

First LED LIGHT Grow vs. HPS LIGHT Grow

**Note:* My knowledge of this process is a scratch on a gnat's ass, yet my enthusiasm is a bull in a china closet.

In concluding this journal things went rapidly and so my Summary is fast and equally furious. The science limited but the fun of perpetual harvest-always a good ride.

Indoor Environment:

- 5'x9' x 6'11" Gorilla Grow tent - NO Extension.
- 4-P600 Platinum Led Grow Lights.
- 5-gal Smart Pots.
- Carbon filter with 6"- 435 cfm Dura fan (outtake/exhaust).
- Dura Fan 4" input fresh air.
- 24/7 - T5 Florescent Veg.

Medium:

Cyco Platinum Series Coco Coir with Vigoro Pearlite 3 to 1 mix.

Nutrients:

- General Hydroponics Flora Trio.
- CaliMagic (Liquid Bloom-flowering).
- Added Terpinator entering week 4 of flower
- pH meter: Blue Lab pH Pen (very cool!).

Strains currently growing (via LED):

Kosher Kush, OG Kush, Northern Lights, White Widow from seed (LOVE SEEDS!) - 8 plants.

LST& DEFOLIATION:

Attempting first "**Schwazzing**" - method of defoliation (modified), topping and LST main colas.

Previously grown (via HPS):

AK-47 (2x), PPP, Black Jack, White Widow, Wonder Woman, Gold Leaf, Amnesia Haze, Sour Diesel, Jock Horror, Ice, OG Kush, Tangie, Lemon Skunk (germinated female seeds - I don't do clones).

Previously used Indoor Equipment:

400 watt HPS light (Sunleaves) in 3'x3' grow tent. Then **400-600-1000 watt HPS light** (Raptor) with dimmable ballast in 5'x5' Gorilla Grow tent.

**Note:* Vegetation happens with 4-T5 fluorescent 2' lamps in adjacent room, then plants get moved into tent for flowering period. The new LEDs have veg light switch and flower light switch (in combination for flower). Plan is to continue with the same process for veg, then moving to flowering tent.

Goals:

1. To reduce heat issue.

Although the location is coastal, the west facing sliding doors create abundant ambient heat on the upstairs level. Reflective skins have been placed on the slider doors as well as reflective drapes and black out curtains – this equals 3 layers of stuff dealing with HPS heat & ambient at heat all times of the year. With HPS lights, the grow tents have needed continuous monitoring for heat – which entails opening & closing the tent doors, the windows, etc. throughout the day, every day, until harvest.

Recently I graduated to a 5'x9' Gorilla tent, yet found that the 1000 watt HPS light in the new tent did not provide enough light disbursement. The HPS light in the new tent was not evenly disbursing light. While the temperature was fine in such a large grow space (comparatively), I **DID NOT** want to do 2 HPS lights. Instead, I chose to go with LED lights that have built in fans - so ideally one does not have to worry about air-cooling them.

2. To lower electrical costs.

Lower the overall draw on power for flower fans & lights.

**Note:* There is also the vegetation space in the adjacent room with 4-T5s that also generate heat and suck power in "perpetual harvest".

3. To increase bud quality.

Increase quality of terpenes, trichomes, & bud density. I prefer bud value vs. yield (although not dissatisfied with the past 2 years of growing).

Concerns & Worries:

Maintain proper heat and humidity: This will be a whole **new process** from scratch after 2 years of growing, or has it been 3? Monitoring light placement above plants is a chief concern since burning can happen with LED lights. Regarding the LED lights, I couldn't help but think what is enough light & what is too much light? I do babysit my plants, so I will observe and seek the balance.

Platinum LED grow light hardware:

