# Roots Organics Soul Coco and Soul Soilless



### Soul Coco

INGREDIENTS Coco Fiber, Leonardite, Beneficial Bacteria

Grown in southern India and perfected in North America, Soul Coco is a superior bulk coir media that provides the ideal air-to-water ratio to support lush root growth. Can be used as a bulk media ingredient or in hydroponic and soilless applications. Contains Bacillus subtilis to enhance the availability of plant nutrients throughout the root system.

# Soul Soilless



INGREDIENTS Coco Fiber, Perlite, Leonardite, Beneficial Bacteria

Grown in southern India and perfected in North America, Soul Soilless is the ultimate coir-based substrate. The ideal natural characteristics of premium coir combine with the mineral power of coarse perlite to create the perfect air-to-water ratio and pH for soilless application. Our specialty large-gauge perlite expands the product's versatility and performance potential for hydroponic or soilless culture practices. For growers who demand the ultimate in performance and consistency.

Contains Bacillus subtilis to enhance the availability of plant nutrients throughout the root system.

Aurora Innovations is extremely proud to introduce Soul Coco and Soul Soilless.

Soul Coco and Soul Soilless were designed to give growers unparalleled quality and consistency in the world of cocoa based growing media. In addition, to the quality of the media themselves, their packaging also enables commercial growers to save a lot of time and money. For example, in addition to the standard 1.5 cubic foot bag and bulk 2 yard totes, Soul Soilless is also produced in two gallon ready-to-use grow bags. These 2 gallon grow bags come in 250 bags per pallet and arrive pre perforated so all you have to do is open them up and plant inside this eliminates the need for containers and saves lots on labor costs. When it comes to growing with Coco in general a few things are very important and Soul Coco and Soul Soilless has them all covered.

First, the cocoa itself must be a very high quality as one of North America's largest importers of cocoa. Aurora Innovations has secured the best quality cocoa fiber in the world. Our cocoa fiber is then triple washed with an EC of 0.3 or less. Second, the dust of fiber ratio must be right for the ideal air to water ratio to be achieved. Aurora Innovations has done countless hours of research and trials in our greenhouses and testing in our lab to master this ratio for use within our industry.

In the case of Soul Soilless the perlite must be of high quality and consistency. The roughly twenty percent perlite concept of Soul Soilless is our course grade perlite which we manufacture in-house. 100% of our perlite is screen filtered ensuring the best possible quality. All of the perlite used in all of our growing media is manufactured by us for these purposes.

Last but not least, our Soul medias are both inoculated with a beneficial bacteria package to give your roots a head start that they will not receive in any other conventional cocoa or soilless growing mix. You can use Soul Coco and Soul Soilless in hydroponic automated systems or you can hand-feed with synthetic hydroponic or coco nutrient formulas. You can also mix cocoa fiber into your favorite soil media as a way to improve soil structure. Coco fiber has the highest cation exchange of any media allowing for more nutrient uptake. We designed our Soul nutrient line to be used with soul medias as an ideal growing system. Although Soul medias will work great with any hydro or cocoa nutrient line. The ideal watering pH for cocoa is five point eight to six point three for maximum nutrient uptake. Pick up a bag of soul cocoa or soul soilless and put them to the test. You'll find they become your favorite cocoa or cocoa pearlite mix before you know it.

# **Roots Organics Soil and Media**



### Soilless

INGREDIENTS

Perlite, Coco Fiber, Pumice, Earthworm Castings, Bat Guano, Leonardite, Volcanic Rock Dust, Volcanic Ash, Kelp Meal, Greensand. Also contains beneficial microbes: Funneliformis mosseae, Rhizophagus intraradices, Septoglomus desertícola to enhance uptake of plant nutrients, increase roots biomass, and help container grown plants resist stress

Roots Organics Soilless coco mix is specifically engineered to allow you to feed heavier for greater yields, while reducing problems with fertilizer-salt toxicity. Plants need to be fertilized in order to thrive and provide you with larger harvests. Roots Organics Soilless mix allows you the ease of hydroponics with the benefits of a natural and organic soil. Coco fiber is an environmentally friendly growing medium that is guickly becoming known

for astounding gardening results. Coco fiber, a by-product of rug and broom-making in East Asia, is a renewable resource.



# Original

INGREDIENTS

Perlite, Coco Fiber, Peat Moss, Composted Forest Material, Pumice, Worm Castings, Bat Guano, Soybean Meal, Alfalfa Meal, Fish Bone Meal, Kelp Meal, and Greensand. Also contains beneficial microbes: Funneliformis mosseae, Rhizophagus intraradices, Septoglomus desertícola to enhance uptake of plant nutrients, increase roots biomass, and help container grown plants resist stress

Roots Organics Original is a ready to use mix created with a balanced air to water ratio of porosity and water retention to allow for frequent feeding of fast growing, heavy feeding plants. For exceptional results, feed with high quality nutrients, such as the Roots Organics fertilizer line.



#### Formula 707

INGREDIENTS

Coarse Peat Moss, Composted Virgin Forest Material, Perlite, Coco Fiber, Pumice, Earthworm Castings, Feather Meal, Bat Guano, Non GMO Soybean Meal, Fish Bone Meal, Greensand, Volcanic Rock Dust, Kelp Meal. Also contains beneficial microbes: Funneliformis mosseae, Rhizophagus intraradices, Septoglomus desertícola to enhance uptake of plant nutrients, increase roots biomass, and help container grown plants resist stress

Roots Organics Formula 707 is a ready-to-use soil created for a special kind of gardener, those who want to control their own destiny. Formula 707 is different from the other growing mixes created by Aurora Innovations. It was designed with greater water-holding capacity, fewer nutrients, less perlite and less pumice, and it contains ingredients specific to large

container gardening. In fact, the packaging is a 30-gallon grow bag containing about 20 gallons of the finest quality potting mix. Just punch holes in the bottom, cut off the top and plant.



### **Green Fields**

#### INGREDIENTS

Composted Forest Material, Peat Moss, Perlite, Coco Fiber, Pumice, Worm Castings, Crab Meal, Feather Meal, Fish Meal, Bat Guano, Soybean Meal, Fish Bone Meal, Kelp Meal. Also contains beneficial microbes: Funneliformis mosseae, Rhizophagus intraradices, Septoglomus desertícola to enhance uptake of plant nutrients, increase roots biomass, and help container grown plants resist stress Roots Organics Green Fields is an ocean-nutrient-based growing mix designed for both the vegetative-and flowering phases of mature plants. Green Fields was designed with greater water-holding capacity, yet it is free-draining for frequent feeding of fast-growing, heavy feeding plants. Green Fields is a ready-to-use soil created with less perlite and pumice, and specific ingredients such as fish meal and crab meal, worm castings,

bat guano, and kelp meal. Experienced gardeners know that a perfect outdoor mix is different than a perfect indoor mix, and Green Fields has been proven as an excellent outdoor blend for your fast-growing plants.



