

#### **Practicing Cactusing**

Garrett Wilkerson





## Peyote (Lophophora Williamsii) Habitat is northern Mexico and

- Habitat is northern Mexico and southern Texas
- •Grows for 2~6 years before being harvestable, 15 years to be big enough to survive harvest
- •Only decriminalized for the Native American Church and in Oakland, CA
- Difficult for beginners to clone



#### San Pedro (Trichocereus Pachanoi)

- •Native to Andes, jungle cactus, grows in many conditions
- Loves water as long as soil drains
- Produces roughly 1 dose per year
- •Grows 1-6 feet per year, each foot being a viable clone
- •Completely legal to own and grow as an ornamental plant







#### Traditional Use

- Stone carvings discovered dating 1,300BC
- San Pedro translates to Saint Peter
- Christian symbols were used interchangeab
- •Also used as wound dressing; antiseptic





#### Alternate Use

- •May 2019: the alkaloid hordenine (peyocactin) effectively sterilizes at least 18 strains of antibiotic resistant Staphylococcus
- •Effective against Pseudomonas Aeruginosa, another common multidrug resistant bacteria
- Insufficient data to confirm relationship to mescaline



### Trichocereus (Echinopsis) Genus The Heavy Hitters:

Trichocereus Pachanoi "San Pedro" Easiest to grow, large inconsistencies in strength

Trichocereus Peruvianus "Peruvian Torch" Less hardy, more consistency in alkaloid profile

Trichocereus Bridgesii "Bolivian Torch" Reliably potent, but prone to root rot



#### Honorable Mentions

Macrogonus Santaensis

Scopulicola Puquiensis

Terscheckii Riomizquensis

Valida Uyupampensis

Werdermannianus Cuzcoensis

Taquimbalensis Fulvilanus

Tacaquirensis Schoenii

**Pallarensis** 





•8-12" is ideal

Cloning = Exponential Growth

Wait for the wound to completely scab over(2-4 weeks)

•Cut at an angle to avoid scab collecting water

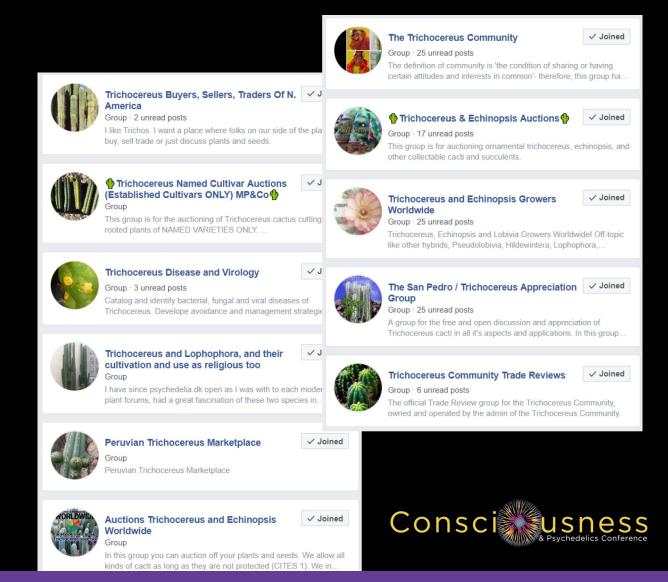




#### Where to Source Clones

#### **Community Auctions**

- Most sellers post often and are well known
- A good way to find named cultivars (Cultivated Variety)
- •Cactus cultivar = cannabis "strain"
- •Good resource for questions, advice, vendors





#### Sourcing Clones

- Large retailers
- Specialty landscaping companies
- •These are usually, but not always, a single fast-growing but low-potency variety
- •Not something to be avoided, just to be aware of





# Your clones are very impressive, you must be very proud.

#### Clones

- "Predominant Cultivar" (PC) san pedro grows much faster and can better withstand harsh weather, but contain less alkaloids
- Ideal for grafting stock and outdoor growth