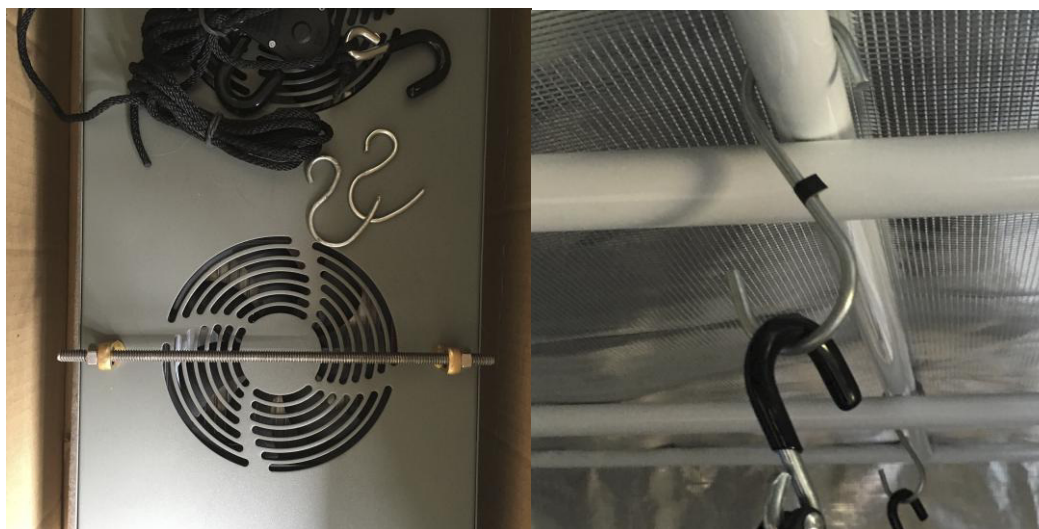
Although each light currently comes with hangers, they are to be disregarded. The goal is to have optimum height (to the top of tent) for each light, if one light needs to go to the top of the tent (depending on strain/plant height, flowering stretch, etc.). Platinum recommends 420 8"-8.5" all thread bar to go between brass units (see photo). The ratchets need to be the kind that sync up tight in the Apollo rope ratchet (see photo). Along with the all thread & nuts, I used flat metal washers to help center the rubber wrapped ratchet hooks and nuts to stay in place for horizontal level (see photo).

Spacing & leveling the lights in the 5'x9' tent:

For the P600 lights - 15" apart with 15" on the left and right of last lights - (they hang perpendicular to width of tent). Approximately 12.5" from rear of light to rear of tent - from front of light to front of tent.

LED lights (top view) / Ratchets / All Thread / S-hooks / Nuts:

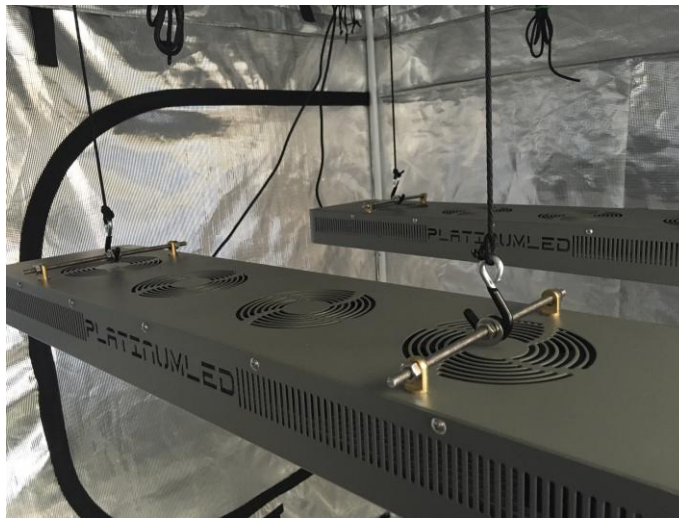
The S-hook shown below is not available now so I changed to a regular S-hook (shortest possible that will hang upon support bars of tent). This enables me to get the lights to the top of the tent without wasting space & maximizing "lift".



S-hook bringing ratchet to support bar at top of tent (as close as possible) for maximum adjustment.



4 flat washers & 8 nuts. 2 all thread @ 8"-8.5". Note that there is potential for 2 more nuts on inside of brass fixtures (per light).



Spacing & Leveling the lights in the 5'x9' tent (P600 x 4):

15" apart with 15" on the left and right of last lights. They hang perpendicular to width of tent. Approximately 12.5" from rear of light to back of tent & 12.5" from front of light to front of tent.



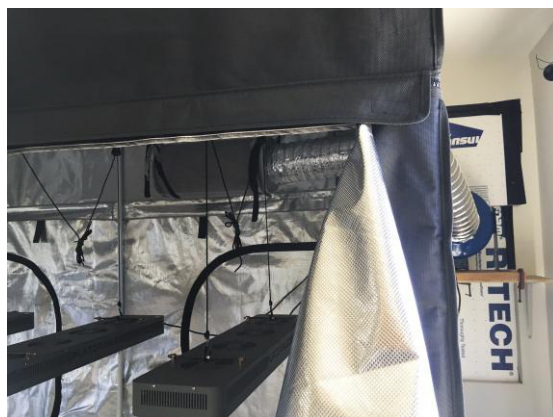
Currently hanging 50" from top of light to floor.