# Green Lite

INGREDIENTS

Perlite, Peat Moss, Composted Forest Material, Coco Fiber, Pumice, Worm Castings, Bat Guano, Soybean Meal, Fish Bone Meal, Fish Meal, and Kelp Meal. Also contains beneficial microbes: Funneliformis mosseae, Rhizophagus intraradices, Septoglomus desertícola to enhance uptake of plant nutrients, increase roots biomass, and help container grown plants resist stress

Roots Organics Green Lite growing mix was created as an aggressively free-draining indoor and outdoor potting mix. Green Lite is designed with more perlite and pumice to give you enhanced drainage and greater oxygen in the root zone, and with specific ingredients for versatile container gardening. This mix has been extensively tested; you'll see the results when you use this excellent, highly porous blend in your garden. Roots

Organics Green Lite is calculated to give you control and accelerate your garden for vigorous plants and root systems.



#### **Emerald Mountain**

#### INGREDIENTS

Composted Virgin Forest Material, Coarse Peat Moss, Perlite, Coco Fiber, Pumice, Earthworm Castings, Bat Guano, Non GMO Soybean Meal, Fish Meal, Feather Meal, Fish Bone Meal, Kelp Meal, Greensand, Volcanic Rock Dust. Also contains beneficial microbes: Funneliformis mosseae, Rhizophagus intraradices, Septoglomus desertícola to enhance uptake of plant nutrients, increase roots biomass, and help container grown plants resist stress

Roots Organics Emerald Mountain potting mix is created for the quality conscious consumer, the special breed looking for the highest levels of performance and economy. We recognized the need for a more economical organic growing media that incorporates a balanced air to water ratio for water retention and porosity while maintaining a reliably free

draining indoor and outdoor potting mix. The ultimate base mix or large container outdoor blend consistently created to out perform. Emerald Mountain potting mix has been extensively tested and you will see the results of our effort designing this excellent base blend in your garden.

# Coco Palms



Washed and age cured coconut husk, buffered with uncalcined limestone Roots Organics Cocopalms is the result of years of research into what makes the best coco growing media. We import only premium fresh waterwashed and composted low EC coir from specific global sources then process and naturally buffer the product in the United States. Roots Organics Cocopalms has a near perfect natural pH level (5.2 to 6.3) for optimum nutrient uptake, as well as a superb air-to-water ratio, creating an ideal material to use as an amendment or mulch. Roots Organics Cocopalms can be incorporated into the perfect hydro media or planted straight into it for the right applications. Aurora has specially designed

Cocopalms with a natural buffer to make it more user-friendly when applied straight or in high percentages. Deliberately enhanced ratios of fiber to dust are calculated specifically as the ultimate growing media for vigorous plants.

Aurora innovations is a family-owned company out of Eugene Oregon.

We manufacture soil and plant nutrients with an emphasis on quality control and consistency. Unlike many other companies in our industry, all of our soils and nutrients are manufactured and packaged by us. We make our own custom fertility package for each and every growing media that we make and we never use any GMO inputs of any kind. We've literally traveled all over the world sourcing the best organic ingredients that we can find. We are a leading North American producer of quality worm castings and perlite. We're also one of the North America's largest importers of high-quality and responsibly sourced bat guano's.

In addition, to this we add our proprietary mycorrhizae and bacterial inoculant Oregonism XL into all of our mixes. This allows us to create a truly living organic soil that is ready to provide you with great results. Our soils come ready to use and you can always plant right in the bag. At Aurora innovations we manufacture each batch with the technology and the machinery required to produce professional organics with precision every time.

Roots Organics soilless mix is actually the first growing media Aurora Innovations ever produced. The soilless mix was designed in 2000 to provide a high quality, cocoa based, growing media that was missing from our market. The soilless is designed to be a 60/40 cocoa pearlite blend. We also add a light charge of mycorrhizae, worm castings, and guano to provide some immediate microbial and roots support. The Soilless mix should be treated like an inert media in regards to feeding immediately and consistently. Our soilless mix was designed with indoor gardening in mind with its light and airy consistency the Soilless does awesome in ebb and flow or drain to waste systems, but it's also suitable for container gardening as well. Our Soul line of liquid nutrients is an excellent choice for this media.

Now, to one of our most popular products, the Roots Organics Original potting soil. The Original potting soil is coco and peat base, with roughly of 14 to 21 day nutrient charge available for heavy feeding plants. With over 50 ingredients this soils got a lot going on. There's plenty of nitrogen for a vegetable and there's a good amount of phosphorous and potassium to provide support for fruiting and flowering plants. The coco base and large amounts of perlite present allow for quick drainage and even drying. Roots Organics Original potting soil is ideal for indoor and outdoor gardening and you can always plant right in the bag. Roots Organics nutrients are the ideal source of nutrition for fast growing heavy feeding plants and our Soul line of liquid nutrients also makes an excellent choice for the Original soil.

Roots Organics Formula 707 named after Humboldt County's own area code, is a peat and cocoa based soil that contains roughly a 12 to 18 day nutrient charge for heavy feeding plants. In the Emerald triangle many growers use soil recipes that they've used for years and sometimes generations. We've put 20 gallons of Formula 707 in a 30 gallon grow bag to allow these gardeners the option to amend and then plant right in the bag. So for the same reason Formula 707 is designed to have a very even amounts of your main macronutrients nitrogen, phosphorus, and potassium. This gives the gardener maximum control, as well as, the ability to feed early. Formula 707 holds water a little longer than the Original because it has slightly less perlite and more peat. It's available in a 1.5 and 3 cubic foot bag and it's ideal for indoor or outdoor gardening and you can always plant directly in the bag. Roots Organics nutrients are the ideal source of nutrition for fast growing heavy feeding plants and our Soul line of liquid nutrients also makes an excellent choice for this soil.

Roots Organics Green Fields is a peat and cocoa based soil, that contains roughly a 21 to 28 date nutrient charge for heavy feeding plants. Green Fields offers a heavier nitrogen and ocean based nutrient package than our other soils. This soil

is ideal for use in greenhouses and outdoor applications. A slightly lower perlite ratio is ideal for maintaining moisture and hot climates, and you can always plant right in the bag. Greenfields is available in both 1.5 and 3 cubic foot bags and the nitrogen emphasis in Green Fields is well suited for an aggressive indoor veg or outdoor applications. Roots Organics nutrients are the ideal source of nutrition for fast-growing heavy feeding plants and our Soul line of liquid nutrients also makes an excellent choice for this soil.

Roots Organics Coco Palms is ready to use, naturally buffered coco fiber. Coco fiber has a naturally ideal pH level and the Coco we import is thoroughly freshwater washed for a consistently low EC. One of the things that makes the coco palms very unique, among other coco's on the market, is that there's no synthetically derive minerals ever added to this coco fiber. So, instead of calcium nitrate we use naturally organic sources of calcium. Coco Palms delivers a pith to fiber ratio designed for aeration in any application. Our Soul line of liquid nutrients makes an excellent choice for this media.

