

Piccolo 10XC Trial at UK

Experimental Procedures

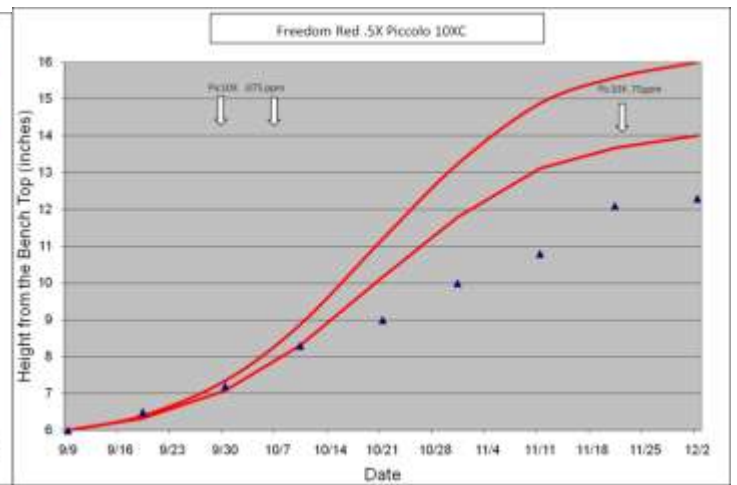
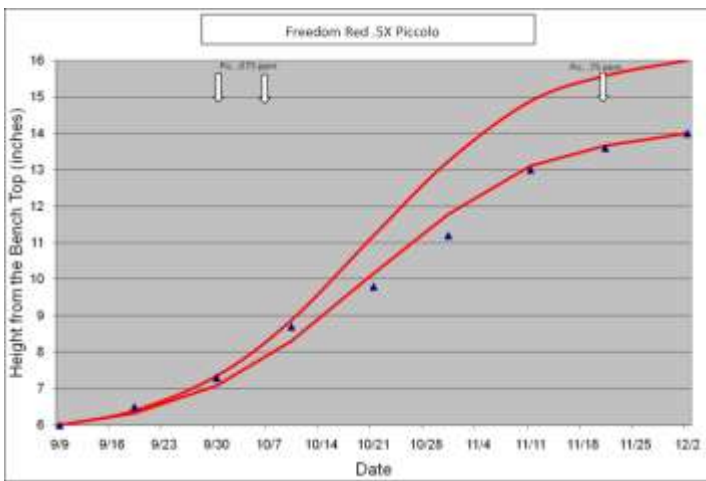
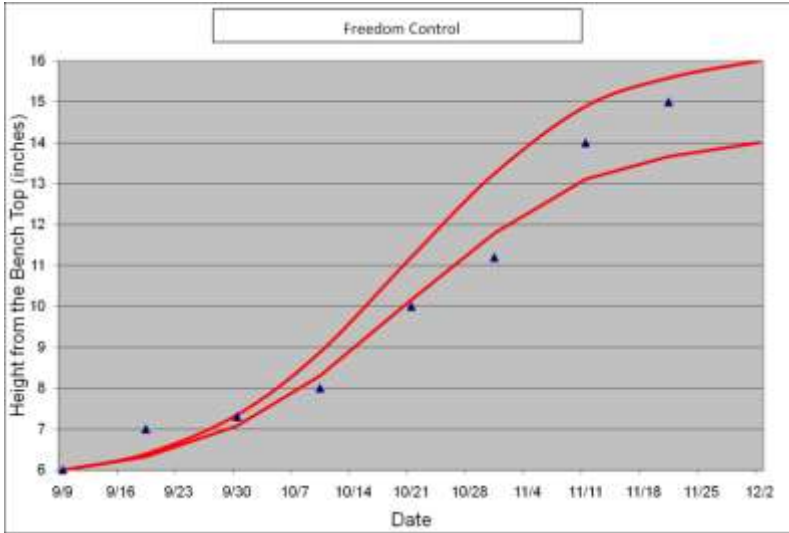
Layout				
Design	Completely Randomized			
Pots per Treatment	10			
Cultural Information				
Source	Ecke Rooted			
Pot Size	6" Azalea			
Height Spec	14 to 16 inches			
Medium	Sun Gro LA-4			
Fertility	300 ppm 20-10-20 Oct 1 st 250 ppm 15-5-15			
Plant Date	8/20/10			
Pinch Date	9/9/10			
Ship Date	12/3/10 (Control and 1X Piccolo treatments only)			
Photoperiod	Lights out 10/5			
Form	Pinched & Thinned to 5 lateral branches			
Treatments (120 ml drenches)				
Piccolo and Piccolo 10XC Drench Rates				
