

Propagation of live San Pedro cactus cuttings



This tip rooted itself. Read the "set & forget" rooting method.

Fast growing, flowering *Trichocereus Pachanoi*



1994

Mountain View, California



1997

A perfect climate for *Trichocereus* as there is no winter frost. Soil is alkaline clay, which they seem to prefer, and the sun shines all through the warm, dry summers.

Instructions that help anyone learn to grow this marvelous species.

Dedicated to a woman named Kate from Watsonville, California who sold me my first cuttings & instructions to propagate them.



Catavina Desert, Baja California, Mexico
Photo © Art Wolfe / www.artwolfe.com

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Using a rooting hormone

How to speed up rooting a San Pedro cutting with a plant hormone

This is the way growers would do it for fast, 100% success. However, In the warm dry spring and summer months there is another way. Cut sections are laid down in the shade to allow the cut to dry & heal for 2 weeks. Then the tips are simply set on top of, or 1" deep into, rich soil. Wood stakes are used to support taller ones. Partial shade is good to avoid cooking them. They can even be set on top of leaf mulch or compost in shady area and roots will bud naturally. They use stored plant energies to root and do not need full sun or water during this phase. After several weeks begin to water them a bit—*whenever you see the vertical ribs becoming thin and flabby it means they need water.* As they drink up the ribs swell out looking "fat".



Do not handle rooting hormone without gloves; do not breathe the powder. *This is a plant chemical that is not meant to be in your mouth, eyes, or lungs.*



Start with a fully healed, dry cut

Here is a San Pedro branch tip about 18" long ready for rooting. You can see by the curve that it was a branch.

To achieve a healed cut

- Cut a fresh cactus with a sharp, clean knife. Sterilize by flushing with isopropyl alcohol. (Not really necessary in warm, dry climates)
- An electric fan will help to dry the cut in 24 hours.
- Let the specimen rest in a shady, cool place for 2 weeks.

It is ready when the cut is dry like paper showing no mold or rot. If you find mold cut & sterilize again, air dry with a fan, etc. (try again)



Cactus Propagation Tips

Callous, or healed cut

Sometimes referred to as a callus, the end is healing very much like our bodies form a scab. In time this will thicken into a scar like material. In fact, any cut, scrape, or gouge on a San Pedro can heal with a tan colored scab.



Rooting hormones contain Auxins (plant hormones) that induce plants to grow roots in stem tissue. Creating high levels of plant Auxins to another plant hormone called Cytokinins triggers this. *Whatever.*

Here we are increasing the level of Auxins on stem tissue by applying a powder so that the San Pedro is stimulated to root.

After rooting

Good root growth in a healthy plant is ensured by having a well-aerated planting medium that retains moisture, but allows oxygen and carbon dioxide to diffuse.

Soil-less growing mixes are free of harmful bacteria, mold, bugs, etc. They are mixtures of perlite, vermiculite, and peat moss. This provides a good balance of pore space and moisture retention, but avoid over watering. *I use sterilized garden soil mixed with sand and perlite.*



One brand of rooting hormone.

Wet the end so the dry rooting hormone powder will stick. Dip in filtered or distilled water.

About water

Avoid fresh tap water as it has chlorine in it. It is customary, for watering plants, to let tap water set in a container overnight so the chloramine gas is released. Only then is it used to water plants.



Dip the cutting to wet it.

Cactus Propagation Tips

Rooting Powder

Dip the wet end in the rooting hormone. DO NOT BREATHE THE POWDER! Or you will have plant roots growing in your lungs.

Normally one dips plant shoots into the jar of powder directly. Our San Pedro is too big to fit, so I poured the powder into a bowl.



Dipped in rooting hormone

Set in loose soil

The pot is small because I am only using it to get roots started. Later it will be planted in a large pot. This small one makes it easy to lift up and check for root buds.

The rooting process uses sterile soil made by baking potting soil in an oven at 400 degrees for an hour. The soil is made from garden topsoil, sand, home made compost (well aged), and perlite. It stays loose, has excellent drainage, natural minerals from the clay soil and humus provided by the compost.



Supporting the section

The problem with long sections is always the mechanical support needed to keep them from falling over. It is simply easier to root short tips, that is why most growers sell small specimens. However, it is just as easy to root a tall one.

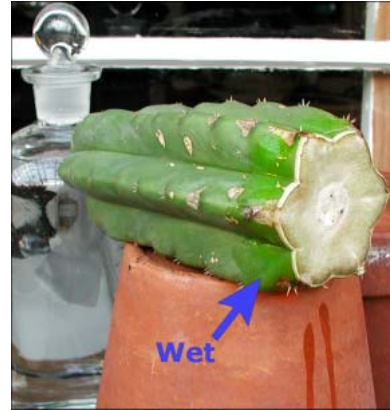


There you go Sir, lean against the wall.

Cactus Propagation Tips

A small tip

Here is a short section tip about 7 inches long. First we wet the end so the powder will stick.



Rooting hormone

The wet end has been dipped in the bowl of rooting hormone.



Now it is ready to be set in a pot of sterile soil.

Set on sterile soil

Do not plant it deep in wet soil or it may rot. Half an inch deep is OK, but remember that roots buds will form—not tiny, delicate root hairs—so it will be OK to lift up and see how it is doing. Later you will “pot it up” into a larger container, or outside.



Take a drink

“Oh! Thank you! I was so thirsty”

See how easy it is to root a short tip? Simply pressing it into loose soil will hold it up—no staking necessary.



Keep in mind that San Pedro will use stored plant energies to bud roots. So you are not really watering the plant. Simply keep the soil damp, not soggy. We’ll update this literature in the future to show you the outcome.

Thank you!

THE END is only a new beginning...