2021 Summer Cannabis Grow - All Seeds

7.19.21

FEED UP TO TWICE PER WEEK — PER GALLON OF WATER

Time* Week	Seedlings and Cuttings	1	2	3	4	SledgeHammer® Flush: 2 tsp/gallon of water	5	6	7	SledgeHammer® Flush: 2 tsp/gallon of water	8	9	10	SledgeHammer® Flush: 2 tsp/gallon of water	11	12
Light Hours	18	18	18	18	18		12	12	12		12	12	12		12	12
EC Range	0.6-0.8	0.6-0.8	1.8-2.1	2.3-2.8	2.5-3.0		2.5-3.0	2.8-3.0	2.8-3.0		3.0-3.3	2.5-2.8	2.0-2.2		1.4-1.7	1.4-1.7
PPM (700 scale) Range	420-560	420-560	1260-1470	1610-1960	1750-2100		1750-2100	1960-2100	1960-2100		2100-2310	1750-1960	1400-1540		980-1190	980-1190
Big Bloom® (OMRI Listed)	6 tsp	6 tsp	6 tsp	6 tsp	3 tsp		3 tsp	3 tsp	3 tsp		3 tsp	3 tsp	3 tsp		3 tsp	3 tsp
Grow Big®			2 tsp	3 tsp	3 tsp		2 tsp	2 tsp	2 tsp		2 tsp	1 tsp				
Tiger Bloom®							2 tsp	2 tsp	2 tsp		2 tsp	2 tsp	2 tsp		1 tsp	1 tsp
Flowers Kiss® (FOLIAR SPRAY APPLICATION)				2 tsp	2 tsp		2 tsp	2 tsp	2 tsp		2 tsp	2 tsp	2 tsp		2 tsp	2 tsp
Boomerang®	1 tsp	1 tsp	1 tsp	1 tsp	1 tsp		1 tsp	1 tsp	1 tsp							
Kangaroots®			1/2 tsp		1/2 tsp			1 tsp								
Microbe Brew®			1/2 tsp	1/2 tsp			1/2 tsp		1/2 tsp			1/2 tsp				
Wholly Mackerel®	1/2 tsp	1/2 tsp	1/2 tsp	1/2 tsp	1/2 tsp											
Kelp Me Kelp You® (OMRI Listed)				1/4 tsp	1/4 tsp		1/2 tsp	1/2 tsp	1/2 tsp		1/2 tsp	1/4 tsp				
Bembé®											3 tsp	3 tsp	3 tsp		3 tsp	3 tsp
Open Sesame®					1/4 tsp		1/4 tsp	1/4 tsp								
Beastie Bloomz®									1/4 tsp		1/4 tsp					
Cha Ching®												1/4 tsp	1/4 tsp		1/4 tsp	1/4 tsp

***SCHEDULE ADJUSTMENTS**
EXTEND VEGETATIVE CYCLE: Repeat Week 4.
EXTEND FLOWERING CYCLE: Repeat Week 12.

CONVERSIONS
1/4 tsp = 1.25 mL
1/2 tsp = 2.5 mL
1 tsp = 5 mL = 1/3 Tbsp
2 tsp = 10 mL = 2/3 Tbsp
3 tsp = 15 mL = 1 Tbsp

FOXFARM

BIG BLOOM:

GENERAL FEEDING:
4 tablespoons (60 mL) per gallon (4L) of water every other watering.
HEAVY FEEDING:
1/2 cup (120mL) per gallon (4L) of water once per week.
SUPPLEMENTAL FOLIAR FEEDING:
1 tablespoon (15 mL) per gallon (4 L) of water once per week during early stages of plant growth.
Do not apply while plants are in direct light.
SEEDLINGS AND TRANSPLANTING:
1 tablespoon (15 mL) per gallon (4 L) of water every other watering.

GROW BIG:

GENERAL FEEDING:
2-3 teaspoons (10-15 mL) per gallon (4 L) of water every other watering.
HEAVY FEEDING:
4 teaspoons (20 mL) per gallon (4 L) of water every other watering.
FOLIAR FEEDING:
1/2 teaspoon (2.5 mL) per gallon (4 L).
Use a pump sprayer and apply to both sides of leaves.
Do not apply while plants are in direct light.

