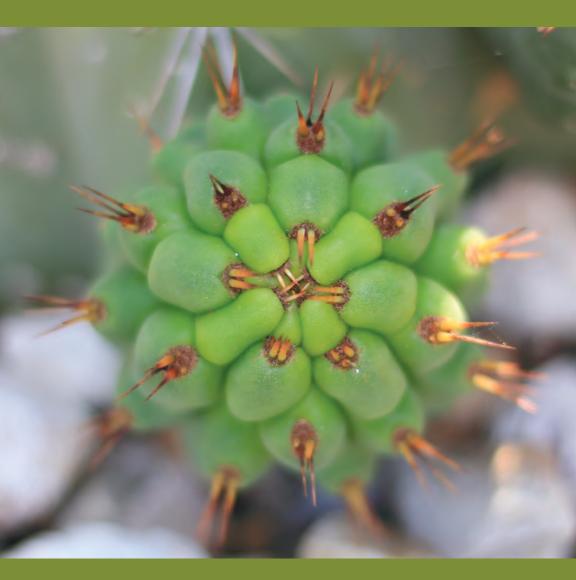
The San Pedro Appreciation Guide



Dr Liam Engel



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The San Pedro Appreciation Guide
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Dr Liam Engel with the original Trichocereus pachanoi 'Booyah' stands at the Damascus Garden.

How to use this guide

The San Pedro Appreciation Guide helps humans navigate the rich and complex world of cacti. Readers will learn to better understand the distinct features of this plant and to determine which San Pedro to invite to cohabitate their garden.

San Pedro, also known as Huachuma and Trichocereus species, are important psychedelic plants that have been cared for by humans for over three thousand years. Like human culture, cacti culture has become increasingly complicated. Every seed-grown plant is as unique as an individual person.

Each of the chapters listed on the following contents page focuses on a category of features worthy of appreciation in San Pedro cacti. Skim the chapter and use subheadings to locate images and descriptive detail related to the specific San Pedro features you appreciate most.



A San Pedro pup emerges. Trichocereus peruvianus 'Christie's' in-ground planting at The Mescaline Garden.

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Grafted variegated seedlings. Trichocereus terscheckii 'Dawson's SS' x Trichocereus bridgesii 'Warrah Mutt' scion on Trichocereus bridgesii 'Psycho0' stock.

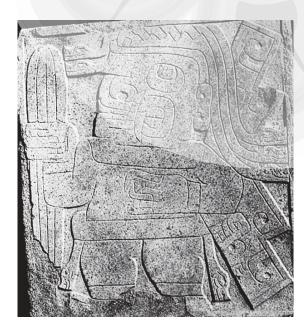
Cultures

Throughout time, humans have had relationships with San Pedro for many reasons. Moreso than other chapters, which tend to emphasise physical appearance, cultural appreciation of San Pedro relies heavily on cacti provenance and history.

There are both ancient and more recent traditions involving psychedelic use of these cacti. Botany, horticulture, hybrids, clones and seed grown plants provide more ways to appreciate San Pedro.

This San Pedro clone was imported to Australia in 1992. It was gifted to the Urban Tribes Nursery by a Peruvian shaman.





An ancient Chavin stone showing a jaguar and San Pedro cacti. Image by Aristóteles Barcelos Neto.

Tradition

The now extinct Chavín culture was home to what is likely the most well-known San Pedro tradition. Chavín culture took place in the Mosna Valley in Peru between 900 and 200 BCE, and there is evidence that suggests Chavín people consumed a variety of psychoactive plants.

San Pedro collectors often appreciate plants with lineage that can be traced back to traditional cultures. Urban Tribes' Trichocereus peruvianus 'Peruyote' was the favourite plant of a shaman located near Tacna, Peru. San Pedro collectors also value lineages that can be traced to culturally and geographically specific areas.

Psychedelic

San Pedro cacti contain varied amounts of the psychedelic mescaline. San Pedro are legal to grow in many states but are typically illegal to prepare and consume. Mescaline is a psychoactive phenethylamine with a duration of as long as fourteen hours. How San Pedro is grown and prepared impacts the amount of mescaline in the final product.