Plan is to have lights 24" above plants when they arrive and offer a period of adjustment & transition for flowering period. After which I will "LOVE MY PLANTS TOO MUCH" (love you GWE!) trying to figure the proper light adjustments. Number of plants undetermined at this time.

Not having to cool the HPS bulb:

In conjunction with the carbon filter & scrubber I have removed one half the ducting. The filter is moved back and to the right of the tent, much closer and more direct to output fan established in the window. I suspect it will be even more efficient.

Indoor Equipment Pictures:



Outdoor vent window done with R-Tech and metal tape. Indoor held with Gorilla tape (love that tape). Window is partially open for R-Tech insert.

Small input fan may or may not be necessary.
7/23/16 – 10:00 am

Testing Environment:

I had peeled off R-TECH from sliders by tent assuming I would need the ambient heat to keep my temperatures up (research & warnings) and left the double layer of black-out curtains up for lights-off period.

Observations & Discoveries:

LED lights do not require a warm up period (unlike the HPS lights), they simply start up & go on full.

These LED light fans ARE noisy – no whisper. Doable but does disrupt the previous working environment along with the other two fans.

Previously used fans:

Carbon/filter/output 6" - 435 CFM Dura fan at ¾ blast. 4" input fan on ¾ blast. West facing sliders open for light and air.

Running HOT - Temperature test:

Ambient temp 65/63 (no plants in tent). Turned LED lights on. Tent started out at 70/62 and CLIMBED to 80.1 degrees F in 45 MINUTES, with the rest of the day to go!

ACTIONS:

Turned off lights. Got new sheets of R-TECK Insulfoam (reflective on one side). Also rehung R-Tech on sliding doors (with Gorilla tape) - returning to the HPS mode heat prevention tactics.

Small input fan is absolutely necessary.

Absolutely necessary to have upper, lower, top ports open – the lights do generate heat. Closing down & turning lights off will now take a little ladder work for closing off the top ports and clipping the fabrics together as well as all other openings. Lastly, I walk around 5'x9' tent to look for light leaks each night.

My situation will have to be monitored continuously:

Each day – in and out - no auto-ons or offs for me. For the time being, there will be more monitoring than the HPS set up.

Magenta Aurora Borealis phenomenon:

Not sure WHY I didn't think of this. I assumed most of the tent would be **closed** in order to keep the temperatures **UP** (per caution). Also may be a stealth issue. It is a neutral, based on fact - scientific statement: "*Are you fucking serious*" - a noisy and MAGENTA (PINK) environment.

Necessary protective eyewear:

A screaming pain in the ass - expensive and ugly as well as cheaply made. Yet, they work...so I think/hope.



ACTIONS: Closed down for the night and went to pour myself a huge glass of wine...or is it spelled, "whine"=)

7/24/16

More research, more blogs, more opinions: putting me right back to HPS. How much heat/electricity would 2 HPS use...re-circling the circle...gak!



Opinion #1: Dual 600W HPS lighting system.

Opinion #2: Dual 1000W HPS & mix 100 HPS with 2 LED.



Veg waiting & approaching 60 days. Kosher Kush in pre-flower.

ACTION: staying the course with LEDs & WILL SEE IT THROUGH

7/31/2016

ACTION: 8 plants into tent. Last night first dark period. 6:30 on and 6:30 off schedule activated.

Observations & Discoveries:

Monitoring temperatures every hour or two. **A cool day.** 1:45 pm & not yet above 80 degree F.

Cast shadows from one leaf over another in tent light - appears as deep magenta-near purple with glasses. Viewing with glasses on is not any truer than viewing under the strong yellow of HPS. Plants need to come out into natural light to view their condition accurately. I am good with that. Always bring plants out of tent to feed/prune etc.

Shot LED environment with Canon EOS 10D. It's an older camera, yet has, "RAW" capability for adjusting color in Photoshop.



Not so easy to fix with LED as with HPS, close enough but plants are greener in real life.

3:00 pm

Opened slider for breeze at 80/55.

Day 1 Conclusion:

There is hope maintaining 75-80 during day. For now...Lights off.

8/1/2016

ACTION: fed tent plants - 2nd feed of transition feed per Flora Trio @ ½ strength plus 5 ml GH Bloom (will gradually increase to 10 ml). Wired more LST for even canopy of 8 plants. I plan in 2 weeks to do 2nd round of "Schwazzing". Thus far plants are perky.