Consciousness & Psychedelics Conference



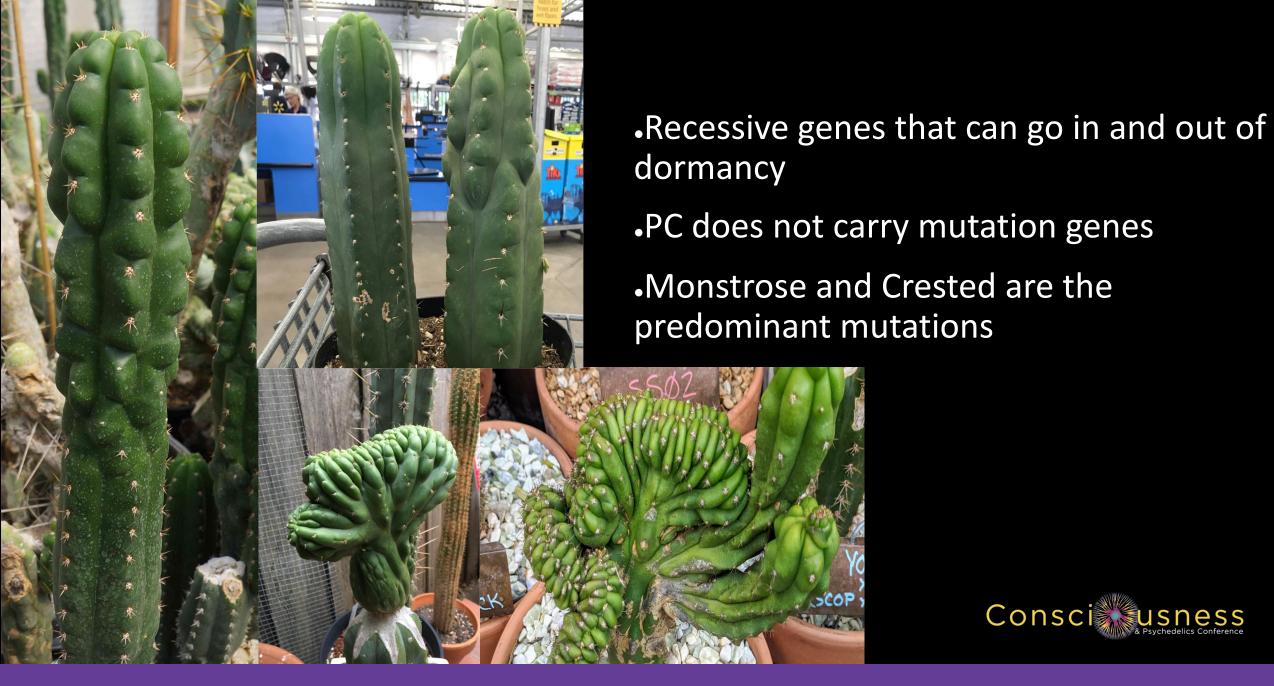


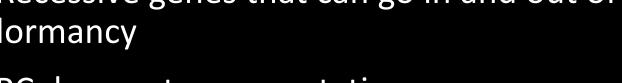












PC does not carry mutation genes

 Monstrose and Crested are the predominant mutations



#### USDA Plant Hardiness Zone Map West Texas Arharillo Average Annual Extreme Minimum Temperature USDA Plant Hardiness Zone Map East Texas Nacogdoches Culberson Hudspeth Upton Reagan Fort Stocktor Alpinè Terrell AUSTIN Presidio Galveston Average Annual Extreme Minimum Temperature 1976-2005 Temp(F) Zone Temp(C) 5 to 10 7b -15 to -12.2 aredo 10 to 15 8a -12.2 to -9.4 20 to 25 9a -6.7 to -3.9 25 to 30 96 -3.9 to -1.1 30 to 35 10a -1.1 to 1.7

Natural Hardiness Range: 8b – 10

- DFW is in hardiness zone 8a
- 5 degrees too cold for true pachanoi
- PC is hardier than true pachanois, can potentially survive



#### Increasing Alkaloid Content



- •At this point
- it becomes illegal





#### Curing (stressing)

- •Chemically and mechanically stress the plant to increase alkaloids
- Deprive of light, water
- •Add nitrogen fertilizer, this will sap water from the plant
- •Grow in stress conditions for 4 weeks, can mechanically cure after cutting