Trichocereus bridgesii 'Psycho0.' While T. bridgevsii are commonly believed to be the most potent San Pedro species, there are numerous reports that support the idea that, compared to other San Pedro, Psycho0 is low in mescaline content.

Growers

In their own way, botanists, horticulturalists and gardeners all study and care for San Pedro. Some care more about names than others.

Botanists are quite limited in what they recognise as a unique plant and have strict rules for what plants are considered worthy of their own name. Botanists focus on genetics and published species descriptions, and might recognise ten or more species as making up the San Pedro cacti group.

Horticulturalists focus more on the different faces of San Pedro – they're more concerned with many cultivars, varieties and clones, rather than with just a few species. Horticulturalists could easily recognise more than a million different types of San Pedro. The detail in this guide is more horticultural than botanical – although these two disciplines are separated by a blurry line.

While a current trend in psychedelics draws new admirers to San Pedro, people have long been growing these plants for other reasons, many detailed in this guide. Some San Pedro have cultural features because of their history amongst botanists, horticulturalists and gardeners. Trichocereus pervuvianus 'Rosei 1', for example, is a famous Australian San Pedro clone that was part of the Field's collection. The Field's collection was imported to Australia by Ralph Field in the 1930s and

donated by Ralph's son Robert Field to the Royal Botanical Gardens Victoria in 2020.

From left to right – classic examples of Trichocereus pachanoi, Trichocereus peruvianus and Trichocereus bridgesii.
Note the small spines on the T. pachanoi and asymmetrical spines on the T. bridgesii. Appearance alone is not enough to identify a species. Without genetic analysis, we can only rely on fastidious labelling and record keeping.

Hybrids

The future of San Pedro genetic research is exciting – we don't currently know how different San Pedro species relate to each other. Two plants may look very different but be genetically similar or look similar and be quite genetically distinct.

It has been argued that all San Pedro are hybrids, and to simplify a very complex situation, we might say there are three classic or stereotypical faces of San Pedro - Trichocereus bridgesii, Trichocereus pachanoi and Trichocereus peruvianus. Additional faces include not only hybrids amongst these species, but with other Trichocereus species AND species from other genera. It takes some practice to tell these species apart by eye, and even then some of these naming uncertainties can only be resolved via genetic analyses.



Trichocereus hybrid 'Supernova'. This plant was bred for its impressive floral display via integeneric hybridisation. In-ground planting by Tony Davey.



Unnamed Trichocereus peruvianus clone from Mark Hoffman. Fresh cutting from The Mescaline Garden.

Clones

Because cacti can grow from cuttings, we have no idea about the age of the oldest cacti. Cacti can be cut and regrown, seemingly forever! Clones are special because they carry a particular heritage. Trichocereus bridgesii 'CSD' carries the name of the notorious and fondly remembered ethnobotanical community member Dennis, AKA Chemical Shaman.

Seed grown

The general rule amongst horticulturalists for plant names is that new names are only given to individual, seed grown plants. It starts a lot of arguments, but as I see it, the purpose of a name is communication – the more information you can record about your plants the better!

A name is the signifier of this information and denotes the lineage and history of a plant. Some believe only a unique or 'special' plant is worthy of a new name. This is more in keeping with a

Bodies

botanical approach, but creating such rules about naming can reduce confusion when people don't maintain good records. While it is confusing when the same plant has been given two different names, it seems rude to think that every human is worthy of a name, but every plant is not.

Typically, a new seedling receives the label 'Pollen donor x Flower donor.' If the grower appreciates the seedling, they might give it an additional name. This is the case for Trichocereus sp. 'Neptune' from The Mescaline Garden. The parent name of this plant is (Trichocereus bridgesii 'SS02' x Trichocereus bridgesii 'SS01') x Trichocereus peruvianus 'Misplant TPM'. This is a bit of a mouthful, so we call them Neptune for short.



Seedlings of mixed, open pollinated Trichocereus peruvianus from the Damascus Garden, sown in a bottle terrarium.

