

12/21/2004 Poinsettias Carry a Secret "Friend" - SHOW DOME

The poinsettia has become a symbol of the Christmas season for many people. In 1997, the U.S. poinsettia market was worth \$325 million, but people have been cultivating them for centuries. Poinsettias originated in tropical Mesoamerica and Mexico. They were valued as a symbol of purity by the Aztecs. Franciscan priests first used the plants in a nativity procession for the Fiesta of Santa Pesebre in the 17<sup>th</sup> century. Joel Poinsett, first U.S. ambassador to Mexico and a well-known botanist, sent some plants back to his home in Greenville, South Carolina. His name became the common name we now use: poinsettia. The official scientific name is *Euphorbia pulcherrima*, putting them in a group of plants with milky sap found around the world.

As most people know, the bright "flowers" are actually colored leaves or bracts. The real flowers are small and clustered in the center of the bracts. The colored bracts are the reason that these "flowers" can last for weeks and months. Although many people love the classic red color, modern breeding seems to produce new colors every year.

No matter what color you prefer, nearly everyone agrees that branched plants with lots of colored bracts are the best. Since 1923, a specialized bacterium has been doing its part to add to the Christmas spirit. It causes dwarfing and multiple branches to form after a single "pinch" of the lead stem, but no other negative effects on the plant. The bacteria are different from common bacteria because they have no cell walls and live only in the phloem (the food-conducting tubes) of the plant. These unusual bacteria are called phytoplasmas and were only discovered in 1973. In nature, they are spread by leafhopper insects that feed on phloem with their piercing-sucking mouth parts. When poinsettias are propagated from cuttings, phytoplasmas go along too, hiding out deep in the stem. Phytoplasmas can't survive outside the plant and are of no danger to people or pets. And despite persistent rumors, poinsettia plants themselves are not poisonous, so you can safely enjoy them for the entire holiday season. Don't miss the thousands of poinsettias in the Frosty Fun display in the Floral Dome through January 2, 2005.

