

Growing a Cactus from Seed

Growing plants from seed is not as hard as you might think – even though many of us have tried and failed! One of the most common mistakes people make is planting the seeds too deeply. You should only plant a seed as deep in the soil as the seed is wide. When seeds are planted too deeply the tiny plants emerge and begin to grow but do not reach the surface before they run out of stored food. Follow these instructions for growing cacti from seed and you will surely be successful.

SEED: It is best to use fresh seed when growing most cacti. Seed can be obtained from a commercial source or collected from a plant in your collection.

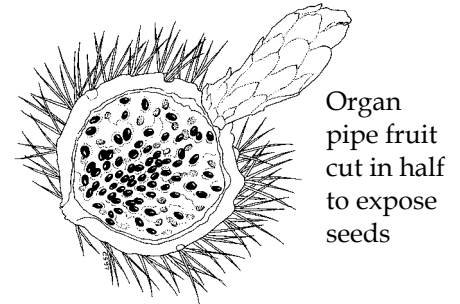
Take care when collecting seed from a cactus collection. Some cactus species hybridize freely and true seed cannot be assured unless pollination has been monitored carefully.

SOIL: A good potting mix, amended with $\frac{1}{2}$ its volume of granite, perlite or pumice for drainage, makes a good mix for growing cacti from seed. It is important that the soil be as pest-free as possible. To pasteurize soil, put it in a shallow heatproof pan, place it in the oven at 300 degrees F for 30 minutes. Most commercial soils are at least pasteurized, if not sterilized. Check the label.

PLANTING: Be sure that all containers to be used are clean. The type of container is not important, but shallow ones are preferred. Water the soil thoroughly and let it drain completely before planting. Spread the seed evenly over the top of the soil. Cover the seed lightly with the mix or very fine sand. When planted, cover the container with any transparent lid. This will retain moisture and allow light to reach the seedlings.

GERMINATION: Cactus seeds need both light and warmth to germinate. A sunny window is a good location, but be careful the light is not too strong and therefore too hot. The moisture retained by the cover should be sufficient to germinate the seed. Most cactus seeds germinate within 3 weeks, but some take much longer – be patient. Once the spines are showing, raise the cover for ventilation during the day. Do not allow the soil to dry out. The amount of water will depend on how much light and heat the seedlings receive. Watch the seedlings carefully. Do not swamp them in puddled water but do not let them dry out completely.

REPOTTING: Seedlings are ready to transplant into larger containers when they are the size of marbles between 6 months to a year after germination. Be sure the soil mix is very well drained, and the container is no larger than twice the diameter of the plant. At this size, plants can be grown in clumps or groups of 6-8 per pot until they are about 1 inch across, then separated and individually repotted. Lift the small plants carefully from the growing mix, place in the new container, firm the soil around the roots, and water in.



It is usually best to let the young plants recover from transplanting in a shaded area. Even in cacti that naturally grow with full sun, seedlings will be tender to full sun until they are older. Acclimate a young plant to the sun gradually beginning when it is about 1 inch across. It is often easier to acclimate young plants to the sun in the winter, and provide some shade in the summer until they are about 3 inches across.

FERTILIZATION: Fertilize young seedlings monthly in the growing season, usually the warm season. Use a formulation specifically for cactus, or an all purpose soluble houseplant formula at ½ the recommended strength.

Need Help?

For more information about particular desert plants or problems, call the Desert Botanical Garden's Plant Hotline, 480-941-1225, Monday through Friday, from 10:00 – 11:30 a.m.

The Desert Botanical Garden provides a range of services to homeowners including a desert Plant Hotline, a variety of classes about landscaping and gardening in the desert, an onsite library, and an extensive selection of resources in the Garden Shop.

