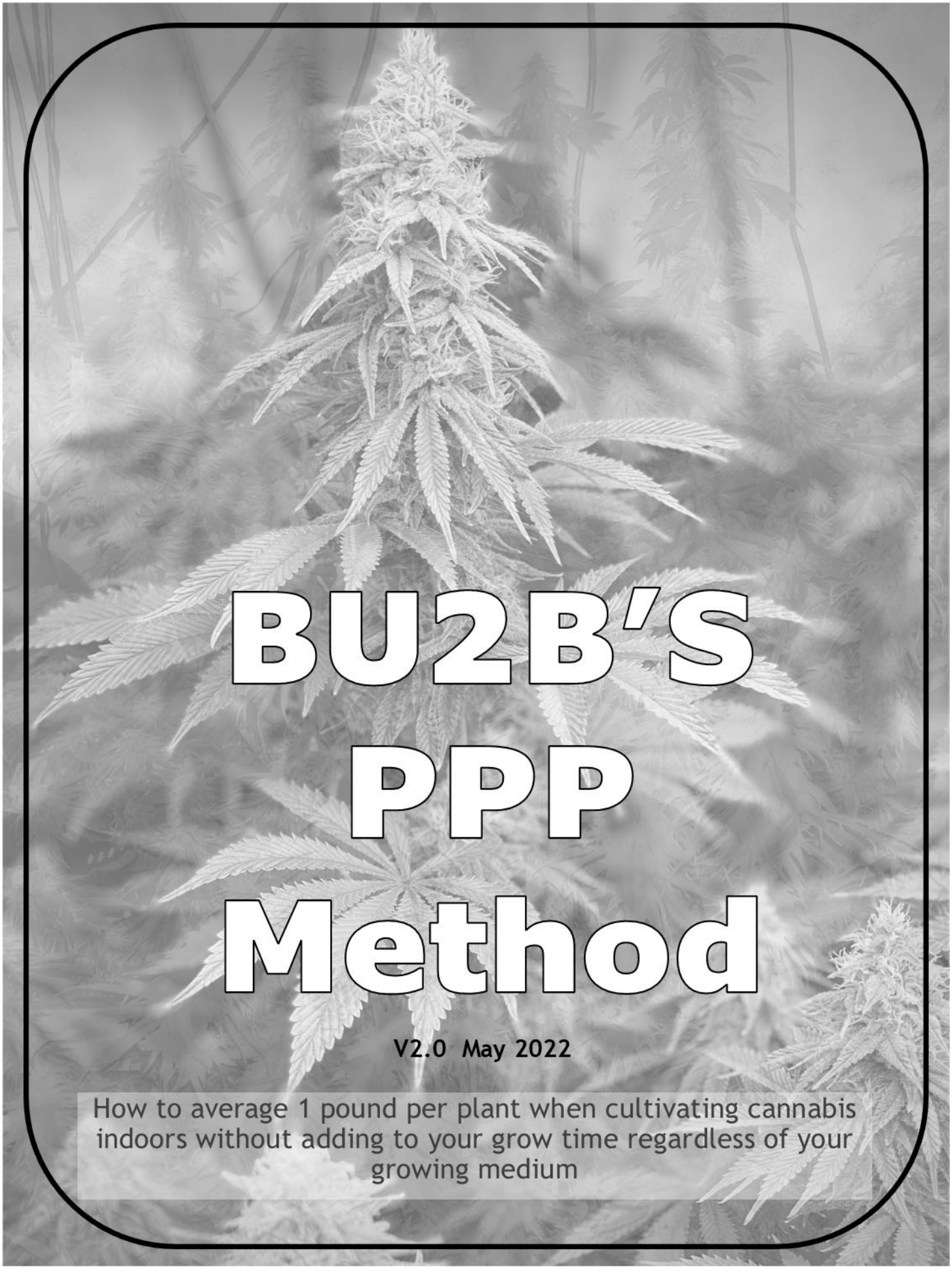


# BU2B'S PPP Method

**V2.0 May 2022**

How to average 1 pound per plant when cultivating cannabis indoors without adding to your grow time regardless of your growing medium

# bu2b's ppp method

**How I average a pound per plant: BU2B's PPP Method**

***Updated March-May 2022***

This article was adapted from a series of posts on the GWE forum in the Fall of 2020 (https://forum.growweedeasy.com/forum/growing-community/463292-how-i-average-apound-per-plant#post464333). The innovative growing method was very well received, and I was asked to expand it into a formal article

Many growers have put this method to use with good success and some helpful and insightful questions and comments have arisen that I hope this update will clarify. The addition of 3D modelling images helps to illustrate the BU2B PPP method more clearly.

This is how I average a pound of trimmed and dried bud per plant and how you can too with no additional time for the grow. I have decided to name the method: "The BU2B PoundPerPlant Method" or BU2BPPP for short. My avatar name BU2B is from a song by RUSH, *"I was Brought Up 2 Believe, the universe has a plan..."* and PPP is for PoundPerPlant.

My hope is that people reap the rewards not so much that I get the credit. It would seem wrong to patent a natural plant process. I don't think you can take credit for the plant doing what it does naturally, though it is my pleasure to show you how to get your plant to do what it does all on its own.

A special thank you to all of you for tuning in, I've been wanting to do this for a while. Nice to know people are interested. Please, if you find any of the information useful, and the results are worth the effort put into them; SHARE IT! I don't have all the answers to growing, but I do know about this method because I've been using and refining it for a while. I feel that not sharing what I learned would be worse than putting my method to scrutiny by others.

**A Reminder**

*"When you've lost your way*
*Colors start to fade*
*Take a look within*
*Find your offering*
*Hold it to the sun*
*Let your spirit run*
*Remember*
*Remember find your center"*
T.Hall

This article will be utilizing Deep Water Culture (DWC) hydroponics growing Northern Lights, but it should work just fine for any growing medium and most any photo period feminized seeds. I will be addressing photo period feminized seed grows only. I'm sure there are a myriad of methods out there that work just fine and produce a nice harvest. But I have been using this method for many years now and it's the one that works for me. Adjust it as needed for your goals, set up and circumstances.

***To get the best out of this method, use it as a guide, not scripture.***

**First, A Word about Nutrients & Lights**

The photo below shows all core nutrients that I use. ph-UP, and Epsom salts are not pictured, but are used as needed. Your choices may be different but should include a well-rounded cannabis specific nutrient or nutrient mix and your choice of bud enhancer. I use the *gh flora grow trio* because they offer a hardwater version which I need for my location. I find the ph perfect trio of *Bud Candy, Big Bud & Flawless Finish* works well and covers all the bases.


**Please note -** with the exception of the ph perfect trio I NEVER use full strength nutrients. I use a 3ml dropper pipette in place of the standard 5ml teaspoon. Believe me, your plants will do just fine with about half the label-recommendation for nutrients. An added plus is that measuring with a pipette is a breeze.

