

**In times where technology is at your fingertips,
we believe that you will enjoy our introduction
to the world's best nutrient program.**

TOTAL PLANT MAINTENANCE – HARNESS THE POWER!

This article is going to load you with information!! It's all about a plant food maintenance program that is so complete, that you'll just have to try it! Read on to see what I mean. It all started back in 1985. The products that were needed for hydroponics were not available in stores; so, over the next decade, the staff of B & B HYDROPONIC GARDENS Inc. (our retail stores' name) looked for great products and bought the rights to them. All products are manufactured under the trade name of GROWING EDGE TECHNOLOGIES Inc. (G.E.T.). **G.E.T. THE POWER!**

There is a bit of extra work, but as with any project that I have ever worked on, a little extra on detail made for many years worth of fine enjoyment! Feel free to email for more specific questions concerning your typical applications.

As a plant goes through the natural stages of development, it's needs for certain mineral elements increases. Using G.E.T.'s POWER charged elements is recommended for the overall health of the plant. These products are designed to deliver that extra mineral element, which a plant requires for development. Timing is everything! When applied at the proper time, the plant can benefit greatly. Do not use more than the recommended amounts until you are familiar with the product. Experiment with a few plants and see the results; try the product at different strengths and different times. We use very pure, high-grade mineral elements. I know you have heard this before, but once you have tried one of our products you'll be back to try some or all the others! Use with care, remember we are talking G.E.T.'s, POWER GROWING!!

A plant grows once all it's needs are met. A warm moist environment will germinate the seeds. Once the seed has broken through the growing medium to the light, then the light energy starts drawing water through the leaves creating a negative effect inside the leaves. This in turn forces the plant roots to find water with mineral salts that have been dissolved into the water. The plant uses these mineral salts and water, with carbon from the air, to build the cells that become the plant. Changes to temperatures, light intensity and colour of light spectrum, will cause a plant to bloom and reproduce itself. Then, the process starts again.

Okay how do they eat? One of the ways plants absorb nutrients is through their leaves, commonly known as foliar feeding. Foliar feeding is a quick way to correct deficiencies and is also good for giving your plants that extra boost of energy. Any nutrient can be sprayed onto a plant. However, do not mix the nutrient solution too strong or it can burn the leaves. A mild solution is best. Foliage misting delivers the nutrients right to the leaves. Another way is through the very fine root hairs, where most nutrients will be absorbed. For instance, on a large tomato plant, these root hairs are so plentiful, that if we took them from a 1-gallon section of a 5-gallon pot of soil, and placed them end-to-

end, they would literally span across hundreds of miles. The taproot and secondary roots, where these fine hairs are found, are always expanding and searching for new soil particles and soil solution (water with mineral elements already dissolved into the water).

The mineral elements that a plant requires are broken down into inorganic elements and organic elements. These mineral elements then dissolve into the water and can be absorbed by the plant's root system through ionic exchange.

What are these mineral elements? On this planet, Earth, there is a total of 103 natural mineral elements. 60 of these elements have been found to be present in plant tissue. Of these elements, 17 are needed for essential plant growth. 3 are found in the atmosphere, they are Carbon, Hydrogen and Oxygen. 14 are found in the growing medium (soil or nutrient solution for hydroponics), Nitrogen, Phosphorus, Potassium, Calcium, Magnesium, Sulphur, Chlorine, Boron, Iron, Manganese, Zinc, Copper, Nickel and Molybdenum. Some of these mineral elements have a positive charge (anions) and some are negatively charged (cations). When a plant is in need of certain elements, there is an ionic exchange.

We all know that H₂O, water, is one atom of Hydrogen and two atoms of Oxygen. Now when we add other atoms to water, by means of natural sources or our fertilizer salts, they dissociate into electrically charged groups called ions. These ions become available to the roots from the soil colloids and from the salts in the soil solution. The positively charged ions (anions) are found in the soil solution. The negatively charged ions (cations) can flow freely from soil colloids and the soil solution. The cations are exchanged into the soil solution where they become available to the plant root hairs. There are a number of theories proposed for how plants absorb atoms. Ions may attach themselves to a carrier and move across the membrane of the root. The release of the atoms from their carrier may occur only on the inside of the root. The vascular system of the plant transfers water and the atoms to the leaves. The leaves manufacture mineral atoms from the roots and carbon from the air into sugars and starches that fuel the plant's growth.