Like human bodies, every San Pedro body is different. Body appearances depend on a combination of nature and nurture and are not entirely predictable.

In this section 'body' refers to biologically typical bodies - this guide refers to biologically atypical bodies as 'special shapes' and are reviewed in a later section.

Features to appreciate in biologically typical San Pedro bodies include columns, ribs, girth, height, colour, growth rings and notches.

A notchy blue growing tip atop a column. In-ground, seed grown Trichocereus pachanoi in the Urban Tribes Nursery.



Columns

Columns, like a tree's trunk, are often the first thing people notice about a San Pedro. A plant may have more than a hundred columns, which can be cut and regrown. A column with the growing tip intact is called a tip cut. A column with the growing tip removed is called a log cut.



Four columns with growing tips growing from a single log column without.

Potted Trichocereus peruvianus in The Mescaline Garden.



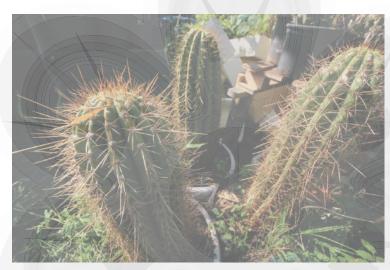
This Trichocereus peruvianus 'Christie's' has seven ribs. Potted plant in The Mescaline Garden.

Ribs

When you look down at a San Pedro tip, you will most likely see a star shape that is segmented into sections. We call each of these sections a rib. San Pedro have around six to eight ribs on average, but these numbers vary widely even on the same plant.

Girth

Cactus seedlings can be as thin as a millimetre, while mature adults can be over thirty centimetres wide. The width of San Pedro bodies varies widely but in optimum conditions new growth can increase in girth, making columns top heavy over time. Certain species are known for being thin, such as Trichocereus bridgesii, while others are known for being thick, like Trichocereus terscheckii. The combined width of all the columns on a single San Pedro planting can easily reach over 20 meters.



Trichocereus terscheckii is often used to promote girth in San Pedro breeding. Potted plants in the Halcyon Garden.

Height

San Pedro can get incredibly tall, but each San Pedro grows at a different pace. The right plant, in the right conditions can certainly grow more than five meters tall.



Using a ladder to pick fruit from tall Trichocereus peruvianus in the Damascus Garden.
San Pedro fruits are discussed in a coming section.



Colour

San Pedro can come in an exceptionally wide variety of blues and greens. In some special cases, San Pedro can even come in purples, reds, pinks and yellows — and potentially in combinations of all of these colours.

This potted and unlabelled Trichocereus hybrid clone in
The Mescaline Garden exhibits a highly desirable blue colour.
Part of this colouring comes from a powdery coating
that can be removed by touch – don't go
wiping your fingers on frosty blue cacti!

Growth rings

Growth rings are tapered lines that appear on San Pedro columns over time. Growth rings can be hard to spot – some people might mistake them for shadows cast by spines. These lines can be used similarly to rings in the trunk of a tree. By counting the number of times the same line appears, you can estimate how many seasons the cacti has been growing.

Growth rings on Trichocereus peruvianus 'Bunnings.' In-ground planting at The Mescaline Garden.

Notches

Notches are V-shaped indents in San Pedro columns which appear above the small circles (areoles) from which spines emerge. Strong notches can give San Pedro a vertical, sawtooth-like profile.

Strong notches on Trichocereus peruvianus 'JAC006.' In-ground planting at The Mescaline Garden.

Spines

Spines clearly offer some
San Pedro protection. It's
obvious to anyone that has
had to move or prune cacti
why people have selectively
bred some San Pedro to have
shorter spines – they hurt!
At the same time, some
people might prefer their
San Pedro to be a hazard.
Maybe they like the spikey
look, or maybe they're
building a fence.

Spines can be long, short, or entirely absent. San Pedro clones tend to have a relatively consistent number of spines per areole, and these spines can come in a range of colours.



Golden spines on a fresh cutting from a seed-grown 'Icaros DNA' in The Mescaline Garden.