I am going to skip over a tutorial on germination. I figure at this point everyone knows how to germinate a seed. More than likely, you already have your own method; either paper towel and baggie or sowing the seeds directly into their growing medium for germination. If anyone has any questions regarding germination, let me know and I will be happy to address them, otherwise, we'll consider the topic covered.

For those who have not read NebulaHaze 's tutorial on modified manifolding I think you will find it very helpful and in line with what I am going to cover. There is a good chance that much of the information will be in Nebula's tutorial as well - but in a different way that will make it easier for you to understand.

The tutorial can be found here: https://www.growweedeasy.com/manifold
While this tutorial will work for any cannabis strain, you will have better results with strains whose leaf nodes are closer together or with strains specifically bred for large bud packs (like White Fire OG x Big Bud).

This tutorial and method are specifically for indoor growing under lights. I have changed light brands several times since I have started growing indoors, but I have always used LED's. When the decision was made to begin growing indoors cost was a real issue. The cost and heat generated from light sources other than LED continues to be, the main reason I not only started with LED's, but also continue using them.

I have found that your plant's will pretty much soak up and use whatever light you can provide. There is no shame in using lower wattage light panels if it is all your budget will afford. I have used light LED sources from as low as 20w up to 3000w (light output estimated in "Equivalent Watts" by the manufacturer NOT actual watts from the wall). If you are using LED's and you are looking to maximize your yields and improve overall plant health while keeping down temps in your grow area, I would highly recommend the newer TS (True Sun) panels and/or COB as the way to go. For reference, the plants shown in this tutorial (unless displayed with a clear 'blurple' hue) were grown using a Mars Hydro TS3000 lamp.

This isn't the place for a "physics of Light" tutorial, but it is a critical factor for any grow. Search YouTube for "Dr. Bruce Bugbee" for a complete education on the subject.

**On With the Show**

The initial training begins early in a young plant's life, and you are 80% done within 4 weeks. This method or any High Stress Training (HST) should only be carried out on healthy and thriving plants. For your sake, and your plant's, never start hacking away at a plant that is struggling just to stay alive.

You are going to veg your plants for the standard 8 weeks before kicking them into flower. Start with a good healthy young plant. I know growers who, try to keep the plant 'as natural' as possible, by adding 4 to 6 hours of darkness to their daily vegetation cycle. You are free to do as you like, but during vegetation mode, it's perfectly safe for your plants to have 24 hours of light as darkness is NOT required UNTIL you are ready to kick your girls into flower. My personal preference is for 24 hours of light during vegetation.

Once your plants have gotten 4 sets of leaves, (don't count the first sprouting leaves – cotyledons) you are ready to begin. If your plant had a rough start or if you are a little unsure about clipping your plant when it's so tiny, you can wait until node set number six. If your plant is doing great and you are confident enough that you know what a sprouting node looks like earlier is better. Generally, your plant is going to be about 2 weeks old when you begin the initial training.

Snip off the growing tip of your plant between nodes 3 and 4 being careful not to damage the two growing tips above the 3rd set of leaves. You want 3 leaf sets below your initial clip. The length of the branch stub left above your node isn't of any 'real' consequence – the important thing here is to NOT damage the growth tips at the nodes. Regardless of how long you leave the stub above the node, it will eventually, dry up and fall off.

When you are done topping your plant, you will have something that looks like the image above. Don't worry too much about time - if your plant takes a little longer to get to 4 nodes that's perfectly fine. Remember your veg time is not going to change, and you will need to work at the speed your plant grows NOT a given amount of time.

Allow your plant to grow as usual. Keep doing what you would normally do for a plant that is 2-3 weeks old. About a week after you topped your plant you are going to remove all the leaves below your initial topping except for the two large fan leaves below your new growing tips. I find that if your plant is healthy and has at least two nodes per each of your new branches that will work just fine.

When you are done with phase two of training your plant should look like the one to the right. You can see the two remaining fan leaves below our two new branches. Everything below that has been trimmed away.

Depending on your plant, this phase of training, initial topping & lower trimming, should be completed by week three or the start of week four.

And... guess what? You are 80% done at this point, but the last 20% will kick your flower harvest into overdrive, I promise.

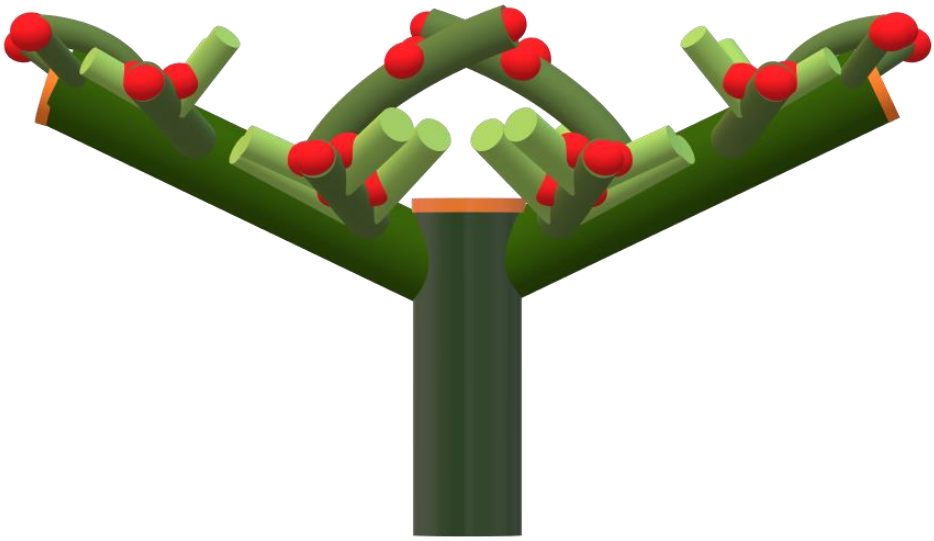
**General Plant Care, The Importance of a Level Canopy, and Low Stress Training**
Before proceeding, let's take a minute to describe the techniques we will be using. To be quite honest I have seen some amazing grows that were pretty much left on their own - which speaks as much about the hardiness of cannabis as it does the growers skill. We are truly lucky to be working with a plant that can put up with just about anything and thrive. We are going to assume you have made it this far with a healthy and vibrant plant. Now we will show how, with a little loving guidance, your plants can be "encouraged" to produce much higher yields. And that is where B2BU's PPP method really kicks in.

As you will see below, we're now ready to shape and prune our plant in productive ways. If you are not familiar with these techniques, they can be a little daunting, so follow along with clear eyes, a little faith, and an open heart.

**The Level Canopy**
Keeping your canopy level has several benefits; not only will it keep exposed growth tips to the maximum amount of light but it will also help you judge which of the new growth tips that are being created just under the canopy to keep when it comes time to flower. As you will see, creating a level canopy and leveraging it to selectively encourage strong bud growth is the heart of this method.

Your level canopy's other benefit is to not only limit undergrowth, but it helps you determine which if any of the growth tips just below the canopy are worth opening a spot for. The importance of keeping a level canopy with Low Stress Training (LST) during vegetation mode becomes obvious when your girls kick into flower mode. It not only allows top flowering branches to get the most light, it also helps you determine which growth tips just under the canopy are worth keeping, won't block other sites, and eventually develop into large bud packets.