About 95% of the water, taken up by the plant roots, evaporates through the leaves; therefore, plants must take up new water solution containing mineral elements to keep the leaves from collapsing. Water keeps the leaves rigid; a lack of water will result in wilting. If the leaves dehydrate too much they will collapse and die.

When setting up your growing area you will need to decide on whether to use soil and soil containers, or a hydroponic system. There is no physiological difference between plants grown in soil or hydroponics when nutrients are delivered in a proper manner.

Soil. What is soil?

There is very little mineral elements available to plants from soil that do not have to be first broken down into a usable form for plants to use as plant food. Many of the organic and mineral elements that a plant requires from soil must first undergo decomposition

by fungi and bacterial processes. Soil is made up of 5% organic materials such as, dead leaves, trees, grasses, shells, bugs & animals. It also consists of 45% inorganic elements, such as, gravel, clay, sand, metals (ores) and silt, which are derived from the original rock by weathering. Also included in the soil composition is 50% water and air.

When gardening inside with soil, most customers use a soilless soil. And water their plants on a regular basis with a milder nutrient solution

Soilless: What is soilless soil?

Soilless soil is made up of ground up sphagnum moss and peat moss with vermiculite and perlite mixed in for better water holding capacity. Soilless mixes are date coded. Use within a 6 month period. The sphagnum and peat moss should not be used for long-term growing, as these mosses will break down over time, approximately 6 months. Another soilless soil is **CoCo-Peat Power**. CoCo Peat Power is made from the husk of the coconut and takes a fairly long time to break down. Both of these soilless soils should be fed a nutrient solution on a regular feeding schedule.

Hydroponic growing consists of keeping the root system moist with an enriched water solution holding the necessary mineral elements essential for plant growth. This can be done with or without a growing medium. If you use a growing medium, the growing medium should be inert and pH neutral so it can't interfere with the mineral elements being delivered to plants. The growth rate and yield will normally be higher when gardening with hydroponics, if you change the nutrient solution on a regular cycle.

With hydroponics a new nutrient solution is constantly being delivered to the growing medium, leaching away the old nutrient solution and bringing new mineral elements to the roots. The more frequent that the nutrient is made fresh the faster the growth will be. Once the solution gets into contact with the root system, the mineral elements that have been dissolved into the water have begun to be absorbed. When you completely remove the old nutrient solution and make a fresh solution, you will see faster growth. When using the same nutrient solution over time, with each passing day you will notice a slow down in growth. Change the nutrient solution again and the speed in which the garden grows is faster. The longest that a nutrient solution should be given to a plant is about 4 days. When you top up a nutrient solution, always use plain pH adjusted water. Never use a nutrient solution to top up the reservoir, even if it is a milder form. By changing the nutrient solution often, it gives us the opportunity to grow our plants closer together. It also gives us healthier, larger plants and flower clusters and faster growth. Making much better use of our growing facility.

One of the biggest fears in the 1930's through to the 80's was the spread of diseases through the interconnected piping used to deliver the nutrient solution. This is still true today. The longer the hydroponic system operates, through cuttings or long-term use of the same plant, increases the likelihood of diseases. Most hydroponic growers use a recovery system, where the nutrient solution is returned to a reservoir, and the nutrient solution is redelivered to the plants. Professional greenhouses usually return their

nutrient solution to waste, which means that they don't reuse nutrients, cutting down the chances of an invasion of bad bacteria.

Common problems to soil and hydroponic growers

There are over four hundred types of moulds, parasites, bacteria and viruses that can attack your plants. There are good and bad bacteria and fungi in soil. Good bacteria are never a problem to the grower. The grower usually will benefit with higher yields from the toxicity of the good bacteria and fungi in the growing medium. Good bacteria benefit the plants by making organic mineral elements more available to the plants. Bad bacteria will attack the good bacteria and inhibit this from happening. Viruses behave differently however. When a plant gets a virus, it can never recover. It is best to look for a new plant specimen for your next crop.

