

Caring for Your Holiday Cactus

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"My grandmother had a whiskey barrel with a huge holiday cactus. Grandpa carried it out onto the porch each spring, and back into the basement each fall. It spent the winter under a tiny basement window. It was covered with thousands of blooms every December. I have a cutting from her plant. It grows fine in my home but it never blooms. What should I do to get it to bloom?"

The Secret

Holiday cacti are triggered to bloom by either one of two things: 1. Long fall nights or 2. Fall nights below 55 degrees Fahrenheit.

If you provide either of these, your holiday cactus will bloom. Keep reading for more information.

What are holiday cacti? Where do they come from?

Holiday cacti are hybrids among various species in genera *Schlumbergera* or *Rhipsalidopsis*. Both genera have flat green stems divided into prominent stem segments, often called joints. *Schlumbergera* have distinct notches on the sides of the stems, often with long, soft projections; *Rhipsalidopsis* have smooth, rounded stem segments. They really are cactus! In the notches, the areoles, you will see tiny, bristly spines if you look with a hand lens or microscope.

Schlumbergera bloom between November and December with beautiful flowers on the ends of stems. Their flowers tend to have gently curved tubes shaped like swan necks and come in colors from white to red, orange, pink, and purple, often white bi-colors. Newer hybrids can even be yellow.

Rhipsalidopsis bloom in mid spring. They have straight tubes, and their flowers tend to look like pinwheels, with petals radiating out like a star. Their flowers can be almost any color but blue and green.

Both kinds grow on trees in tropical jungles, usually at higher altitudes. They attach to branches with their roots and grow side by side with begonias, bromeliads, and cool-loving orchids. In habitat they are never dry for very long, and they grow under the forest canopy in bright shade.

Because they come from higher altitudes, they are difficult to keep alive outside in Arizona summers. I don't try any more. They make much better house plants. *Schlumbergera* hybrids are quite easy to grow here; *Rhipsalidopsis* are considerably more difficult, because they are less tolerant of high temperatures and low humidity. Almost all the cacti you see offered for sale during November and December are *Schlumbergera* hybrids.

Make Them Bloom

As fall progresses days get shorter and nights get longer. Your plants can sense this. In fact, this is the main trigger for blooming in *Schlumbergera*. They will bloom reliably within 6 weeks of nights exceeding about 13 hours. But - Artificial light will confuse them!

Just a few minutes of artificial light will reset their clock. If your plant is in the living room or on the kitchen windowsill, and you turn on the lights after dark for even 10 minutes just once, you will prevent that plant from blooming.

Grandma's huge plant bloomed so well because Grandma didn't have electricity! Her plant spent the winters in the cool, damp basement, with just a little light, and with long dark nights.

Cool nights will also do the trick, and if the plants experience cool nights, the light doesn't matter. The critical temperature is about 55 degrees Fahrenheit.

You have two options: In the fall, either put your plant in a room where you will never once turn on the lights at night, or put your plant outside on the patio, where it can experience cool fall nights. Your plant will bloom within 6 weeks of long or cool fall nights.

If you put your plant outside in the fall, be careful to protect it from freezing. These plants can't take any frost at all. Fortunately, in most of the Valley, a patio cover will provide enough protection even on frosty nights.

Keep your plants evenly moist during the fall. Don't stand them in water, but don't let them wilt, either, especially if buds are forming. If plants wilt the buds may drop unopened.

Rhipsalidopsis hybrids are easier to bloom - if you can keep them alive through the summer. They will bloom in the spring so long as you keep them evenly moist and not too hot.

It's budding on the patio! But I want it inside when it blooms!

Holiday cacti are notorious for dropping buds if the plant is moved, especially if moved into a heated home. They will also drop buds if you let the soil dry.

To prevent bud drop, do not bring them into the house until flowers have opened. Then, put them in the coolest spot in the house. It is even better to put them outside again for the night during this time. Keep the plants well watered while in bud and flower.

Are the plants done flowering. Now what?

Most of these plants produce as many flowers, by weight, as they have stem. That is an enormous strain on the plants.

They take a rest for 6 weeks or so after flowering. During this time, keep the plants in bright light with cool temperatures, and let the soil go almost dry between waterings. The plants will shrivel somewhat and look very tired. This is normal after the prodigious flowering.