If you allow your plants to grow upward from the initial Y topping at around a 45 degree angle your plant will reward you with a relatively level canopy.



## Low Stress Training (LST)

This technique is invaluable in creating and maintaining the level canopy. It involves physically bending the plant's branches into the shape you want to create. It can be a little daunting the first time you try it since you are forcing tender little branches in directions that aren't natural. There are also some risks involved since branches can be damaged or even break off entirely if you aren't careful. A little finesse is required.  There are several excellent LST tutorials available on GrowWeedEasy.com and if you aren't already familiar with LST you may want to refer to them before proceeding.

## Begin Low Stress Training

Thus far we have gotten our plants up to a healthy 4 weeks old, topped it once and removed all leaves/branches below the initial Y cut - in this session we're going to get our training and the 'work' 95% complete.

As your plant grows you want to 'gently' fold down and restrain your two new branches, so they are growing as horizontal as possible. As your plant grows new node sets will grow out. It will produce leaf nodes in sets - two horizontal and then two verticals. You want to remove all the nodes that are facing downward. For example, if your branch is growing nodes will appear rather like a "+" sign if viewed from the top (when growing vertical) or straight on from the end of the branch (when growing horizontal).

Unlike a traditional manifold, you want to leave all the nodes/branches/leaves on your plant EXCEPT for those that grow downward. If viewed from the end of the branch your stem should look like an inverted "_|_". By about week 4 your plant should look like the ones shown above.

As your plant continues to grow you want to keep it horizontal without breaking or damaging your two new branches while still allowing a slight amount of upward angled growth.

Remove all growth on the underside of your two branches. As the plant develops you want to remove the large fan leaf that will be over the second node growing upward. In the image below you can clearly see where the large fan leaf over the upward growing node has been removed.

As long as your plant is still healthy and doing well, continue in the same vein for around a week, removing all nodes that grow downward, keeping your plant as horizontal as possible, and removing all large fan leaves from above all upward growing nodes.

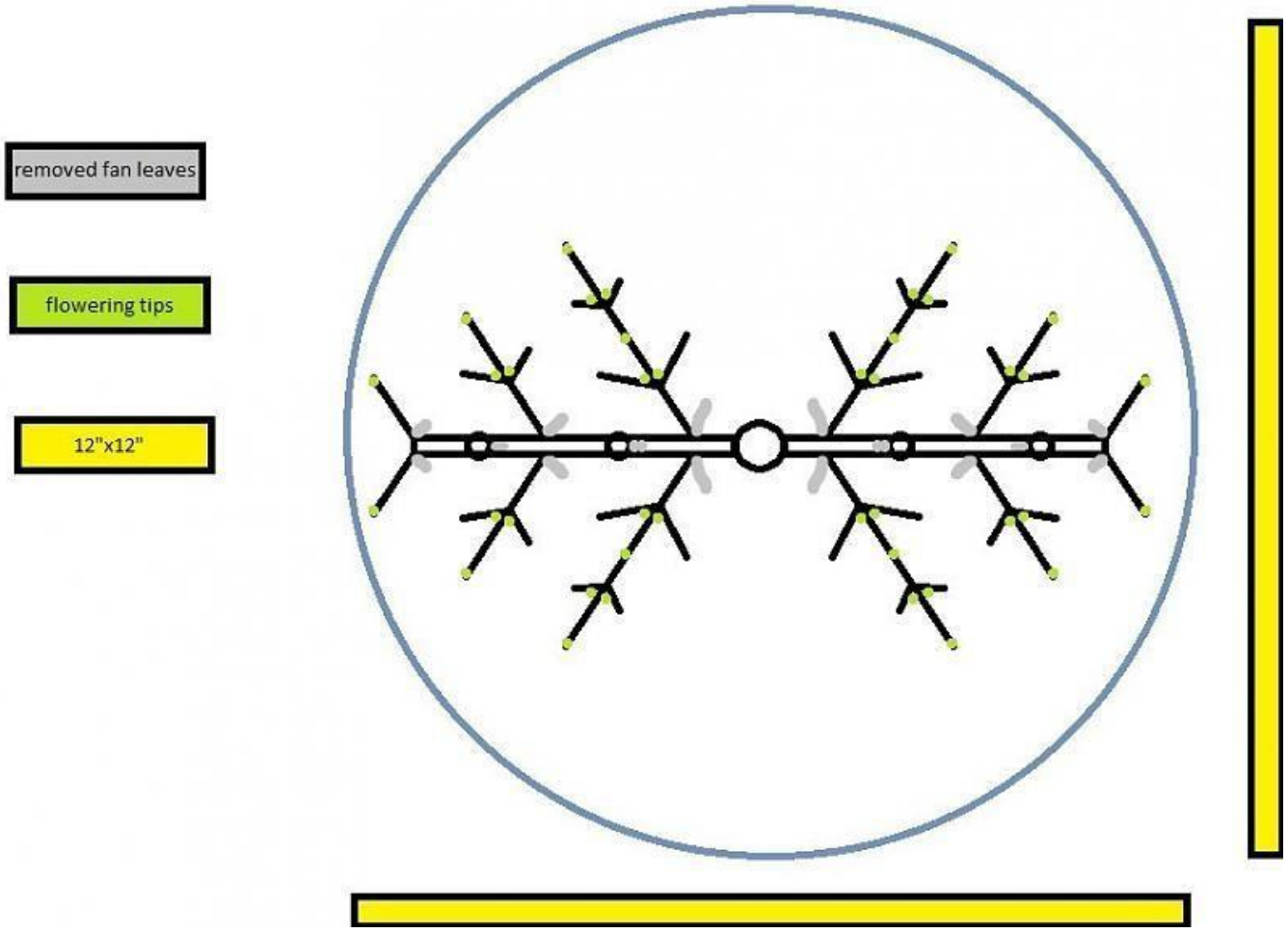
This image is from a FIMmed plant with 3 main branches.

**Secret Sauce: Strategic Topping**

When your plant has grown to the point that there are 3 branches growing on each side of the two mainline branches we are going to 'top' the ends of each of them. You should have 3 branches on each side of your two new branches growing horizontally and 3 branches growing upward on each side of the Y.

You are basically topping each end of the two “main” branches (each side of the Y) at the end making it split, just as you did for your initial topping that created your plants Y structure. You want to do this when the plant has 3 horizontal 'sets' of leaves. When you top just after the 3rd horizontal node you will have 8 growing branches on each side (including your two vertical branches).

I am hoping that if a picture paints a thousand words that a diagram is worth at least a few hundred. Here is an image viewed from above after topping. This shows your core plant structure and the 44 flowering growth tips we are shooting for.