Concerns & Worries:

Again (as in past) humidity concern. This AM at opening - 73% humidity. Early in process - didn't do a wobble on it - yet it's a future concern.

Feeling confident Day 2. Highest temp 80 degrees F @ 4pm - still overcast day @ 70 degrees F outside, 65 degrees F ambient room and 80.1 degrees F in tent.

Observations & Discoveries:

Bending over and lifting plants out of tent to the sink for feed & waste is a bit tedious (x) 8 (not complaining). Not used to wearing glasses while doing it, nor used to re-zipping each time to control temps and to keep the pink out. As stated: riding the bull of the new.

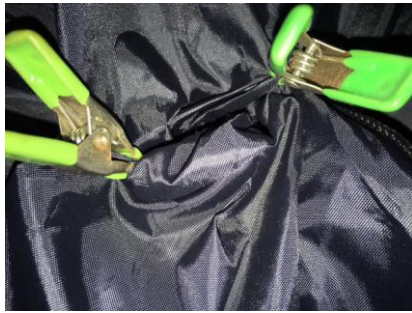
8/2/2016

Observations & Discoveries:

Light base 24"-27" above canopy. Would like to see leaves bending/curving up to light a bit - is it too much light, or not enough? Yet, then again Indicas...hmmm. Tomorrow I will lower the lights a bit (dreading 8 ratchets), but that is why I did 8 plants instead of 10.

Lights on in the AM. Opening ports: removing clips, undoing drawstrings (all on ladder), bending for lower portals @ 6:30 am. SHARP is a bit of a drag...but it's probably more my age (a real drag).

ACTION: 6:30PM shut down; like leaving pink on till done closing to view **pink leak** and to trap some heat and low humidity for the night. These **little** clips are **SO** handy after cinching the cords on portals. Wrap it up nicely. No (pink) leaks.



8/3/2016

Temperatures maintaining (no weather issues at this time), did not lower lights, plants show no signs of shock or distress. Perky enough.

8/6/2016

Temperatures maintaining - same weather today. Plants have now been in LED environment for 1 week now.

Observations & Discoveries:

Indicas are bushy for sure. Today I did one schwazzing (modified) before entering into flower...more green & lower robust growth now. Plants appear to be thriving across the board. Not into the flowering stretch yet. Next week more schwazzing, which they will need. Thought I was being conservative with 8 plants...NOT. Humidity still in 60s+ degrees F at opening. Watching **The Cut Down, The Results LED vs HPS** on YouTube...I can't believe I am watching the whole thing. There are some interesting points, e.g. more growth in the larding area with trichomes...now more wine to finish the video. Plants require just the same or even a tad bit more fluid for feeding for run off and to stay perky – as have been my experiences in HPS light grows. Currently 1.5 gallons feed/flush necessary for one 5-gal smart pot with Cyco coco coir/perlite.

ACTION: (Karma means Action!) looking into **Macro Olloclip** for iPhone. Fed #2 transition, then next week flush.

8/7/2016 - WEEK #1 in LED tent

Maintaining. Have not needed to adjust feeding schedule as yet with coco coir, if anything, I will add a little **more** liquid per plant to get run-off/waste AND to keep plants perky! More LST wiring...

ACTION: Veg plants – backups incase week one didn't go well - went to Buddha today. I hate doing that. Now I'm saving a little on electrical till new seeds come in for next grow. Strains & seed sources: Master Kush & Misty Kush from Nirvana, Sour Diesel & Super Skunk from Bergman.

Left and right of grow space.

OG Kush is more yellow and wider (in span) of the 8 plants.



8/8/2016

Observations & Discoveries:

This morning I found I needed to do more LST on Kosher Kush, which is not a fluffy plant but obviously thriving (still waiting to be impressed by DNA Genetics having grown Tangie and Lemon Skunk). I must say just entering into week #2 of flowering - I am impressed with the plants under the LED lights. Still 22" – 24" base of light above canopy. Temps remain consistent.

ACTION: more LST raining...will probably be on-going event till colas are established & Schwazzing #2 takes place. Back to GWE per usual to confirm observations. LOVE GWE!!

8/9/2016 - 6:30 am

Observations & Discoveries:

Just starting week 2 of flower & BUDLETS everywhere! Indeed the STRETCH is on! Plants showing daily and rapid change, which I don't recall with HPS. Wishful thinking? Strain? LEDs? Stems are changing over night! It's going to be a daily practice to monitor LST even though I started with good & even canopy.

