

GreenCoast Hydroponics

Advanced Nutrients Schedule

Details and All.

- Change reservoir every 7 days
- Keep pH between 6.1 - 5.3
- Only add additives whenever you change out reservoir (once a week)
- Add Nutrient to keep TDS at desired ppm level as needed (daily)
- Use only RO or Distilled Water

Reservoir Maintenance

- Add all Additives First (brief description of functionality below)
 - SensiZym** - Collection of Enzymes. Digests dead and dying plant proteins which can be harmful to the roots. Speeds up metabolism. Promotes new root growth.
 - B-52** - Ascophylum Nodosum. Cytokinins. Has b - vitamins for stress relief. Increases plant metabolism while strengthening immune system. Note: *we suggest 1/2 strength until Plants are strong*
 - Humic Acid** - Helps with nutrient and water absorption, and speeds up metabolism.
 - Fulvic Acid** - Accelerates cell division, increases root formation and root respiration, promotes uptake of nutrients by increasing permeability of plant membranes and increases drought tolerance.
 - Mother Earth Tea Blend** - Provides missing elements, beneficial bacteria, enhances fragrance, taste and oil production of flowers and fruits.
 - BudBlood** - Buffer Salt. Speeds up uptake of Potassium and Phosphorus. Promotes faster Bloom set.
 - Big Bud** - Rich in Potassium and Phosphorus. Dramatically increases growth, weight, resin and sugar.
 - OverDrive** - Increases girth and size of Flowers in Final 2-3 weeks. More resin, sugar, flavor!
 - Piranha** - Mycorrhizae, and Trichoderma Fungi. Dramatically increases root growth and resistance to diseases. Mycorrhizae are THE number one beneficial micro-organism. enough said.
 - Voodoo Juice** - Collection of 5 beneficial bacteria. Includes Bascilus Subtilis, and a Nitrogen fixer. Extremely good for the roots. Promotes new growth. Fights a plethora of potential pathogens.
 - Tarantula** - More beneficial bacteria to compliment Voodoo Juice. Extra protection. More root growth.
 - CarboLoad** - Carbohydrates. Matched to Plants internal amounts. Replenishes depleted levels. Also acts as food for beneficals. Essential in establishing colonies of 'good' Fungi and Bacteria.
 - Barricade** - Potassium Silicate. Hardens Cell Walls. More overall weight. Larger Yield. Added Protection in both roots and leaves against pathogen/insect attack.
 - Final Phase** - Flushing agent.
- Important notes about adding some of these Advanced Nutrient products:
 - Piranha - add slowly and mix thoroughly. Turn pump on after mixed well into solution. Mycorrhizae only have about 3 hours to get to the root zone and colonize. They need oxygen to live (aerobic organisms.) Also - Make sure you have no screen between pump and system. Piranha will clog this screen. Remove it before innoculating.
 - CarboLoad - pour slow, mix constantly; this will prevent lumping!
 - Tarantula - Most people add to small jar, mix it up and then use a syringe to apply to the roots with help of syringe. You can use a little less. Helps reduce dramatic pH swings(Up.)
 - You can use Barricade like pH up. Add it last and adjust pH with it. You might not use as much as is called for but that's o.k.
- Now add your nutrient to the desired TDS (ppm) level. *If Nutrient TDS is ever too high - Just add Water.*
- Check and adjust pH daily
- Make Sure you have air stones in reservoir
- Make sure water temp is 68-75deg F. 68-72 degF is ideal.
- Advanced Nutrients calls for a Reservoir change out every week. (You can stretch this. See below)

Other Maintenance

- Note: There is a lot of additives. You do not need to use them all. Ask us which can be cut. . . These comprise the 2+ program, and all work synergistically to increase your root zone and overall plant health.
- Make sure you have great drainage in trays/pots. No roots sitting in standing water!
- *Make sure you have great drainage in trays/pots. No roots sitting in standing water!*
- General Rule: Healthy Crop will bring ppms down every day, once you add water back to normal level.
- Check for Nutrient burn. if you see leaf tips yellow/browning or burning on edges of leaves, Lower your Overall TDS values. Do not let plants get necrotic spotting in the middle of leaves. If you see any serious burning - FLUSH reservoir and re-do nutrients at 200ppm lower than before.
- Always look for signs of overwatering - Plants get heavy saggy look and feel to them. Adjust water timer.