	Early Drench(es) as needed (ppm)			
	<i>Control</i>	<i>.5X</i>	<i>.75X</i>	<i>1X</i>
Freedom Red	0	.075	.1	.15
Prestige Early Red	0	.075	.1	.15
Advent Red	0	.1	.15	.2
Jubilee Red	0	.1	.15	.2
1188	0	.05	.075	.1
	Late Drench on 11/25 (ppm)			
	<i>Control</i>	<i>.5X</i>	<i>.75X</i>	<i>1X</i>
Freedom Red	0	.75	1	1.5
Prestige Early Red	0	.75	1	1.5
Advent Red	0	1	1.5	2
Jubilee Red	0	1	1.5	2
1188	0	.5	.75	1

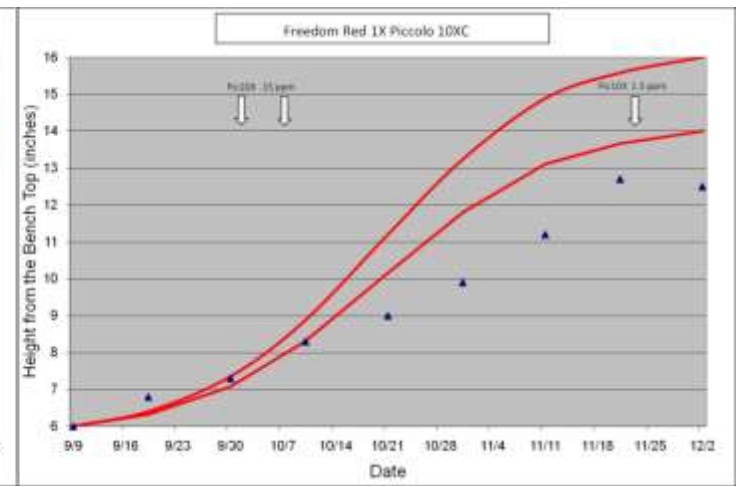
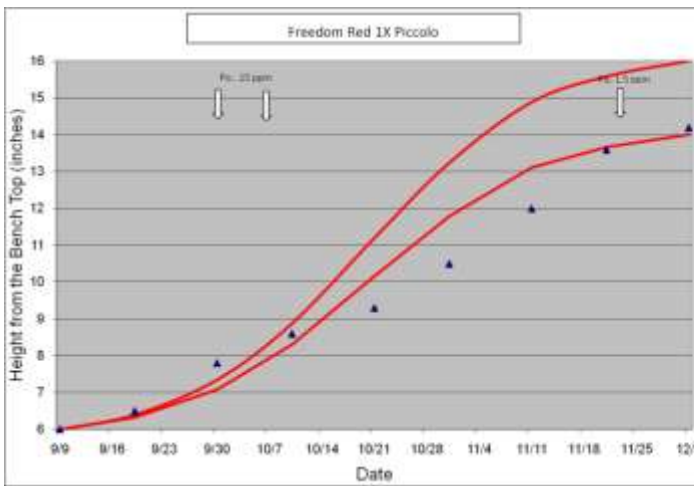
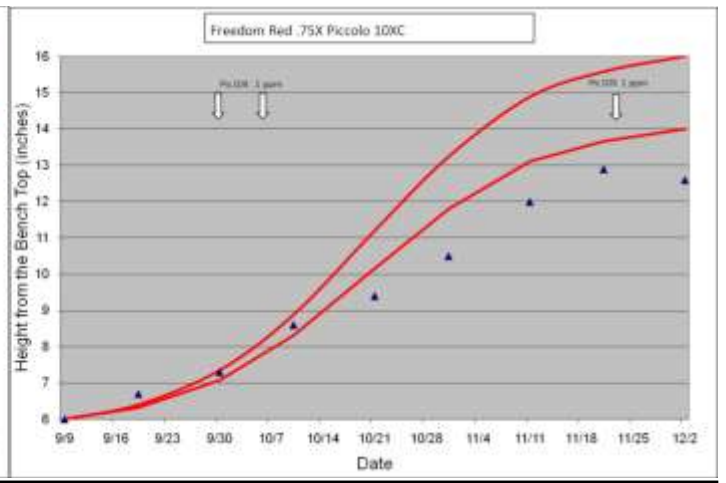
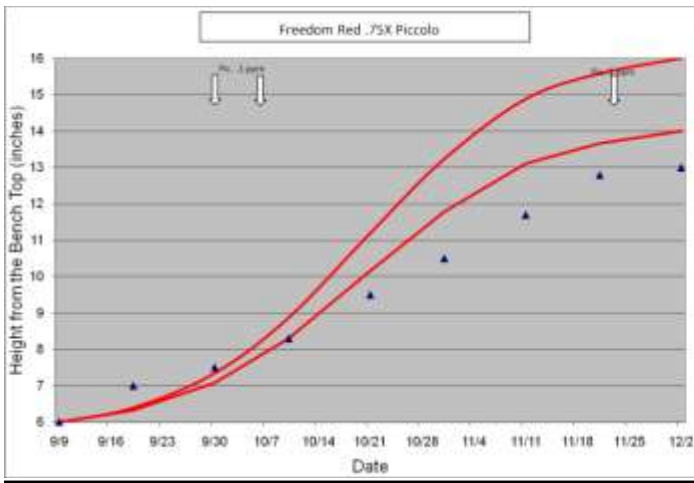
The treatment drench rates were assigned based on the relative vigor of each cultivar.

