.9 mL	0.5 mL	1.25 mL	2 mL	0.5 mL	2 mL	5 mL	–	2.2
	Week 4	Mid Bloom	0.6 mL	3.6 mL	2.4 mL	–	1.25 mL	–	0.5 mL	2 mL	5 mL	1 mL	2.4
	Week 5		0.6 mL	3.6 mL	2.4 mL	–	1.25 mL	–	0.5 mL	2 mL	5 mL	1 mL	2.4
	Week 6	Late Bloom	–	3.2 mL	2.2 mL	–	1.25 mL	–	0.5 mL	2 mL	5 mL	1 mL	2.0
	Week 7	Ripen	–	3.2 mL	2.2 mL	–	1.25 mL	–	–	2 mL	5 mL	1 mL	2.0
	Week 8	Flush	–	–	–	–	–	–	–	2 mL	–	–	0.1

\*For the hardest flowers achievable, use HortirawK in the final 3 weeks of Bloom. Follow instructions on page 25.  
 For additional weeks of bloom repeat week 7 - For best results, flush for the last 7 days with water & Rezin.  
 If using PK Spike instead of Massive, reduce your base nutrient to stay within the target EC.

# BACKCOUNTRY BLEND



## SLOW RELEASE GRANULAR

### WHY?

Backcountry Blend - is a set and forget feeding program created as a complete soil amendment for outdoor plants. A granular, slow-release nutrient that is easily applied around the base of your plants to provide both macro and micronutrients for vegetative, flowering and late flowering stages. It is also buffered to correct soil pH with every water.

### HOW?

As a slow-release granular blend, Backcountry Blend - will not overwhelm your plants with nutrients when applied to soil. We've taken care to ensure the macro and micronutrients are evenly dispersed over the entire fertiliser range allowing for more even absorption. Unlike some of its liquid counterparts for outdoor grows, these granular products are affordable, while still providing quality sourced nutrition like a healthy dose of micronutrients with every watering. Backcountry Blend - can be used and stored for several growing seasons without any degradation.

Ensuring your grow media is within the optimal pH range is essential for the uptake of nutrients. BackCountry Blend - is designed to neutralize acidic soils and prevent pH issues, such as nutrient deficiencies and lockout. Using Backcountry will bring most soils into the correct pH range. Flowering plants require large amounts of phosphorus and potassium to produce large, beautiful fruits that we growers strive for. Backcountry Blend - Boost provides a huge spike of PK to improve yields, floral development and overall colour and aroma.

### USE:

Top dress at 1 g/L of Soil or Coco. Refer to the feed chart in this product guide for more specific application.



Suitable for Both Soil and Coco Substrates

## BACKCOUNTRY BLEND - Soil & Coco Feed Program

FEED CHART	Amount used per every litre of soil									
	🌱 Vegetative Stage			🌸 Flowering Stage						
	Week 1	Week 4	Week 6	Week 1	Week 3	Week 4	Week 6	Week 8	Flush 1	Flush 2
🌱 Backcountry Blend Feed Program										
🌱 BACKCOUNTRY BLEND GROW	1 gram	1 gram	-	-	-	-	-	-	-	-
🌱 BACKCOUNTRY BLEND BLOOM	-	-	-	1 gram	-	1 gram	-	-	-	-
🌱 BACKCOUNTRY BLEND BOOST	-	-	-	-	1/2 gram	-	1/2 gram	-	-	-

\*This Feed Program Is A General Guide

### \*IMPORTANT USAGE NOTES:

**Measure carefully.** A little goes a long way. Back Country Blend is a 'super concentrated' slow release fertiliser. You can always add more if required.

As climate and temperature can affect nutrients release, slightly lower your application rate in drier regions and slightly raise you application rate in wetter regions.

Water regularly and maintain soil moisture where possible. Over fertilisation may cause tip burn. Irrigate with fresh water if tip burn occurs.

When using feed rings or drippers be sure to top dress *within the drip line*. This means, if you water a plant from a feed ring or dripper system, it would leave a distinctive wet area around the plant. Top dress only where you intend to distribute the water. With drippers, divide the total amount required and distribute in piles below each dripper.

# BUD BOOSTER 1-50-30



## SPECIALTY POWDERED FLOWERING ADDITIVE

### WHY?

Bud Booster is a specialty flowering additive used in conjunction with your regular fertiliser program. It helps promote blooming and assists in the plant's metabolism during the flowering stage.

Bud Booster is a great choice for entry-level growers looking to introduce a flowering additive into their feed program.