Length

Spines can be over 20cm long, and their length can vary widely on the same plant. Some San Pedro have more variable spine length than others.



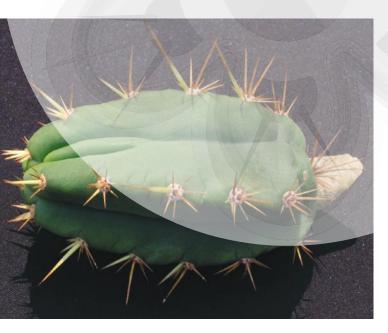
The spines pictured here on Urban Tribes 48th seed grown Trichcoereus bridgesii vary in length and quantity per areole. Sometimes this cacti grows with no spines at all. Note Australia's oldest Ayahuasca vine in the background.

Number per areole

It is unusual for a San Pedro to have an equal number of spines on every areole. It isn't just because spines get knocked off - spines rarely grow in complete uniformity, although it is unusual for the number of spines per areoles to vary by more than six or so spines.



Curving 9-13 spines per areole on an unlabelled, seed grown Trichocereus terscheckii.



Colour

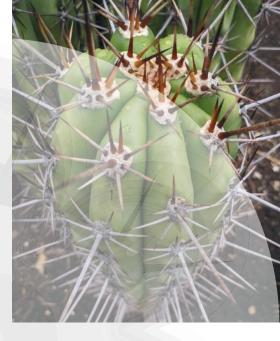
Spines are one of the most colourful parts of a San Pedro. Spine colours include black, white, brown, green, yellow, red, purple and all the colours in between. Spines are typically more than one colour, with new spine growth at the base of the spine appearing brighter.

Trichocereus bridgesii 'Psycho0' x Trichocereus peruvianus 'Paradeyes' showing 4 to 10 yellow to reddish-brown spines per areole.

Areoles

You may note that 'areole' has a similar spelling to 'areola'. People delight in both areole and areola – albeit for reasons that differ in spikiness. Areola are the small circular area of skin surrounding the nipple. San Pedro areoles, on the other hand, are the small circular area of felt surrounding the spines. Areoles primarily differ in their size and colour.

This Trichcoereus taquimbalensis has very large, white felted areoles.



Size

Areoles vary from a couple of millimetres in size to a couple of centimetres. Areoles on a single plant tend to be much more consistent in size than spines. Sometimes areoles may seem more like a depression in a rib, at other time areoles may appear more swollen.

This Trichocereus scopuli**cola has** small, sunken areoles and tiny spines. In-ground planting at The Mescaline Garden.



Colour

Areole colours are also less diverse than spine colours. San Pedro areoles tend to range from white to grey or black, or to appear as various shades of brown.

> Medium sized black areoles contrasting strongly with red spines. Trichocereus sp. 'FPP' from the Damascus Garden.



Special shapes

This section focuses on the unique physical shapes exhibited by a minority of San Pedro. Unlike human culture, in San Pedro culture, unique and unusual bodies are celebrated, sought after and seen as worthy of extraordinary appreciation.

While it is difficult to summarise special shapes in all their impressive diversity, this guide notes cresting, extra bits, terminating tips, melting ribs and excessive pupping as core themes in San Pedro special shapes.



Freshly germinated San Pedro seeds.

Note the albino seedling – this plant cannot produce chlorophyll and will need to be grafted and kept in shade to survive.

Growers tend to prefer variegated plants that produce chlorophyl in some areas, resulting in a patterned appearance and greater sun protection.

Chlorophyl deficiencies can be appreciated as a special unusual quality, as well as a colour of a San Pedro body – but this chapter focuses on special shapes.

Cresting

A San Pedro crest refuses to grow from a single point. Cresting, also known as fasciation, involves San Pedro growing horizontally, as well as directly upwards, rather than from one growing point. This results in a fan-shaped body.

This Trichocereus peruvianus 'Hamilton's crest' is partially reverting to three columns of regular growth. The left side remains a crest – it cannot find a single growing point.