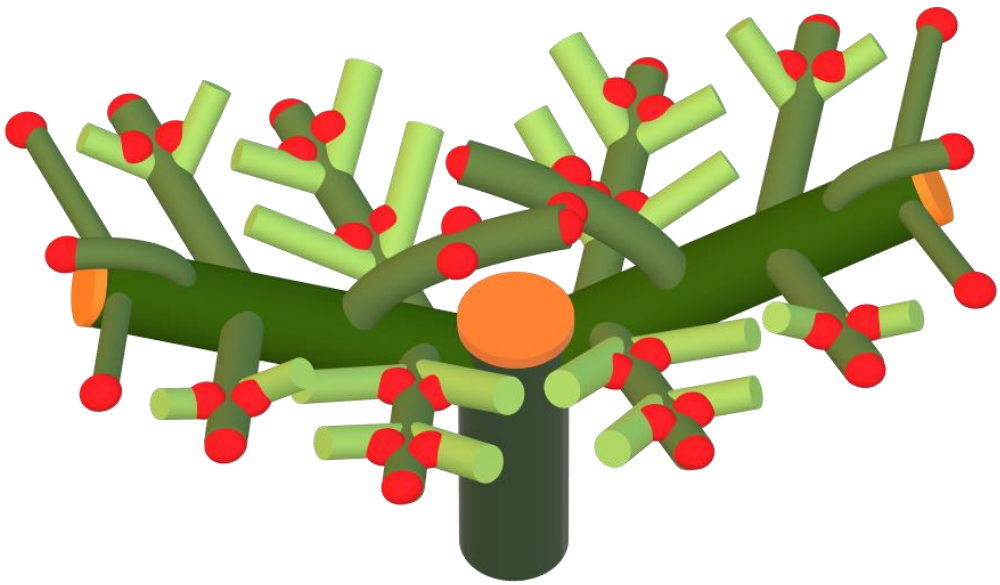



If your plant has a basic structure like the one above, you will already have 44 flowering branches on your plant (including the 4 upward growing of your 'new' horizontal branches on either side of the Y). Count em so you really understand that number. Each side has 20 green dots (flowering tips) and there are four more growing straight up along the central axis.

There have been many questions regarding topping and overcrowding. The original diagram showing growth tips, while technically correct, is more clearly displayed in the 3D version below. While it clearly shows where topping has occurred it also clarifies an issue with the original graphic which showed ‘NODES’ on the first branch out from the Y that appear to be upward growth nodes that I usually remove. The improved graphic also shows growth tips and LST direction for the 4 upward growing growth nodes.

BU2B's PPP Method 3D Plant Layout and Training Structure

- ALL downward facing growth removed from each side of the initial Y topping
- RED = Flowering growth tips
- DARK GREEN = Main Branches
- GREEN = Side Branches
- LIGHT GREEN = Stem
- ORANGE = Indicates where the plant was topped
- Side branches have only horizontal growth (ALL vertical growth is removed until a diameter of about 12 inches) when each side branch is allowed to grow upward
- Every 2 nodes of growth on the plant will produce 32 additional flowering growth tips beyond the 44 shown in the 3D model (44+32=76)



You can leave upward facing growth on your side branches, however doing so will significantly crowd or shade 4 nodes.

**How many is too many?**

The number of flowering tips grows exponentially as your plant grows new nodes. That leaves us with an important choice. You can continue 'topping' each branch growing off your main Y, and you will end up with more flowering tips. What you want to consider is that you are spreading the growing area of each branch to twice its size but adding only one more flowering branch as well as slowing plant growth. Beyond a point you get more, but smaller, buds and a longer grow time.

When you think about it the problem is pretty obvious. Your plant has a limited number of resources and the more flowering tips you encourage, the less “plant energy” each one will receive. Additionally, each time you top a growth tip the recovery takes time and energy away from overall growth. Finally, consider that 1 topping = 2 tips. Allow those to grow out then for a week then top again. 2nd topping = 4 tips (allow to grow out), top a 3rd time, 3rd topping = 8 tips. So, getting up to 16 growth tips before entering flowering can add an additional 3 weeks to your veg time.

With the BU2B PPP method you should already have over 44 'flowering tips' by week 6 - with more coming all on their own as the branches grow outward and upward until the end of vegetation week 8. Then we will be ready for the flowering phase.

Keep in mind that at the same time you are keeping an eye on plants basic structure, you are also doing regular 'indoor' plant maintenance such as defoliating to keep 'flowering tips' exposed, LST to keep your canopy level, and dealing with any health or pest issues.

Using my method for estimating yield (explained below) I’ve found that the original “Fab 44” will pretty much insure a pound of dried and cured flower from a medium to high producing cannabis strains.  Sticking to 44 branches will also allow you to open your plant up giving it more light and room to fill in. That allows for even fuller flowering branches.  The biggest problem people have with this method is not the growth, it’s which branches to keep and learning how many is too many for your individual growing set-up.  60 branches is a lot and 72 is probably too many for 2 plants in a 4x4 grow tent.

As your plant grows keep it as 'splayed out' as possible. The plant to the right has three branches on each side of the new branches and two growing upward.
To make the most of space on your plant I usually fold each of the two first vertical branches together as shown above so that there is no 'donut hole' in the center of your plant as it grows.
By week 5 or 6 your plant should be 95% done.

Let your plant grow as usual. Care for it as you would normally care for your babies, but DON'T remove any branches growing upward. Once your plant is about as big around as a 5-gallon bucket growth will be upward and outward.

By mid-week 6 vegging your plants should look similar to these two girls. Note: The two plants on stage for this tutorial are a Northern Lights Xtreme (the smaller one) and $100 OG on the right.

**Fine Tuning, Supercropping & Defoliation**
We have now gotten our plant up to 6 weeks of vegging and had already completed the initial plant training.

In weeks six and seven of your plant's life you are going to have some major choices to make.

**Should I Supercrop?**
If you've never super-cropped your plants before I will tell you, the first time I supercropped a plant it was the scariest thing I have ever done. You don't need to have a heart attack though, if done properly you're really not killing your plant, though when you see all those branches laying over your first reaction is likely to be "OMG! What have I done!" *Supercropping,is a high stress training technique. It is described in this tutorial:*
*https://www.growweedeasy.com/how-to-super-crop-marijuana*

I don't always super-crop my plants, in fact if I were to consider super-crop grows to number of grows I would say it's pretty darn close to 50/50. My reason for super-cropping or not can be variable - Is the strain known to have 'larfy' buds? Are leaf nodes close or far apart, - I find super-cropping more effective on plants whose nodes are a bit more spaced out. If leaf nodes are close you have a much higher chance of your buds becoming a substantial bud packet all on their own without super-cropping.

If you do decide to super-crop your plants, it will work great with this method and the last two weeks of vegging is the time. DO NOT wait until your plant has begun flowering to start supercropping! I find that by the time a plant has entered flowering and any stretch at all has occurred many, many strains will have developed hollow branches and super-cropping at this stage could be very problematic for your grow.

**General Approach to Defoliation**
The next very important choices are deciding which branches to leave, and which ones to remove. There is a point where encouraging more top bud sites decreases the size of the buds themselves and reduces your overall yield. As long as your plant is in veg mode, it is creating more flowering branches. You are going to have to choose which of your growing flowering tips are doing the best and have the best chance of growing to the top of the canopy. If there's no chance or less chance, you'll want to remove the growing tip/branch. In the long run all the crowded or covered growths will do nothing but pull the juice away from your flowers.