#### Curing (stressing)

- Mechanically stress by lightly scoring
- Harvest in winter, or refrigerate (do n
- •Be careful not to injure, plant could d



#### Anatomy









#### Extraction

- Huachuma (Wachuma) tea
- Acid/Base washing extraction
- D-limonene extraction
- •Powder/tar pill
- •Gummies
- Chocolates







#### Huachuma (wachuma) cactus tea

- •Remove spines with a knife, rock, brick, or sandpaper
- •Remove the waxy outer skin this layer induces nausea
- Preserve as much green flesh as possible
- Discard woody core, white flesh is irrelevant
- •Freeze and thaw 3x to weaken cell walls



#### Huachuma (wachuma) cactus tea

- •Blend with water until even consistency (as little as possible, it'll have to be boiled out in the next step)
- •Boil lightly at least 6hrs, stirring every 15 min.

- •Continue reducing until tea is enough to consume in one pass
- Strain through a shirt or cloth
- Have a chaser handy







#### Food-Safe Extract

•Mix 100 grams of dried, powderized cactus (minus core) with 25 grams of calcium hydroxide, 300 ml water to make it feel wet but not watery, mix ~5 minutes

•Add 300 ml of d-limonene, mix well, let sit 3 hours

• If possible, mix everything in a french press so cactus pulp can be mashed after soaking





#### Food-Safe Extract

- •Pour through a filter, set pulp aside
- •Add 25 ml of vinegar, mix thoroughly
- •Separate the vinegar from the d-limonene using a glass gravy separator or a separatory funnel (vinegar is at bottom, limonene at top).
- •NOTE: Separatory funnels are controlled in Texas





#### Food-Safe Extract

- •Evaporate vinegar at 155F
- •Add and separate another 25ml of vinegar at least 2-3 times
- •Repeat all previous steps at least twice with the used cactus pulp



#### Etiolation



- Caused by lack of sunlight during growing season
- •Will not "get fatter"
- Does not affect plant's health, but will be a weak point as it grows



#### Rot







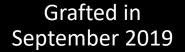
- Bacterial infection caused by the roots not being able to dry out
- •Mushy, dark sections
- Immediate surgery is required, rot can kill in 24hrs
- Bacteria can transfer to healthy plants



Progress as of November 2019



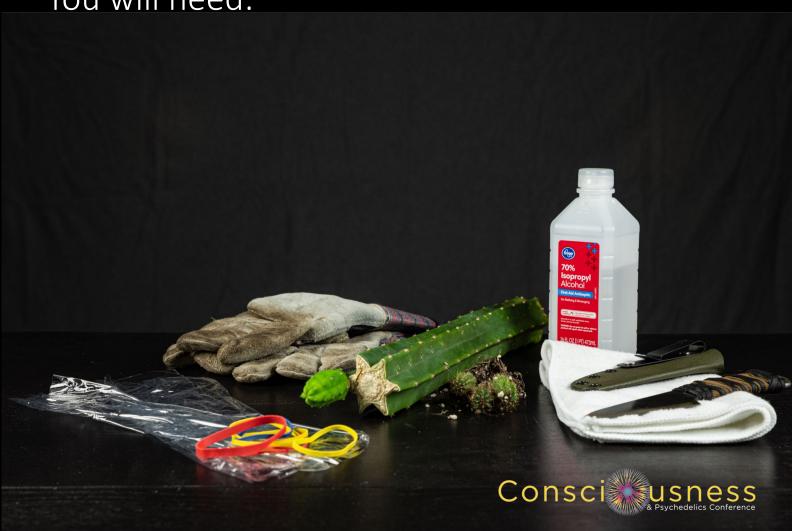
- Useful for rapid propagation and saving the genetic material of a doomed plant
- Essentially creates 2 wounds and uses pressure to ensure they heal together





You will need:

- Rubbing alcohol
- •Clean rag
- •Gloves
- •Sharp knife
- Plastic wrap or pantyhose
- Rubber bands or twine