Have used Cyco Platinum coco coir third time now. Have done coco blocks - broke down in wheel barrels & rinsed (hand-squeezed) two times, Botanicare, Black Gold, and Advanced Nutrients coco coir. If I had to do it again, I would do a block soak and rinse again (removing salts). I am sold on Cyco Platinum for right now. The Cyco has proven to be very clean. Run off for one rinse pH-ed at 6.1 (pH-ed water at 6.0-6.1) for first rinse in smart pots. I do not know that "muddy water" is actually bad for plants in coco coir. My pH-ing is kept consistent thanks to my Blue Lab pH meter - my most important tool! Worth noting that my nutrients are pretty clean in color, not yet involved in the extra rich & need to shake nutrients around...yet. I will continue to serve at ½ strength per GWE's recommendations.

Point being:

Cyco always looks damp, always feels damp. The finger poke for 1" dry is NOT reliable with this medium. I literally have to LIFT the plant out of the saucer to feel/sense the weight. If I don't, then the "next feed/flush" is past due. Looking at perk on leaves is very important. I have feared over watering & feeding. Learning this grow is going to be moisture sucking. That said, I get to worry about humidity in the tent.

DID NOT KNOW until last grow that I could premix nutrients or flush (the day before) ...which I was told not to by a hydro grower. I became ever gleeful when I found was OK on GWE. It already takes 2 hours to feed & drain waste in my current set up. As for tomorrow, I know I will need to do my flushing early – at opening (or feeding) so that my humidity does not need to build up more than necessary. Once gallons are good to go...then I can go to work :/



8/10/2016 - 7:30 am

ACTION: I thought I was on top of it, yet plants are a little dry...next feed will have to be Saturday AM. Also modified Schwazzing (more defoliation than ever before), & am wiring down more branches. Overall the canopy is running at 15" and they are not pretty right now :{. I

think this will be the last major training and defoliation, yet I may squeeze wires. Lastly the 5-gal pots are each taking 2 gallons of flush (next time feed) - that is more than I have done in the past as well.

Two very distinct OG Kushes. One is very bushy & deep green – the other is very lean, wide, and much more yellow. I will be feeding and flushing much more frequently than past grows. All are perky again, yet a tad naked...at least it is warm.

- **75 days old in my count from first green of seed.**
- **Flower Day 11 early to defoliate 2nd time but plants severely leafy covering budlets.**
- **Now they can relax and grow...I hope.**



Northern Lights



Kosher Kush #1



OG Kush #1



OG Kush #2



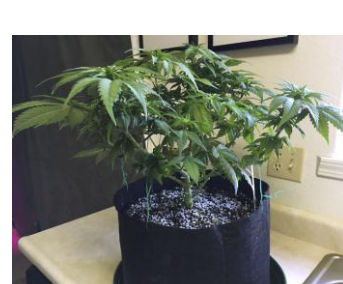
Kosher Kush #2



Northern Lights #2



White Widow



#3 Northern Lights

8/10/2016 - Next Day

After more LST, Defoliation/Schwazzing modified.





*Left and right sides of the canopy. Hoping that 1 (of the 2) OGs surprise me...
I've not had budlets this soon 12 days into flower.

8/13/2016:

2 weeks into flower period

Observations & Discoveries:

Plants looking a bit droopy- lowered lights to 15 " above canopy (from 22') . Had them too high out of fear of burning . Plants responded within hours. Much better!

Able to monitor heat and because we are having fog need to make sure it doesn't cool too much. Humidity is always a problem.

Filling up after defoliation/schwazzing

8/21/2016

Entering the 4th week of flower. GWE Newsletter discussed Terpinator

4.) Trichome-Increasing Supplements

Some supplements claim to actually increase either the number of trichomes on your buds, or the potency of your buds. Although there are lots of "snake oil" products out there in the supplement world, some supplements have proven themselves time and again.