Specialized 2 Advanced Nutrients Feeding Charts:

You have before you either a 20 Gallon or 40 Gallon Feeding chart for Veg and Bloom. You will have to decide if you are going to use Medium or Heavy Strength. If a specialized chart is needed we can make one up for you. Different Additives are used at different points to promote unique results within your plants --- Accelerated root growth, disease/pathogen resistance, metabolic enhancement, tougher cell walls, faster cell division, and more are all addressed in this program. You are on one of the most cutting edge feeding programs available. Take a moment to look over the chart and check the pattern of the **TDS levels** going up and down for various phases/weeks, recognize trends, *notice how certain additives are being used and then ultimately phased out.* Once a week you will drain and fill res. w/ fresh RO water, then add your additives, then your nutrient to desired TDS, then adjust pH. During the course of the week add nutrient and bring to correct TDS level.

Seedlings or Cuttings:

Use **SensiGro 2 Part** (for main nutrient)

If starting from seed you will want to build your TDS up. You will start at 300-400ppms after the seed cracks. To Crack the seed soak in warm water between a damp paper-towel for a couple of days. Once crack, move to ready-gro cube. You will bring TDS up 200 or so ppms per week until at 1000-1200ppms for Bloom.

Note: **B-52, Piranha, Voodoo Juice, and Sensizym** are all good at this stage. (After first roots developed.)

If Using Rooted Cuttings, you will want to start your clones off at the same TDS that the parents were kept at. If you do not know what that level was, than a safe place to start is at 800 - 1000ppms. You will be looking for new growth on the tops of the plant before we can safely put them into the vegetative stage.

Note: One of the major problems people have with cuttings is that they throw them under too intense of a light source. Clones are coming from an area with a low intensity of light and extremely humid conditions. Make sure your HID light is high at first and lower it 6" a day until desired height is reached. Also spray plants occasionally with **Liquid Karma**, and preferably a wetting agent like **Penetrator**.

Vegetative Stage:

Use **SensiGrow 2 Part** Nutrient

If starting from seed - you will raise your ppms up to 1000-1200ppms throughout this phase. You will want to start at 300-400 ppms. For the first 2 weeks you will coddle your plants and tend to their every desire. You will then raise the ppms 200 per week. Look to see if there is any damage at all to their leaves. If yes, lower the TDS! Steadily raise ppms every week until you get to 1000-1200ppms. You should be able to follow the Bloom chart/map in this hand-out. You may have to start week 1 at 1100 instead of 1200. If this is the case, raise ppms 100 every week until you get to 1500 in week 5 (instead of week 4.) ASK US for Advanced Veg sched.!

If starting from rooted Clone - You will want to keep your plants in the 1000ppm - 1200ppm range for entire veg. cycle. No Higher levels needed. *Yes. You can start rooted cuts at 800 -1000ppms! That's where parent was.*

Before adding Nutrient:

Add Each of your desired additives.

Now add Nutrient to desired TDS (ppms)

You will want to maintain your pH at 5.8 - 6.1(6.2).

Here is an example of a 3 week vegetative schedule (starting from cuttings/clones of your favorite plant(s):

Week 1 - TDS - 800 (Fresh Reservoir)

Connect Air Stones to Air Pump and submerge in water, making sure they work.

Set appropriate on/off times on irrigation pump timer. - Make sure to CONNECT PUMP to TIMER & it is ON!

Start Your Reservoir by adding RO water

Next Add **SensiZym, Voodoo Juice, Piranha, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 strength,) **and Barricade.** (Check Nutrient chart - specific amounts / Changes w/ reservoir size, and strength.)

Now add **SensiGrow** - bring TDS to 800 ppms. Adjust daily, making sure it stays at 800 ppm all week. Adjust **pH to 5.8-6.1** (Most Plants will now be at **pH 6.0**)(But plants are specific, experiment.)

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Make sure your growing pot(s) and tray(s) have excellent and COMPLETE drainage!