Results

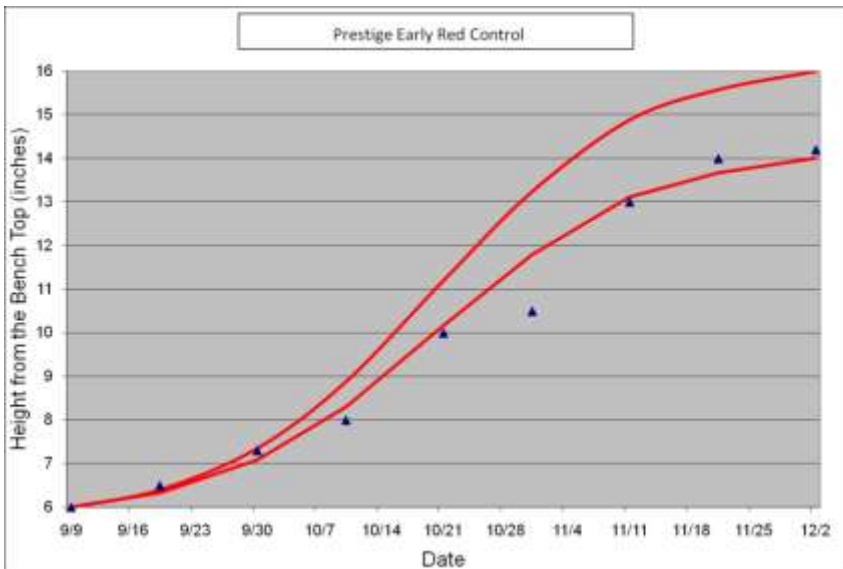
1. Graphical Tracks for all treatments
2. Photos of bract puckering
3. Post Production leaf and cyathia drop