Roots Organics Green Light was originally designed for lovers of the Roots Original who wanted even more perlite so a lot of indoor and urban gardeners prefer a light airy mix they can water and feed more often. For that reason, Green Light is our lightest soil mix and has less food than the Roots Organics Original potting soil. Green Light contains roughly a 5 to 14 day nutrient charge for heavy feeding plants, but you can often start feeding with the soil within a week. Green Light is great middle ground between the Original potting soil and the Soilless mix for virtually anyone making their own media at home; that involves adding more perlite. We've done the work for you and you can even plant right in the bag. Roots Organics nutrients are the ideal source of nutrition for fast-growing heavy feeding plants and our Soul line of liquid nutrients also makes an excellent choice for this soil.

Roots Organics Emerald Mountain is a compost rich soil that offers an incredible value. It has almost as much food as the Formula 707 but with less perlite and cocoa; making it ideal for outdoor applications. Emerald Mountain works wonderfully as a standalone potting soil or makes an ideal base for custom soil blends. Roots Organics nutrients are the ideal source of nutrition for fast-growing

and heavy feeding plants and our Soul line of liquid nutrients also makes an excellent choice for this soil.

# **Roots Organics Soul**



### Soul Grow--NPK / 3 - 1 - 1

#### DERIVED FROM

Bat Guano Extract, Alfalfa Extract, Kelp Extract (Ascophyllum nodosum), Yucca Extract, Molasses, Potassium Nitrate, Monopotassium Phosphate, Calcium Nitrate, Iron EDTA, and Magnesium Nitrate. Contains Non Plant Food Ingredient Humic Acid.

Soul Grow is a powerful blend of soluble and natural fertility components, enhanced with potent botanical extracts. Apply during the growth stage for quality and increased yields. Formulated from only the highest quality soluble and natural ingredients and targeted to increase plant vigor for larger harvests. Designed for diverse applications. Should be used in combination with a circulation pump and airstone in

any large container or reservoir they are stored in before/during use. With adequate circulation and aeration, Soul is a simple-to-use, very effective, soluble and natural hydroponic nutrient blend that allows people to up their quality and quantity significantly, while lowering their costs.



#### Soul Bloom--NPK / 1 - 4 - 3

#### DERIVED FROM

Bat Guano Extract, Alfalfa Extract, Kelp Extract (Ascophyllum nodosum), Yucca Extract, Molasses, Potassium Nitrate, Monopotassium Phosphate, Calcium Nitrate, Iron EDTA, and Magnesium Nitrate. Contains Non Plant Food Ingredient Humic Acid.

Soul Bloom is a powerful blend of soluble and natural fertility components, enhanced with potent botanical extracts. Designed specifically for enhanced quality and increased yields in versatile, demanding applications for the bloom stage. Soul Bloom and Grow are user-friendly and pH stable.



#### Soul Amino Aide--NPK / 5 - 0 - 1

#### DERIVED FROM

Kelp Extract (Ascophyllum nodosum), Yucca Extract, L-Glycine and L-Arginine Soul Amino-Aide plant supercharger is a complex amino acid blend specifically formulated to increase plant vigor and yields. Chemists at Aurora Innovations created this blend of amino acids after extensive, hands-on research into compounds that can be beneficial for plant growth and yields. Harness that power with Amino-Aide and see the results for yourself. Great for both potting soil and hydroponic gardening.

### Soul Grow-N--NPK / 8 - 0 - 0 + Ca 8%



#### DERIVED FROM

#### Bat Guano, Calcium Nitrate and Magnesium Nitrate

Soul Grow-N nitrogen supplement was specifically crafted for the gardener who demands faster growth from high-performance fertilizers. A deliberate blend of fast-acting and natural nitrogen and calcium sources engineered for maximum effect and high solubility. Grow-N puts the controlled application of these essential nutrients in your hands. For exceptional results, combine these highly soluble, fast-acting nutrients with any base nutrient program.

#### Soul Infinity--NPK / 0.5 - 2 - 1

#### DERIVED FROM



Soy Protein Hydrolysate, Kelp Extract (Ascophyllum nodosum), Yucca Extract, Molasses, Calcium Amino Acid Complex and Iron Amino Acid Complex. Contains Non Plant Food Ingredients Humic Acid and Silica (derived from Bamboo Extract) Soul Infinity is a complex blend of powerful natural plant nutrients we formulated to increase vigor and prevent nutrient deficiencies common in fast-growing and heavy-feeding plants. With its deliberate blend of distinct ingredients, Soul Infinity can be used with any base fertilizer line as a powerful supplement to increase growth and yields.

#### Soul Big Swell--NPK / 2 - 5 - 3

#### DERIVED FROM



Yucca Extract, Molasses, Phosphoric Acid, Potassium Hydroxide, and L-Glycine. Contains Non Plant Food Ingredient Silica (derived from Bamboo Extract). Soul Big Swell has been designed specifically to increase flower size, vigor and quality. Aurora's research has resulted in a distinctive formula of powerful natural botanical extracts, amino acids and molasses combined to yield a specific ratio of available phosphorus and potassium. For exceptional results, use Soul Big Swell as an additive in conjunction with any base nutrient program.

# Soul Peak--NPK / 0 - 10 - 7



#### DERIVED FROM

Alfalfa Extract, Phosphoric Acid, and Potassium Hydroxide Soul Peak contains distinctive botanical extracts, as well as ample phosphorus and potassium to encourage only the strongest flowers. Years of research and extensive testing have resulted in a truly unique PK formulation that enhances the vigor of plants during their blooming phase. Soul Peak supports the development of intense features and show-quality blooms in your favorite flowers.

We wanted to make a more versatile line for different applications including both soil and soilless mediums. This gives the aggressive gardener an advantage without abandoning our trademark commitment to organics. This led to Soul, because Roots Organics liquids are 100% organic, frankly, they're just a little too thick to be used in most hydroponic applications. Soul is not 100% organic, but is organically based and with readily available pharmaceutical grade micronutrition, and chelates to aid an easy uptake and availability.

In reality, Soul is more ecofriendly than many products that claim to be fully organic without certifications. Soul should be used in combination with heavy aeration and circulation in a large container. With adequate circulation and aeration, Soul is a simple to use, very effective nutrient, that allows people to up their quantity and quality significantly all while lowering your costs.

The Grow, Bloom, and Infinity are the base of the Soul line. One distinction between Soul and Roots liquids is that you don't use the Grow all the way through the lifecycle with Soul. You have a more traditional transition into bloom. Infinity provides many of the same benefits of Trinity like a sugar, kelp, and protein boost, with the addition of three amino chelates for extra help with nutrient uptake. Infinity also has bamboo extract as a natural source of silica. Green tea extract to boost vigor and immunity, as well as grapeseed as a taste enhancer.

Amino Aide and Big Swell are the rock stars of the Soul line. Pretty much anyone running any line can get better results by adding these two products to their schedule. Amino Aide is a veg boost, but more specifically a plant mass supplement that consists of complex amino acid blends, formulated to increase plant vigor and yields. Chemists at Aurora created this blend of amino acids after extensive hands-on research into compounds that can be beneficial for plant growth and yields. Add 5 mils of this per gallon to any regimen and you'll see a noticeable difference in no time. If you're curious though, try a side-by-side comparison, by growing one plant with Amino Aide and one without. We think you'll be on board pretty quick.