On warmer days in late February or early March you can water your plants with some dilute fertilizer solution. They will perk up and begin to grow again.

Be sure to bring them into the house before it gets too hot for them. Your signal will be when nights begin to warm noticeably. Throughout the summer they should be in active growth. Keep fertilizing at least weekly with a full-strength balanced fertilizer. These plants are very heavy feeders. Just think about all the flowers they produce!

Where can I get them?

You're in luck! The Desert Botanical Garden Plant Shop stocks holiday cactus starting around Thanksgiving. They sell out fast. Be sure to drop by early or they will be gone! The Plant Shop is open during regular

Garden hours and during Luminaria evenings, Thanksgiving through early January. The Plant Shop has holiday cactus care instructions for all who purchase holiday cactus.

How do I propagate them?

The usual ways: Cuttings or seeds. Most people use cuttings. Be aware it is illegal to propagate patented plants by cuttings, and many of these hybrids are patented.

Cuttings will root at any time of the year, though rooting during warm weather is faster. Use your fingers to break off sections of stem with 2-3 joints. You can even root 1-joint cuttings if they fall off your plants. Stand the cuttings in a small container of water so half of the lowest joint is under water.

Finally, you have a use for the dozens of shot glasses your brother brings back as cheap gifts from his travels!

Check the water level daily; developing roots will be killed if they dry out.

Once roots form, transplant to any light, organic-based potting soil. Use a fairly small pot so it doesn't stay waterlogged. Keep the soil moist but not soaking wet. Transplant to progressively larger pots as the plant grows. Keep the plants moist but not waterlogged. For small cuttings, use half-strength balanced fertilizer weekly.

Once the plants have some size, switch to full-strength.

Or, I have discovered you can grow the plants indefinitely in water! I found this out after rooting a cutting in a wine bottle. Drain the bottle and add fresh water weekly. I use quarter-strength fertilizer solution. Watch for mosquitos! They will breed inside your house in standing water if you let them.

These plants are also easy from seed. It is completely legal to produce seed on patented plants.

Holiday cactus, like most cactus, are not self-fertile; you will need two different plants to set seed. I don't mean two plants that originated as cuttings of the same plant; these are just clones of the same plant. I mean two different colored flowers.

Using a cotton swab, pick up some yellow pollen from the anthers on a flower from one plant. Transfer it to the stigma on a flower from another plant. The stigma is usually colored deep pink.

Don't pollinate too many flower on any given plant. It takes a lot of energy to grow a fruit with seeds. Try not to exceed one fruit per plant in a 4" pot, and proportionally more fruits if your plant is larger. Keep records of the pollen donor so you can figure out who was the daddy.

The base of the flower will grow and swell. When it is ripe, in about 4-8 weeks, it will probably turn color, and it may even split, exposing the shiny black seeds.

Harvest the seeds. I squeeze out the inside of the fruit into my hand. Then I rub and roll the sticky inside of the fruit between my left palm and right index finger until the whole mess is dry. I separate out just the shiny black seeds. If I am not ready to plant the seeds, I put them into a paper coin envelope - I label it with a pencil so later I won't think it's a tiny insect collection.

When ready to sprout the seeds, sprinkle them lightly on the surface of some potting soil in a styrofoam cup or plastic container. Heavily moisten the soil with a spray bottle. Cover the cup with plastic wrap, or enclose the cup in a zip baggie. Put the cup in bright light but not in direct sunlight.

The little plants will sprout within a week or two. Keep them moist. When they start developing new little stems, begin to fertilize them with quarter-strength liquid fertilizer weekly.

If fuzzy, cottony-looking white mold appears, remove the cover for a few hours and let the surface dry. This should kill the mold.

Don't transplant out the seedlings until the pot is so crowded you can't see the soil. Cactus seedlings like to be crowded. When you do transplant, move about 5-8 plantlets to a new cup. Cover with plastic or a baggie at first. When they are growing well, open the baggie or plastic a little at a time to get them accustomed to the light.

They might bloom their first year, or almost certainly in their second year! Plus, you never know what you will get, since no two plants are alike from seed.

Now go make Grandma proud.