CAL-MAG

Mix 1 tsp (5 mL) per gallon (4 L) of water. Begin use just before bud development. Continue use as needed, not more than once per week.

Epsom Salt & Egg Shells (CAL-MAG Substitute)

Eggs - Crushed fine, 1 tablespoon per 2 gallon growing medium
Epsom Salt - 1 tea spoon per 2 gallon medium medium

TIGER BLOOM:

GENERAL FEEDING:
2-3 teaspoons (10-15 mL) per gallon (4 L) of water every other watering.
HEAVY FEEDING:
4 teaspoons (20 mL) per gallon (4 L) of water every other watering.
RECIRCULATING SYSTEMS:
2 teaspoons (10 mL) per gallon (4 L) of water with every reservoir change.
Use 3 teaspoons (15 mL) for heavy feeding.
SUPPLEMENTAL FOLIAR FEEDING:
1/2 teaspoon (2.5 mL) per gallon (4 L) of water every other week.
Do not apply under direct light or during heat of the day.

SLEDGEHAMMER - FLUSHING AGENT

IN-GROUND GARDENS AND CONTAINER PLANTINGS:
Mix 2 teaspoons (10 mL) per gallon (4 L) of fresh water.
Drench soil or preferred medium thoroughly.
Apply every 3-4 weeks until harvest.
HYDROPONIC RECIRCULATING SYSTEMS:
Mix 2 drops per gallon (4 L) of fresh reservoir water.
Combine with fertilizers during weekly feeding schedules.
Kick it through your system once with every reservoir change.
FLUSH:
Mix 1/2 tsp (2.5 mL) per gallon (4 L) of fresh reservoir water.
Perform a complete system flush every two weeks.
Cycle system for one hour and change reservoir water.

KANGAROOTS - ROOT DRENCH & MICROBES

IN-GROUND GARDENS AND CONTAINER PLANTINGS:
2 teaspoons (10 ml) per gallon of water
Drench soil or preferred medium thoughoughly
Apply every other week throughout the vegetative and blooming cycles,
particularly during the earlier stages of plant development.
HYDROPONIC RECIRCULATING SYSTEMS:
Mix 1/2 teaspoon (2.5 mL) per gallon (4 L) of fresh reservoir water.
Use in conjunction with FoxFarm fertilizers or any nutrient regimen.
Flush system every two weeks.

BEMBE - FLOWER SWEETENER

IN-GROUND GARDENS AND CONTAINER PLANTINGS:
Mix 1 tablespoon (15 mL) per gallon (4 L) of fresh water.
Begin use once buds have appeared.
Apply every other week until harvest.
Drench soil thoroughly.
HYDROPONIC RECIRCULATING SYSTEMS:
Mix 1/2 teaspoon (2.5 mL) per gallon (4 L) of fresh reservoir water.
Begin application once first buds have appeared.
Use in conjunction with FoxFarm fertilizers or any nutrient regimen.
Flush system every two weeks.

MICROBE BREW - MICROBIAL INOCULANT

IN-GROUND GARDENS AND CONTAINER PLANTINGS:
Mix 2 teaspoons (10 mL) per gallon (4 L) of fresh water.
Drench soil thoroughly.
Apply every other week throughout the vegetative and blooming cycles until harvest.
HYDROPONIC RECIRCULATING SYSTEMS:
Mix 1/2 teaspoon (2.5 mL) per gallon (4 L) of fresh reservoir water.
Use in conjunction with FoxFarm fertilizers or any nutrient regimen.
Flush system every two weeks.

NATURE'S LIVING SOIL CONCENTRATE

Super Soil Technique:
1. For containers 5 gallons or greater use 3.2 ounces of concentrate per gallon of container
2. Fill a container 1/3 full with the concentrate and potting soil and mix thoroughly.
3. Fill the remaining 2/3 of the container with base potting soil only
4. Plant and water from seed to harvest

Living Soil Technique:
1. Thoroughly mix 1 lb of Nature's Living Soil concentrate for every 5 gallons of organic potting soil to make a ready to use Living Soil
2. Make a small hole, about the size of a 16oz cup, and fill with organic potting soil.
3. Plant and water from seed to harvest

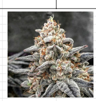
Top Feeding:
1. Sprinkle a thin layer of Nature's Living Soil concentrate on the top of the soil and water.

