

Poinsettia, by Audrey Holt

Flowers and Their Meanings

Floriography is the language of flowers. By assigning symbolic meanings to various flowers, floriography can be thought of as a cryptic way of communication through flowers.

Meaning has been attributed to flowers for centuries throughout Europe, Asia, and Africa. In Victorian society, gifts of specific flowers were used to send coded messages to express feelings not spoken aloud. Today you can find many websites and books explaining the various meanings associated with flowers and specific months. December flowers include the following:

- narcissus: innocence, purity, hope, wealth, sweetness, self-esteem, vanity
- poinsettia: success, celebration, good cheer, mirth
- holly: happiness, optimism

Poinsettias are considered a birth flower for December. The Aztecs considered these flowers as a symbol of purity. Today, the vibrant poinsettia flowers signify success, good cheer, and celebration. This article will discuss poinsettias (*Euphorbia pulcherrima*; “spurge most beautiful”) and their history, care, and propagation.

Poinsettia Legend and History

Native to Central America, poinsettias have a rich cultural history that spans hundreds of years. In fourteenth century Mexico, Aztecs used poinsettias to make dyes for textiles, and the milky sap was made into a preparation to treat fevers. Red was considered a symbol of purity and poinsettias were used in religious ceremonies. In Aztec culture the plant was known as “Cuetlaxochitl” (ket-la-sho-she) meaning “star flower that grows in residues or soil” .¹

Seventeenth century Franciscan monks near Taxco, Mexico used the shrub in a nativity procession. There is a Mexican legend about a poor little girl who had nothing to give the baby Jesus at the Christmas Eve service. The child picked a bouquet of weeds and placed them at the nativity scene in front of the church. The weeds burst into bright red flowers; hence, people called them “Flores de Noche Buena,” or “Flowers of the Holy Night.”²

In the winter of 1828 Joel Roberts Poinsett, a doctor, botanist, and the United States’ first Ambassador to Mexico, was on a diplomatic mission to Taxco, Mexico. Curious about an unfamiliar plant with bright red leaves in the countryside, he sent plants and cuttings back to South Carolina where he kept a greenhouse. Studying and propagating the plants, Poinsett gave plants to friends and botanical gardens.³ One recipient was John Bartram, who gave the plant to Robert Buist, who is thought to be the first person to have sold the

plant under its botanical name *Euphorbia pulcherrima*. About 1836 the plant formally attained its popular name of “Poinsettia” from William Prescott.²

Commercial poinsettia production began in California about 1909 when the Ecke family grew them as cut flowers. Paul Ecke Sr. developed poinsettia plants that could be grown indoors in pots and discovered a technique which caused seedlings to branch, resulting in a fuller plant. He began growing plants in tens of thousands for the Christmas season. The Ecke Farm sold starter plants or cuttings of poinsettia varieties to other growers that could cultivate plants they could sell in their local markets.⁴ In 1923 Mrs. Enteman of Jersey City, New Jersey noted a seedling with characteristics that became the genetic model for most cultivars until the early 1960’s. It was named ‘Oak Leaf’. Until this time, premature leaf and bract fall were major problems. In 1963 the Mikkelsen family of Ohio introduced the first long-lasting cultivar, ‘Paul Mikkelsen’.⁵

Poinsettia trivia adds interest. The poinsettia is one of the few flowers of North America that has its own special day. In 1851, to commemorate the date of Poinsett’s death, December 12 was named National Poinsettia Day.² In 2002 Congress made it official. They are the national flower of Trinidad and Tobago and the floral emblem of Madagascar. In Spain the poinsettia is known as Flor de Pascua, or Easter flower; in Chile and Peru, it is known as Crown of the Andes; in Italy, Stella di Natale, or Christmas Star; and in Germany, Weihnachtsstern, or Christmas Star.⁶

Buying and Caring for a Poinsettia

The poinsettia plant appears in stores before Thanksgiving. Often the plants are not cared for properly. Before buying a poinsettia, check the plant as follows.

Check where the plants are displayed in the store. Avoid poinsettias that have been left standing outdoors exposed to the cold or displayed at the front of the store in drafts from opening and closing doors.

Check the color of the plant. Turn the plant around, look for plentiful dense, dark green foliage and colorful bracts, the modified leaves. Check the true flowers, the small green or yellow parts in the middle of the plant. If closed and green the plant will last longer. Yellow flowers producing powdery yellow pollen, or turning brown, means the plant is past its prime.