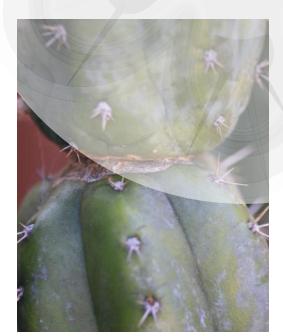


Extra bits

Some cacti get interesting lumps and bumps. While these bumps can look like new pups or growing tips, a new pup should break the skin on the cacti and emerge from beneath the areole.



Trirchocereus hybrid 'Neptune' displaying both extra growth and yellow variegation pattern on the far left column. Note the column on the far right has terminated and pupped again from the tip – the other growths are not proper growing tips!



Terminating

Sometimes a tip stops growing. Often this is due to damage from snails or other pests, but a tip may also terminate due to sunburn or genetic factors. Terminating is a normal part of growth, but as a special shape, terminating involves a new growing tips repeatedly breaking through existing growing tips, like a destructive matryoshka doll.

Close up of a terminated and pupping tip on a Trichocereus peruvianus 'Sausage plant'. Sausage plant has a tendency to terminate growth tips, pup at the tip, and repeat. The resulting column appears segmented – like a sausage.



Melting

It is quite common for San Pedro to add or lose a rib on certain areas of a column. Cacti will often do this in response to age or varied growing conditions – the plant changes in size and changes its number of ribs to match. A melting San Pedro will add and remove ribs as its regular pattern of growth, and ribs become less clearly segmented.

This San Pedro went to add a new rib – then changed its mind. The result is a segmented diamond of flesh that doesn't have a single areole.

Excessive pupping

Unlike the other special shapes mentioned in this guide, excessive pupping (the growth of new column growing tips) is relatively easy to induce. Some hybrids are more likely to pup, with

intergeneric hybrids between San Pedro and Echinopsis species being a clear example. Pupping can be induced organically, by removing a tip or adding coconut water, or more aggressively, with the addition of products such as 6-Benzylaminopurine (benzyl adenine/BAP). Excessive pupping can also signal infection and the need to quarantine, a symptom commonly termed 'witches' broom.'



San Pedro will pup after a tip is cut or damaged. This San Pedro hybrid pupped seven times after their main column was removed.

Flowers

A flower is the San Pedro equivalent of a Tibetan sand mandala.

A flower takes months to form, but blooms and withers within as little as 24 hours. From seed, a San Pedro may take over ten years to flower, and many San Pedro only flower once a year. A large, in-ground San Pedro stand may have 30 flowers. A potted San Pedro may have only one.

Different San Pedro exhibit different flowers which can be appreciated for their colour, size, fertility and flowering frequency. I am yet to encounter a breeding program focused on San Pedro flower scents – but I imagine this is only a matter of time.



Trichocereus hybrid with yellow flower in bloom.

In ground planting by Tony Davey.



Trichocereus hybrid with red flower in bloom. In ground planting by Tony Davey.

Colour

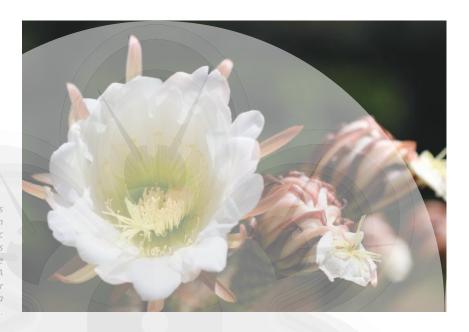
A classic San Pedro has a white flower – coloured flowers are the result of intergeneric hybridisation. You will notice most cacti with coloured flowers do not look like typical San Pedro. Such a plant is an ongoing project that to my understanding has not yet been achieved.

You cannot be certain what colour the flower grown from a seed will be, and you cannot be certain of what the cacti that grows the flower will look like either. There is a lot of trial, error and time involved if you want to breed the traits you want, like coloured flowers, into a plant that looks like a San Pedro.

Size

San Pedro flowers are quite large. Their size ranges from ~20cm to over 30cm wide, and their hairy, trumpet shaped flower tubes are slightly longer.