Compost Tea:
Add 2-3 heaping tablespoons of concentrate and one tablespoon of un-sulfured black-strap molasses per gallon of water and let stand for 24 hours.

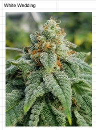
Section	Item	Pot	7.24.21	7.26.21	7.27.21	7.30.21	8.8.21	8.9.21	8.7.21	8.17.21	8.23.21	8.23.21	8.28.21	8.28.21	9.1.21	9.1.21
								NORMAL								
			GERMINATION			SEEDLING		VEG STAGE								
	TOTAL WEEKS GROWING		1			1	2	1		2	3				4	
	LIGHT HOURS (ON/OFF)							18/6								
	WEEK OF STAGE		1			1	2	1		2	3				4	
	EC (ms/cm) RANGE										2.3-2.8		2.3-2.8		2.5-3.0	
	EC (us/cm) RANGE										2300-2800		2300-2800		2500-3000	
	PPM (500 SCALE)* RANGE		P	T		W	W		A	W	1150-1400	W	1150-1400	W	1520-1500	W
RECOMMENDED	Big Bloom		L	U	S	A	A		D	A	6 tsp	A	6 tsp	A	3 tsp	A
RECOMMENDED	Grow Big		A	R	E	T	T		J	T	3 tsp	T	3 tsp	T	3 tsp	T
RECOMMENDED	Tiger Bloom		N	N	E	E	E		U	E		E		E		E
RECOMMENDED	Bembe		T	E	D	R	R	T	S	R		R		R		R
RECOMMENDED	CaMg+ or Egg Shells & Epsom Salt		E	D	S			R	T		2 tsp		2 tsp		2 tsp	
RECOMMENDED	Kangaroots		D					A	E							
RECOMMENDED	Microbe Brew							N	D		1/2 tsp		1/2 tsp			
RECOMMENDED	SledgeHammer							S								
RECOMMENDED	Nature's Living Soil															
RECOMMENDED	Black Strap Molasses															
USED	Big Bloom							P			45 ml		45 ml		22 ml	
USED	Grow Big			L				L			22 ml		22 ml		22 ml	
USED	Tiger Bloom			I	S			A	L							
USED	Bembe		S	G	P			N	I							
USED	CaMg+ or Egg Shells & Epsom Salt		E	H	R			T	G		15 ml		15 ml		15 ml	
USED	Kangaroots		E	T	O			E	H							
USED	Microbe Brew		D		U			D	T		4 ml		4 ml		4 ml	
USED	SledgeHammer		S	O	T				S							
USED	Nature's Living Soil															
USED	Black Strap Molasses															
TDS	EC (ms/cm)			N	E						2.2		2.8		2	
TDS	ppm				D						1034		1300		900	
PH	pH Level Before					5.8		6.2		5.7	6.7	6.6	6.9	7	6.8	6.7
PH	pH Level After					6.2		6.2		6.1	6.2	5.8	6.4	5.9	6.4	5.9
PH	Amount (ml)					5 drops		-		5 drops	2 ml + 5 drops	3 drops	3 ml + 5 drops	5 drops	3 ml	3 drops
SLURRY	White Wedding Rbx - Ocean Forrest Soil pH/EC Slurry Mix	5 Gallon Fabric Pot														
SLURRY	Snowcain V2 - Ocean Forrest Soil pH/EC Slurry Mix	3 Gallon Fabric Pot														
SLURRY	Glue Sniffer S1 - Ocean Forrest Soil pH/EC Slurry Mix	3 Gallon Fabric Pot														
SLURRY	White Wedding Rbx - Coco-Loco pH/EC Slurry Mix	5 Gallon Fabric Pot														
SLURRY	Snowcain V2 - Coco-Loco Soil pH/EC Slurry Mix	3 Gallon Fabric Pot														
SLURRY	Glue Sniffer S1 - Coco-Loco Soil pH/EC Slurry Mix	3 Gallon Fabric Pot														
LIGHT	Right Grow Box Plant Height (in.)															
LIGHT	Right Grow Box Light Height (in.)															
LIGHT	Right Grow Box Light PPFD Level (umol/m2/s)							460	600	650						
LIGHT	Right Grow Box DLI (mol/m2/d)							29.808	38.88	42.12						
LIGHT	Left Grow Box Plant Height (in.)															
LIGHT	Left Grow Box Light Height (in.)															
LIGHT	Left Grow Box Light PPFD Level (umol/m2/s)							460	600	600						
LIGHT	Left Grow Box DLI (mol/m2/d)							29.808	38.88	38.88						
VPD DAY	Grow Box Temp (F)															
VPD DAY	Grow Box Temp (C)															
VPD DAY	Plant Leaf Temp (F)															
VPD DAY	Relative Humidity (%)															
VPD DAY	Vapor Pressure Deficit (VPD) (kPa)															
VPD NITE	Grow Box Temp (F)															
VPD NITE	Grow Box Temp (C)															
VPD NITE	Plant Leaf Temp (F)															
VPD NITE	Relative Humidity (%)															
VPD NITE	Vapor Pressure Deficit (VPD) (kPa)															
	Date		7.24.21	7.26.21	7.27.21	7.30.21	8.8.21	8.9.21	8.7.21	8.17.21	8.23.21		8.28.21		9.1.21	
	Amount Fed To Each Plant							hybrid fed 1 pint/gallon water		hybrid fed 1 pint/gallon water	hybrid fed 1 pint/gallon				hybrid fed 1 pint/gallon	
	Notes				all seeds sprouted!		used same water in gal jug	moved from cardboard growbox to main grow box	I lowered the lights to increase the PAR	**leaf temp was 83 Deg F**	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes	made 1.5 gallons of water