Organic fertilizers for hydroponic growth:

Because of the sterility of a hydroponic system, there is a lack of good fungi and bacteria, which is needed to help break down the mineral elements, and therefore, the growth can be considerably slower. We recommend the use of fertilizers (mineral elements), which have been properly balanced with all the 14 mineral elements that a plant requires from the soil. They are already in their ionic exchange capabilities.

Organic fertilizers for soil:

In outdoor gardens, if we always add fertilizer, then we destroy the natural balance of fungi and bacteria. Without the natural decaying process, new nutrients will not be delivered to the soil. At this point, you as a gardener will see a lack of growth and probably decide to start supplementing the soil with more fertilizer.

Organic fertilizers for soilless soil:

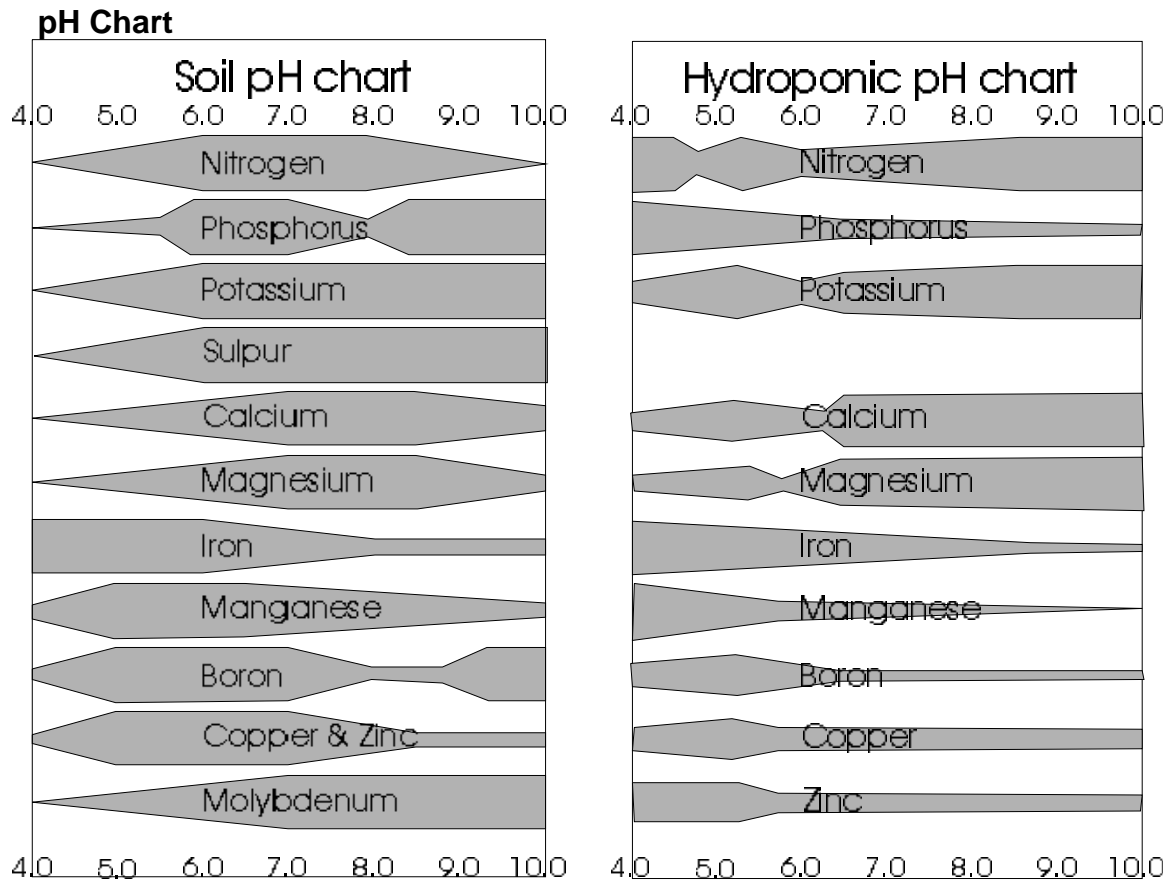
We recommend the use of Ectomycorrhizal fungi tablets¹ for use in indoor container gardens using a soilless soil. Soilless soil has been sterilized to ensure there are no unwanted seeds, bugs, bacteria and fungi present. Without reintroduction of dead vegetation such as leaves, trees, grasses, shells, bugs and animals, there is very little fungi food to break down into inorganic properties.