Big Swell is a bloom boost, it's best used throughout the flower cycle. In the first couple of weeks of flowering, 5 mils per gallon is fine, but during the later weeks you may want to try bumping that up to 10 or even 15 mils per gallon, if you think your plant can take it. Use Big Swell up into the last week or two of your flowering cycle and this will result in a noticeable size and taste boost.

Peak is our big PK boost. It's a great finisher, but can be used whenever a large boost of phosphorus and potassium is required. Peak also includes a hop extract, a natural source of micro nutrition, as well as a natural preservative.

Grow-N is a highly concentrated nitrogen and calcium boost, and is essentially a four times stronger old-school cal-mag that had about 2% nitrogen and 2% calcium. This product should not be overfed, but is incredibly effective at supplementing nitrogen and calcium. We call the Grow-N our samurai sword when used correctly by trained hands, it's one of the best weapons in the arsenal. But if used by untrained hands it can be quite dangerous.

# **Roots Organics Dry Nutrients**



#### Uprising Grow--NPK / 6 - 1 - 2

DERIVED FROM

Feather Meal, Bat Guano, Fish Meal, Non Gmo Soybean Meal, Chicken Manure, Langbeinite, EarthWorm Castings, Volcanic Rock Dust, Non Gmo Alfalfa Meal, Crab Meal, Greensand, Volcanic Ash, Dolomite, Blood Meal, Fish Bone Meal and Nettle Leaf. Also contains non plant food ingredients Humic Acid, Beneficial Bacteria and Beneficial Fungi.

Roots Organics Uprising Grow is a diverse blend of 100% natural and organic ingredients specially formulated for maximum results. This formula is effective alone as an amendment or as a top dress for encouraging vigorous growth. Use it in conjunction with Roots Organics Uprising Bloom during a plant's flowering phase or combine it with Roots Organics Uprising Foundation to create a powerful supplement.



#### Uprising Bloom--NPK / 3 - 6 - 4

#### DERIVED FROM

Fish Bone Meal, Bat Guano, Crab Meal, Feather Meal, Langbeinite, Volcanic Rock Dust, Non Gmo Soybean Meal, Non Gmo Alfalfa Meal, Greensand, Phosphate Rock, Volcanic Ash and Hop Flowers. Also contains non plant food ingredients Humic Acid, Beneficial Bacteria and Beneficial Fungi.

Roots Organics Uprising Bloom is a diverse blend 100% natural and organic ingredients formulated for maximum results. This formula is effective alone as an amendment or as a top dress for encouraging vigorous flowering and fruiting. Uprising Bloom is most effective when used in conjunction with Roots Organics Uprising Grow during a plant's vegetative phase, or with Roots Organics Uprising Foundation as a supplement.



#### Uprising Foundation--NPK / 2 - 1 - 1

#### DERIVED FROM

Bat Guano, Fish Bone Meal, Non GMO Soybean Meal, Non GMO Alfalfa Meal, Feather Meal, Crab Meal, Kelp Meal, Volcanic Rock Dust, Langbeinite, Oyster Shell Flour, Greensand, Volcanic Ash, and Dolomite. Also contains non plant food ingredients Humic Acid, Beneficial Bacteria, and Beneficial Fungi.

Roots Organics Uprising Foundation is a diverse blend of 100% natural and organic ingredients formulated for maximum results. When used alone as an amendment or as a top dress, this formula is effective for supplementing calcium, magnesium and iron. It is particularly dynamic when blended with Roots Organics Uprising Grow (for the vegetative growth phase) and with Roots Organics Uprising Bloom (for the bloom phase).



# Nitro Bat Guano--NPK / 9 - 3 - 1

DERIVED FROM

100% Natural Bat Guano Roots Organics Nitro Bat Guano is an excellent source of nitrogen, phosphate and calcium. Carefully processed and sifted to make it easy to work with, Roots Organics Nitro Bat Guano encourages vigorous growth and is fast acting for quick results.



# Super Phos Bat Guano--NPK / 1 - 14 - 0

DERIVED FROM

100% Natural Bat Guano

Roots Organics Super Phos Bat Guano is incredibly high in phosphorus and calcium and is extracted from select caves when the quality is at its highest. Potent and powerful high phosphorus guano consciously extracted to not disturb the bat colonies, and to provide an unparalleled completely natural source of phosphorus and calcium. Roots organics super phos bat guano is fast acting and so powerful it should be used carefully and sparingly. All of the roots organics guanos are carefully sourced for quality and harvested with bat friendly methods so you and your garden get performance with principles.



# Phos Bat Guano--NPK / 0 - 7 - 0

DERIVED FROM

100% Natural Bat Guano

Roots Organics Phos Bat Guano is an excellent source of phosphorus and calcium. Carefully processed and sifted to make it easy to work with, Roots Organics Phos Bat Guano encourages vigorous flowering and fruiting. All of the Roots Organics guanos have been sourced for quality and harvested with bat-friendly methods so you and your garden get performance with principles.



# Sea Bird Guano Powdered--NPK / 0 - 12 - 0

#### DERIVED FROM

100% Natural Seabird Guano

Roots Organics Seabird Guano is an excellent source of phosphate and calcium. Carefully sifted and processed to make it easy to work with, Roots Organics Seabird Guano encourages vigorous growth and is fast-acting for quick results. All our Roots Organics guanos have been carefully sourced for quality and harvested with habitat-friendly methods so you and your garden get performance with principles. Available in both powdered and granular form.



### **Oregonism XL**

INGREDIENTS

Funneliformis mosseae, Rhizophagus aggregatum, Rhizophagus intraradices, Septoglomus deserticola, Bacillus amyloliquefaciens, Bacillus licheniformis, Bacillus megaterium, Bacillus pumilus, Bacillus simplex, Bacillus subtilis, Pseudomonas fluorescens, with Humic Acids derived from Leonardite

Roots Organics OregonismXL root growth enhancer helps to increase nutrient availability and uptake, encourages vigorous root systems, and helps container grown plants to resist stress. OregonismXL increases root mass and size by colonizing the root system with symbiotic fungi and bacteria. The fungi extend their network into the surrounding plant rhizosphere, massively increasing plants' ability to uptake water and vital nutrients. Increased root surface area and enhanced nutrient uptake help to

boost plant productivity and yield. Roots Organics OregonismXL is a custom blend of Vesicular Arbuscular Mycorrhizae (VAM), with Bacillus bacteria, Pseudomonas bacteria, and humic acid. OregonismXL's fungi and bacteria are specifically selected for tolerance to environmental extremes.



# Soybean Meal--NPK / 7 - 1 - 2

#### DERIVED FROM

Soybean meal (7% Slow Release Nitrogen from Soybean Meal)

Roots Organics Non-GMO Soybean Meal is a powerful source of slowrelease nitrogen. When used as an amendment or top dress, Non-GMO Soybean Meal is particularly effective for encouraging vigorous vegetative growth. Ethically sourced for quality. Roots Organics—performance with principles.