There is a very real danger in overdoing defoliation. In fact, one of the main issues I see with growing is defoliation. Regardless of our desire to do differently, it seems a lot of us humans, have a real tendency for extremes. This carries over to our care for our plants as well, as we have a predisposition to either not defoliate enough or strip our plants of needed leaves. There are some great tutorials on GWE on defoliation and all are focused on what really matters, your harvest. If you're having issues or questions about defoliation explicitly, I would highly recommend you take the time to look them up.
Here are a few to get you started:
https://www.growweedeasy.com/defoliation https://www.growweedeasy.com/schwazzing-cannabis
https://forum.growweedeasy.com/forum...flowering-auto

I have fondness for following what fellow GWE grower Canuck147 does when it comes to defoliation: Pick a set day of the week to do your defoliation and remove leaves covering bud sites. Why is this a good thing? If you have any obsessive-compulsive tendencies in the least or have a fear of damaging your plant; giving yourself a set day to defoliate can really help. It can keep you from picking your plant to death or from not defoliating enough.
I have some friends who grow who just don't do well unless things are methodically done, always the same, at the same time, with every grow. Unfortunately growing does not work like that. You must treat every grow, every plant, every strain, and every stage of your plants development as new - and as simply something that MUST be done to achieve the results you have in mind. Having a method, a system, and a predefined outcome gives you the foundation you need to achieve your goals.

Unless you are growing the same thing every grow, a 'do this at exactly this time' approach just doesn't work.

Regardless of your defoliation itinerary, each of your plants main flowering branches should be easily visible without looking like each one is a separate plant when it is in veg mode if you are using this method.

You may notice from the image above that there are a lot of leaves left on those girls. In veg mode, I keep branches defoliated and bud sites open, but not to the point they are completely exposed to the light. Ambient light can still get in, but they are not defoliated to the degree that I do during flowering. I think that if you leave most of the interior structure of your plant open to ambient light during veg mode and later remove the small undeveloped side branches off your flower branches (leaving the flowing node at the leaf/branch junction) you will have a more favorable outcome.  Keeping growth tips beneath the canopy exposed to ambient light instead of full light will also make these growth tips slightly smaller but will result in nodes that start further down your flowering branches. You are only keeping those tips from direct light for a week or two, but that does make a difference.

To sum up my growing philosophy: I have found that growing 'technique' is on equal PAR with lighting (pun intended). Any usable product from a grow is a victory and one that should be celebrated with a good dream cloud, but we are all here because we want to do better and want others to do better too. I truly believe there is not a photo strain out there that couldn't benefit from a good manifold training.

**Veg Mode Defoliation**

Once we have established our ideal 44 growth tip configuration, via selective pruning and LST, we let the plant grow normally. During that veg growth our plant will develop many more shoots and branches and we will methodically defoliate with the intention of allowing partial light into the undergrowth such that we encourage some but not all undergrowth growth tips to emerge above the canopy.

We achieve that end by scanning down each branch, looking for growth nodes that will (eventually) be allowed to grow out to harvest, and others that we determine are not viable. It's all about access to light, and the plant's resources. There are three levels to consider:

First, we trim to allow full light exposure to "The Fabulous 44," those nodes we have already created with low stress training and topping

Second, we trim to provide partial light to new "candidate" growth tips below the canopy that we want to keep. Partial light at this point keeps these nodes healthy but discourages them from developing too early and pushing out multiple side branches.
We pick the new candidates based on where they occur in order to "fill the holes" in our canopy, as well as their general health and size.

Finally, we remove those larfy understory branches that we don't want consuming precious plant resources. We leave fan leaves alone wherever they don't get in the way of our candidate growth tips. Viewed from the side our plant is fairly bushy at the bottom, thinner but selectively leafy at canopy level slightly shading the candidate buds. And, peeking above it all, the heads of our 44 main growth tips.

The goal is for our plant to enter flowering with a healthy supply of leafy foliage and 44 to 60 beautiful colas. We have our original Fabulous 44 and a new handful of candidate growth tips hovering just below the canopy going into the flowering stretch.

The guidelines above will keep you in the game, but defoliation is a balancing act and only practice and experience can ultimately guide you. In spiritual terms, we use our Zen Mind to envision the perfect realization of our vegging life form and assist it in achieving the oneness of the Tao.

**Begin Flowering**
To recap, we have sown our seed, sprouted & transplanted the tiny plant, then topped her and trimmed the lower branches. We tied down the two mainline branches and then selectively trimmed for a horizontal canopy with growth tips that are filling out our plant with about 40 flowering branches.

I do a short transition from veg to bloom, both in nutrients and lights. This generally takes 7-10 days (as each day I am increasing the total contiguous amount of darkness by at least 1 hour).

Though I do count the day the girls made it to 12 hours of darkness. I start counting flowering from the day I first see flowers (3-7 days after 'the switch') not from the day the darkness is at 12 hours.) Everyone may have their own way of counting - this is mine and works for me. It is really not that big of a thing. But, if you ever wonder why some people's plants finish at a different time for the same strain under the same general conditions, it may come down to just a simple matter of counting when flowering starts.

I find the same thing is true when it comes to vegetation time - many count week four for example at the start of the week not at the end of the week. Where I count week 4 day 2 some may count as if week 4 has already occurred and may report week 4 day 2 as just past 4 weeks.

Just before the transition to flower I do another cleanup trim removing extra leaves that cover potential bud sites.  I don't remove leaves unless they are blocking or will block a flowering growth tip within the next three weeks.

Just finished watering the girls - week 5 day 2 of flowering:

**Flowering Defoliation**

When in flowering mode - defoliation takes on an entirely new level of importance.
There are two base types of flowering when dealing with indoor photoperiod plants: Plants that do a lot of stretching during flowering will generally have more flowering from the top of the canopy (before flowering began) upward. Plants that do very little stretching during flowering will generally have more flowers from the top of the canopy (before flowering began) downward.

The majority of stretching during flowering occurs during the first 3 weeks. Both base flowering types will benefit from your defoliation efforts. For “Stretchy” flowering plants you can increase your flowering weight by opening up the plant allowing more smaller buds that left on their own wouldn't develop. For less stretchy flowering plants, defoliation can lead to substantially larger bud packets.

When it comes to the defoliation of for your plant(s) for flowering, I stick by these general guidelines:

- Defoliate your plant to expose nodes prior to kicking your plant into 12/12 for flowering.
- When your plant is 3 weeks into flowering remove all undergrowth that you are sure is never going to make it to the top of the canopy.  Remove large fan leaves covering all flowering sites and open your plant up to ambient light AND direct light.
- Continue to clean out undergrowth and keep bud sites open and exposed to light as your plant flowers.

It was not until preparing for this journal that I discovered what “Schwazzing” was, as a defoliation technique.  I was surprised to find that the general method I follow for defoliation of my plants in flowering mode has already been named and in use by many.