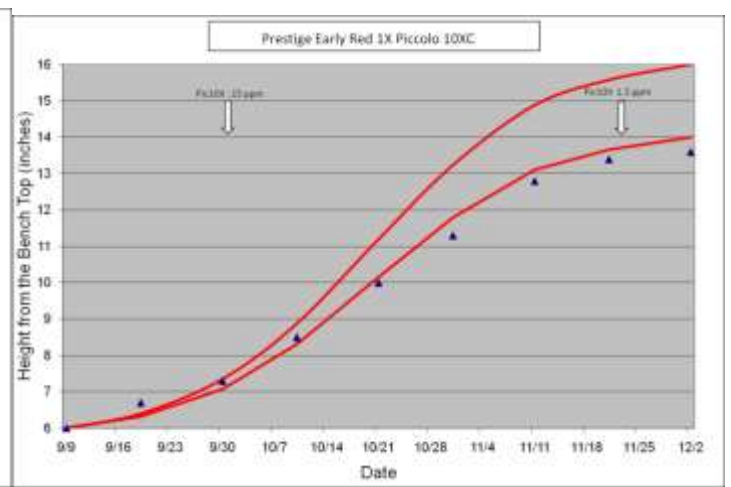
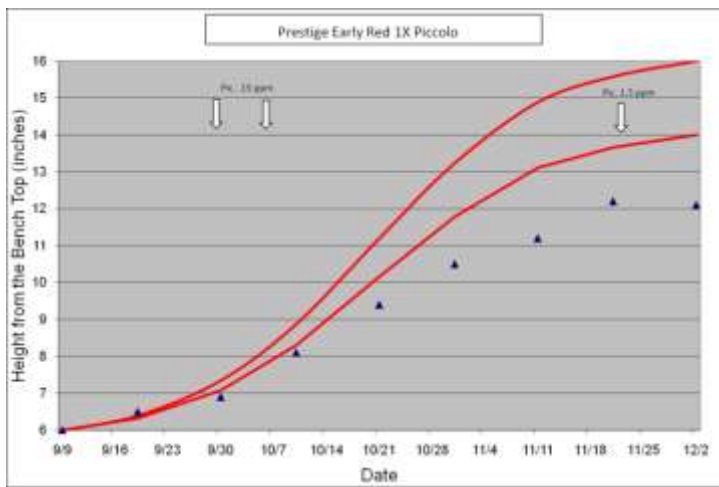
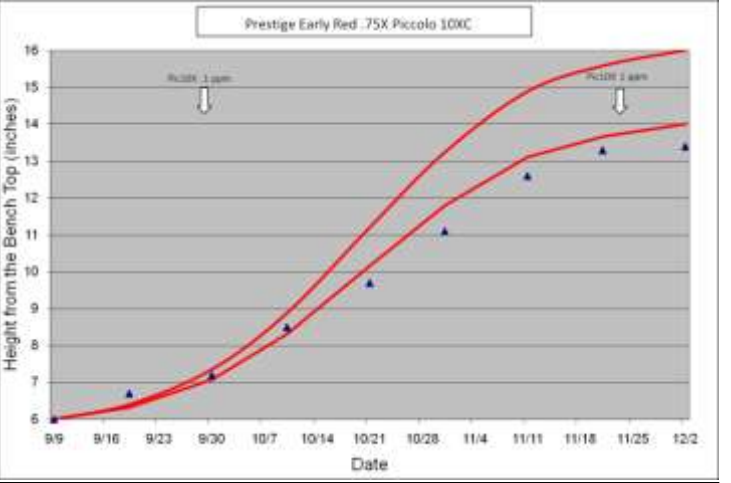
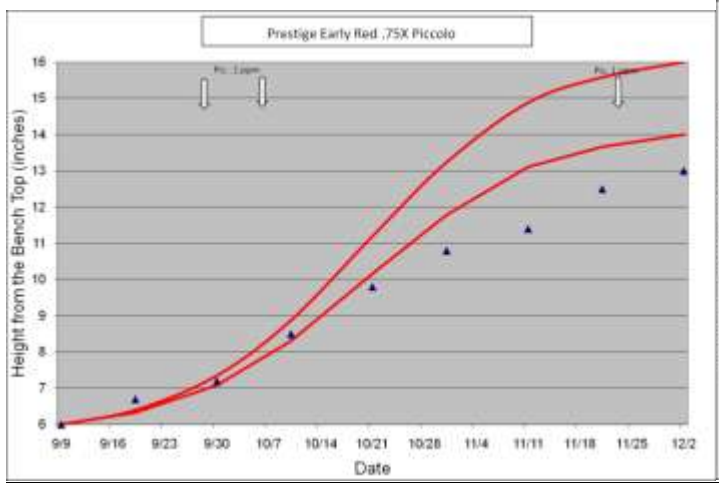