# **Essential Earth Powdered**

CONTAINS NONPLANT FOOD INGREDIENT Humic Acid 50% (derived from Leonardite) Roots Organics Essential Earth is a concentrated natural humic acid supplement derived from natural leonardite from a freshwater peat source. This premium humic acid soil conditioner is designed to aid in the uptake of micronutrients.



# Elemental -- NPK / 0.25 - 0 - 0.1 + Ca 20%

### DERIVED FROM

*Calcitic Lime, Dolomitic Lime, Gypsum and Fish Protein Hydrolysate* Roots Organics Elemental calcium and magnesium supplement was specifically created to augment calcium and magnesium levels and prevent deficiencies that can occur with fast-growing plants. Elemental contains two absolutely essential macronutrients: Calcium, an essential nutrient for plant health due to its role in cell walls, membranes and other biochemical processes; and magnesium, which is a central component of the chlorophyll molecule. Supplementing calcium and magnesium is one of the secrets of expert growers and results in more vigorous plants and larger yields.



# Fish Protein--NPK / 13 - 1 - 2

# DERIVED FROM

*Fish Protein Hydrolysate* Roots Organics Fish Protein is a truly powerful source of key plant nutrients. Potent levels of water soluble Nitrogen and other available and soluble primary nutrients hydrolyzed for easy delivery to your plants as a liquid suspension, a powerful top-dress, or a dynamic amendment. Roots Organics Fish Protein is a rapidly available plant nutrient supplement that allows the discerning grower to target specific nutritional needs and maximize vigor, growth and yield.



# **Bio Force**

INGREDIENTS

Bacillus amyloliquefaciens, Bacillus licheniformis, Bacillus megaterium, Bacillus pumilus, Bacillus simplex, Bacillus subtilis, Pseudomonas fluorescens, Trichoderma harzianum. Contains beneficial bacteria and fungi to enhance nutrient availability, and to help container plants resist abiotic stress. Roots Organics Bio Force biological inoculant supplies a suite of powerful bacteria and fungi to your plant's root system and surrounding rhizosphere. Our researchers have selected specific organisms and ratios to maximize benefits to your garden. This grouping is selected for their ability to increase nutrient availability and to help container grown plants resist abiotic stress. Roots Organics Bio Force proprietary biological inoculant blend contains beneficial bacteria and fungi with sustaining

microbial food to enhance crop production.

Trying to figure out the perfect gardening regimen is a fine art. Your plants will tell you when you're getting it wrong and when you're getting it right. We're here today to try to help minimize the gardener's age-old process of trial and error. To help you customize your gardening plan we'll be looking at the renovations arsenal and talking about your options for every step of your garden's lifecycle. We'll also share the best practices for the application of our favorite products.

The Uprising Grow, Foundation, and Bloom are comprehensive assortments of dry organic food sources combined to stimulate ample growth and spur fruit or flower production. In addition, they provide a backbone of macro and micronutrients. These organic products are especially popular with conscientious organic gardeners, but they're also a wise choice for any gardener who wants to save time and money. Many of our customers use the Uprisings as a top dressing to supplement liquid nutrients, but these dry products are a great standalone three-part system and can support an entire crop without additional help.

Our Elemental is an organic dry form of cal-mag with fish protein hydrolysate and trace amounts of iron and sulfur. With 20 percent calcium availability, Elemental is a lot of bang for your buck. You can always use it as a top dressing application or mix it as a soil amendment. If you want to add it to water, the best method is to half fill a jug of water add the elemental shake that vigorously for a minute or so, then add that to your reservoir. Just make sure to always add Elemental before you add any other nutrients to your reservoir.

If you're looking to encourage vigorous, vegetal growth; Roots Organics 7/1/2, non-gmo, Soybean Meal is an excellent source of slow release nitrogen, amino acids, and protein. When used as a soil amendment or a top dress this product is particularly effective. Like all Roots Organics ingredients, our soybean meal has been carefully and ethically sourced for quality.

At Aurora Innovations we take great pride in being one of the largest guano importers in North America. We also take great pride and harvesting all our guanos using bat and bird friendly methods. This translates to keeping the animals safe and happy in their natural environment while also ensuring a sustainable source of guano for many years to come. All our guano's can be brewed into a tea or applied by amending soil, or by top dressing beds or containers.

We offer a wide variety of guano's to cater to many different NPK ranges. For example, Super Nitro Bat! Our Super Nitro Bat Guano, being a 15.5-1-1, offers an extremely concentrated nitrogen source for fast-growing plants. It's our highest nitrogen guano. In fact, it offers one of the highest levels of nitrogen on the market, it's the perfect way to supercharge your vegetative cycle.

Our 9/3/1 Nitro Bat Guano is an excellent source of nitrogen, while having slightly more phosphorus and potassium than our Super Nitro. This makes it a great guano for amending soil or as an addition to tea brews.

Our 0/7/0 Phos Bat Guano with 5% available calcium is a great gentle source of phosphorus to initiate flowering and is a very economical option for getting you through the bloom stage of your plant's life.

Aurora's Super Phos Bat Guano surely earned that title. Boasting an NPK of 1/14/0 and 20% available calcium, making it easily one of the strongest Phos Guanos on the planet. These numbers are achieved by very selective sourcing and timing of seasonal harvests. This premium guano is a no-brainer for people looking to push the size and quality in their flower. Super Phos is the finest sieve of any of our Bat Guanos, making it especially well-suited for tea brews but can be top dressed or amended to soil, just like all of our other guano's.

What bulks flowers and brings taste and smell to the forefront? Phosphorus and calcium! Our Seabird Guano delivers an ideal dose of 20% calcium and 12%

phosphorus and as you can expect from all Roots products this Guano has been carefully sourced and harvested with habitat friendly methods.

Essential Earth is a dry, humic acid powder, with almost 50% available humic content. Humic acid dramatically increases your plants uptake abilities. Each plant has something known as the cation exchange capacity, often abbreviated as CEC. This is the capacity of a plant to absorb negative ions, also known as cations, which comprise the vast majority of macro and micro nutrition. Simply put, the greater the CEC, the more nutrients your plant can uptake and process. Essential Earth is a great way to increase your plant CEC by giving it a giant boost of humic acids.

If you're looking to boost root zone health and save money at the same time, our comprehensive and inoculant package, Oregonism XL, includes all the necessary mycorrhizae, beneficial bacteria, and trichoderma you need. Plus, kelp, yucca, and humics-- giving your plants a huge advantage. The inoculant package in Oregonism XL aids to liberate bound-up nutrients in the rhizosphere, increase drought resistance by extending the surface area and reach of your roots, and improving soil structure by secreting proteins; causing better soil aggregation. The trichoderma are especially effective in preventing colonization of fungal pathogens. Oregonism XL can be used in a few different ways; to prevent shock during transplanting sprinkle it directly on your roots. You can also water in it as a concentrated solution, or you can top dress it and then water it in. When applying hydroponically you want to make a concentrated solution in a gallon or two of water and then dredge each plant at the base and root zone.