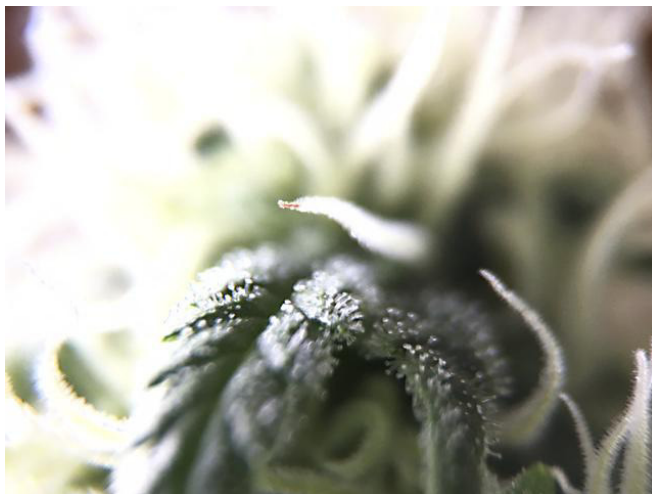
Rhizoflora Terpinator is one of the most popular supplements to help increase trichome production and is used by both hobbyist and commercial growers to increase both the number of trichomes and terpene (smell) production. There are probably other great supplements that do this, too, but this particular one has been tried and tested by many real cannabis growers.

ACTIONS: Bought some. Directions say use it throughout the complete growth cycle. I have added it in at the beginning of week 4 at 10mls. Directions say 10-30mls during flower. Blogs have varying opinions per usual. My (beloved) Hydro stores differ in opinion. If it doesn't work - fine. My concern is that my various strains will all be of lemon/grapefruit and not individual. Only one way to find out. And: should the Terpinator work I have compromised my science in using the LED lights to find out if they increase Terpenes and Trichomes alone. MAYBE I will have double the fun?

GERMINATED: Misty Kush, Sour Diesel, Super Skunk, & Master Kush. Maybe will use **Cyco Platinum Supa Sticky** in their flowering period (only) to see how that works, I do well with the Cyco Platinum Coco Coir as.

8/22/2016

ACTIONS: Bought into the [Ollclip Macro Pro Lens](#) for the iPhone 6. Not that impressed with the 21x capacity YET. Will try the 14x next time around. Yes I horde trichomes - dry ice hash a cardio work out! Images at 3 weeks of flower



Fed plants, introduced Terpinator 10mls along with Kool Bloom (per usual), canopy holding steady (altho Og Kush –yellow one) is 22" in diameter.) No leaf burning on any of the girls...

OG Kush 1 at beginning of 4th week (8/22) into flower (left)

OG Kush 1 After initial Schwazzing/modified (right) (8/10)



8/22 Canopy



8/10 Canopy



8/23/2016

Left & Right entering 4th week of flower

lights 18" above canopy Girls bushed out again
temps running 75-79 with supervision



Playing Leonard Cohen's "Closing Time" at lights off...love my plants and Cohen
If next life? I want to be a back up singer for him
No science-just a note

8/31/2016

Observations & Discoveries:

A grower friend I admire very much visited (it has been a year since last visit). He grows indoors and out doors. He termed my tent "sea of green" which it isn't because my space is not conducive for it. However the plants due to LST-thank you GWE appear from the top to be just that...almost. ☺ He gets down on his hands and knees and checks the underside of leaves, checks for proper "lolly_popping" which I don't do properly but get close, lopes my buds (harvested & cured) and says "you harvested this (Ice) at just the right time!?? He is going to do a KIND LED grow in a few weeks...his first LED as well.

I notice that the OG Kush 1 continues to yellow-but I remember my last OG and it was not a robust girl either. OG Kush 2 a little better. Friend says OG Kush hard to grow indoors. Actually said the Kush family is difficult. Friend not worried about leaves. Said leaves are good, perky, all is fine. I do have small tips of leaves brown-tiny. At this point with 4+ more weeks to go-...not a problem.

Still dealing with temps up or down. Here it is a daily event. Friend reminded me that "Weed Likes Heat" which took the edge off as I am now trying to keep my temps up rather than down and that is a fine line.. Daily monitoring

Cyco Coco Coir continues to be challenging. Smart Pots get light -to me that means to feed / water. Then Fungus Gnats say I am over watering thank you GWE. So-I will take the gnats over not enough water or food for the plants. There are not that many and strips are up-it is a minor problem being taken care of. (the little bastards). I never had gnats before Cyco Coco Coir-zero.

8/31/2016 continued 4.5 weeks into flower.

Let the fattening begin...this is where I become impatient and really need to be patient. Images 6 of the 8 plants got impatient.



and then **The Ladies in Waiting** 2 weeks old.
Will pick 8 of 15



Closing time Cheers!

9/15/2016
Observations & Discoveries:

Northern Lights (3 plants) are coming into harvest; harvested one today-pistils 50-70% color change, pistils curled in, and trichomes going milky with a very few amberat 47 days of 45-50 per ILGM). I wondered if LED lights would increase flower time-thus far not. May be so with the Kosher Kush and White Widow. OG-Kush always an issue, always small buds but doing well.