Though the discovery is different the defoliation method for flowering plants that I have described above is essentially the same as “Schwazzing” If you would like to find out more about the schwazzing technique read the Schwazzing tutorial found here on GWE: https://www.growweedeasy.com/schwazzing-cannabis

**Waiting for Harvest Time**

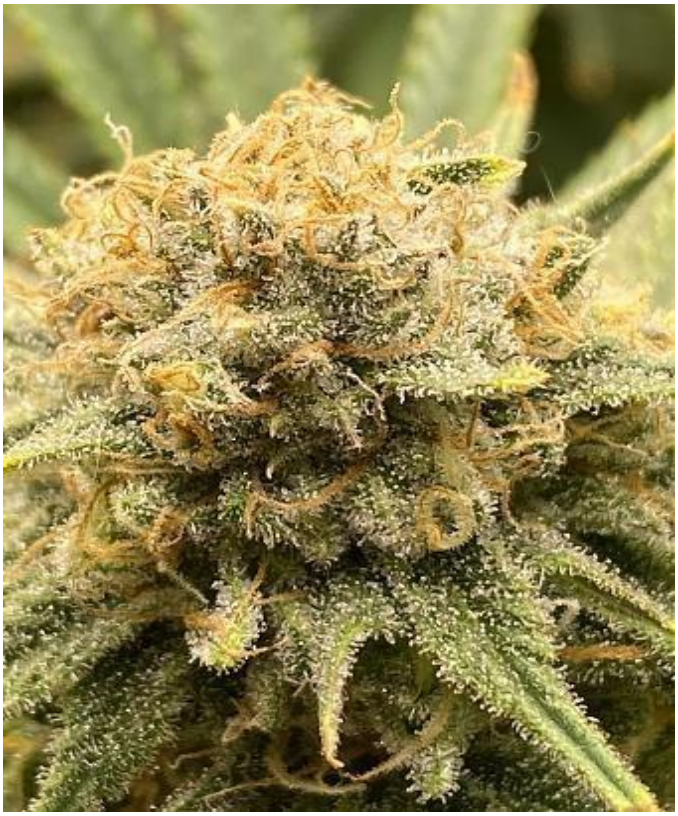
*Tomorrow,*
*And tomorrow,*
*And tomorrow,*
*Creeps in this petty pace till the last recorded syllable of time…*

*-Wm. Shakespeare*

When is the right time to Harvest? There is a lot of debate on the issue, but here are my thoughts on how to know if your plant is done or you're just done growing it.

*Do you go by the strain's general guidelines?*
*Do you estimate the percentage of red hairs?*
*Do you wait until trichomes are mostly milky, all milky?*
*Do you wait for a few amber trichomes or not?*

Yes, to all of the above. I think you do need to keep the specific strain's known flowering time in mind. Yes, you should watch the white pistils turning red, and of course you should check your trichomes to curate the character of your bud. All these can help you time harvest. But most important of all It's all up to you to choose the weight you give each method and how you apply it.



I'm pretty much an indica guy so you may want to take this information with that in mind.
But honestly, it is the same for all photo period cannabis when it comes to harvest time:

- Know your plant strains flowering time or have a good estimate
- When your plant is nearing the end of its known flowering time keep an eye on trichomes for your desired effect. Mostly clear - generally more energy, jumpiness (indica or sativa). Mostly cloudy - ideal for most folks. A few amber trichomes - couch lock is on its way. Mostly amber – zzzzz, CBN time.
- To get the added benefit of extra added weight allow your plants flowers to fully mature!

OKAY... so how do I know when my plants flowers have developed to their fullest?
As your plant nears harvest your flowers are going to look similar to the one shown above. Lots of trichomes, most of them cloudy, maybe 30% amber or more (depending on your preferences) and pistils have changed color; for all practical purposes it looks good to go.

***The Final Push***

Though I take all these things into account - here is how I determine if the plant is done or if I'm just done growing it. If your flowers have developed to their fullest you are going to find that they will give a 'final push' during their last 7-10 days.

Take a look at the following photos for examples. These buds show the Final Push in action. Notice the new growth pushing out of the buds? New pistils are lighter in color around your bud where Final Push growth is occurring.

This is also the time that your female plant, which up to this point has shown no indication it has male tendencies or is a hermaphrodite, can produce seeds. IF you keep an eye on your buds and notice new growth that previously looked finished, this is ***"The Final Push"*** and Harvest Time is upon us.

You can easily see new white pistils emerging among the earlier curled red hairs.

Here, again, look for new white pistils among mature growth, the Final Push!

This is your plant’s last attempt at making sure it doesn't go without progeny. The flowers are swelling, and the plant is doing its best to ensure that if there are any boys at all out there, they know she is still available.

***“Huc Venite Pueri ut Viri Sitis” (Come Hither Boys…)***

The Final Push growth is one of the best indicators I have found that your plant is done (or very near done) and should be harvested in 7-10 days to avoid possible seed development. Waiting until this 'final push' can add a substantial jumpstart to the weight yield of your harvest and help make your buds firmer.

In the past my habit was to always leave my girls in the dark the last 36 to 48 hours of their life. Whether this actually increases the THC level of your buds is debatable.  Evidence is mounting that cooler temperatures during flowering are of more benefit to the plants terpenes and trichomes than 36 to 48 hours of darkness just before harvest.

## Estimating Your Yield

In the end, it's all about yield, right? The thought of that sparkling natural medicine accumulating on our beautiful nugs sustains us through those long days of incremental progress.

If yield is the payoff, here's how I estimate final harvest weight for this method:

- Number of **full** flowering branches when your plant is six weeks into flowering (it should be defoliated enough to see all bud sites) divided by two. Before week 6 I find it's more of a hoping game when trying to estimate yield totals. (**Flowering branches / 2**)
- If branches are relatively full each two full branches will be about 26 grams.
  **(Flowering branches / 2) x 26 = Total Weight**
- Divide the total from the above by 28 to get number of ounces.
- EXAMPLE for the Northern Lights shown here, this how I estimated total dried and cured weight:
  **((((46 / 2) = 23) x 26) = 598 / 28) = 21.36 oz**

I find it pretty reliable actually. I always try to 'underestimate'; counting 4 branches that were not at the top of the canopy as two full branches. Keep in mind, depending on your plants flowering type a full branch can look completely different. If your flowers are more spread out, as long as they average the same amount as a flowering plant with close nodes - it still counts as a full branch. Of course, nothing is foolproof when it comes to estimating a harvest, you still have bud density to consider. But I found this to be close more often than not. If you're looking back on past grows and you see 8 colas of 6" or more about 4 oz is a pretty good guess for your grow.

Here's the BU2B PPP Method applied to our two different tutorial plants: At this point (with about 3.5 weeks to go) I'm estimating a minimum of 11 oz of flower dried and cured from each plant. Time will tell how close my estimate is.