Check the soil. It should not be dripping wet or totally dry. Look at both sides of the leaves, the stems and soil for insects or disease. If a light tap on the sides of the pot causes the leaves to drop, better not to buy the plant.

Check the temperature of your vehicle during the ride home. Do not leave it in a cold car while you run other errands. Protect your poinsettia from damage to branches or foliage. If the poinsettia has a plastic sleeve around it, remove it when you get home to keep the plant from producing ethylene which causes premature aging.⁷

Plant care in your home is important. Place your plant in indirect sunlight for at least six hours per day. Have temperature at 65 to 75° F during the day. Dropping the temperature to about 60°F at night will not hurt the plant. DO NOT expose plants to temperatures below 50°F. DO NOT place plants near cold drafts or excessive heat.

Water when the top inch of soil is dry to the touch and allow water to drain completely. Over-watering causes roots to die. Under-watered plants wilt and shed leaves. Poinsettias prefer room-temperature water. Keep your plant happy and mist it daily or place it on a humidity tray filled with a single layer of pebbles and a water level half way up the pebbles. DO NOT fertilize poinsettias during the blooming period.

Numerous studies have been conducted on poinsettia toxicity, and according to the “American Medical Association Handbook of Poisonous and Injurious Plants,” other than occasional cases of vomiting, ingestion of the poinsettia plant has been found to produce no harmful effects. Probably best to keep pets away from the plant. People with latex allergies can be sensitive to the milky sap and should be careful when handling the plants to avoid a rash.

Scientists have studied the poinsettia for its air cleaning abilities. The leaves, stems, and roots remove formaldehyde from indoor air.

Poinsettia as Cut Flowers

As cut flowers, poinsettias can stay fresh for up to two weeks if you stop the sap from dripping out. There are two methods used to seal the sap: steam or heat. If you do not stop the sap from dripping, the poinsettia cutting quickly droops and fades.

The steam method: Using your scissors or knife, simply snip a stem of at the desired height. Dip the cut end immediately into a cup of boiling hot water for 20 seconds to seal in the milky sap. Then dip it into a cup of cold water for 10 seconds. Arrange as desired in water in a vase or in wet floral foam.⁶

The heat method: As soon as you remove the stems from the plant, singe the cut ends with a candle or long match to stop the sap from dripping out. If you have to re-cut the stems at a later time you must re-singe the cut ends again.⁷

Cultivating and Propagating Poinsettias

The holidays are over. If you decide not to turn your poinsettia into a houseplant, you can compost it. Your other option is to give the poinsettia to a gardener who might be up to the challenge of encouraging it to re-bloom. If you wish to force re-blooming, follow these steps.

January to March is a rest period. Provide six hours a day of diffused sun and water lightly when the soil is dry to touch. After about half of the poinsettia's leaves have fallen off, gradually reduce watering frequency to allow the soil to dry out to prepare for dormancy.

Be careful the stem does not shrivel, a sign the plant is stressed and dying. When the plant has acclimated to this drying process, move to a cool spot to keep it about 60° F.

In late spring prune the poinsettia when the plant is finishing its rest period. Using clean pruners or fine snippers, work one stem at a time, cutting each one back to about four-inches, just above a leaf node. Wear gloves because poinsettias ooze sap that is irritating to skin and eyes. By the end of May, you should see vigorous new growth. It may be time to re-pot the plant to a container one size up. Use a sterile potting mix made for indoor flowering plants. Continue regular watering, and fertilize every 2 to 3 weeks with a fertilizer made for indoor plants.

When nighttime temperatures rise above 55°F move the plant outdoors for the summer to a sheltered spot in the garden. Avoid placing it in direct sunlight. Leave the poinsettia in the pot or plant it in the ground. Pinch back new growth in June, July or August to promote a bushier plant. Do not prune the plant after August. The stems should have branched and leafed out by mid-August. At the end of summer re-potting may be necessary. Bring the plant indoors to your brightest window. Continue watering and fertilizing.