Northern Lights known for frosty, hi yield, easy grow. So I don't know if it is the LED lights promising dank and frosty, or Terpinator promising more terpenes (does it crowd Trichomes?? BIG QUESTION), nonetheless-I have very little waste, bud sites are **very** close, minimal spacing, no larf per se, short stems, and sticky & dank. The dry will be more informative.

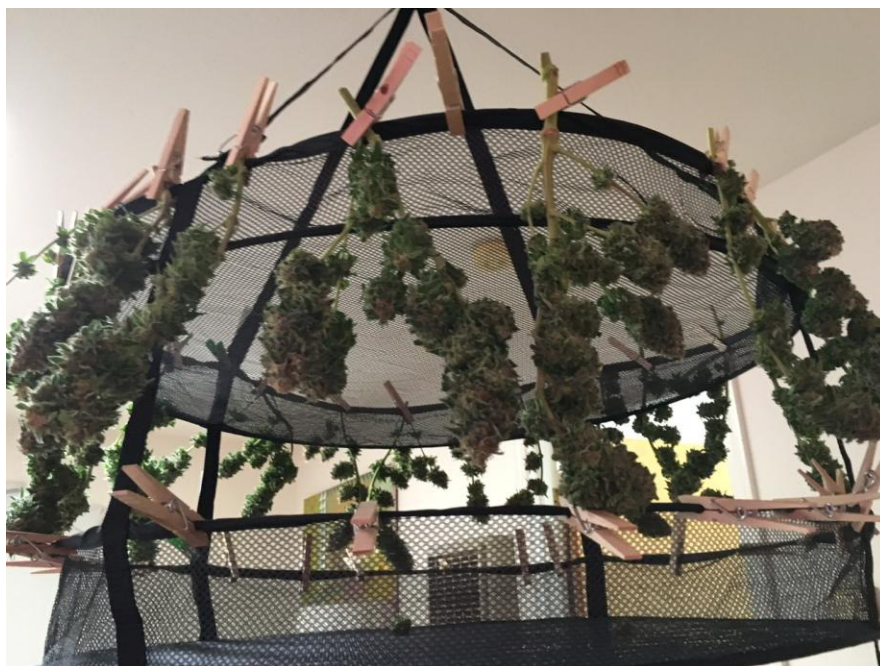
Not as many branches due to LST, Schwazing, Lollipopping-bigger buds, condensed, less waste (of stem and leaves without sugar). To be tested with Sativa strains ☺

2 more NL to harvest (staging) then OG Kush, then Kosher Kush (so frosty) and White Widow...

Humidity continues to be a factor, keeping temps between 73 and 79 with monitoring.

What I like about this image is that they are short, fat and very dank right now.

I have never weighed in after cure..but will altho it compares to nothing at this time.



eight more plants to go

I love my plants and when I dump the waste into the green can I thank them for their work

9/19/2016

Action: Harvested Northern Lights; my first grow of NL and she is a divine plant. Easy to trim with little waste: large, medium & small buds, dank and frosty as assured by strain – so still don't know if it the LED lights and or Terpinator or strain or all of the above makes her so. Of course the real test will be in the smoke. Also harvested strange OG Kush below because she told me to clearly altho early by a week!



The strange Og after Schwazzing & in flower



Observations & Discoveries: The two OG Kush are sticky & dense -more than my previous try. Bud sites closer and a little larger in bud structure than my first attempt with HPS lights. The "strange" OG remained strange to harvest and offered up

some nice buds. Top shelf being MUCH better than first time I grew her. This I consider to be an accomplishment with the LEDs . I do not plan to grow this particular strain again.

Still have a hard time with ambient light being Magenta.....ugh & burp



9/22/16

Action: drying as above for four days then clipping down to buds and laying in mesh for a few. Jarring some rotating my two Caliber IV- more Caliber IV on order. BEST TOOL along with BLUE Lab! Thank you GWE!!!!

QUESTIONS: Does the Terpinator crowd out Trichomes?
What are the "non-ball sugar stems?"

COULD IT BE that LEDs-maintaining prop temp and humidity-create an earlier harvest by a week when watching pistils (which are not the same as with HPS) nor per strain, watching trichomes becoming milky earlier with out the wait. ??? I am watching trichomes as the final....and voting with my feet then committed to 2 month cure at minimum.

9/23/16

Observations & Discoveries:

Into the final loop of harvesting the Kosher Kush next week and White Widow the week after depending on trichomes?

