

# North Carolina Flower Growers' Bulletin

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## POINSETTIA SCHEDULING

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*The following article was adapted from the Proceedings of our 1994 Poinsettia Production Update interactive video program, held 19 July 1994.*

If you wish to compare poinsettia scheduling to music, the poinsettia breeder is the composer, the customer is the conductor, and the grower is the musician. The musician has to go with what the composer gives him, and the conductor eventually does direct the show.

There are some very important traits possessed by the varieties, and these traits play key roles in scheduling. These traits are:

- 1 How many weeks are required from when stock plants receive the final pinch until shoots are ready for propagation? This trait was considered in Propagation Pointers and will not be repeated here. One should remember, however, that varieties are classified as 5, 6 or 7 week maturity groups.
- 2 How many days are required for rooting? Varieties are classified as slow, moderate or fast, and most are in the moderate group.
- 3 How many days are required for rooted cuttings to be ready for pinching, after potting? Pot size is a major consideration. Two weeks is adequate for plants in 6 1/2" pots, while three weeks might be needed for plants in 8 or 10" containers.
- 4 How vigorous is the growth? Varieties are classified as short, medium and tall. Most varieties are medium in growth habit (See Table 1).
- 5 How many days are required for vegetative growth, from pinching to flower bud initiation? Again, pot size is important, as well as the growth characteristic. According to Paul Ecke Poinsettias, a short growing variety in a 6 1/2" pot could require 10 long days after pinching, a medium variety 5 days, and a tall variety 0 days. Plants in larger containers, where larger plants are desired, will require more time.
- 6 What is the flowering response? (Number of weeks from the start of short days to flowering - same as with potted chrysanthemums). So far 8 weeks has been the shortest response time, and 10 weeks is the longest. Most varieties are in the 8 1/2 or 9 week response groups (Table 1).

**Table 1. Characteristics of poinsettia cultivars grown during the 1993 cultivar trial at NCSU.**

Variety	Response			
	group, weeks	Growth habit	Height on 11/19/93	Branching
<u>Red Varieties</u>				
AH Brilliant Diamond	9	medium	17"	good
AH Dark Red	9	medium	14"	good
AH Diva Starlight	8.5	medium	14"	good
Celebrate	9	tall	9"	fair
Celebrate 2	8.5	medium	11"	good
Cheers	9	medium	13"	good
Feliz Navidad	8.5	short	12"	good
Freedom	8	short-medium	11"	excellent
Jolly Red	9	medium	10"	good
Lilo	8.5	medium	14"	good
Red Sails	9	medium-tall	13"	fair/good
Regal Velvet	10	tall	10"	fair
Supjibi	8.5	medium	11"	good
V-14 Glory	9.5	medium	10"	good
V-17 Angelika	9	medium-tall	14"	excellent
Yuletide	9.5	short	12"	good
<u>Pink Varieties</u>				
AH Hot Pink	9	medium	14"	good
Celebrate Pink	9	tall	9"	fair
Celebrate 2 Pink	8.5	medium	9"	good
Freedom Pink	8	short-medium	10"	excellent
Lilo Pink	8.5	medium	13"	good
Noel Hot Pink	9.5	medium		excellent
Pink Peppermint	9	medium-tall	10"	fair/good
Supjibi Pink	8.5	medium	10"	good
V-14 Hot Pink	9.5	medium	10"	good
V-17 Angelika Pink	9	medium-tall	12"	excellent
<u>White Varieties</u>				
AH Top White	9	medium	16"	good
Celebrate 2 White	8.5	medium	8"	good
Frost	9.5	medium	10"	excellent
Lilo White	8.5	medium	13"	good
V-14 White	9.5	medium	11"	good
V-17 Angelika White	9	medium-tall	12"	excellent

**Table 1, Continued.**

Variety	Response group, weeks	Growth Habit	Height on 11/19/93	Branching
<u>Marble Varieties</u>				
AH Marble	9	medium	15"	good
Freedom Marble	8	short-medium	10"	good
Lilo Marble	8.5	medium	13"	good
Noel Blush	9.5	medium		excellent
V-14 Marble	9.5	medium	9"	good
V-17 Angelika Marble	9	medium-tall	12"	excellent
<u>Novelty Varieties</u>				
Freedom Jingle Bells	8	short-medium	11"	good
Jingle Bells 3	10	medium	10"	fair
Lemon Drop	8.5	short	9"	poor

The customer, or the retail outlet manager, is the conductor because the arrival date at the market usually is announced by this individual. The grower who says that the crop will not be ready then, or the crop will be over mature, eventually will be replaced by a grower who will have plants available when the retailer wants them. The grower must adjust a schedule to fit the cultivar's traits and to meet the market date set by the customer.