To renew its brightly colored bracts in time for the holidays your poinsettia will need ten weeks of 13 to 14-hour nights with no ambient light. Starting in early October, from about 5 pm to 8 am, cover the plant with a cardboard box or keep it in a closet. During the day, bring it back out to the window and water sparingly. In early December, when buds form, stop the dark treatment. In mid-December, stop fertilizing. Your plant should be blooming again!⁸

Propagating Poinsettia Plants from Cuttings

Just after new growth starts in early summer, take three- to six-inch cuttings from healthy new stems of vigorous parent plants. Tap some rooting hormone powder on a paper towel and dip the cut end in the powder. Insert the cuttings in pre-poked holes in potting medium, such as coconut coir, potting soil, or a mixture of vermiculite and perlite, two to three inches deep in sterilized nursery pots or plastic cups. Mist your young poinsettias daily, but don't water the growing medium. At this point the cuttings are getting the moisture they need through their leaves; they don't have any roots yet. Put the cuttings somewhere bright but out of direct sunlight. Placing the pots inside plastic bags increases the humidity.

After about four weeks, your young plants should be growing roots and be ready to transplant into pots. Use well-draining potting soil and pots with drainage holes. After transplanting, you can begin to water your plants normally. Water deeply enough so that it runs through the drainage holes in the bottom of the pot. The surface of the soil should be dry to the touch in between watering. When the rooted cuttings are about six weeks old, pinch off the growing tip to encourage new shoots at the next leaf nodes. The more shoots it grows, the more flowers and color your plant will eventually have.⁸

Growing Poinsettia from Seeds

The real flower, the small yellow parts in the center of the bracts is where the pollen is produced and where the poinsettia seed pods will develop. With a cotton swab, gently brush against every flower, making sure to pick up some pollen each time. After a while, you should start seeing poinsettia seed pods, bulbous green things growing up on stalks out of the flowers. When the plant starts to fade, pick the poinsettia seed pods and store them in a paper bag in a dry place.

When the pods are brown and dry, they will open inside the bag. The seeds inside the pods are small and dark. In order to germinate, the seeds first need to spend about three months in a cool place, like your refrigerator, a process called cold stratification. Then you can plant them under 1 ½ inches of soil, but it may take a few weeks for them to sprout. Just keep the soil warm and moist until they do. Care for your seedlings the same as you would any other. Once mature, you will have yourself a poinsettia plant for gift giving during the holidays.⁹

Enjoy your poinsettia!



Notes

¹[Zack Sterkenberg](https://www.ambius.com/blog/the-long-strange-tale-of-the-poinsettia-in-christmas-lore/), "The origins of the poinsettia: The long, strange tale of the poinsettia," ambius, December 2019, <https://www.ambius.com/blog/the-long-strange-tale-of-the-poinsettia-in-christmas-lore/>

²"History and Legend of Poinsettia, Phoenix Flower Shops, 2020, <https://www.phoenixflowershops.com/pages/poinsettiahistory.htm>

³ "Ornamental Production: History of Poinsettia Production," Aggie Horticulture, Texas A&M Horticulture Extension, Accessed 12/1/20, <https://aggie-horticulture.tamu.edu/ornamental/the-texas-poinsettia-producers-guide/history/>

⁴ Matt Krantz, "Leaders & Success: Paul Ecke Sr.: 'Poinsettia King' Cultivated a Holiday Tradition," Investors' Business Daily, 11/21/2018, <https://www.investors.com/news/management/leaders-and-success/paul-ecke-poinsettia-king-biography/>

⁵ "Poinsettia - Euphorbia pulcherrima, Calyx Flowers, Calyx Flowers, Inc., 2020, <https://www.calyxflowers.com/floral-library/poinsettia/>

⁶ Liz Anderson, "Poinsettias as Cut Flowers," Richard Jackson Garden, Accessed 12/1/20, <https://www.richardjacksonsgarden.co.uk/poinsettias-as-cut-flowers/>

⁷ "Poinsettias as Cut Flowers," houseplants411.com, houseplants411, 2020, <https://www.houseplant411.com/askjudy/how-to-use-poinsettias-as-cut-flowers>

⁸ Kristina Hicks-Hamblin, "How to Grow and Care for Poinsettia Plants," Gardener's Path, October 9, 2020, <https://gardenerspath.com/plants/ornamentals/grow-poinsettia/>

⁹Liz Baessler, "Poinsettia Seed Pods: How and When to Plant Poinsettia Seeds," Gardening Know How, last updated 11/30/20, <https://www.gardeningknowhow.com/ornamental/flowers/poinsettia/planting-poinsettia-seeds.htm>