Section	Item	(no date)	9.5.21	9.5.21	9.6.21	9.6.21	9.10.21	9.10.21	9.14.21	9.14.21	9.18.21	9.18.21	9.22.21	9.22.21	9.25.21	9.26.21	9.26.21	9.30.21	9.30.21
		NORMAL																	
		FLOWER STAGE																	
	TOTAL WEEKS GROWING	5							6				7					8	
	LIGHT HOURS (ON/OFF)	12/12																	
	WEEK OF STAGE	1							2				3					4	
	EC (ms/cm) RANGE			2.5-3.0				2.5-3.0		2.8-3.0	C	2.8-3.0		2.8-3.0			2.8-3.0		3.0-3.3
	EC (us/cm) RANGE	S		2500-3000				2500-3000		2800-3000	O	2800-3000		2800-3000			2800-3000		3000-3300
	PPM (500 SCALE)* RANGE	T	W	1250-1500	A	T	W	1250-1500	W	1400-1500	M	1400-1500	W	1400-1500	A	W	1400-1500	W	1500-1650
RECOMMENDED	Big Bloom	A	A	3 tsp	D	O	A	3 tsp	A	3 tsp	P	3 tsp	A	3 tsp	D	A	3 tsp	A	3 tsp
RECOMMENDED	Grow Big	R	T	2 tsp	J	P	T	2 tsp	T	2 tsp	O	2 tsp	T	2 tsp	J	T	2 tsp	T	2 tsp
RECOMMENDED	Tiger Bloom	T	E	2 tsp	U	P	E	2 tsp	E	2 tsp	S	2 tsp	E	2 tsp	U	E	2 tsp	E	2 tsp
RECOMMENDED	Bembe	E	R		S	E	R		R		T		R		S	R		R	3 tsp
RECOMMENDED	CaMg+ or Egg Shells & Epsom Salt	D		2 tsp	T	D		2 tsp		2 tsp		2 tsp		2 tsp	T		2 tsp		2 tsp
RECOMMENDED	Kangaroots				E					1 tsp	T	1 tsp			E				
RECOMMENDED	Microbe Brew			1/2 tsp	D			1/2 tsp			E			1/2 tsp	D		1/2 tsp		1/2 tsp
RECOMMENDED	SledgeHammer										A								
RECOMMENDED	Nature's Living Soil										2 tblspns								
RECOMMENDED	Black Strap Molasses										1 tblspn								
USED	Big Bloom			22 ml				22 ml		22 ml		22 ml		22 ml			22 ml		22 ml
USED	Grow Big	F		15 ml				15 ml		15 ml		15 ml		15 ml	G		15 ml		15 ml
USED	Tiger Bloom	L		15 ml	L	P		15 ml		15 ml		15 ml		15 ml	R		15 ml		15 ml
USED	Bembe	O			I	L									O				22 ml
USED	CaMg+ or Egg Shells & Epsom Salt	W		15 ml	G	A		15 ml		15 ml		15 ml		15 ml	W		15 ml		15 ml
USED	Kangaroots	E			H	N				7 ml		7 ml			S				
USED	Microbe Brew	R		4 ml	T	T		4 ml						5 ml	S		5 ml		
USED	SledgeHammer																		
USED	Nature's Living Soil										3 tblspns								
USED	Black Strap Molasses										1.5 tblspns								
TDS	EC (ms/cm)			2.5				1281		1300		1237		1448			1427		3.1
TDS	ppm			1159				2.8		2.8		2.6		3.1			3.1		1464
PH	pH Level Before		6.4	6.6			6.9	6.7	6.7	6.8	9	6.7	6.8	6.5		6.9	6.4	6.3	6.2
PH	pH Level After		5.9	6.3			6.1	6.2	5.9	6.4	5.9	6.1	5.9	6.2		6	6	6.3	6.2
PH	Amount (ml)		2 drops (1)	3 ml			3 ml down + 1 ml up	3 ml	2 drops	4ml + 2 drops	16 ml	5 ml	3 drops	3 ml		4 drops	3 ml	0	0