### HOW?

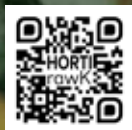
Bud Booster is our original powdered bloom additive that delivers high amounts of Phosphorus (P) and Potassium (K) to your plants. Phosphorus promotes flower formation and increases overall yields during the flowering stage. Added Phosphorus will also aid with photosynthesis and the plant's ability to uptake nutrients. Potassium helps improve the quality of your plant's flowers and starch production. Bud Booster also contains added Boron (B) and Nitrogen (N). Boron aids the plant's transport of sugars and the development of a healthier flower. Nitrogen plays a major role in basic plant functions, such as photosynthesis, that go into maintaining higher yields. All this results in an increase in flower mass and overall size to deliver an impressive crop yield.

### USE:

Use at a rate of 3 grams per 10 litres when buds are forming and continue with every fertiliser application during the blooming cycle. Stop using in the last week of flowering.



# HORTI rawK 0-0-62



## SPECIALIST POTASSIUM FORMULA

### WHY?

HortiRawK (formerly called Dense) is a one of a kind flowering additive with a specially formulated blend of Potassium, which can be used separately from your regular feeding program. It is designed to maximize mass and bulk flowers during the bloom stage.

### HOW?

Plants lacking in Potassium during the later stages of bloom will produce airy and loose flowers. By introducing a 0-0-62 straight Potassium formula, HortiRawK ensures you get maximum weight out of your flowers when it comes time to harvest. The results come from the key role Potassium plays in the development of flowering plants. Potassium is responsible for sugar production and the plant's ability to store the energy needed for flower development. It also increases the strength of the plant at a cellular level and helps produce sturdy stems to support larger flower sites. These benefits make HortiRawK a must use for growers looking to get the most out of their flowers in time for harvest.

### USE:

**Soil Application:** Use 1-2 g/L of water once a week in the last 3 weeks of flowering with water only. Allow at least one week of flush.

**Hydroponic Application:** Flush nutrient reservoir of existing solution. Use 1-2 g/L of water once a week in the last 3 weeks of flowering with water only. Run for 2 days straight (48 hours). Flush then replace with fresh nutrient solution. Allow at least one week of flush.



# KARBO BOOST



## CARBOHYDRATE LOADING POWDER

### WHY?

Karbo Boost is a powdered supplement that delivers an added source of both unique and specific carbohydrates for microbial life during the flowering stage. This encourages the rapid expansion of beneficial microbe colonies in the grow medium. Carbohydrates supply microbes with a vital source of food they need to thrive in the root zone of your plants.

### HOW?

Our formula uses naturally occurring carbohydrates to ensure your plants are getting an added clean source of energy to support heavy fruiting. An added source of carbohydrates is important during the flowering stage to ensure microbes can help your plants uptake the nutrients they need to produce a healthy and aromatic crop. These microorganisms can help break down larger elements into simple chemical components that are easier for your plant to uptake and absorb. Healthy microbial life in the rhizosphere not only helps mobilize nutrients, but it also benefits water and oxygen absorption in the root zone for faster and stronger growth. The end result is a significant increase in flower weight, taste, and overall yield.

### USE:

Dissolve 3 g of Karbo Boost into 10 litres of water. Use right throughout the flowering cycle. Allow at least one week of flush prior to harvest.



Suitable for Both Soil and Hydroponic Substrates

# HORTI™

COMMERCIAL LINE



## HORTI GROW

Horti Grow is expertly formulated to encourage lush, green growth and offers an optimal array of nutrients for the growth stage. Horti Grow provides the ideal spectrum of macro, micro, and secondary nutrients during the vegetative stage of development, so you can rest assured your plants are getting what they need to prepare them to grow big and healthy flowers or fruits.

## HORTI BLOOM

Horti Bloom is expertly formulated to encourage flower development and offers an optimal array of nutrients for the early to mid-flowering stages of development. Horti Bloom provides the ideal array of macro, micro and secondary nutrients needed for optimal bloom formation and development.

## HORTI LATE BLOOM

Horti Late Bloom is formulated to finish off flowers in the last two weeks of the flowering stage 2020, offering the optimal array of nutrients needed to finish strong with the ideal range of macro, micro, and secondary nutrients your plants crave during the late-bloom stage of development.

## HORTI CAL

Horti Cal keeps plants strong throughout the entire growth cycle. It is formulated to supplement nitrogen, calcium, and magnesium, maintaining healthy plants and encouraging rapid growth and development with a carefully selected array of macro, micro, and secondary nutrients.

## HORTI LATE CAL

Horti Late Cal is a zero-nitrogen formula designed for the late bloom phase. It delivers highly bioavailable calcium and essential micronutrients to support strong bulking, maintain plant health, and encourage vigorous development.