The Roots Organics Dry Player Pack is a one and done buy for anyone looking to grow a few plants totally organic and really crush it. This box of dry nutrients comes with 4 ounces of our Oregonism XL, three-pound bags of each Uprising product, our Elemental, Seabird Guano, and Nitro Bat Guano. This player pack in addition to starting in good soil, can make a beginner look and feel like they really know what they're doing. While also giving the veteran farmer a great preview of products that we offer and their effectiveness. Our dry player pack only requires a couple measuring spoons or glasses, and requires no pH adjustment or brewing to achieve a high yielding fully organic crop. With so many dry organic options ranging from a comprehensive three-part, to individual inputs and guano's, Aurora Innovations can satisfy nearly every dry organic need a grower might have and if you have liquid nutrient needs of course we've got that covered too.

# **Roots Organics Liquid Nutrients**



excellence in your plants.

#### Buddha Grow--NPK / 2 - 0.25 - 2

#### DERIVED FROM

Bat Guano, Kelp Extract (Ascophyllum nodosum), Soy Extract, Molasses, Worm Castings, Yucca Extract

Roots Organics Buddha Grow and Buddha Bloom promote vigor, substantially increase yields and enhance the quality of production and flavor in soil-grown plants during their growth and bloom stages. Distinctive blends of the finest organic ingredients are harvested from natural sources around the world, providing secure livelihoods for communities engaged in the sustainable extraction and production of these high-quality nutrients. Worldwide sourcing and deliberate design create exceptional liquid blends that are targeted to encourage



### Buddha Bloom -- NPK / 0.5 - 2 - 1

#### DERIVED FROM

Bat Guano, Phosphate Rock, Molasses, Earthworm Castings, Yucca Extract, Kelp Extract (Ascophyllum nodosum), Soy Extract

Roots Organics Buddha Grow and Buddha Bloom promote vigor, substantially increase yields and enhance the quality of production and flavor in soil-grown plants during their growth and bloom stages. Distinctive blends of the finest natural and organic ingredients are harvested from natural sources around the world, providing secure livelihoods for communities engaged in the sustainable extraction and production of these high-quality nutrients. Worldwide sourcing and deliberate design create exceptional liquid blends that are targeted to

encourage excellence in your plants.



#### Trinity--NPK / 0.25 - 0.1 - 1

#### DERIVED FROM

Kelp Extract (Ascophyllum nodosum) and Soy Protein Hydrolysate. Also Contains Non Plant Food Ingredients Molasses Carbohydrates, Yucca Extract, Humic Acid derived from Leonardite, Triterpene Saponins derived from Quillaja saponaria Roots Organics Trinity is a complex blend of organic and natural plant nutrients designed for maximum effect as a plant and rhizosphere growth enhancer. With its deliberate blend of distinct plant nutrients, Trinity is a universal supplement for growth and bloom. A distinctive formula of complex carbohydrates combined with soy protein extracts to encourage plant vigor, reduce stress, maximize root growth and increase plant yield. Trinity can be used with any nutrient program.

# Surge--NPK / 2 - 2 - 0.5

#### DERIVED FROM



Hydrolyzed fish stabilized with phosphoric acid, Kelp (Ecklonia maxima), Molasses and Langbeinite

Roots Organics Surge plant nutrient and microbe stimulant is designed from the finest sustainably-harvested and enzymatically processed marine protein materials. The addition of natural sugar, kelp and humic acid to a powerful fish base creates a potent fusion of natural compounds to enhance the distinctive qualities and flavor of your harvest. Faster growth and greater yields for lush plants rich with essential oils - all these benefits from one powerful product.

#### Extreme Serene--NPK / 0.25 - 0.1 - 2

#### DERIVED FROM



Seaweed Extract (Ascophyllum nodosum, Chondrus Crispus, Ecklonia Maxima, Laminaria digitata, Palmaria palmata), Spirulina. Also Contains Non Plant Food Ingredients Triterpene Saponins derived from Quillaja Saponaria Roots Organics Extreme Serene is a natural source of growthpromoting nutrients and botanical extracts. Our revolutionary new formula improves upon the original: We have targeted and isolated crucial components in various kelp species and stabilized the solution for maximum absorption. Extreme Serene captures the fast-growing power of marine kelp to encourage vigorous shoot and root growth. Use Extreme Serene in conjunction with any nutrient program or as a

foliar feed.

#### Ancient Amber -- NPK / 0.1 - 0 - 0.01

#### DERIVED FROM

#### Soybean Fermentation Extract And Nettle Extract

Roots Organics Ancient Amber is a highly-soluble and distinctly active Natural nitrogen source extracted from nettle, a nutrient-rich perennial plant used by humans Since Ancient times, and from a non-GMO soybean meal.



# HP2--NPK / 0 - 4 - 0

#### DERIVED FROM



100% Natural Seabird Guano and Biogenic Phosphate Rock Roots Organics HP<sup>1</sup> liquid seabird guano is a natural source of phosphorus, ideal for use during flowering and fruiting. Aurora Innovations has taken generations of gardening experience and distilled it into a unique, easy-to-use formula for the hobbyist and professional gardener. Roots Organics HP<sup>1</sup> is minimally processed to preserve all of the benefits and amazing synergistic qualities found in seabird guano and biogenic phosphate rock.



#### DERIVED FROM



100% Natural Seabird Guano, Phosphate Rock and Langbeinite Roots Organics HPK liquid bloom booster features a combination of seabird guano, an unparalleled source of available natural phosphorus, phosphate rock, and langbeinite, a natural source of potassium that is carefully mined from ancient sea beds in the deserts of the American Southwest. Aurora Innovations has taken generations of gardening experience and distilled it into a distinctive, easy-to-use formula for the home and professional gardener. Roots Organics HPK is minimally processed to preserve all the benefits and amazing synergistic qualities found in our exceptional ingredients.

Let's begin with the Roots Organics liquid plant nutrients. This completely organic line of nutrients is designed for use in soil. The core of this line is the Buddha Grow, the Buddha Bloom, and Trinity.

The Buddha Grow is used throughout the lifecycle of the plant, but the amount is reduced during bloom. This is really to maintain a consistent supply of nitrogen throughout the bloom cycle. Buddha Grow is the ultimate, organic, liquid, grow nutrient. It's got everything you need. Bat guano, kelp, non-gmo soy protein hydroxylate, worm castings, molasses, a yucca extract, and we also add a humic acids to increase your plants nutrient uptake. Buddha Grow forms the backbone of the Roots Organics liquid line, or can be used in addition to any soil regimen.