Check water temp after 1-2 days. Make sure it is between 68-72 deg F. This is extremely important to get right.

Week 2 - TDS - 1000

Drain and clean Reservoir. Refill reservoir with RO water.

Put Air Stones back in Reservoir - be sure they are plugged in and working.

Next Add **SensiZym, Voodoo Juice, Piranha, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 strength,) **and Barricade.** (Check Nutrient chart - specific amounts / Changes w/ reservoir size, and strength.)

Now add **Sensi Grow** - bring TDS to 1000 ppms. Adjust daily, making sure it stays at 1000 ppm all week.

Adjust **pH to 5.8-6.1** (You will have to play with pH - between 5.8-6.1.)

Make Sure Tray(s) and Pot(s) are draining completely.

Make sure you Irrigation PUMP and TIMER are still ON!

Make sure Reservoir temperature is between 68-72 deg F. (Check 1-2 days after - make sure it is still on point.)

Week 3 - TDS - 1200 (Drain and Re-Up Reservoir)

Check water temp after 1-2 days Make sure it is between 68-72 deg F.

Start Your Reservoir by adding RO water

Connect Air Stones to Air Pump and submerge in Water, Making Sure they work.

Next Add **SensiZym, Voodoo Juice, Piranha, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 strength,) **and Barricade.** (Check Nutrient chart - specific amounts / Changes w/ reservoir size, and strength.)

Now add **Sensi Grow** - bring TDS to 1200 ppms. Adjust daily, making sure it stays at 1200 ppm all week.

Adjust **pH to 5.8-6.1** (You will have to play with pH - between 5.8-6.1. Dial it in over course of week 1.)

Make Sure Tray(s) / Pots Drain.

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Fruit / Flower Stage:

Use **Sensi Bloom 2 Part**

Use all **2+ Additives** at various points along the way.

Follow your Individual Advanced Nutrient 2+ Feeding Chart for amounts and when and what to add.

Below is a list of pH and additive trends to be aware of:

Week 1 - Add **BudBlood, Piranha, Voodoo Juice, Tarantula.** No **B-52.** **pH 5.8**

Week 2 - Introduce **BigBud,** Add **Piranha, Voodoo Juice, Tarantula.** No **B-52,** No more **BudBlood.** **pH 5.8**

Week 3 - Introduce **B-52,** Keep on **BigBud,** We suggest more **Piranha** and **Voodoo Juice.** **pH 5.7**

Week 4 - Still **BigBud,** still suggest more **Piranha,** and **Voodoo Juice** (no **Tarantula.**) **pH 5.6**

Week 5 TDS - Last week of **BigBud,** Up to you whether to cut **Piranha, Voodoo?** **pH.5.5**

Week 6 TDS - Introduce **OverDrive.** **pH 5.4**

Week 7 TDS - Keep on **OverDrive.** **pH 5.3**

Week 8 TDS - **FLUSH** either 4-7 days from being done. Use Final Phase **pH 5.6**

- Notice pH goes down from 5.8 to 5.3 and then back up to 5.6 for FLUSH.
- Look at your 2+ Feed chart. Notice that the TDS (ppms) climb from week 1 and peak at week 4-5.

GC Note: We believe in substituting **Liquid Karma** (1- 2tsp. per Gallon,) instead of **B-52** during bloom. When adding **Liquid Karma** please note: that it contains fulvic acid. Therefore either cut the **Grangma Eggys Fulvic Acid** out of the diet or reduce to 1/2 strength. When adding **Liquid Karma** reduce **Humic Acid** to 1/2 Strength. We don't cut it out completely because it ads a nice earthy flavor. We also add **Tarantula** at half strength during the first 2 weeks of Bloom. **Tarantula** is a great additive containing a vast number of beneficial bacteria which help in an array of different ways. It will raise the pH and is grainy. Adding at 1/2 concentration can help reduce these side effects. Also some growers add **Tarantula** to a medium size jar of 80 deg water and shake it up real good. Then add this to the base of the plants (at the roots.) Make sure that you evenly disperse.

