

## San Pedro (*Trichocereus pachanoi*)

Thank you for purchasing the San Pedro Growbox. 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 contain other psychoactive alkaloids. The mescaline concentrations are highest in its skin, which can be peeled. When this skin is dried and grinded, a powder is yielded that can be consumed. The traditional native preparation of the San Pedro cactus is different. Shamans from Peru boil slices of the stem for a few hours. The liquid that is obtained in this process has been drunk in Peru for over 3,000 years.

## Instructions:

First of all please check if the San Pedro Growbox contains the following items:

- Grow container with lid
- Potting Soil (50%)
- Coarse Sand (20%)
- Gravel (20%)
- Perlite (10%)
- 25 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 too much water may cause rotting in the roots of your cacti.

The next step is to mix the soil with the sand, perlite and gravel. Firstly, divide the gravel in two halves and put one half on the bottom of the growing container so it is just covered. It is recommended to sterilize the mixture before you use it, do this in the oven at 150-180°C for about an hour (make sure you use an oven proof dish and not the growing container: it will melt) or you can use the microwave at a low capacity for about 30 minutes.

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

## Seeding- and germinating conditions.

### Seeding

We are now ready to start the seeding. The seeds should be put on the soil and then pressed very gently into the ground with – for example - a pencil. Make sure they do not sit too deep, about 1.5 – 2 times their height is ideal. Put a few sprays of 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 grow box directly on a heater because it may dehydrate 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 is very important 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 gradually get used to more dry conditions, start to make holes in the lid of the container to slowly bring down the humidity in the grow box. Make more holes every few days. 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 not to expose the container to 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 indirect sunlight. Approximately at the age of 1 year, 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 dehydrates before watering the cacti, to simulate dry growing conditions.

When 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 better. Try to get a pot that has about 4 times the diameter of the cactus. Changing pots will give the cactus the opportunity to gain nutrients from the fresh 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. Preferably, give them only a little water in the winter to prevent them from completely dehydrating.

San Pedro cacti are growing more rapidly in the period from spring to fall. In this period they need most water and nutrients. As for nutrients you can use special cactus nutrients. Always be very careful not to give them too much. Good cactus 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.

When it comes to watering, the best way is to “bottom” water them. Just put your San Pedro with pot on the bottom of the sink, and let it sit in a layer of water for a short while. The “bottom” watering method will assure strong roots, because they have to reach out for the water. Although this is a good way to water them, you should occasionally water them from above as well.

It is very important to know that in Winter, the San Pedro cactus is best at a temperature of 5-10 °C (it can also be kept at room temperature but preferably colder). But always 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. In ideal conditions, it could grow up to half a meter a year. If you wish to know more about psychoactive cacti and their 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