Trichocereus
grandiflora is known
for numerous, prolific
flushes of flowers
throughout the
growing season. A
similar white flower
is to be expected on a
classic San Pedro.



Frequency

Some San Pedro flower more readily than others. In nature, a plant will flower as a survival instinct. Some growers take advantage of this instinct to trigger flowering, and stress their plants by restricting water, nutrients and root space.

Immature flower tubes on an in-ground San Pedro hybrid. These are due to bloom within a month or so.

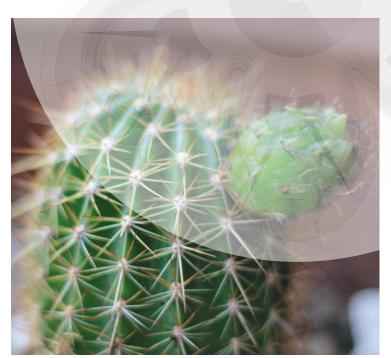


Fertility

Seeds are produced by collecting pollen from one flower and depositing it on the stigma inside another flower. San Pedro don't have genders, but people tend to call the pollen recipient the mother and the pollen donor the father. If pollination was successful, the mother cacti will bear fruit. If we're lucky, the fruit will contain viable seeds. Certain parents are more likely to produce seed, and these plants can be appreciated for their fertility.



Trichocereus hybrid WK showing fluff that precedes flowers. Some Trichocereus species produce flowering hormones in large quantities. When cut, some Trichocereus may flower so prolifically that they do not have enough energy to produce roots and die as a result. In ground planting by Tony Davey.



Fruits

San Pedro fruit can be a delicious, fresh treat or a stinky, fertile mess. Both fruits can be desirable, but it depends if you want to grow more cacti or if you'd rather have a snack. San Pedro fruits can be appreciated for their flavour and for the viability and common traits of their seeds.

A small, ripening fruit on an Echinopsis/Trichocereus intergeneric hybrid. Potted plant at The Mescaline Garden.

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Flavour

Dragonfruit is the classic cacti fruit —the pulp and seeds of a San Pedro fruit don't look or taste too different. I enjoy all cacti fruits best when they have been cooled first in the fridge —a side of vanilla ice cream doesn't hurt either.

There are unique San Pedro fruits - some growers are working to develop fruit with particular flavours. I am most excited for Halcyon's work breeding with the Trichocereus macrogonus 'Coconut Beast' series – the fruits taste like coconut!



Millions of open pollinated Trichocereus pachanoi harvested seed from the Damascus Gardens, note all the fruits have split. Growers wishing to eat cacti fruit would likely harvest earlier. I recall a distinct smell of fermentation...



Seeds

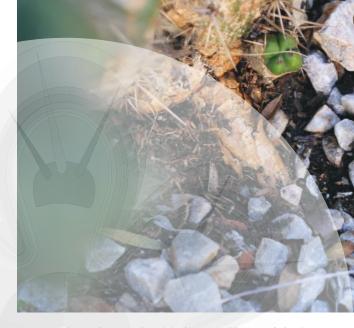
Growers wishing to harvest seed typically wait for cacti fruit to split. Harvesting fruit before this time can result in underdeveloped brown or green seed that might not germinate. Seeds from fruit from certain San Pedro will be more likely to germinate than others. Seeds of fruit from certain San Pedro will be more likely to display particular traits, too.

Seeds from the Trichocereus macrogonus 'Coconut Beast' series – I chose to grow these seeds instead of eating the sought-after fruit. Germination rates can be improved by soaking seed for ~24 hours prior to sowing.

Growth habits

In nature, most San Pedro grow directly upwards in columns and eventually fall over. The fallen columns take root, produce new columns, and the cacti spreads in this kind of sprawling fashion. Some San Pedro have a tendency to grow along the ground, like a snake — a San Pedro climbing up or down a cliff is not an uncommon sight to see in South America.