SLURRY	White Wedding Rbx - Ocean Forrest Soil pH/EC Slurry Mix																		
SLURRY	Snowcain V2 - Ocean Forrest Soil pH/EC Slurry Mix																		
SLURRY	Glue Sniffer S1 - Ocean Forrest Soil pH/EC Slurry Mix																		
SLURRY	White Wedding Rbx - Coco-Loco pH/EC Slurry Mix																		
SLURRY	Snowcain V2 - Coco-Loco Soil pH/EC Slurry Mix																		
SLURRY	Glue Sniffer S1 - Coco-Loco Soil pH/EC Slurry Mix																		
LIGHT	Right Grow Box Plant Height (in.)															24"			
LIGHT	Right Grow Box Light Height (in.)															14"			
LIGHT	Right Grow Box Light PPFD Level (umol/m2/s)				900			871								871			
LIGHT	Right Grow Box DLI (mol/m2/d)				38.88			37.64								37.64			
LIGHT	Left Grow Box Plant Height (in.)																28"		
LIGHT	Left Grow Box Light Height (in.)																14"		
LIGHT	Left Grow Box Light PPFD Level (umol/m2/s)				900			948									948		
LIGHT	Left Grow Box DLI (mol/m2/d)				38.88			40.96									40.96		
VPD DAY	Grow Box Temp (F)				80		70								84	84			
VPD DAY	Grow Box Temp (C)														29	29			
VPD DAY	Plant Leaf Temp (F)				80		80								80	84			
VPD DAY	Relative Humidity (%)				72		85								65	65			
VPD DAY	Vapor Pressure Deficit (VPD) (kPa)														1.4	1.4			
VPD NITE	Grow Box Temp (F)				80		70								84	74			
VPD NITE	Grow Box Temp (C)														29	23			
VPD NITE	Plant Leaf Temp (F)				80		80								80	74			
VPD NITE	Relative Humidity (%)				72		85								65	50			
VPD NITE	Vapor Pressure Deficit (VPD) (kPa)														1.4	1.4			
	Date		9.5.21		9.6.21		9.10.21		9.14.21		9.18.21		9.22.21		9.25.21	9.26.21		9.30.21	
	Amount Fed To Each Plant		hybrid fed 1 pint/gallon				hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon			hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon	
	Notes		made 1.5 gallons of nutes	made 1.5 gallons of water			made 1.5 gallons of water	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes	made 1.5 gallons of compost tea	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes	swapped ex. fan for a/c. adj. growss temp & humidity for proper vpd for mid/late flower stage	made 1.5 gallons of water	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes

