

San Pedro (*T. pachanoi*)

The San Pedro is a large columnar cactus that can grow up to 6 meters in height and contains mescaline. The San Pedro cactus has also been found to have other psychoactive alkaloids. The mescaline concentrations are the highest in the skin, which can be peeled. When this skin is dried and grinded, a powder is yielded that can be consumed. More traditional native preparation of the San Pedro cactus is somewhat different. Slices of the stem are boiled for a few hours. The liquid made by this process has been drunk in Peru for over 3000 years.

Instructions:

For cultivating San Pedros make sure you collect the following necessities:

- Grow container with lid
- Potting Soil (50%)
- Coarse Sand (20%)
- Gravel (20%)
- Perlite (10%)
- Seeds of San Pedro (*Trichocereus pachanoi*)

First Setup

The first step in growing your own San Pedro is to make small drainage holes in the container where you will be growing in. This is necessary because over-watering can cause rotting of the roots of your cacti.

The next step is to mix together the soil with the sand, perlite and gravel. First divide the gravel in half and put one half on the bottom of the growing container so its just covered. It's a good idea to first sterilize the mixture, as there might live some bacteria that will eat the mixture's useful minerals too. To do this use an oven at 150-180 °C for about an hour (make sure you use an oven proof dish and not the growin container, this will melt) or you can use the microwave at a low setting for about 30 minutes.

Now when mixed together you can make it moist. A good way to determine if the soil is moist enough is to squeeze it in your hand. If there is no water emerging from the soil yet it is perfect, if it is a bit too moist, just add some more soil so don't put it all together at once. Once it's perfect you can fill the container with this mixture.

Seeding

We are now ready to start the seeding. The seeds should be put on the soil and can be pressed very gently into the ground with a pencil. Make sure they are not too deep, about 1.5 – 2 times their height is ideal. Now spray a couple times with water over the soil and close the lid on the box.

Temperature

The best temperature for the germination of San Pedro seeds is a temperature between 20 to 30 °C, ideally around 23 °C. To acquire such a temperature you could place it next to a heater or use an electric blanket to keep them warm. Always be careful when placing the growbox directly on a heater because it may dry out and your seeds will not germinate. Some people use a heating element for an aquarium or terrarium to acquire the perfect temperature. Of course this is not necessary but it will improve and speed up the process of germination.

Humidity

While germinating the San Pedro seeds, it's best to keep the humidity high. In this period the soil should also be kept moist. After a while the cacti are mature enough to get used to a very dry environment. To let the young cacti adapt from their humid environment to dry conditions, we start to make holes in the lid of the container to slowly bring down the humidity in the growbox. After a few weeks you can completely remove the lid, but still keep the soil moist for about two months.

Lighting

While your San Pedro seeds are germinating it is important to not put the container in contact with full sunlight. Use fluorescent tube lighting or compact fluorescent lighting (CLS) for 16-18 hours a day. When the cacti are a bit stronger and older (2-3 months) you can slowly let them get used to the indirect sunlight. If they are around 1 year old they can be placed in direct sunlight.

After this we can start treating the cacti like adult species and give them less and less water. Make sure that the soil completely dries out before watering the cacti, to simulate dry growing conditions.

If the cacti are about one year old (or 1-2 cm in diameter) you can start thinking about repotting them. Always keep in mind that a bigger pot is not always best. Try to get a pot that has about 4 times the diameter of the cactus. Changing pots will give you the opportunity to give the cactus more nutrients in the new soil.

Taking care of your San Pedros.

Cacti are used to dry conditions and therefore should never be given too much water. The best time to water the San Pedro cactus is in spring and you can keep watering them until autumn. Especially when kept outdoors you should never water them too much in winter because the cold combined with the water will damage the San Pedro cactus. It is best to give them only a little water in the winter to prevent it from completely drying out.

San Pedro cacti are growing actively in the period from spring to fall. In this period they need the most water and nutrients. For nutrients it's best to use special cacti nutrients and always be very careful not to give them too much. Good cacti nutrition is always low in nitrogen and high in potassium and phosphor. These are indicated by numbers at the label of the bottle in a NPK value. A good NPK value for cacti would be 4-7-7 or even 2-7-7.

A good way to water is to "bottom" water them. Just put your San Pedro with pot in the sink with a small amount of water for a short while. The "bottom" watering method will assure strong roots because the roots have to reach out for the water. Although this is a good way to water them, you should occasionally water them also from above.

It is very important to know that the San Pedro cactus is best kept in winter at a temperature of 5-10 °C (it can also be kept at room temperature, but preferably colder). Also make sure it will get enough light.

We hope you will enjoy growing your own San Pedro Cactus, it is one of the fastest growing cacti in the world. It could grow up to half a meter a year under ideal conditions. If you want to know more about cacti (cultivation) there are some interesting books available in several (online) shops :

San Pedro and related Trichocereus Species by Trout

Cultivation and propagation of cacti by Trout