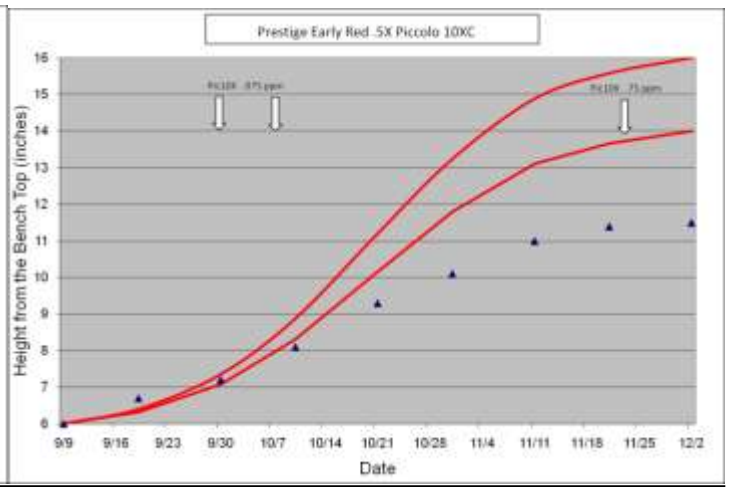
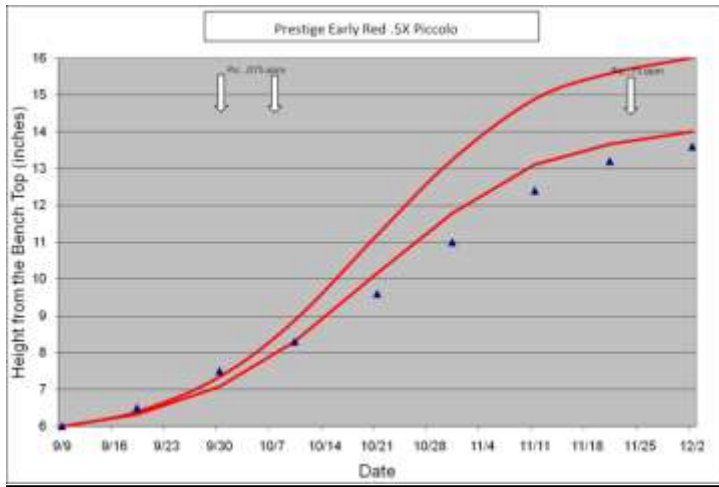
Freedom Red



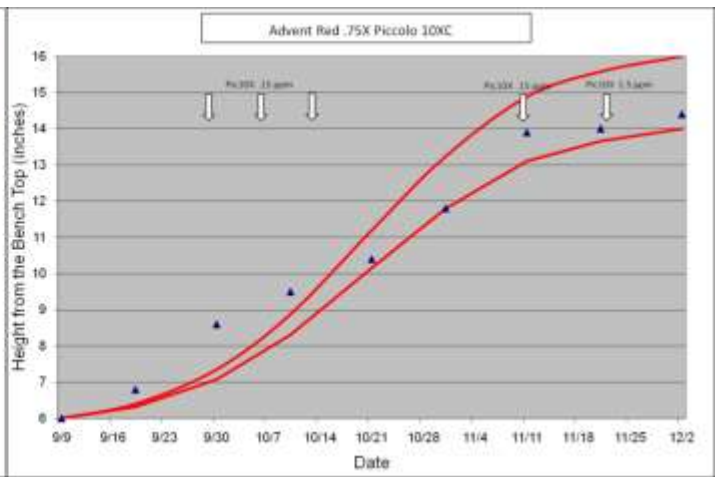
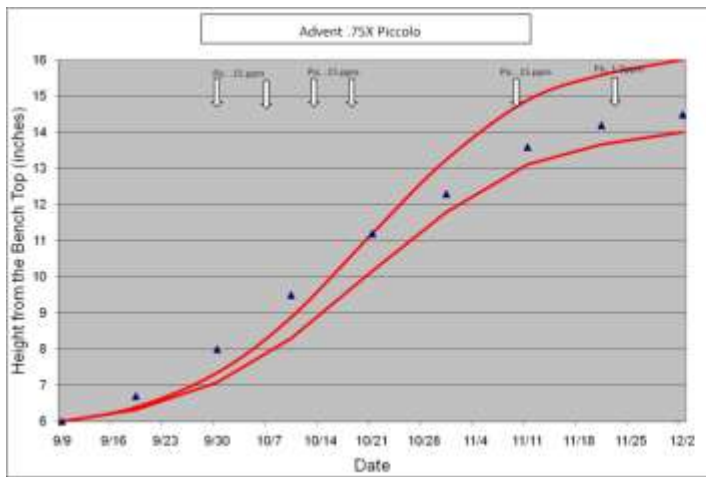