You will harvest anywhere from weeks 7-10 of Bloom. At that stage you will need to Flush. Use **Final Phase**. You can see that the general trend here is to raise your TDS up from 1000-1200 at week 1 all the way up to 1500-1800 over the course of the first 6 weeks of bloom; and then back down slightly before Flushing. (Note that some plants need more than 8 wks to create fruits/flowers - up to 10 weeks. Adjust accordingly. Just keep TDS at 1500-1800. Call or Come into 'the' Shop and we will help modify your schedule for you!)

Note: If at any point you see rust colored spotting, leaf tip burn, discoloration around leaf edges, yellowing of newer leaves, etc. lower TDS by 200. If gets worse, drain / Flush Reservoir. Check pH daily!

Working with this many additives can be a tricky endeavor. It can however, be very rewarding in the long run because your fruit/flowers will be more aromatic, have more flavor, and generally look very beautiful. Working with Advanced Nutrients can also increase your Yield anywhere from 15% - to as much as 100%. Trouble is that if Trouble comes knockin' - It will be hard to identify the problem, because you are adding so many different substances to your reservoir. Best thing to do - CALL US! Please pay good attention to your plants and again --- If signs of nutrient burn are observed - lower TDS. Check your pH - make sure it is on point.

Also Note: We are assuming that you will be changing your reservoir out each and every week. This is what Advanced Nutrients (the company) expects and calls for. You can "cheat" on a few of these weeks. Your best - OPTIMUM - results will occur if you do not cheat and actually change your reservoir each week. But, for those who are feeling lazy, or whose pockets aren't deep enough (heh heh,) or who just don't believe it really matters so much. . .You can skip changing the following weeks: week 3, and week 5. During these weeks you can just top your nutrient and water off. Do not add any additives. Just adjust pH and maintain TDS values for given week. Again if you have any questions concerning this CALL US!

You don't have to sterilize the reservoir between each week. Only sterilize the reservoir between each crop / cycle; after each complete round of growing. Otherwise you can just drain your reservoir and then just refill it to its appropriate Full level.

Here is an example of an eight-week bloom schedule: (For best results, transfer this onto a real calendar!)
---For TDS values look to your **Feed Schedule**.

Week 1 - TDS 1200 (Drain and Refill Reservoir, Add **Bud Blood**, Build microbial colonies.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between 68-72 deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Voodoo Juice, Piranha, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength,) **Carboload, and Barricade**. (Feed chart has amts. / Changes w/ res size, and strength.)

Add **Bud Blood**.

Now add **Sensi Bloom** - bring TDS to desired level. Adjust daily w/ **Sensi Bloom** all week, keeping TDS good. Adjust **pH** to **5.8**

Make sure Tray(s) and Pot(s) are draining completely.

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Week 2 - (Drain and Refill Reservoir, pH shifts, Add **BigBud**, Raising colonies of Beneficials.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between 68-72 deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Voodoo Juice, Piranha, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength.) **Carboload, and Barricade.** (Feed chart has amts. / Changes w/ res size, and strength.)

Add **BigBud.**

Now add **SensiBloom** - bring TDS to desired level. Adjust daily w/ **Sensi Bloom** all week, keeping TDS good.

Adjust **pH** to **5.8**

Make sure Tray(s) and Pot(s) are draining completely.

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Note: At this point you should see fluffly, fuzzy, beautiful HEALTHY roots. You should see a cotton like fuzz which shows you that your Mycorrhizae are blossoming and thriving. This should be used as an indicator for all your microbes. If healthy and thriving, we will now be cutting out the Voodoo Juice and Piranha, and just adding Carboload; which will feed these Beneficials. If perchance, these microbes are not doing so hot, or in a week or two start dying off, consider adding more Voodoo Juice and Piranha.

Week 3 - (Drain and Refill Reservoir, pH lowers, Maintain **BigBud**, Maintain colonies of Beneficials.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between **68-72** deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength.)

Carboload, and Barricade. (Feed chart has amts. / Changes w/ res size, and strength.)

Add **BigBud.**

Now add **SensiBloom** - bring TDS to desired level. Adjust daily w/ **Sensi Bloom** all week, keeping TDS good.

Adjust **pH** to **5.7**

Make sure Tray(s) and Pot(s) are draining completely.