pH: What is pH?

pH means potential of Hydrogen ions. All mineral elements have a specific pH range; which means that the mineral element can become more available within certain pH ranges. The scale is from 0 to 14 with 14 being the highest for alkalinity and 0 is the

¹ Ectomycorrhizal fungi tablets contain the following: *Pisolithus tinctorius*, *Rhizopogon roseolus*, *Rhizopogon fulvigleba*, *Rhizopogon villosuli* and *Rhizopogon amylopogon*.

lowest for acidity. Most life on this planet tolerates a range of pH between 4.5 and 8.5 without suffering too much harm. The pH within the higher and lower ranges will not allow for as much chemical availability. (See chart on page 5). By adjusting the solution's pH to between 5.5 and 6.0, we can potentially provide the plant with more mineral elements and/or nutrients. Each fertilizer manufacturer should provide a proper range of pH to benefit their nutrients the most.



A & B per liter of water, the chemical potential is set on the inside of the plant's root system. Decrease the ml by 1 ml per liter of water creating a higher need for certain mineral elements. Now, start the flowering cycle at the same ml strength as for vegetation 1 ml more than where flowering levels normally start. The plants' natural ionic exchange should have a higher negative and positive need within the plant; therefore, absorbing more mineral elements (fertilizer salts), and triggering faster growth and flowering. Plants are not unlike us...the more you get, the more you want. Don't forget Plants have the capability to adjust the pH of the growing medium. This allows the mineral salts to become more available by releasing the chemical potential of that element within its desired pH range. When you garden in soil, use a container that is large enough to allow the roots to spread out. Otherwise, they will be growing around and around, and on top of each other in the bottom of the container. When the roots lay

on top of each other and are not being separated by the growing medium, the plants cannot react with the soil collides to release the mineral element. When you allow this to happen, you will be lowering your capacity for higher yields. If the roots were separated by soil particles, then they will be able to find new mineral elements. More nutrients, more yields!

If we deliver a nutrient solution without adjusting the pH, certain elements will not be available and precipitation will occur. Remember that very little Iron (Fe^{++}), Manganese (Mn^{++}), magnesium (Mg^{++}) and Zinc (Z) is available to plants in a pH range above 7. With Phosphorus (P) and Molybdenum (Mo), the availability of the mineral elements will be reduced with a pH above 6. Iron (Fe), Phosphate (P), Calcium (Ca), Calcium Sulphate and Phosphorus (P) can form Calcium Phosphate ($\text{Ca}_3(\text{PO}_4)_2$); a precipitation that occurs above pH 6.0. All three above elements will be reduce once the precipitation of C and P start to take place. A word of caution: If you are on well water and your pH is higher than 9 from the tap, and the parts per million are higher than 350, the levels of bicarbonate ions will be present enough to inhibit other ions (plant food) from being utilized by the plant. If you are growing with hydroponics and this type of tap water, your yields will be lower. We recommend that you look for a different water supply or alternatively, switch to soil. For soil, make the required amount of nutrients for each watering. The soil collides will retain the minerals and release them back to the soil solution and the plants will be able to feed on the nutrients. Make only enough nutrient solution for that watering. If you decide to continue to grow with hydroponics and you see precipitation in the water solution, then your nutrients have locked up and they are not available to your plants, nor will they ever be available to the plants roots. Keep in mind that some forms of precipitation that occur are not visible to the naked eye.

Many manufacturers of plant food build their plant food to be pH stable. pH buffers such as 2-(N_morpholino) ethanesulfonic acid – abbreviated to MES will stabilize the nutrient solution. We, at Growing Edge Technologies (G.E.T.) build our plant food without pH stabilization capabilities, allowing the grower to monitor the nutrient solution and fix a situation before it becomes a problem with yield.