Section	Item	10.4.21	10.4.21	10.9.21	10.9.21	10.13.21	10.13.21	10.17.21	10.17.21	10.21.21	10.21.21	10.25.21	11.1.21	11.1.21			Item	Section
	TOTAL WEEKS GROWING	9				10				11		12					TOTAL WEEKS GROWING	
	LIGHT HOURS (ON/OFF)																LIGHT HOURS (ON/OFF)	
	WEEK OF STAGE	5				6				7		8					WEEK OF STAGE	
	EC (ms/cm) RANGE	C	2.5-2.8		2.5-2.8		2.0-2.2		2.0-2.2		1.4-1.7						EC (ms/cm) RANGE	
	EC (us/cm) RANGE	O	2500-2800		2500-2800		2000-2200		2000-2200		1400-1700						EC (us/cm) RANGE	
	PPM (500 SCALE)* RANGE	M	1250-1400	W	1250-1400	W	1000/1100	W	1000/1100	W	700-850	W					PPM (500 SCALE)* RANGE	
RECOMMENDED	Big Bloom	P	3 tsp	A	3 tsp	A	3 tsp	A	3 tsp	A	3 tsp	A					Big Bloom	RECOMMENDED
RECOMMENDED	Grow Big	O	1 tsp	T	1 tsp	T		T		T		T					Grow Big	RECOMMENDED
RECOMMENDED	Tiger Bloom	S	2 tsp	E	2 tsp	E	2 tsp	E	2 tsp	E	1 tsp	E					Tiger Bloom	RECOMMENDED
RECOMMENDED	Bembe	T	3 tsp	R	3 tsp	R	3 tsp	R	3 tsp	R	3 tsp	R					Bembe	RECOMMENDED
RECOMMENDED	CaMg+ or Egg Shells & Epsom Salt		2 tsp		2 tsp		2 tsp		2 tsp		2 tsp						CaMg+ or Egg Shells & Epsom Salt	RECOMMENDED
RECOMMENDED	Kangaroots	T															Kangaroots	RECOMMENDED
RECOMMENDED	Microbe Brew	E															Microbe Brew	RECOMMENDED
RECOMMENDED	SledgeHammer	A															SledgeHammer	RECOMMENDED
RECOMMENDED	Nature's Living Soil	2 tblspns															Nature's Living Soil	
RECOMMENDED	Black Strap Molasses	1 tblspn															Black Strap Molasses	
USED	Big Bloom		22 ml		22 ml		22 ml		22 ml		22 ml		HARVEST - WASH PLANTS	START DRYING	END DRYING	START CURING	Big Bloom	USED
USED	Grow Big		7 ml		7 ml												Grow Big	USED
USED	Tiger Bloom		15 ml		15 ml		15 ml		15 ml		7 ml						Tiger Bloom	USED
USED	Bembe		22 ml		22 ml		22 ml		22 ml		22 ml						Bembe	USED
USED	CaMg+ or Egg Shells & Epsom Salt		15 ml		15 ml		15 ml		15 ml		15 ml						CaMg+ or Egg Shells & Epsom Salt	USED
USED	Kangaroots																Kangaroots	USED
USED	Microbe Brew		4 ml		4 ml												Microbe Brew	USED
USED	SledgeHammer																SledgeHammer	USED
USED	Nature's Living Soil	3 tblspns															Nature's Living Soil	
USED	Black Strap Molasses	1.5 tblspns															Black Strap Molasses	
TDS	EC (ms/cm)		2.9		3		2.2		2		1.6						EC (ms/cm)	TDS
TDS	ppm		1370		1487		1045		941		736						ppm	TDS
PH	pH Level Before	10.1	5.1	7.3	5.2	6.6	5.1	7.1	5	6.5	5	6.5					pH Level Before	PH
PH	pH Level After	6.3	6.2	5.8	6.3	5.9	5.9	6.2	6.3	6.5	6.4	6.5					pH Level After	PH
PH	Amount (ml)	12 ml	4 ml	8 drops	4 ml	2 drops	2.5 ml	9 drops	4 ml	-	2.5 ml	-					Amount (ml)	PH
SLURRY	White Wedding Rbx - Ocean Forrest Soil pH/EC Slurry Mix																White Wedding - Ocean Forrest Soil pH/EC Slurry Mix	SLURRY
SLURRY	Snowcain V2 - Ocean Forrest Soil pH/EC Slurry Mix																Snowcain V2 - Ocean Forrest Soil pH/EC Slurry Mix	SLURRY
