



Consumer Care of Poinsettias

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Poinsettias are the traditional Christmas plant because of their colorful bracts. The bracts are actually modified leaves and the yellow cyathia in the center of the bracts are the true flowers. Plant breeders have introduced many new cultivars over the past few years and there are over 100 cultivars currently available. The array of colors range from red, pink, white, salmon, to bicolors. With these new, longer lasting cultivars being available, it is possible for a properly cared for poinsettia to remain beautiful in the home for 2 to 3 months.

The poinsettia is a small tree and is native to the tropical areas of southern Mexico and Central America. It was introduced to the United States in 1825 by Joel Poinsett, the first U.S. ambassador to Mexico. The name poinsettia is derived from his name. The botanical name for the poinsettia is *Euphorbia pulcherrima*.

Poinsettias are not poisonous, but eating them is not recommended. Those who are sensitive may experience minor eye and skin irritations if they come in contact with the milky white, latex sap.

Purchasing Plants

Select plants which have brightly colored bracts and dark green foliage covering most of the stem. Avoid plants

which have dropped their leaves, are wilted, or have faded, torn, or discolored bracts. This indicates the plants were not properly cared for (i.e. not watered, boxed or sleeved too long, or diseased) and the length of enjoyment of the plant will be dramatically shortened. Some common causes for failure of poinsettias to last are listed in Table 1. Traditionally, the presence or absence of the true flowers or cyathia (the small, round, yellow parts located in the center of the bracts) has been the measurement of freshness. As the plant ages, the cyathia typically drop. However, many of the newer cultivars have improved cyathia retention or there are few cyathia present, which limits the use of cyathia as an indicator of age.

Since poinsettias are tropical plants, temperatures below 50°F will cause chilling injury. The "selling" establishment should sleeve or cover the plant when the plants could be exposed to temperatures below 50°F. Poinsettia plants should be kept in a warm vehicle, but not placed in the trunk of an automobile. Chilling injury causes the bracts to have a blue or white discoloration and possibly result in leaf drop.

Watering

Water the plants so that the planting medium (soil) is slightly wet, but not soggy. Poinsettias do not like "wet feet". If the pot is covered with decorative foil, remember to punch a few drainage holes in the bottom. Pour off any water

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Symptoms	Possible Cause(s)
Lower leaves turning yellow and dropping; roots appear white and healthy	1. Inadequate watering 2. Low light conditions 3. Plants were boxed or sleeved too long (Epinasty)
Lower leaves turning yellow and dropping; roots discolored	1. Root rot caused by overwatering or allowing water to remain in the saucer
Small, round cyathia (true flowers) in the center of the bracts drop	1. Low light conditions 2. Aged plants 3. Cultivar with few cyathia
Bracts fade in color	1. The plant has aged 2. Temperatures too warm (>75° F) 3. Low light conditions
Bracts with blue or white discoloration	1. Chilling injury. Plants exposed to <50° F

Reflowering

If desired poinsettias can be reflowered. Although it may be easier to compost your plant and purchase a new one the following Christmas. If you plan to keep a poinsettia plant, care for it as you would any houseplant. Place it in a sunny location, water as needed, and

which collects in the saucer. Poinsettias cannot tolerate drying out, which can cause premature leaf drop. Drought is the most common reason that poinsettias fail to last. If the plant has been in your home for over 30 days, a half strength fertilizer solution should be applied monthly.

Temperature

The optimal daytime temperatures for maintaining poinsettia quality is 70° to 75°F. Avoid temperatures above 75°F because this will cause premature bract fading and leaf drop. Lowering the night temperatures to 60° to 65°F helps to maintain bract coloration. Avoid temperatures below 55°F because this will result in chilling injury. Also avoid placing the plants in cold, drafty locations, by heating vents, or on top of appliances.

Light

Place the plant in a well lighted area of the house to maintain good bract color and avoid leaf drop. Plants can be placed in direct sunlight (south, east, or west exposure), but a sunny location increases the water demands of the plant. Avoid letting the plant touch cold windowpanes because chilling injury can occur.

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After the last chance of frost has past, cut back the stems to 3 to 4 inches to promote new growth. Repot the plant in a slightly larger container. If more than one plant was in the original container, separate each plant into its own individual pot. Water the plants thoroughly after replanting. Initially place the plant outdoors in a semi-sunny location for 2 weeks so it can become acclimated to the higher light conditions before moving it into full sun. Fertilize the plant with a complete-analysis, water soluble fertilizer (such as 20-10-20) every 2 weeks. Pinch the plant back to 2 or 3 leaves per shoot if it becomes too large. Prune out extra shoots if the canopy is too crowded. Move the plant indoors before the weather turns cool in the fall (night temperatures below 60°F).

Long nights (short days) promotes flowering of poinsettias. Starting the last week of September or the first week of October, provide the plant with at least 13 hours of *uninterrupted darkness*. Exposing the plant to any light (car lights, turning on the room light, etc.) during the night's darkness period will cause a delay in flowering. In general, interrupting the darkness will add an additional day before the plant flowers. Plants can be placed in a closet, box, or limited-

used room to provide the required dark period. Be certain, however to place the plant in a sunny location during the day. The daytime growing temperatures should be 70° to 75°F and no lower than 64°F at night. Continue to fertilize the plants every other week with a complete-analysis, water soluble fertilizer. Water the plants as needed to keep the planting medium (soil) moist, but not wet. The plants should bloom after 9 to 11 weeks of the long night treatment. The length of time to bloom depends on the variety grown.

Pest Problems

Whiteflies are the major insect pests of poinsettias. The adults are tiny, white flies that fly when plants are disturbed. Adults lay eggs on the underside of older leaves. The immature larva are yellowish in color, oval shaped insects which feed on the undersides of the leaves.

For Further Reading:

Nell, Terril A. 1993. Flowering potted plants: prolonging shelf performance. Ball Publishing, Batavia, IL.

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by the North Carolina Cooperative Extension Service nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage and examine a current product label before applying any chemical. For assistance, contact an agent of the North Carolina Cooperative Extension Service in your county.