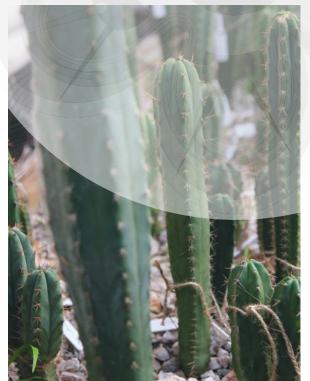
Not all San Pedro grow the same though – some grow faster than others, and some are more or less tolerant to particular environmental conditions.



Exposed root on the original in-ground 'Neptune' planting.

Note the corking at the base of the plant – this occurs on all San Pedro with age.

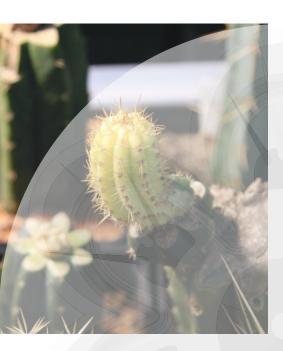
Corked plant material is tough – but very difficult to graft.



Vigour

Vigour refers to how fast a plant grows. Vigour can be improved by controlling environmental conditions, but some plants will always grow more vigorously than others. Fast growing San Pedro clones can prove to be particularly popular grafting stock, such as Trichocereus pachanoi 'Predominant Cultivar', commonly called 'PC'. Slow growing San Pedro may make better feature plants for smaller areas.

Every San Pedro grows at a different pace. There are almost one hundred unique San Pedro in this single garden bed at The Mescaline Garden, most of which were planted at the same age, at the same time – note the huge variation in size.



Hardiness

Different San Pedro prefer different homes, and unless you have a greenhouse with comprehensive environmental controls, it is best to choose a San Pedro suited to your garden. Tailor your San Pedro choice to the temperature, light, humidity, growing medium, water and fertiliser of your garden. Treating all your San Pedro the same may be making them grow differently – although in the right conditions, many will thrive on neglect!

This grafted, variegated San Pedro hybrid would not survive in full sun. The plant survived on it's own roots, but did not thrive. The hybrid was grafted and now grows more vigorously.

Scion

A scion is the part of a graft that steals growing power – a grafted scion becomes an artificially attached growing tip. If the scion does not have a growing tip, it will likely pup from an areole. Many scions can be grafted on a single plant, but the more growing tips, the slower each tip will grow. Growers will often remove all growing tips but one from a grafted plant, to maximise growth of the scion.

Seed grown Trichocereus terscheckii grafted on in-ground stock in The Mescaline Garden.



Grafts

Grafting might be undertaken to save a plant from dying, to grow a plant faster, to achieve a particular appearance, or just for fun. On a basic level, grafting takes the roots and growth of one plant and gives them to another, creating a somewhat parasitic relationship between the two plants. The skill in San Pedro grafting is connecting the vascular rings correctly, applying sufficient pressure and preventing infection.

There are two components of a graft – the scion and the stock. As well as appreciating San Pedro for their suitability for grafting, people also appreciate San Pedro that have been de-grafted, or for having never been grafted at all.



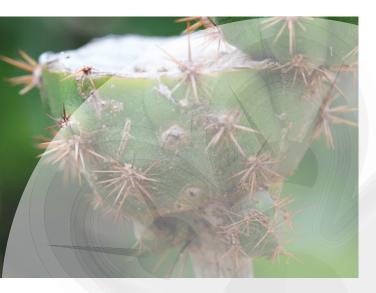
Horizontal cross sections of a San Pedro cacti. Note the circular core of vascular bundles in the middle – these must be interlocked when grafting. FYI - the outer green layer of flesh typically contains greater concentrations of mescaline than the white flesh.

Stock

The stock is the component of a graft that is having its growing power stolen – the grafted scion on top leeches from the stock. Vigorous and hardy San Pedro clones are a very popular stock for grafting a whole variety of cacti – not just Trichocereus species.

Tips removed from San Pedro used as stock for grafting. Scions have now replaced these tips. The tips can be calloused and rooted to be used as stock, again.





De-graft

It can be hard to remove a scion from the stock at their original point of union. Growers often leave some scion remaining on the stock, removing a large tip to be grown on its own roots — a de-graft. The remaining scion can pup again and continue to leech energy from the stock.

