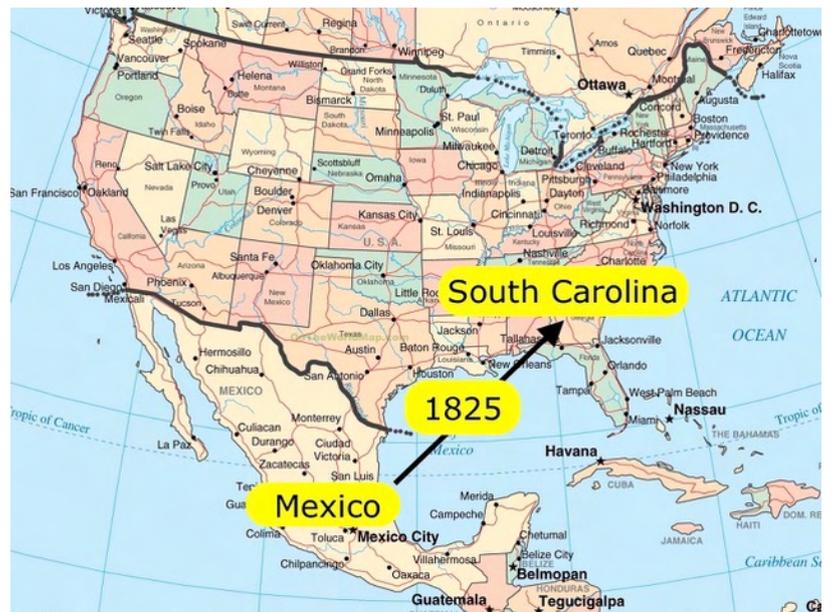
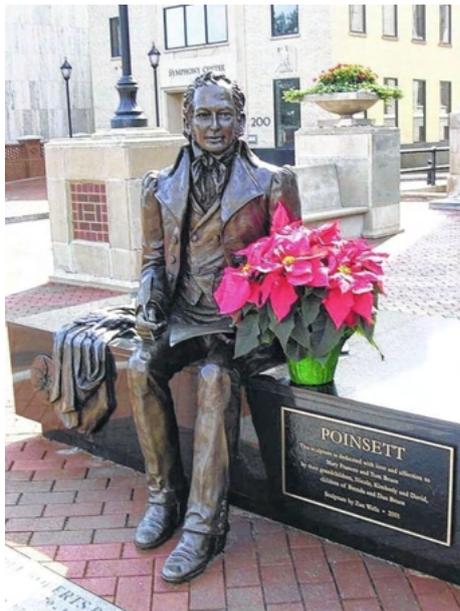


## Poinsettias: The Christmas newcomer, with an interesting past and a fascinating biology

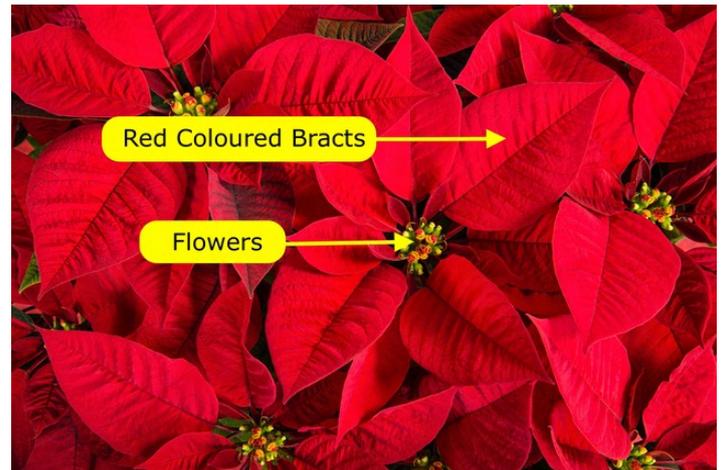
As soon as the last pumpkin has been sold for Halloween, the supermarket shelves change colour from orange to red with rows of Poinsettias (*Euphorbia pulcherrima*) for sale. A recent newcomer to the 'Christmas scene', we now buy an amazing 4 million each year, to brighten our homes. This is nothing compared to the United States, where 70 million are sold for Thanksgiving and Christmas. If that sounds like blatant commercialism, you may be right. However, that doesn't stop Poinsettias having an interesting past and a fascinating biology.



We have Joel Robert Poinsett to thank for both bringing the plant into cultivation and giving us its common name. Poinsett was appointed the first American ambassador to the newly constituted country of Mexico in the early 1820s. Not just a diplomat, he was also a keen botanist and horticulturist, sending seeds and plants back to his home in South Carolina.



The plant Poinsett knew and propagated was not the pot plant we know today but a four-metre high tree. Apart from the height, the foliage and flowers would have looked identical, the bright red coloured bracts taking on the role of petals in attracting insects to the small central flowers.



The observant of you would have noticed Poinsettias are Euphorbias, just like the ones in your garden and the Spurges (also Euphorbias) which grow in our countryside. Like other Euphorbias they have amazingly small complex and beautiful flowers. Next time you see a Poinsettia in full flower, take out your magnifying lens. An incredible world of tiny male and female flowers, with bizarre glandular structures will appear.



But how did we get from a four-metre tree to a Christmas pot plant? It has taken over 150 years of selective plant breeding to reduce its height. Then to produce a bushier plant with multiple flowers and dark red bracts, a phytoplasma infection (a type of bacteria) is introduced.

The plant owes its popularity to just one man, Poinsettia enthusiast Paul Ecke. Inheriting his parents Poinsettia nursery in the early 1960s he systematically went about sending plants to all the American television networks. Poinsettias appeared everywhere, on newscaster desks and decorating the studios of chat shows.

We now have the ideal decorative Christmas plant but how do we get it to flower with those stunning red bracts just in time for Christmas? For a long time, it was thought the hours of daylight were important for timing of flowering. Surprisingly, we now realise it is the hours of darkness, not daylight that is critical.

Poinsettias are 'short day plants' and need 12-14 hours of darkness per night in October to November to produce the perfect plant in time for the festive season.

Plants tend to be divided into three types: 'Short day plants' like Poinsettias need long periods of darkness, flowering in early spring or autumn, as opposed to 'long day plants' which require short periods of darkness, flowering in the summer, and finally 'day neutral plants', unaffected by the hours of darkness.

Hopefully, you will now never pass the shelves of Poinsettias without stopping, looking, and thinking about their heritage and fascinating biology.

Ian Brand

[www.wharfedale-nats.ork.uk](http://www.wharfedale-nats.ork.uk)

*If you would like to know more about our Christmas Plants, then tune in to the webinar "The Twelve plants of Christmas" Tuesday 21<sup>st</sup> December at 7.30pm. There is something for everyone in this festive talk; plants, history, geography, insects, birds, cooking tips, but above all some interesting stories.*

*It includes Holly & Ivy through to Brussels Sprouts & Cranberries and many more besides. They all have their tales to tell, as well as fascinating biology.*

*Grab yourself a beer, a glass of wine or a cup of tea, sit back and relax and get yourself in the festive mood.*