## Harvest Day 5 December 2020

Anticipation ends and that happy day comes at last! The figurative and literal product of your hard work is realized in the form of stout branches of solid buds hanging upside down and growing piles of glistening sugar leaf trim in the bin. Harvest is the closing of one chapter and the beginning of a new series of dry & cure decisions standing in the way of final rewards. If you have followed this tutorial from the beginning, we hope you will share a part of our satisfaction with this outcome.

**BU2B PPP Grow Statistics**
Germination start date August 3, 2020 (paper towel & baggie method)
Germinated seeds planted in jiffy pod August 5, 2020
Germinated seeds pop the surface of Jiffy Pods (Official Start of Grow) August 7, 2020
Topping date August 18, 2020
Switch to 12/12 October 5, 2020
Start of flowering October 10, 2020
Harvest date December 5, 2020
Dry trim and popcorn buds 30.68g or 1.09 oz
Sugar leaf and popcorn buds 171.36g or 6.12 oz
Total bud weight 812g (29 oz even)
Total trim & popcorn buds 202.04g (7.22 oz)
Total grow weight - 1014.04g (36.22 oz)

***Sample Buds!***

So, let's cut to the chase, Here's the ***BU2B PPP Northern Lights***, before and after harvest.

**Northern Lights Tally**

Total time from Start to Harvest 4 months and 2 days

Final Dry Weight: Northern Lights - 453.6g or 16.2 oz

**…And the equally bountiful *BU2B PPP* $100 OG Harvest**

**$100 OG Kush Tally**

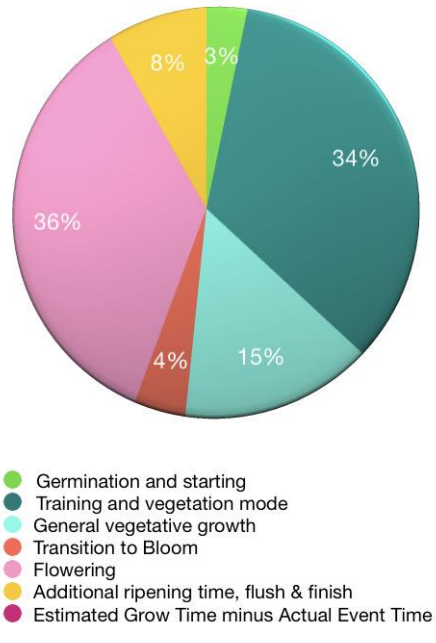
Total time from Start to Harvest 4 months and 2 days
Final Dry Weight: 358.4g or 12.8 oz

## BU2B's PPP Method Grow Timeline

| PPP Average Grow Time | |
|---|---|
| Average grow time including flowering | 112 |
| Transition to bloom & extra ripening | 10 |
| **Estimated time for the grow in Days** | **122** |

| Event Time in Days | |
|---|---|
| Germination and starting | 4 |
| Training and vegetation mode | 41 |
| General vegetative growth | 18 |
| Transition to Bloom | 5 |
| Flowering | 44 |
| Additional ripening time, flush & finish | 10 |
| **Total Actual Days** | **122** |

| Time remaining in Days | |
|---|---|
| Estimated Grow Time minus Actual Event Time | 0 |



**Happy Trails**

We are pretty much done here folks. I have outlined the method, given my ramblings and thoughts on nutrients, flowering types, defoliating and general plant care. All that's left now is to wait for the final outcome of the two plants in my current grow. I am *tentatively* setting the date of the final post of this journal as December 13, 2020. I will continue to post updates and as long as I find I don't ramble too much or repeat information already covered, I will also post thoughts and comments.

Please feel free to ask questions or make comments. I will do my best to answer your questions or at least point you in the direction where you 'can' find the answer if I don't know. It's quite possible someone already following the journal knows the answer.

If you find the information found in this journal useful, PLEASE pass the information on to others; I don't really care about getting any credit - I just want to share what I have found out with others. So once again, if the efforts are worth the rewards, please share.

If you find ways of improving on this method, I would like to hear about it... but other than that - The info is yours to do with as you see fit.

Have a great time growing. Be kind to each other (or someone's gonna be standing in the corner!), and remember it is the diversity that makes us strong. We all think differently, and to quote WookieFoot, *"We may not have it all together, but together we can have it all".*

Please note that a huge portion of my working knowledge when it comes to growing was gleaned from right here on GrowWeedEasy.com. I owe a huge debt of gratitude to the amazing people in the GWE community, SiriusFourside & NebulaHaze for a place to pool all the information together.

Please feel free to ask questions and make comments - even if I don't have the answer; someone on GWE will know and I will do my best to ensure that questions are answered. I am not afraid to say, "I don't know", if in fact, I don't - but someone will know.

**A special note of thanks to @grouchyoldman (who is anything but) for his effort and commitment to insure this document is what it is today. Without his hard work, skill and patience BU2B'SPPPMethod would have remained a grow journal. I bow to the buddha within you my friend. All my best, Always.**

## BU2B's PPP Method Q&A

Many interesting questions were raised as this method was unveiled in the original GWE forum postings. That conversation was valuable and below we have distilled the essence and present the queries and replies.  Thanks to everyone who participated.

***Can PPP be used with Autoflowers***

I think it is very fitting that one of Nebula's newsletters was on Autoflower strains. I'm sure some strains perform better than others though I do not grow autos as a general rule. It is just my preference.

That said, I have used this method on an autoflower plant - but not on purpose. I didn't know it was an auto when I started.  A year or so I had my strains all picked out and germinated for the next grow. I was really looking forward to both the Granddaddy Purple and the Black Mamba (both "feminized").

The Grandaddy Purple ended up being an Auto. I'd never grown an Auto before - to my way of thinking - the seed costs the same as a feminized seed, but you get only a few ounces from an Auto while the corresponding feminized plants I can usually get a pound per plant out of (using the BU2B PPP method). To me it just didn't seem like much of a comparison.

I now must change my tune a bit - in favor of Autoflower's. The Grandaddy Purple, "Accidental Auto," went from seed to within a week or two of harvest while the Black Mamba was just starting its flowering transition. I trained it out just like usual as I didn't know it was an auto, and WOW I'm glad I did! The resulting autoflower plant produced a pretty good seven-ounce harvest. It was quite impressive - especially for an Accidental AutoFlower!

I still don't know what strain it is - but it is nice to know that in a pinch you can go from seed to flower with a decent yield in about half the time it takes to train and flower out a photo period feminized plant.

I'm not sure it's time for me to change my grows from feminized photo's to Auto's, but it has given me something to think about as in just 9 weeks I got a nice harvest!

***Reduce Nutrient Levels?***

Nute companies are not dumb, the recommended amount on the label is generally the maximum you can give your plants with minimum ill effects. I always start low. If a plant lets me know it needs more nutrients, I use 1/2 to 1/3 of the manufacturer's recommended dosage. I can increase if needed. Nebula really helped it click for me when she described nutrients as multivitamins with environment and light as the major food sources. Giving your kids more multivitamins will not make them healthier (and will likely cause more harm than good), as the multivitamin is intended to fill the gaps in needed nutrients and minerals NOT as your child's major food source. To be honest I have NEVER had to add more full spectrum nutrients, though I have added cal/mag on occasion when the girls request it.