Buddha Bloom goes hand in hand with Buddha Grow, and provides the necessary nutrition for the flowering phase. It provides the extra phosphorous and

potassium that heavy feeding plants require, with the same content of humic acids as the Buddha Grow. Buddha Bloom is best used in conjunction with Buddha Grow, but can work well with any nutrient in the soil

Trinity is the catalyst in our line and works well with any nutrient program. Trinity is a combination of virtually everything you want to give your plants. By supplementing with Trinity you're gonna get the flavors and smells, that growing organic is all about. For gardeners that use a primarily mineral regiment, Trinity is a great way to add lots of good organics with one product. Trinity is also a great boost of carbohydrates, protein, kelp, as well as humic acid, and fulvic acids all in one bottle. With Trinity you've got a molasses base and three other complex carbohydrates coming from yucca, aloe, and kolea extracts, which also double as wetting agents. There's high grade kelp, which is the fastest growing plant on earth, makes a great natural source of B vitamins and natural plant growth stimulators. The protein boost comes from non-gmo soy protein hydrolysate. Finally, a sizable presence of both humic and fulvic acids provide forms of natural chelation for plant nutrient uptake. One extra use of Trinity is that it can be used as a flush of five mils per gallon. As a final flush pure water is always recommended, but five miles per gallon of Trinity for a few feedings can do wonders on your plants. It's always great to do an intermediary flush.

Roots Organics HP-2 and HPK are the two bloom boosters of the Roots Organics liquid line. Both HP-2 and HPK are guano based products because guano is great! As one of North America's leading guano importers, we deal with an awful lot of "it". We insist only using guano's that are harvested using bat friendly methods because bats are great! Guano is the best natural provider of phosphorus rich plant nutrition on the planet. Roots Organics HP-2 is a high source of phosphorus coming from liquefied bat guano. HP-2 is a critical product that adds to the quality of any organic garden and the extra phosphorous coming from the HP-2 enables vigorous flower development. Guano also naturally enhances aromas and tastes, of organically produced crops.

Roots Organics HPK is phosphorus from bat guano and some potassium from a mineral called langbeinite. Which is mined from dried-up sea beds in the Southwest United States. This potent combination of phosphorus and potassium is ideal for final stages of flowering. The HPK provides the most concentrated organic phosphorus and potassium boost available in liquid form. We wanted to separate these two products because cocoa, often highly present in our own potting soil, has a high cation exchange rate with potassium. This means that the plant takes it up quickly and easily, and for this reason it's important that you don't overdo potassium in a cocoa based media.

Extreme Serene is a high-grade cold pressed kelp supplement with the premium organic wetting agent of coleus Saponaria. It's hard to overstate just how useful kelp is to an organic garden! Kelp is the fastest growing plant on earth and as such, it's a great source of B vitamins and natural plant growth stimulators, as well as useful amino acids. Cold processing is essential to maintaining the integrity of the cytokinins and auxins that are present in kelp and maintaining a balanced level of the two. An ideal balance of cytokines and auxins help promote the lateral growth so you get bushy plants with lots of tops. There's more than just two kinds of high grade kelp in Extreme Serene. We also add hydrolyzed Irish moss, hydrolyzed dulse, and photosynthetic cyanobacteria. Extreme Serene can be watered in and it also shines as a foliar feed, because kolea is present, you can mix Extreme Serene up at about 15 mils per gallon and spray it on as a foliar feed. Extreme Serene is most easily thought of as an "extreme green everything up spray". As a foliar it gives plants that "lush green happy plants look" every gardener is after. Extreme Serene is also great to help bring back from mother plants and clones that have started to yellow.

Ancient Amber is a fulvic acid supplement that is a critical component to any organic garden. In addition to fulvic acids, Ancient Amber also provides some bactillis subtilis, which is especially helpful for disease suppression. There is also a nettle extract which provides some amino acid nitrogen. Like the Extreme Serene, Ancient Amber is great is to water in and shines as a foliar feed. Ancient Amber is especially useful as a foliar spray during the transition into flowering and will help focus development upward towards flower sites.

Surge is our premium fish-based liquid and it is designed to specifically benefit essential oils and terpene production. Surge has a potent fish hydrolysate base and we combine that with kelp, humic acids, langbenite, yucca, and molasses, to create a powerful bio catalyst. Cold enzyme hydrolysis allows for the maximum preservation of complex amino acids, as well as, small and large peptides; which leads directly to healthier, more flavorful plants. Surge goes hand-in-hand with Trinity in our line and also works great as a standalone additive in any garden. Using surge will ensure that you end up with the best tasting and most resinous plants that you can produce.

# **Roots Organics Terp Tea**



garden's natural terpenes.

### Terp Tea Grow---NPK / 7 - 1 - 1

#### DERIVED FROM

Bat Guano, Fish Bone Meal, Fish Meal, Langbeinite, Kieserite, Non Gmo Soybean Meal, Feather Meal, Chicken Manure, Kelp Meal, Dolomite. Also contains nonplant Food ingredients Humic Acid, Beneficial Bacteria and Beneficial Fungi. Roots Organics Terp Tea Grow delivers critical nutrition for heavy-feeding, high-yield plants. Recommended for both large and small-scale gardens, this high-quality dry fertilizer is simple, comprehensive, and completely natural. Our powerful one-part grow and one-part bloom formula can serve as base nutrition or as a supplement, and can be delivered in large batches or controlled point feedings. Amend any potting soil with this micronized vegetative nutrient to activate the aromatic power of your



# Terp Tea Bloom--NPK / 3 - 7 - 4

#### DERIVED FROM

Bat Guano, Fish Bone Meal, Crab Meal, Kelp Meal, Non Gmo Soybean Meal, Seabird Guano, Feather Meal, Langbeinite, Kieserite, Phosphate Rock, Sulfate of Potash, Dolomite. Also contains nonplant food ingredients Beneficial Bacteria and Beneficial Fungi.

Roots Organics Terp Tea Bloom delivers critical nutrition for heavyfeeding, high-yield plants. Recommended for both large and small-scale gardens, this high-quality dry fertilizer is simple, comprehensive, and completely natural. Our powerful one-part grow and one-part bloom formula can serve as base nutrition or as a supplement, and can be delivered in large batches or controlled point feedings. Amend any potting soil with this micronized flowering nutrient to activate the aromatic power of

your garden's natural terpenes.

Certified organic, Roots Organics Terp Tea Grow and Terp Tea Bloom, represent the most exciting new kind of dry nutrients from Aurora Innovations. These micronized, organic, fertilizer blends are on the cutting edge of organically boosting yields and terpene profiles. What makes the Terp Tea so special is a specially formulated array of organic fertilizers designed to boost yields and terpene profiles, combined with the versatility to administer them in multiple ways. Roots Organics Terp Teas were designed with large-scale commercial applications in mind.

The Terp Teas can be top dressed and watered in, or they can be mixed into tanks for large-scale liquid applications. Roots Organics Terp Teas can be used as

supplements to existing nutrient regiments or they can be the backbone-based nutrient of your entire program. When used as a base nutrient application rates of 2 to 3 cups per hundred gallons of solution is recommended. However, when the Terp Teas are being applied as a booster, 1 to 2 cups per gallon will do the job. When used as a top dressing an easy rule of thumb is one teaspoon per gallon of media. So, a 5-gallon pot would get 5 teaspoons of Terp Tea in a container you are feeding, for a weekly application rate. When mixing up large tanks, put your tanks concentration in a five-gallon bucket and pre mix it in water and then add that to your feed table.