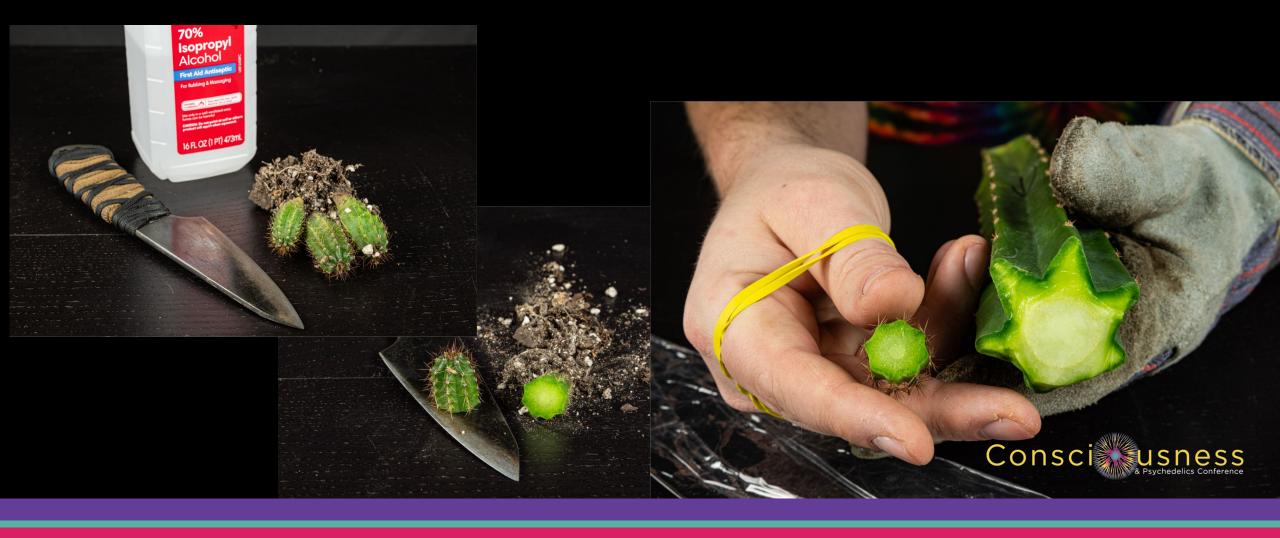
•Discard pups and cut down to before it branched off from the vascular ring



•Cut the stock into a pencil shape to prevent pushing off the scion as it dries



•Align and offset vascular rings from stock and scion



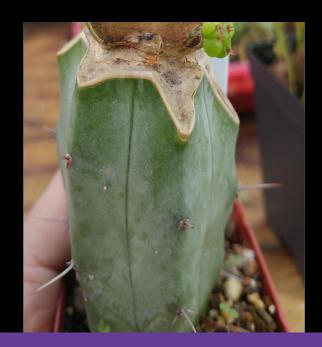
- Secure scion to stock using constant downward pressure
- •Do not make airtight seal this invites mold
- •Keep them like this for 2-4 weeks







- Slab Grafts use mid sections instead of tips
- •Same idea as tip grafts: connect vascular rings
- Useful for rare cultivars







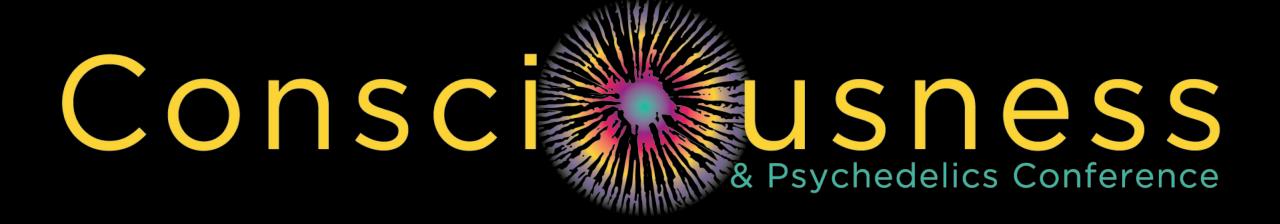


"The pro-psychedelic plant position is clearly an anti-drug position."

Drug dependencies are the result of habitual, unexamined and obsessive behavior; these are precisely the tendencies that psychedelics mitigate."

- Terence McKenna







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