By monitoring the pH of the hydroponic nutrient solution, the grower can monitor the health of a plant. If the pH of the nutrient solution continuously rises then the plant is healthy and actively feeding. Do not allow the nutrient solution to climb above pH 6.5. Change nutrient solution, even if it is before the regular nutrient schedule change. There are two main reasons why the nutrient solution can drop in ph value. One is by not providing adequate volume of nutrient solution. If the volume of water containing mineral elements is not enough then the alkaline ions, such as, Ammonium Nitrate (NH_4^+), Potassium (K^+), Calcium (Ca^{2+}), Magnesium (Mg^{2+}) will be utilized by the plant or plants quicker. Use a Parts Per Million (PPM) Electrical Conductor Meter to monitor the strength of nutrient solution. When the nutrient solution drops by 200-ppm you have to change the nutrient solution. Use 1 liter of nutrient solution per 4 days on small or young plants and up to 10 liters for large tomatoe plants. The second reason is that the plant is fighting off an invasion of bad bacteria in the root zone.

Now, when the plant is sick, does the plant just stop growing or absorbing water? No. If a plant is under attack by viruses or diseases, the plant will secrete a secretion that lowers the pH of the surrounding area, in its attempt to kill the bacteria. In hydroponics, the pH of the nutrient solution will fall and other plants in the hydroponic system might get infected because of the interconnecting tubing. The pH will crash even faster, depending on the volume of water. All of this means lower yields. What do I do if I notice the pH dropping and I want high yields? Once the pH starts to drop, it is time for **ROCKET POWER**. Our ROCKET POWER is designed to give the plant such a kick-start, that the plant will have to restart growing again. If the plant does not start to grow again and all conditions have been provided, then we suggest to G.E.T. a new plant to start growing again.

Because of the nature of chemistry and to G.E.T. the most out of ROCKET POWER set the pH at 5.2 and completely submerge the plant roots, in order to eliminate all of the oxygen surrounding the root ball. After 45 minutes remove the plant and wash off excessive solution. When using Let's Grow and Bloom. Change nutrient solution daily. This will help ensure the bacteria won't get a chance to build up to dangerous levels again while your garden is in recovery mode. After 4 days, resume the normal schedule. Monitor closely the pH for dropping in value. Repeat application of ROCKET POWER if pH falls again. This process is easy to notice for Hydroponic gardening. Soil or soilless methods of growth cannot be monitored as accurately as hydroponics for pH dropping. There are pH test kits that can be used for testing the soil pH. A visual way is to look for a lack of growth or dullness in the leaves. Plants leaves should have a healthy vibrant shine to them.

Regular feeding formula: Try this method first, gain confidence, then try the Power Feeding or a variation of this formula and enjoy! When harvesting plants that have only leaf harvesting value, such as herbs & lettuce use just the vegetation formula. For plants that produce flowers, fruits or vegetables, start introducing the flowering formula when the plant is mature enough. The charts on page 8, 9, 10, 11, 12 and 13 are to help guide you.

The Micro nutrient incorporated into Let's Grow & Bloom is used to keep the plant healthy. The A & B concentrates are designed for accelerated growth. They are also used to agitate the plant for it to produce more oil content. See our product description.

Power feeding: An interesting alternative to regular plant feeding.

Have you had a friend that has gone on a diet, lost 30 – 40 pounds only to regain more weight once the diet is over? We can apply nutrient solution in a similar manner for similar results. The best time to put your plant on a diet is just before introducing the flowering food. The pressure of the mineral elements at the root system is 4 ml of Let's Grow to adjust all the other requirements like, light, heat, water, air and carbon dioxide.

Day 1 starts as soon as the seed breaks through the growing medium. Once the light (artificial or sun light) illuminates the leaves, then the plant is ready to utilize nutrients. Chose one of the following charts that best suits your stage of growing.