Through extensive research Aurora Innovations discovered a process to micronized organic material that in the past was not possible on a large scale. We invested time and capital into new machinery, to micronized high-grade organics into such a fine powder.

Terp Tea finally allows organic gardeners the ability to apply all these high-grade organics into a simple comprehensive nutrient. Administered in either dry form or liquid form. There is simply no easier or more efficient means of delivering an organic fertilizer of this quality on a commercial scale. Terp Tea brings the highest grade certified organic bat guano, fish bone meal, kelp meal, langbeinite, and feather meal altogether. But in addition to these organics, we have added a mycorrhizae and beneficial bacteria, specifically targeted toward increasing phosphorus availability. This product is available in 3, 9, and 40-pound bags, as well as, 2,000 pound totes.

Terp Tea Grow and Terp Tea Bloom puts the control in the hands of the gardener. The micronized form allows the quickest breakdown possible increasing the ability and speed that plants can uptake and benefit from the nutrition. In a competitive marketplace, terpene profiles and resin content are becoming more and more important. Don't cut corners and cheat yourself, or your garden. Use Roots Organic Terp Teas to organically, and ethically, boost your yields, and terpene profiles to their maximum potential.

# Roots Organics Earth Worm and Big Worm



# **Earth Worm**

INGREDIENTS Vermicompost

Roots Organics Earth Worm vermicompost contains organic matter to assist in soil aggregation and improve cation exchange capacity of soils. Our earthworms are carefully tended and fed an unparalleled blend of natural and organic feedstocks for exceptional quality vermicompost. Roots Organics Earth Worm is a great amendment or top dress to aid in the proliferation of soil microbes and encourage vigorous root growth.



# Big Worm

INGREDIENTS 100% Worm Castings

Roots Organics Big Worm pure and premium worm castings is a distinctive natural soil amendment. Our earthworms are carefully tended and fed an unparalleled blend of organic and natural feedstocks for exceptional quality worm castings. No fillers, no chemicals and no tricks. Just pure and exceptional worm castings. Add Roots Organics Big Worm pure and premium worm castings to any soil as an amendment and conditioner.

Many moons ago, in a quest to make the best quality potting soil on planet Earth, Austen and Bo the founders of our Aurora Innovations, were determined to find ingredients to make soil healthier, and richer for Earth life. Through exhausting trials and tribulations our company has developed a worm farm like no other!

Our worm castings and compost are CDFA certified organic, as well as, OMRI certified organic, and free of any waste products. Aurora Innovations is one of the world's largest producers of certified organic worm castings. Using a proprietary organic diet and screening process we can provide gardeners and growers of any scale with the highest quality worm castings available anywhere on the globe.

Much of our castings are used internally, as a key ingredient in our organic potting soils, but because of the scale of our operations, you have the opportunity to take that same quality home in the form of Big Worm. Big Worm is an ideal soil amendment and rejuvenator and is also a great addition to compost teas. In addition to amending soil, you can always top dress Big Worm as well, and simply water it in for an easily administered boost to your rhizosphere.

Do the visual comparison between Big Worm and any other worm casting on the market and the proof is in the castings. There is no filler in Big Worm! Just pure, certified organic, good old-fashioned, worm food!

# **Roots Organics CalMag**



# CalMag

GUARANTEED ANALYSIS Calcium 4.0% Magnesium 1.0% (0.5% Water Soluble Magnesium) Sulfur 4.0% DERIVED FROM Kieserite, Gypsum Roots Organics CalMag is a pure and all natural blend of calcium, magnesium and sulfur to support plants during fast growth. By creating a product free of added nitrogen, phosphate, and potassium, we give you control to supplement as needed without affecting primary fertility input ratios. Roots Organics CalMag is ideal for fast-growing and heavy feeding plants. Use in combination with high quality base fertilizers like Roots Organics Buddha Grow and Buddha Bloom.

Aurora Innovations is proud to introduce Roots Organics Cal-Mag. It's well known amongst experienced gardeners, that maintaining healthy and balanced levels of calcium and magnesium, are crucial to maximizing both quality and yields. That is exactly what Roots Organics Cal-Mag was designed to do.

Roots Organics Cal-Mag empowers growers to provide their plants with ideal calcium and magnesium levels, organically. Roots Organics Cal-Mag is designed to be a liquid Cal-Mag that is ideal for both flowering and the vegetative stage. Cal-mag with 4% available calcium is the most concentrated organic liquid Cal-Mag currently available for our industry!

Most nutrient programs can add 3-5 mils per gallon and experience even greater plant health or fend off a potential calcium or magnesium deficiency. What a win! An organic calcium and magnesium supplement with twice the concentration of competing synthetic Cal-Mags. In addition to this, Roots Organics Cal-Mag has an available sulfur content of 4%, which is often one of the most overlooked macronutrients. Your plants deserve only the best organic nutrients and when it comes to calcium and magnesium Roots Organics Cal-Mag is exactly that.

# **Roots Organics Rain**

# Rain

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SOIL AMENDING GUARANTEED ANALYSIS Active Ingredient: Yucca schidigera extract (wetting agent) 80.0%

Active Ingredient: Quillaja saponaria extract (wetting agent) 16.0%

Inert Ingredient: Aloe vera extract 4.0%

Roots Organics Rain promotes water penetration and aids in the dispersion of foliar applications. A combination of the natural wetting agents yucca and quillaja, this product reduces water surface tension and enhances the movement of solutions and soluble nutrients throughout the rhizosphere. By reducing surface tension and increasing the leaf surface to foliar and liquid fertilizers, Roots Organics Rain enhances the effectiveness of foliar-applied agents. Use this product to assist water infiltration, increase volumetric moisture content of media, reduce evaporative water loss, improve irrigation efficiency, and equalize the

osmotic differential in soil and soilless media by mediating more uniform moisture distribution. A powerful gardening tool, Roots Organics Rain is designed for both foliar and root zone application.

Another new product from Aurora Innovations in 2019, is Roots Organics Rain. Roots Organics Rain is a certified organic, wetting agent designed for use as a soil drench or as a surfactant when applying a foliar feed. When applying your favorite foliar feed nutrient, Rain will act as a surfactant allowing for graded disbursement to the stomata. Essentially making water wetter.

Wetting agents are essential for consistently even soil penetration when watering, and they are a must-have in order for foliar feeds to be effectively absorbed by the leaves. At 80% yucca, 16% quillaja saponaria, and 4% aloe; Rain is a wetting agent that is super concentrated with the highest quality organic ingredients, ensuring your plants will only get the best.

Some wetting agents may contain ingredients you may not want to consume, so do your research before applying to your favorite plants. Roots Organics Rain is the only product on the market that incorporates all three of these highly effective organic wetting agents into a powerful synergistic formula. 5 mils per gallon of Roots Organics Rain is all it takes to see immediate results in your watering and 10 mils per gallon in your foliar feeds.