SLURRY	Glue Sniffer S1 - Ocean Forrest Soil pH/EC Slurry Mix																Glue Sniffer S1 - Ocean Forrest Soil pH/EC Slurry Mix	SLURRY
SLURRY	White Wedding Rbx - Coco-Loco pH/EC Slurry Mix																White Wedding - Coco-Loco pH/EC Slurry Mix	SLURRY
SLURRY	Snowcain V2 - Coco-Loco Soil pH/EC Slurry Mix																Snowcain V2 - Coco-Loco Soil pH/EC Slurry Mix	SLURRY
SLURRY	Glue Sniffer S1 - Coco-Loco Soil pH/EC Slurry Mix																Glue Sniffer S1 - Coco-Loco Soil pH/EC Slurry Mix	SLURRY
LIGHT	Right Grow Box Plant Height (in.)																Right Grow Box Plant Height (in.)	LIGHT
LIGHT	Right Grow Box Light Height (in.)																Right Grow Box Light Height (in.)	LIGHT
LIGHT	Right Grow Box Light PPFD Level (umol/m2/s)																Right Grow Box Light PPFD Level (umol/m2/s)	LIGHT
LIGHT	Right Grow Box DLI (mol/m2/d)																Right Grow Box DLI (mol/m2/d)	LIGHT
LIGHT	Left Grow Box Plant Height (in.)																Left Grow Box Plant Height (in.)	LIGHT
LIGHT	Left Grow Box Light Height (in.)																Left Grow Box Light Height (in.)	LIGHT
LIGHT	Left Grow Box Light PPFD Level (umol/m2/s)																Left Grow Box Light PPFD Level (umol/m2/s)	LIGHT
LIGHT	Left Grow Box DLI (mol/m2/d)																Left Grow Box DLI (mol/m2/d)	LIGHT
VPD DAY	Grow Box Temp (F)	84		86		85		80		82		82		60			Grow Box Temp (F)	
VPD DAY	Grow Box Temp (C)	29		30		29		27		28		28					Grow Box Temp (C)	
VPD DAY	Plant Leaf Temp (F)	84		86		85		80		82		82					Plant Leaf Temp (F)	
VPD DAY	Relative Humidity (%)	65		63		61		60		56		56		60			Relative Humidity (%)	
VPD DAY	Vapor Pressure Deficit (VPD) (kPa)	1.4		1.6		1.6		1.4		1.6		1.6					Vapor Pressure Deficit (VPD) (kPa)	
VPD NITE	Grow Box Temp (F)	74		74		74		74		74		74		60			Grow Box Temp (F)	VPD
VPD NITE	Grow Box Temp (C)	23		23		23		23		23		23					Grow Box Temp (C)	VPD
VPD NITE	Plant Leaf Temp (F)	74		74		74		74		74		74					Plant Leaf Temp (F)	VPD
VPD NITE	Relative Humidity (%)	50		50		50		50		50		50		60			Relative Humidity (%)	VPD
VPD NITE	Vapor Pressure Deficit (VPD) (kPa)	1.4		1.4		1.4		1.4		1.4		1.4					Vapor Pressure Deficit (VPD) (kPa)	VPD
	Date	10.4.21		10.9.21		10.13.21		10.17.21		10.21.21		10.25.21	11.1.21	11.1.21			Date	
	Amount Fed To Each Plant	hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon		hybrid fed 1 pint/gallon		top fed 1 pint/gallon					Amount Fed To Each Plant	
	Notes	made 1.5 gallons of compost tea	made 1.5 gallons of nutes	made 1.5 gallons of water. bottom leaves are dying off. will need to add soil to top	made 1.5 gallons of nutes	made 1.5 gallons of water. put living soil on top of pot	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes	made 1.5 gallons of water	made 1.5 gallons of nutes	didn't add anything to the water	used 4-bucket method: baking soda, lemon juice only				Notes	