LEAF CROPS SUCH AS LETTUCE OR HERBS

With most herbs and lettuces we consume only the leaves. When the leaves are the part of the plant that we grow to eat, then use the following chart.

Leaf crop's Let's get started

All mixing is per 10 litres of water

The different stage's of plant life.				
Stage	Let's Grow A & B	Power Thrive	Let's Start	Dip to Grow*
Cuttings	20 ml of each	40 ml		See * for info
Transplanting	30 ml of each	20 ml	20 ml	See * for info

Insecticide use | 4 ml Power Thrive per 1l water; mist plants with P.T. after insecticide has dried.

Grow adjust the pH to 6.1

Use the following Growth formula until you or your garden is ready to introduce the flowering stage. You may grow for one day or grow in vegetative stage indefinitely.

The decision to flower is for the gardener!

Stage	Let's Grow A & B	Power Thrive	Let's Start
Week 1	40 ml of each	20 ml	20 ml
Week 2	40 ml of each		30 ml
Week 3	40 ml of each		30 ml
Week 4	40 ml of each		30 ml
Week 5	40 ml of each		30 ml
Week 6	40 ml of each		30 ml

Keep using this method of delivery of plant food as your garden grows. Pick healthy leaves and consume them in your favourite recipes. Herbs, Lettuce, Celery, and Carrots (root crops such as carrots, stop feeding plants nutrient solution, feed just plain water to allow the tap root to search for food. After 2 – 3 weeks resume feed chart to allow tap root to develop), Potatoes we will have a new formula in 2007 that will increase your yield by 1.5 to 4.5 tons per acre. Just waiting for university trails to finish.

Use the grow formula until the garden is ready to be harvested.

*Dip to Grow, transplanting: for small root balls use right out of bottle, dilute Dip to Grow for larger transplants.

*Dip to Grow foliar feed; mix 10 ml of Dip to Grow with 1 litre water, mist plants until spray mixture starts to run off leaves. This will reduce moisture lost from plant leaves.

Soil Let's get started

All mixing is per 10 liters of water

The different stage's of plant life.

Stage	Let's Grow A & B	Power Thrive	Let's Start	Dip to Grow*
Cuttings	20 ml of each	40 ml		See * for info
Transplanting	30 ml of each	20 ml	20 ml	See * for info

Insecticide use | 4 ml Power Thrive per 1l water; mist plants with P.T. after insecticide has dried.

Grow adjust the pH to 6.1

Use the following Growth formula until you or your garden is ready to introduce the flowering stage. You may grow for one day or grow in vegetative stage indefinitely.

The decision to flower is for the gardener!

Stage	Let's Grow A & B	Power Thrive	Let's Start
Week 1	40 ml of each	20 ml	20 ml
Week 2	40 ml of each		30 ml
Week 3	40 ml of each		30 ml

Use the bloom formula until the garden is ready to be harvested.

Flowering adjust the pH to 5.7

stage	Let's Bloom A & B	Power to Bloom	Power Thrive	Let's Flower	Let's Fruit
Flowering week 1	30 ml of each		20 ml	20 ml	
Flowering week 2	30 ml of each			30 ml	
Flowering week 3	30 ml of each	1 gram		30 ml	
Flowering week 4	30 ml of each	See * for info		30 ml	
Flowering week 5	30 ml of each	1 gram			30 ml
Flowering week 6	30 ml of each				30 ml
Flowering week 7	30 ml of each				30 ml
Flowering week 8	Follow week 7 or Rinse * the soil with water to allow plants to utilize any nutrients within plants leaves before harvest.				

*Dip to Grow, transplanting: for small root balls use right out of bottle, dilute Dip to Grow for larger transplants.

*Dip to Grow foliar feed; mix 10 ml of Dip to Grow with 1 liter water, mist plants until spray mixture starts to run off leaves. This will reduce moisture lost from plant leaves.

*Power to Bloom; as you watch your garden flower, you will notice the plants producing flowers very rapidly around the 3rd week.. This is the critical time to make sure that Power to Bloom is readily available in the growing medium.

*The Rinse Solution is a product that is designed to allow the plant to utilize the fertilizers within the plant, producing a much sweeter tasting produce. Or use plain pH adjusted water to rinse leaves of excessive nutrients.

