

from the Bedford Extension Master Gardener
HELP DESK

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A Bedford Area Master Gardeners Association (BAMGA) Publication
October 2017

Getting Holiday Cacti to Bloom

The client wanted to know how to ensure that her Christmas cactus blooms at Christmas time.

DIAGNOSIS / RECOMMENDATION

The client was sent a copy of information from NCSU [1]. The article identifies that temperature and day length are the critical triggers for blooming. It states that flower buds will form if one of the following conditions is met for about 8 weeks before your target date:

- Night temperature kept at 50 to 55 degrees F (day length will not matter)

Or

- 13 hours of uninterrupted darkness per day (if the temperature is between 55 and 70 degrees)



ADDITIONAL INFORMATION

Even though they are often confused, there are actually two different species of holiday cacti: Thanksgiving cactus (*Schlumbergera truncata*), and Christmas cactus (*Schlumbergera bridgesii*). (There is also a related Easter cactus, *Rhipsalidopsis gaertneri* syn. *Hatiora gaertneri*.) And while these are actually cacti, they are not the dry, desert type. All of these are native to rain forests in South America. They also are epiphytic (meaning they grow on other plants and derive moisture and nutrients from air and rain). Growing conditions include higher humidity, bright but filtered light, and relatively moist soil [2].

To distinguish the two *Schlumbergera* species, look at the shape of the flattened stem segments, which are botanically called phylloclades. On the Thanksgiving cactus, these stem segments each have 2 to 4 saw-toothed serrations or projections along the margins. The stem margins on the Christmas cactus are more rounded. Note that there are no true leaves on either of these holiday

cacti, so photosynthesis occurs within the green phylloclades.

A second method to distinguish between these two *Schlumbergera* species is based on the color of the pollen bearing anthers. The anthers of the Thanksgiving cactus are yellow, whereas the anthers on the Christmas cactus are purplish-brown. [3, 5] The Easter cactus has very different phyllocades (smooth and wavy with bristle ends). It also blooms in the spring with cool temperatures but normal daylight periods. [4]

Place holiday cacti indoors in a cool, bright location where daytime temperatures are 65-70° F and evening temperatures are 55-65° F. If plants are exposed to night temperatures cooler than 55° F, plants will bloom in approximately 5-6 weeks, sometimes regardless of the day length. However, if the night temperature is 60-65° F, these plants must have at least 12 hours of **complete darkness** every night for about 6 weeks in order to bloom. Plants are unlikely to bloom if exposed to night temperatures above 65° F. This means that you may need to put the plants in a dark closet or cover them with a box. Even light from outside streetlights can be too much. [2, 3] No flowers will form above 68° F, regardless of day length [6]

These plants also tend to bloom best when somewhat pot bound. However, it is very important not to overwater these plants or most of the buds will fall off. [3, 4]. Temperatures that are too high, exposure to drafts, or insufficient light also can contribute to bud drop. These plants prefer to be on the dry side when forming buds, during bloom, and generally from October to April when not actively growing. [5] Regular fertilizer application from April until October will help keep these plants healthy. [2, 3, 6]



PHOTO CREDITS Bedford Extension Master Gardeners DotN, HelenH, LynnF and PhyllisT

RESOURCE LINKS

- [1] <https://wilson.ces.ncsu.edu/2008/11/growing-christmas-cactus-2/>
 - [2] <https://www.extension.umn.edu/garden/yard-garden/houseplants/holiday-cacti/index.html>
 - [3] <http://www.clemson.edu/extension/hgic/plants/indoor/flowering/hgic1554.html>
 - [4] <http://www.missouribotanicalgarden.org/gardens-gardening/your-garden/help-for-the-home-gardener/blog/articleid/242/what-holiday-cacti-do-you-have.aspx>
 - [5] <http://www.ladybug.uconn.edu/FactSheets/holiday-cacti.php>
 - [6] <http://web.extension.illinois.edu/cfiv/homeowners/111122.html>
- All resource links accessed September 4, 2017*

Answers provided herein were based on specific situations and growing conditions.
These recommendations may or may not be appropriate for all circumstances.

For specific recommendations for your particular situation please contact your local Cooperative Extension Office.

MASTER GARDENER HELP DESK

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