When Allen Hammer spoke on scheduling at the 1994 Southeast Greenhouse Growers' Conference and Trade Show he used the sheet on page 5, to let growers practice scheduling. Information has been provided so most of the blanks can be filled in by growers. Poinsettia breeders are generous in the distribution of cultivar descriptions, and I would urge growers to seek and follow this information. Growers should remember that these guidelines are general, and plants in their greenhouses might not respond exactly as predicted.

The optimum temperature would be 65 °F at night, and 5 to 10 degrees warmer during the day.

A day temperature of 70 °F is best on a cloudy day, and 75 °F on a bright day, but such a day temperature is hard to maintain on a bright day in the southeast.

Lighting of poinsettias to keep them vegetative was a common practice 30 to 40 years ago and my predecessor Jack Gartner and his research technician, Martin McIntyre, were instrumental in developing the procedure. Lighting was done then because the varieties quickly lost their leaves and bracts at maturity and the Christmas season was not 6 to 8 weeks long as it is now. Growers would begin lighting about September 20 to 25, as it was believed that flower initiation occurred about then. Lighting was continued to October 10, and the 10 or 10 1/2 week response groups would be at their peak December 15 to 20. The delayed initiation did cause a major height problem, and no effective growth regulator was available for the first 10 years of lighting. The arrival of Cycocel was welcomed, and so was the long lasting variety, Paul Mikkelsen.

For about 20 years lighting ceased to be a commonly used practice, unless growers had a

very late sales date. The 'Freedom' series has taken us back to lighting, as varieties in that series will be in flower 8 weeks after the start of short days. Growers who pinch in mid September and do not light could have plants which are too early and too short for most customers. Once flower initiation has occurred no new leaves will be formed, which means that the number of internodes and subsequent height will be affected.

The fact that 'Freedom' apparently initiates flower buds earlier in September than most varieties, and that it is in the 8 week response group, is a double-edged sword, almost assuring short plants in flower in mid to late November unless lights are used.

In scheduling 'Freedom' one only has to back up 8 weeks from the date of desired maturity to the date when lighting is stopped. Plants in large containers will be rooted, panned and pinched earlier than those in smaller containers.

Mum lighting is adequate (incandescent lights from 10 PM to 2 AM). Black cloth or isolated houses should be used for 'Freedom' plants lighted after start of natural short days, or stray lights will delay flower initiation on varieties which should not have delayed initiation.

Growth regulator applications must also be considered in poinsettia scheduling, particularly with varieties such as the 'Heggs' or those in the 'V-17 Angelika' series. We have found that two weeks after pinching is a good time to apply most growth regulators, as shoots will be about two inches long. Repeated applications might be needed for some varieties, but the deadlines given by the formulators should be observed.



## COMING EVENTS

<u>Event</u>	<u>Date</u>	<u>Time</u>	<u>Location and Contacts</u>
27th International Professional Plant Growers Association Conference and Trade Show	Friday-Tuesday 23-27 September		Buffalo, New York. Contact PPGA at (800) 647-7742 for more information
N.C. State Poinsettia Open House	Wednesday November 30	10:00-3:00	Horticulture Field Laboratory, Raleigh, N.C. Contact Roy Larson at (919) 515-1196 for more information

# Trail Schedule for 1994 Poinsettia Crop

Cultivar: \_\_\_\_\_

Response Group: \_\_\_\_\_

Growing Temperatures: \_\_\_\_\_ Night \_\_\_\_\_ Day \_\_\_\_\_ Daily Average

Tall, Medium, or Short Cultivar: \_\_\_\_\_  
 (Do you need growth regulator or extra vegetative growth)

Container Size(s)

Operation			
Sell Date			
____ Wk Response Group			
Short Days Start			
____ Wks Growth			
Pinch Date			
Lights On			
____ Wks Growth			
Pot Date			