White Wedding

Snowcain V2


Glue Sniffer S1

Growing Mediums	Pot Size	Which plants are in which soil?	Amount for 12 gallons (1.6 cuft) total
Fox Farm Ocean Forrest (75%)	5 gallon	- White Wedding (1 seed)	8 gallons
Vermiculite (25%)	3 gallon	- Snowcain (1 seed)	4 gallons
Dolomite Lime (2 tablespoons/ga	3 gallon	- Glue Sniffer S1 (1 seed)	24 tablespoons / 1.5 cups / 342 grams
Gypsum (10g/cu ft)			1-1/8 tablespoon / 16 grams
Nature's Living Soil	5 gallon	- White Wedding (1 seed)	
Fox Farm Bushdoctor Coco-Locc	3 gallon	- Snowcain (1 seed)	
Vermiculite (50%)	3 gallon	- Glue Sniffer S1 (1 seed)	
Dolomite Lime (2 tablespoons/gal)			
Gypsum (10g/cu ft)			

Amounts for Living Soil Mix	Amount for 4 gallons (1/2 cuft) total
Nature's Living Soil (1 lb/gallon)	4 pounds
Fox Farm Bushdoctor Coco-Loco (50%)	3 gallons
Vermiculite (25%)	1 gallon
Dolomite Lime (2 tablespoons/gal)	8 tablespoons / 1/2 cup / 113 grams
Gypsum (10g/cu ft)	1/3 tablespoon / 5 grams

Amounts for 2/3 Coco-Loco Soil Mix in rest of the pot	Amount for 8 gallons (1 cuft) total
Fox Farm Bushdoctor Coco-Loco (75%)	6 gallons
Vermiculite (25%)	2 gallons
Dolomite Lime (2 tablespoons/gal)	16 tablespoons / 1 cup / 226 grams
Gypsum (10g/cu ft)	2/3 tablespoon / 10 grams

1. Mix 1/3 pot of Coco-Loco w/ Living soil. Place mix into bottom 1/3rd of the pot
2. Fill the remaining 2/3rd of the pot w/ Coco-Loco
3. Water only w/ no nutrients

Growing Mediums For Seedlings	Which plants are in which soil?	Amount
Fox Farm Ocean Forrest (50%)	- White Wedding (2 seed)	1 gallon
Fox Farm Happy Frog (50%)	- Snowcain (2 seed)	1 gallon
Vermiculite (25%)	- Glue Sniffer S1 (2 seed)	3 quaarts
Dolomite Lime (40g/cu ft)		1 oz
Gypsum (10g/cu ft)		

VPD Calculations - MAGNUS Equation

VPD=((6.1078*EXP(17.08085*T in degC/(234.175+T in degC)))-(6.1078*EXP(17.08085*T in degC/(234.175+T in degC))*(Humidity in %/100)))/10

VPD=3.386*(EXP(17.863-9621/(leaf temp in Deg F+460))-((RH%/100)*EXP(17.863-9621/(air temp in Deg F+460))))

Prop/Early Veg Stage (kPa): 0.4-.08
Late Veg/Early Flower Stage (kPa): 0.8-1.2
Mid/Late Flower Stage (kPa): 1.2-1.6

get.py

```
from math import exp
#VPD calculations
config.vpd=((6.1078*exp(17.08085* config.bme280_temperature/(234.175+ config.bme280_temperature)))-(6.1078*exp(17.08085* config.bme280_temperature/(234.175+ config.bme280_temperature))*(config.bme280_humidity/100)))/10
```

config.py

```
config.vpd = 1.0
```