You as the gardener will learn a lot about feeding your plants. By trying our products at different strengths, different times, will give you different out comes. So experiment a little to create your own personal feed chart that will depend on the environment you have provided for your plants.

Power Thrive Soil Let's get started

All mixing is per 10 liters of water

Stage	Let's Grow A & B	Power Thrive	Dip to Grow*
Cuttings	20 ml of each	40 ml	See * for info
Transplanting	30 ml of each	20 ml	See * for info

Insecticide use | 4 ml Power Thrive per 1l water; mist plants with P. T. after insecticide has dried.

Grow adjust the pH to 6.1

Use the following Growth formula until you or your garden is ready to introduce the flowering stage. You may grow for one day or grow in vegetative stage indefinitely.

The decision to flower is for the gardener!

Stage	Let's Grow A & B	Power Thrive
Week 1	50 ml of each	40 ml
Week 2	50 ml of each	40 ml
Week 3	50 ml of each	40 ml

Use the bloom formula until the garden is ready to be harvested.

Flowering adjust the pH to 5.7			
stage	Let's Bloom A & B	Power to Bloom	Power Thrive
Flowering week 1	40 ml of each		40 ml
Flowering week 2	40 ml of each		40 ml
Flowering week 3	40 ml of each	1 gram	40 ml
Flowering week 4	40 ml of each	See * for info	40 ml
Flowering week 5	40 ml of each	1 gram	40 ml
Flowering week 6	40 ml of each		40 ml
Flowering week 7	40 ml of each		40 ml
Flowering week 8	Follow week 7 or Rinse * the soil with water to allow plants to utilize any nutrients within plants leaves before harvest.		

*Dip to Grow, transplanting: for small root balls use right out of bottle, dilute Dip to Grow for larger transplants.

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Hydroponics Let's get started

All mixing is per 10 liters of water

The different stage's of plant life.				
Stage	Let's Grow A & B	Power Thrive	Let's Start	Dip to Grow*
Cuttings	20 ml of each	40 ml		See * for info
Transplanting	30 ml of each	20 ml	20 ml	See * for info

Insecticide use	4 ml Power Thrive per 1l water; mist plants with P.T. after insecticide has dried.
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Grow adjust the pH to 6.1

Use the following Growth formula until you or your garden is ready to introduce the flowering stage. You may grow for one day or grow in vegetative stage indefinitely. The decision to flower is for the gardener!

Stage	Let's Grow A & B	Power Thrive	Let's Start
Week 1	50 ml of each	20 ml	20 ml
Week 2	50 ml of each		30 ml
Week 3	50 ml of each		30 ml

Use the Bloom formula until the garden is ready to be harvested.

Flowering adjust the pH to 5.7					
stage	Let's Bloom A & B	Power to Bloom	Power Thrive	Let's Flower	Let's Fruit
Flowering week 1	40 ml of each		20 ml	20 ml	
Flowering week 2	40 ml of each			30 ml	
Flowering week 3	40 ml of each	1 gram		30 ml	
Flowering week 4	40 ml of each	See * for info		30 ml	
Flowering week 5	40 ml of each	1 gram			30 ml
Flowering week 6	40 ml of each				30 ml
Flowering week 7	40 ml of each				30 ml
Flowering week 8	Follow week 7 or Rinse * the soil with water to allow plants to utilize any nutrients within plants leaves before harvest.				

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Power Thrive Hydroponics Let's get started

All mixing is per 10 liters of water

Stage	Let's Grow A & B	Power Thrive	Dip to Grow*
Cuttings	20 ml of each	40 ml	See * for info
Transplanting	30 ml of each	20 ml	See * for info

Insecticide use | 4 ml Power Thrive per 1l water; mist plants with P. T. after insecticide has dried.

Grow adjust the pH to 6.1

Use the following Growth formula until you or your garden is ready to introduce the flowering stage. You may grow for one day or grow in vegetative stage indefinitely.

The decision to flower is for the gardener!