I am observing and discovering that this journal is rather useless as:

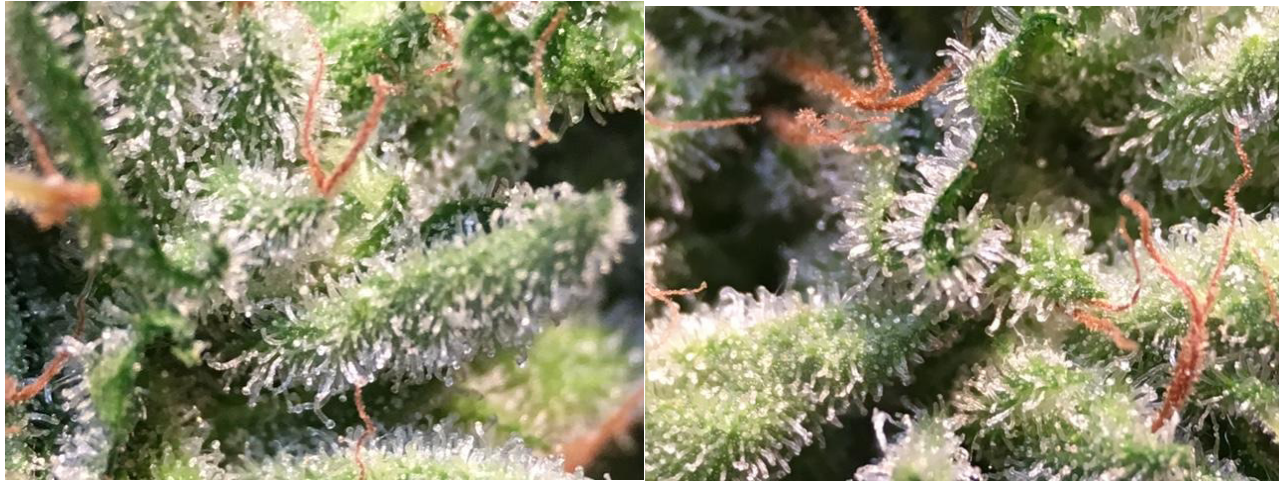
I have only one strain to compare the change to-**OG Kush..which has been better all around**

I am growing strong indica strains and adding terpinator to my feed but have nothing to compare it to from the past.

I have had a few incidents of bud rot this first time (4 buds from 8 plants) with LED (only once/ one bud with HPS last grow -did I bring spores home from dealing with a friends bud rot? and I **do** nip it in the bud..worse than a case of head lice, clap..whatever..hate it. OR ARE MY BUDS SO DENSE!!!!

;))

Action: messed with the Olloclip again..hohummm..here are a few of the Kosher kush test shots/ pulled a sample .
Not thrilled with the Ollo clip but STOKED with the sugar



I failed this mission in testing HPS vs LED

Will report with final thought and then add to that the yield after cure and smoke test from my side. Yield won't rock a ship but smoke test will be informed by others...again after quality not quantity.

Summary: As I said I cannot scientifically prove anything and nor do I suppose this rather lengthy journal would be of any help to others. Some cool pictures tho!? The harvest of Kosher Kush and Northern Lights went like greased lightening. I wasn't ready for it anticipating another week or more. Late nights-spent happily. Along with that a nasty heat wave here which complicated my slow dry on the nets. I went with the flo, the cure is on, now a lot of burping jars morning and night. No Complaints!

1. I was able to adjust to the lights/ temps/ humidity is hopeless here.
2. My plants DID come to fruition early by 1 week-even tho I planned to do the distance per breeders recommendation.
3. Have much sugar BUT grew sugar strains and added Terpinator to my nutrients..so I do think my plants were of better quality but not sure which element is responsible.
4. I do not plan to go back to HPS but plan to be increasingly attentive to my LEDs, allowing a little heat as flower progresses, watch the plants cautiously and see if I can improve again.
5. My feeding schedule did not change that much. Some plants needing a bit more than others...like the OG Kush

Going with LEDs from Advanced Platinum Thanks Mark



nets during dry 2 of 3



TO:
 my past, present & future plants
 GWE Nebula Sirius all of you
 My hydro KID
 My plumber
 And my friends C & V who are saddling up for the ride
 Thank you so much ☺

The Burp





next loop: 6 weeks; Master Kush, Misty Kush, Super Skunk and Sour Diesel
LST & topping

Of course: trying to decide what to grow next

AND
!

Remember to gift freely for those in need
with card



CHEERS!
T