

New poinsettia for the nontraditionalist

December 7 2006

U of I plant scientist Daniel Warnock hopes that one day soon a uniquely marbled pink poinsettia will be available to consumers who like decorating for the holidays with a flare for the unusual. The variety is yet unnamed, but is a natural mutation of a poinsettia variety called Premium Picasso. The topmost leaves which are red on the traditional poinsettia, on this new variety have an unusual almost watercolor wash of pink, red and white.

"We work with several companies that breed and distribute poinsettias and when we showed them this natural mutation, they all loved it," said Warnock.

Among plant breeders, the mutated variety is called a "sport" of the original. "You could spend years trying to cross-pollinate poinsettias and never get a variety like this one that sported on its own," said Warnock. The task that lies ahead for Warnock is to make the sport predictable and able to be reproduced in the greenhouse.

The current plant is still unstable genetically -- which results in some of the top leaves perfectly mottled while the others are solid or only half-way there. Warnock says that of about 50 plants, he will select the two or three that have the desired percentage of splotches and use cuttings from those as parents for the next generation. This process continues until the entire plant consistently and uniformly displays the blotchy look that the distributors were so captivated with.

Warnock said that for the past five years he has cooperated with

researchers at Kansas State University and Tennessee State University to trial new varieties of poinsettias for commercial companies. The companies get information on when to plant and when to begin pinching the leaves and shading the plants in order to trick the plants so that they will be in full color in time to sell for the holidays.

"In order to have a steady supply for the six- to eight-week holiday season, we test varieties that can be timed to be in perfect color for pre-Thanksgiving sales all the way to Christmas," said Warnock.

The three universities in the program are at three different latitudes so they get three separate sets of data. "Here in Illinois, it starts getting cloudy in early November and that affects the amount of light coming into the greenhouse. They don't have that problem in Kansas," said Warnock.

The topmost leaves change color based on the amount of daylight they are exposed to, much like trees change color in the autumn. The greenhouse is equipped with large black curtains that can be drawn to completely block out the sunlight.

Warnock said that some people try to get their poinsettias to turn red again the following year, but it's nearly impossible because the plant's exposure to the light has to be completely controlled. Beginning in September, the plants need to be kept in total darkness from 5:00 p.m. to 8:00 a.m. "The plants are so sensitive to light that if people open the closet door for one peek during that time period, or even shine a flashlight in, the plants won't change color," said Warnock.

Source: University of Illinois at Urbana-Champaign

Citation: New poinsettia for the nontraditionalist (2006, December 7) retrieved 26 April 2024 from <https://phys.org/news/2006-12-poinsettia-nontraditionalist.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.