***How to use this method with clones:***

Hats off to you cloners! I have never been too good at making clones (I know, I know, like "small plants" - it's easy!) That is not to say I haven't been successful, just not consistent. This section addresses how to apply the BU2B PPP method to clones. Clones are slightly different in that nodes are offset along the branch, not paired as in a plant started from seed.

To use this method on a clone, you will want to start with a healthy clone and a new branch off the main branch. Pick a good side branch off the main growth tip that has about the same number of nodes as your main branch. If you don't have any actual branches (not just leaves) then start near the top of your clone with the next branch.

Your main branch is going to be one side of the "Y" we are creating and the branch you have chosen near the top of your clone is going to be the second side. Gently fold the plant over and restrain the main branch right at the node. You DO NOT have to 'top' your clone, you are making use of what is there naturally.

Though new nodes on your clone will be offset, the same principle applies. Remove downward-facing growth and follow the general guidelines of this grow method. We are trying to create the same "Y" shape using LST with three new branches on each side of the "Y." Allow your clone to grow normally until it has produced around 44 upward and side branching growth tips.

I don't think there's much doubt that the plant itself doesn't give a care if the nodes are not even. Below are images of a clone grown under BU2B PPP to give you just one idea on how to apply this method to your clone. I can't make your clones have even nodes - but as see you can see, in the end it's not 'much' of a problem.


The grown-out Clone nearing harvest.

***A note about chemical bud enhancers:***
I have used bud enhancers since growing indoors under lights and always in the amount shown on the label. This is the only nutrient I use at full strength. This has proven to not always be the healthiest choice for my plants.  If you are starting to see some nute burn before you kick your plants into flower) you should always use your bud enhancers at a less than full 'label' dosage.  Chemical Bud Enhancers are not for beginners, you need to know your plant *really* well first!

I have found that with chemical bud enhancers it is not uncommon to have some nutrient burn on your leaves. If you are not damaging your leaves to the point of making photosynthesis difficult, you are not going to damage your yield and some nute burn can be acceptable. While this is far from ideal, it is also not that unusual. If you can adjust so that you have no nutrient burn, that's the best of all possible outcomes. But do not be surprised or alarmed if you see leaf tips turning dark on the tips or edges, just keep an eye on it. Don't let it get out of control and ***keep in mind you're growing strong flowers not pretty leaves***. Your plants need enough healthy leaves to fuel good bud growth so use your judgement. If you kill off the leaves or have enough unhealthy ones so that photosynthesis cannot occur properly your harvest will suffer.

***Synthetic PGRs?***
NO - and really no! I have no intention to start doing so. For those who don't know what PGRs are, it stands for Plant Growth Regulators and they have been in use by the farming community for some time. Some of the most common active ingredients of modern Plant Growth Regulator or Plant Growth Retardants are: ancymidol, chlormequat chloride, daminozide, ethephon, flurprimidol, paclobutrazol and uniconazole. Keep an eye on your labels, or maybe just avoid them altogether.

There are health concerns which simply have not been answered yet and until they are, I would not recommend their use. To quote *High Times* "Despite healthier growth and increased resistance to fungus, pot grown using PGR's often has an inferior flavor and visual appearance, and the harshest critics point out that exposure to these compounds put consumers at risk of liver damage, cancer and infertility. These damning claims warrant further investigation of the safety of these chemicals on cannabis."

***Quadlining?***
I have used quad lining only once when doing a SCROG grow and to be honest the SCROG was so much tedious daily work for me that I literally could not 'physically' keep up with and do it justice. When I was 20 years younger? Maybe. I confess I was just fleshing out the details out on this method and I really didn't give the quadlining the chance it deserved.

The one issue I've seen with quadlining and this method, as others in our grow coalition have ventured forth, is that as there are no 'elbows' on the bottom branches I have seen them pull away (break off) from the main branch as they just get too heavy with flowers. But I am sure that can be addressed.

I do think that if this method was applied to quad - lining and you allowed your main branches to get a few more nodes on them before topping them that you would be looking at a MONSTER plant and bud producer that would literally limit you to one plant per 4x4 tent (not that that's a bad thing.) If anyone is up to giving it a try, please let us know your results.

***Humidity Control***

Living in the southwest having humidity too high is rarely a problem, but I have had high humidity leave some ugly white spots on my leaves that almost gave me a heart attack! When I do have an issue with humidity it is always during veg mode. I find that keeping a close eye on the plant and removing excess leaves really helps. Thinning them can bring your humidity down sometimes as much as 20%. My tent has active fan output and passive outdoor input. If you just cannot get the humidity under control your only viable option may be a de-humidifier.

***Crowded House: Less may be More***

I have found that four or more plants grown in a 4x4 tent do not produce any significant advantage in flower production or weight of cured flowers over two, just more work. Growing four plants in my tent, the dried and cured harvest per plant averaged about 6 ounces per plant. As an example, the four plant grow shown below produced 23 ounces. My next two-plant grow using the same technique produced 28!

It is easy to get carried away, hoping for that truly memorable MONSTER HARVEST. However, keep in mind that if you get too many flowering tips you are going to eventually run into the same issue with two plants in your tent as you would have with four.

Unless you are doing a SCROG grow there is just no way to effectively open up the plant in flowering to utilize those growth tips to their full potential. Creating a massive number of growth tips will only end up producing many more smaller bud packets that do not increase yield but do increase trim work when your harvest is done.

Your final yield in a crowded tent is likely to be smaller due to limited grow room size and the inability to open the plants up during vegetation & flowering. I still recommend about 40-50 flowering branches total before flowering begins.

***Bonus Tip: Super Easy Hash:***

Save your kief! Before jarring your buds run them through a bud spinner or use a 100 micron bubble bag or screen and give your buds a good shake before jarring them. Don't go crazy on them, you want some trichomes left on your buds. You won't hurt the quality of your smoke and you'll gather a ton of kief. Place your collected kief into your favorite decarb device (or an oven at no more than 225 degrees f for 30 minutes) for 30 to 45 minutes. Not enough to decarb your kief, but enough to melt it. Allow to cool - ta da! Get your dab spoons ready; you've just made 20 grams of deliciously aromatic and potent Hash! Image shows 20g compressed kief before and after being processed.


bu2b

I was brought up to believe the universe has a plan. We are only human It's not ours to understand. The universe has a plan, All is for the best, Some will be rewarded and the devil will take the rest. All is for the best; Believe in what we're told, Blind men in the market buying what we're sold. Believe in what we're told until our final breath. While our loving Watchmaker loves us all to death. In a world of cut and thrust I was always taught to trust. In a world where all must fail heaven's justice will prevail. The joy and pain that we receive each comes with its own cost the price of what we're winning is the same as what we've lost. All is for the best; Believe in what we're told, Blind men in the market buying what we're sold. Believe in what we're told until our final breath. While our loving Watchmaker loves us all to death. Until our final breath. the joy and pain that we receive must be what we deserve. I was brought up to believe