

The Weekly Plant Holiday Edition - 16Dec 2012

Common name: poinsettia

Scientific name: *Euphorbia pulcherrima*¹ (translates as “the most beautiful Euphorbia”)

TAV location:

Tables in the Community Center. *See Poinsettia Gallery - next page!*

Discussion:

For several years I was involved in the National Poinsettia Cultivar Trials, a cooperation between Purdue University, University of Florida-Gainesville, and North Carolina State University. The goals of the trials were 1) to provide optimized instructions so producers could maximize their profits while growing high-quality poinsettias, 2) to allow producers to see the newest poinsettia varieties, and 3) to allow consumers to see the newest poinsettias varieties and give their feedback on the colors and forms they prefer. I learned a lot!

The poinsettias you see through the holidays start their life at one of the five poinsettia breeders (four are in Europe, only Ecke Ranch in California is in the US). Each fall millions of 3” poinsettia cuttings (the tip of a stem plus several leaves) are shipped to local growers. These cuttings are potted up, allowed to produce roots and grow, pinched, and eventually treated to induce flowering.

There are a couple of interesting steps in this process. The first is size control. A well-grown poinsettia can easily reach 10 feet but then no one could easily transport it home. To control the plant’s size, there are several options. You can pinch off the upward growing point when the plant is still small. This would cause the plant to produce side shoots that grow more out than up, hence a shorter plant. Pinching also creates a fuller, more attractive plant. You can add in the use of a chemical growth regulator to help fine-tune the height (see photo). Once the plant is the right size, you induce flowering. The flowers of poinsettia are terminal, that is they occur at the tip of a stem. The tip of a stem is the upward growing point of the stem. When you induce flowering, the “upward growing produce more leaves” growing point is changed to a “stop growing upward and turn into flowers” growing point and the height of the plant no longer increases.

The second interesting step in producing poinsettias is flower induction. Poinsettias are “short-day” plants. They respond to the natural shortening of the days in autumn by starting to flower. Producers control the flowering by pulling giant shades over the plants so they get exactly the right number of dark hours.

So what’s new in poinsettias? Recyclable pots made of rice hulls. Spray paints used on white poinsettias to create all colors of the rainbow (Colt blue was particularly popular in Indiana). Bracts (the colorful part of the poinsettia) and leaves in variegated colors (red with pink or white, green with white). Bracts with



Top: poinsettias treated with 3 different levels of growth hormone + control on right. Note shade clothes.

Bottom: poinsettia flowers are not very ornamental. The bracts (modified leaves) below the flowers give the plants value.



points like a holly leaf or twisted and curled. Bracts in unusual colors - purple, deep wine red, yellow. To get a look at some of the newest varieties see these websites:

<http://tinyurl.com/ptsball>

(see page 15 for a look at poinsettia cuttings) and

<http://tinyurl.com/cbcqurd> .

So many choices! And in the end, which do people buy? Yep, good old red poinsettias that look like the one you had twenty years ago.

¹ The USDA, ARS, National Genetic Resources Program *Germpasm Resources Information Network* - (GRIN) Online Database is the source of the currently accepted scientific name.

A Gallery of Poinsettias

From the National Poinsettia Cultivar Trials

Would you buy any of these????

Color variants (l to r):
 Dulce Rosa
 Monet Twilight
 Plum Pudding



To left - Shape Variants (top to bottom):

Carousel Pink
 Strawberries and Cream (two personal favorites)
 Winter Rose Pink



Winter Rose was not sold for at least 10 years after it was developed. The growers were convinced it would never sell. Now very small plants with just a single rose, in white, pink, or red, are used on tables - a rose for each person.



To right - Variegations (top to bottom):
 Holly Berry
 Goldstar Pink (never popular)
 Sonora White Glitter - always near the top of popularity trials.