Trichocereus peruvianus 'TPM' x Trichocereus peruvianus 'Sharxx Blue' with a special form grafted on Pereskiopsis sp. Note the calloused, whitish brown area on top, from which a piece of the hybrid was previously de-grafted.

Never grafted

Some growers have a particular appreciation for seed grown plants that have never been grafted. Grafting accelerates growth, creates a different appearance and results in less mescaline production by weight. Some people regard this as cheating and prefer plants that have never been grafted.

A San Pedro seedling that has never been grafted.



Environments

San Pedro are incredibly resilient cacti. They can grow in many different environments, which effects the appearance and behaviour of San Pedro. By controlling San Pedro environments, growers can make San Pedro grow bigger and faster, flower more frequently and even (controversially, for some) increase the likelihood of variegation or special forms.

San Pedro may be appreciated for being planted directly into the ground, for being potted, for the way in which they have been fed or fertilised and for their relationship with sustainability and conservation practices.



A calloused, cut column of a Trichocereus bridgesii 'Psycho0'.

In-ground planting at The Mescaline Garden.

In-ground

San Pedro planted directly in the ground have more root space, allowing them to grow much larger than potted plants. However, San Pedro like well-draining soil – a mix of 50:50



organic:drainage is a good general guide. Rather than digging a hole in your garden, removing some of the soil and mixing it with rocks, it is generally easier to fill a bottomless pot or raised garden bed with pre-prepared growing medium. As the San Pedro grows stronger, roots will be better able to grow into soil with less drainage — enjoying many benefits of both potted and in-ground planting.

San Pedro roots can get bigger in the ground than they can in pots, with columns growing much larger and faster as a result. This stump of one of the plants in the Trichocereus pachanoi 'Booyah' series was retrieved from the Damascus Garden – some of the roots were almost 20cm wide.

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Potted

Potted San Pedro grow slower than plants rooted in the ground, but there are some advantages. Potting can increase the rate and frequency of flowering, and permit you to move plants in response to the weather. This is particularly important for growers that experience low temperatures – some growers may bring their cacti indoors for the winter to avoid frost or snow.

Potted, coloured (hopefully) flowering San Pedro hybrid in The Mescaline Garden.



Fertiliser and additive history

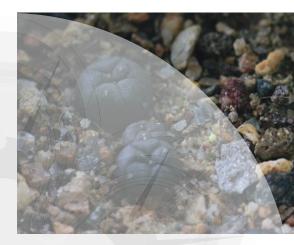
The demand for organic produce isn't limited to boring fruits and vegetables — a plant's consumption history is important for many San Pedro cultivators, too. Seller etiquette requires buyers to be told how a San Pedro was grown, this includes not only nutrients and fertilisers but also herbicides and pesticides. Plants that have had BAP applied, for example, may be viewed as undesirable by some.

Watering in The Mescaline Garden. Seed grown San Pedro hybrid.

Sustainability/conservation

While most San Pedro aren't threatened in the wild, Peyote (Lophophora williamsii) are at risk of extinction. San Pedro can be appreciated as a sustainable, alternative mescaline cacti to Peyote.

Despite San Pedro's prominence in nature, it is generally best to avoid cacti collected in the wild, unless it is sourced ethically, legally and without environmental impact. This is especially the case for Peyote. Wild San Pedro that have been sustainably sourced deserve appreciation. Growing cacti in your garden can help protect their relatives growing at home in their natural habitat.



Seed grown Peyote in The Mescaline Garden.

Acknowledgement of Country & cacti

I grow San Pedro on Country stolen from Darug and Gundungurra people. First Nations Australians are plant experts that continue to show an unparalleled level of plant knowledge and care.

San Pedro have their own important cultural history throughout South America, dating back thousands of years. These cacti are not native to Australia and should be planted with foresight and sensitivity to the local environment.



Local Acacia longifolia setting seed in The Mescaline Garden



The San Pedro Appreciation Guide Dr Liam Engel

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