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Week 4 - (Drain and Refill Reservoir, pH lowers, Maintain **BigBud**, Maintain colonies of Beneficials.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between 68-72 deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength.)

Carboload, and Barricade. (Feed chart has amts. / Changes w/ res size, and strength.)

Add **BigBud.**

Now add **SensiBloom** - bring TDS to desired level. Adjust daily all week.

Adjust **pH** to **5.6**

Make sure Tray(s) and Pot(s) are draining completely.

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Week 5 - (Drain and Refill Reservoir, pH shifts, Approaching TDS highs, Maintain colonies of Beneficials.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between 68-72 deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength.)

Carboload, and Barricade. (Feed chart has amts. / Changes w/ res size, and strength.)

Add **BigBud.**

Now add **SensiBloom** - bring TDS to desired level. Adjust daily w/ **Sensi Bloom** all week, keeping TDS good.

Adjust **pH** to **5.5**

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Week 6 - (Drain/Refill Reservoir, pH lowers, Peak TDS, Add **OverDrive**, Maintain colonies of Beneficials.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between 68-72 deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength,)

Carboload, and Barricade. (Feed chart has amts. / Changes w/ res size, and strength.)

Add **OverDrive**.

Now add **SensiBloom** - bring TDS to desired level. Adjust daily w/ **Sensi Bloom** all week, keeping TDS good.

Adjust **pH** to **5.4**

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Make sure Tray(s) and Pot(s) are draining completely.

Make Sure Roots are still healthy. Almost at the home stretch!

Week 7 - (Drain/Refill Reservoir, pH lowers, Maintain **OverDrive**, Maintain colonies of Beneficials.)

Drain and Refill Reservoir using RO water

Check water temp after 1-2 days. Make sure it is between 68-72 deg F.

Connect Air Stones to Air Pump and submerge in water, Making Sure they work.

Next Add **SensiZym, Humic and Fulvic Acid, Mother Earth Tea, B-52** (add at 1/2 -full strength,)

Carboload, and Barricade. (Feed chart has amts. / Changes w/ res size, and strength.)

Add **OverDrive**.

Now add **SensiBloom** - bring TDS to desired level. Adjust daily w/ **Sensi Bloom** all week, keeping TDS good.

Adjust **pH** to **5.3**

Make sure you CONNECT Irrigation PUMP to timer and it is ON!

Make sure Tray(s) and Pot(s) are draining completely.

Week 8 - (FLUSH!)

Check Water temp - it should be between 72-77 deg F.

Add **SensiBloom** and bring TDS up on a daily basis.

Adjust **pH** to **5.8**

FLUSH either at the beginning of this week and ignore the below. or after 3 days Flush for final 4 days.

Read Flushing notes below. If 3-4 Days before done keep OverDrive going!

Flushing:

To flush, drain reservoir 4-7 days from finish. Fill with fresh water. Add **Final Phase**. Add Nutrient, raise TDS to level for Flush week on Feed chart. Run for 1-2 days. Drain Reservoir. Repeat process (add Final Phase) and run until fruit is ripe. Some feel 3 Flushes is *even* better. One a day until last flush which runs for 2 days.

General Notes:

If at any point you see evidence of disease (persistent major pH shift, foamy / slimy-ness in the reservoir, large scale root death.) You will need to clean and sterilize the reservoir and trays. Flush out the pots and trays with a copious amount of water. Bleach as much of the hydro system as possible, including tubing, pump, reservoir and trays. Bleach will kill diseases, but is also toxic to plants, so be sure to rinse well before re-using. Refill reservoir and re-dose. Be prepared to Flush the system every other day until the problem is solved.

Again, look for any signs of stress. Anything at all, If you see any discoloration, or any damage to the roots. Call us! or come in and talk with us about it! *We can help.* We can help - If its not too late!

Disclaimer

We are in no way responsible for your results. Results are not guaranteed. Environmental Conditions can change any end result. We are not responsible for other people's mistakes. This is a generalized recipe for tomatoes and cucumbers in particular. Use a TDS meter. Maintain pH. Use RO water. Change Out Reservoir. Call us with problems. This recipe is intended for legal use only.