Suitable for Both Soil and Hydroponic Substrates

Feed Chart

**HORTI™**

COMMERCIAL LINE

	Vegetative	Early Bloom	Mid Bloom	Late Bloom	Late Bloom (Zero N)	Flush
Target EC	1.8	2.0	2.2	1.8	1.8	0.0
<b>grams per 100 litres of water</b>						
HORTI GROW	100	—	—	—	—	—
HORTI BLOOM	—	112	120	—	—	—
HORTI LATE BLOOM	—	—	—	120	120	—
HORTI CAL	75	100	110	80	—	—
HORTI LATE CAL	—	—	—	—	68	—

**Usage Instructions:**

Thoroughly mix granules into water until completely dissolved.

**Nutrient Solution Parameters:** Keep the nutrient solution pH between 5.8 and 6.3, and maintain the solution temperature between 18°C and 23°C.

**Electrical Conductivity (EC) Target:** The target EC is based on 0.0 EC water at 18°C.

*Note: Tap water quality varies and is likely to increase the EC above the stated target.*

**EC Monitoring:** Measure the EC of the feed tank and nutrient runoff. If it exceeds the recommended level, reduce it by either diluting the feed tank with water or flushing the growing medium with a pH-adjusted nutrient solution at one-third strength.

**Run-to-Waste Systems:** Aim for at least 10% runoff to avoid mineral salt buildup.

**Final Flush:** In the final 7 days before harvest, flush your system with pH-adjusted water to remove excess nutrients, improving flavour, aroma, and overall quality.



## Commonly Asked Questions

**Q. I have recently changed to growing under LED lights. Does my nutrient strength need to be stronger due to the increased light output that LEDs provide?**

**A.** Possibly. High intensity LED rooms and/or CO<sub>2</sub> rooms can use up to 30% higher EC than listed in our feed programs, however every phenotype will have slightly different requirements. Caution should always be used if exceeding the recommended EC levels.

**Q. I am starting the Easy Feeding Program (1, 2, 3, 4) but I don't have a separate grow and bloom nutrient. Am I missing something?**

**A.** You're not missing anything. Dual Fuel 1 & 2 is used for both the grow and bloom stages. Massive is used as your dedicated bloom booster and will be added in the bloom period for the extra Phosphorus & Potassium your flowering plants require.

**Q. I am starting the Professional Feeding Program. What part should I add first?**

**A.** Always add Plant Guard first. Allow to diffuse in the nutrient tank before adding any other nutrients or additives. Adding Plant Guard second will immediately turn your nutrient tank cloudy as it falls out of solution. If this happens dump the affected tank and start again, but this time with Plant Guard first.

**Q. There are two bloom boosters - Massive and PK Spike. What is the difference?**

**A.** PK spike is a mineral based Bloom Booster. Massive is a mineral/organic blend. Each independently delivers the full amount of Phosphorus & Potassium that your plants need. Use one or the other depending on your growing method.

**Q. Why do you sell two different bloom boosters? It's confusing.**

**A.** Some licensed producers use UV sterilization to deliberately target and kill organic matter. Sterile facilities use only mineral based fertilisers such as PK Spike.

**Q. What are the advantages of organic additives like Massive?**

**A.** Massive is a mineral and organic blend. Organically minded growers seek the advantage of the symbiotic relationships between plants and organics that nature provides. Advantages include naturally occurring growth enhancers, Gibberellins, amino acids and enzymes.

**Q. Your feed chart only shows nutrient strengths in EC. What should I do if I have a ppm, TDS or CF meter?**

**A.** All of these meter readings are just a measure of nutrient concentration. Use the conversion chart on this page to align your meter reading with the recommended EC of our nutrient feeding programs.

USEFUL CONVERSIONS	
1 tsp	5 mL
1 tbsps	15 mL
1 oz	30 mL
1 qt	946 mL
1 L	1000 mL
1 gal	3.875 L
1 gal	128 oz

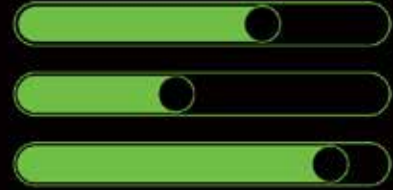


## EC Conversion Chart

EC ms/cm	CF	ppm 500 TDS	ppm 700 (ECx700)
0.2	2	100	140
0.4	4	200	280
0.6	6	300	420
0.8	8	400	560
1	10	500	700
1.2	12	600	840
1.4	14	700	980
1.6	16	800	1120
1.8	18	900	1260
2	20	1000	1400
2.2	22	1100	1540
2.4	24	1200	1680
2.6	26	1300	1820
2.8	28	1400	1960
3	30	1500	2100
3.2	32	1600	2240
3.4	34	1700	2380
3.6	36	1800	2520



# GreenPlanet Nutrient Calculator



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