Stage	Let's Grow A & B	Power Thrive
Week 1	50 ml of each	40 ml
Week 2	50 ml of each	40 ml
Week 3	50 ml of each	40 ml

Use the bloom formula until the garden is ready to be harvested.

Flowering adjust the pH to 5.7

stage	Let's Bloom A & B	Power to Bloom	Power Thrive
Flowering week 1	40 ml of each		40 ml
Flowering week 2	40 ml of each		40 ml
Flowering week 3	40 ml of each	1 gram	40 ml
Flowering week 4	40 ml of each	See * for info	40 ml
Flowering week 5	40 ml of each	1 gram	40 ml
Flowering week 6	40 ml of each		40 ml
Flowering week 7	40 ml of each		40 ml
Flowering week 8	Follow week 7 or Rinse * the soil with water to allow plants to utilize any nutrients within plants leaves before harvest.		

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Outdoors let's get started

All mixing is per 10 liters of water

The different stage's of plant life.

Stage	Let's Grow A & B	Power Thrive	Let's Start	Dip to Grow*
Cuttings	20 ml of each	40 ml		See * for info
Transplanting	30 ml of each	20 ml	20 ml	See * for info

Insecticide use | 4 ml Power Thrive per 1l water; mist plants with P.T. after insecticide has dried.

Grow adjust the pH to 6.1

Use the following Growth formula until you or your garden is ready to introduce the flowering stage. You may grow for one day or grow in vegetative stage indefinitely. The decision to flower is for the gardener!

Stage	Let's Grow A & B	Power Thrive	Let's Start
Week 1	60 ml of each	20 ml	20 ml
Week 2	60 ml of each		30 ml
Week 3	60 ml of each		30 ml

Use the bloom formula until the garden is ready to be harvested.

Flowering adjust the pH to 5.7

stage	Let's Bloom A & B	Power to Bloom	Power Thrive	Let's Flower	Let's Fruit
Flowering week 1	50 ml of each		40 ml	20 ml	
Flowering week 2	50 ml of each			40 ml	
Flowering week 3	50 ml of each	2 grams		40 ml	
Flowering week 4	50 ml of each	See * for info		40 ml	
Flowering week 5	50 ml of each	2 grams			40 ml
Flowering week 6	50 ml of each				40 ml
Flowering week 7	50 ml of each				40 ml
Flowering week 8	Follow week 7 or Rinse * the soil with water to allow plants to utilize any nutrients within plants leaves before harvest.				
If weather permits keep feeding and add more weeks onto chart for the length of your outdoor season!					

*Dip to Grow, transplanting: for small root balls use right out of bottle, dilute Dip to Grow for larger transplants.

*Dip to Grow foliar feed; mix 10 ml of Dip to Grow with 1 liter water, mist plants until spray mixture starts to run off leaves. This will reduce moisture lost from plant leaves.

*Power to Bloom; as you watch your garden flower, you will notice the plants producing flowers very rapidly around the 3rd week.. This is the critical time to make sure that Power to Bloom is readily available in the growing medium.

*The Rinse Solution is a product that is designed to allow the plant to utilize the fertilizers within the plant, producing a much sweeter tasting produce. Or use plain pH adjusted water to rinse leaves of excessive nutrients.

You as the gardener will learn a lot about feeding your plants. By trying our products at different strengths, different times, will give you different out comes. So experiment a little to create your own personal feed chart that will depend on the environment you have provided for your plants.

A plant has different stages of growth; in the end the plant must produce a seed. The seeds are usually found in the fruit or flowers of the plant. A plant will usually devote most of its energy to the formation of the seed once the flower is pollinated. You can manipulate a plants growth, such as bonsais, by restricting the needs of a plant. In the same manner you can manipulate a plant to make it grow and bloom heavier by providing key mineral elements at different times and in different amounts.

**REMEMBER LOOK AFTER YOUR GARDEN AND YOUR GARDEN WILL LOOK
AFTER YOU!**

I HOPE YOU HAVE ENJOYED THIS ARTICLE.

Written by William Sutherland

To help you put all this information together, we have more information below, about the other requirements that will make your garden Grow! Read on my fellow gardener!