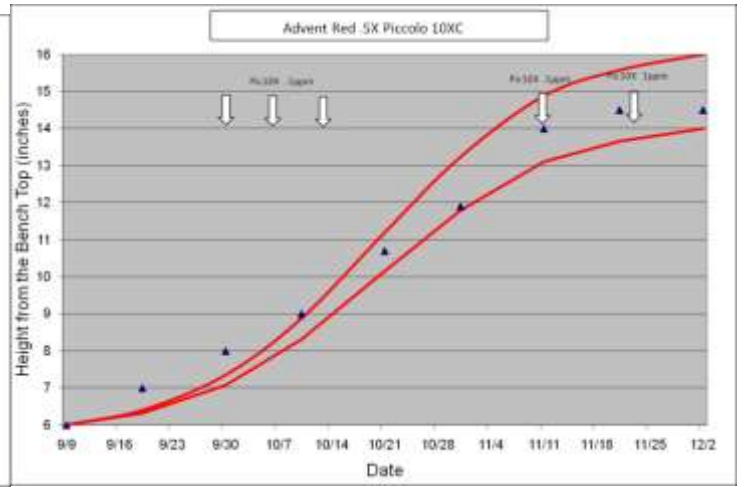
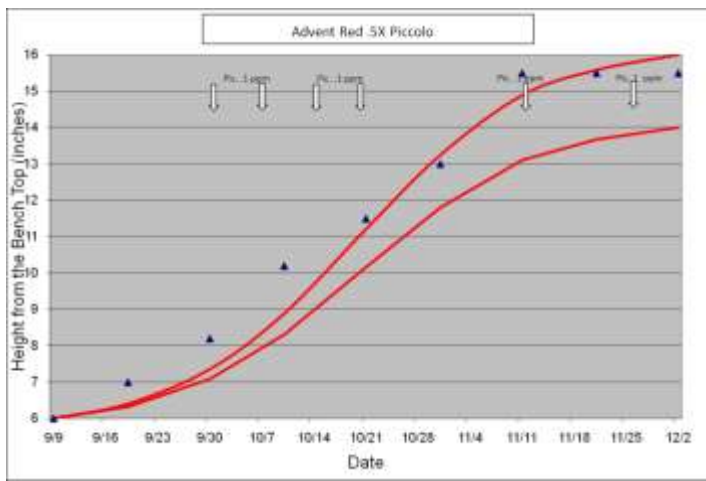
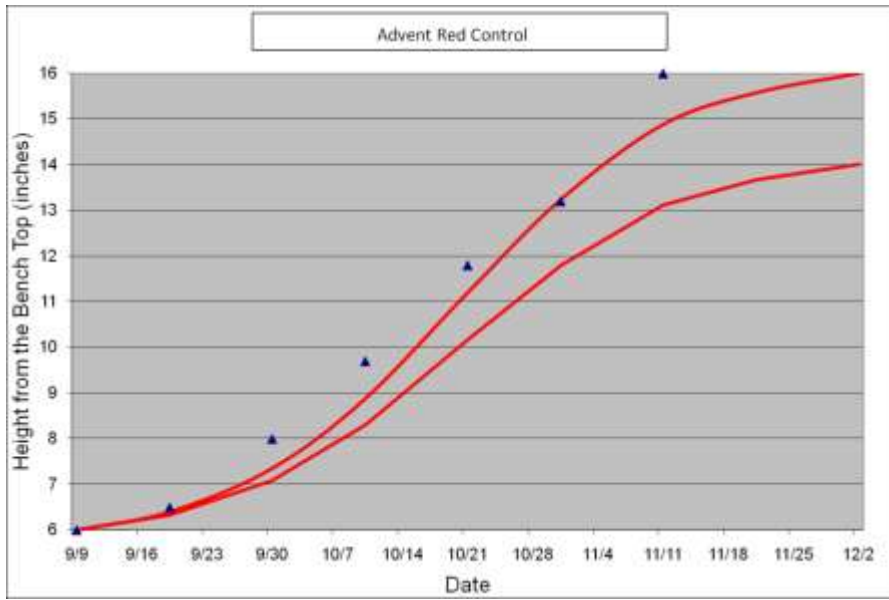


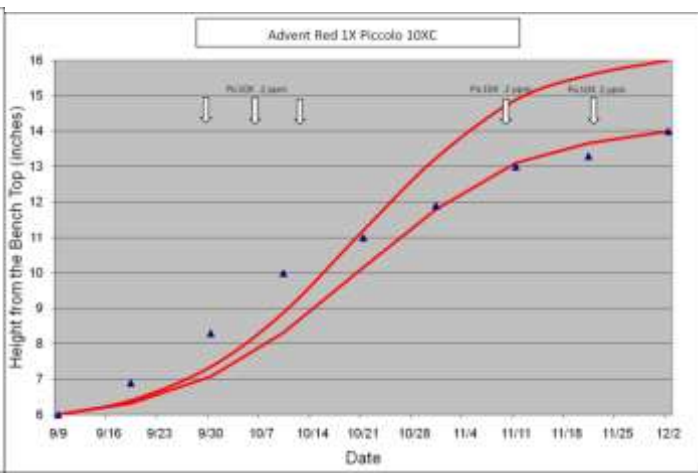
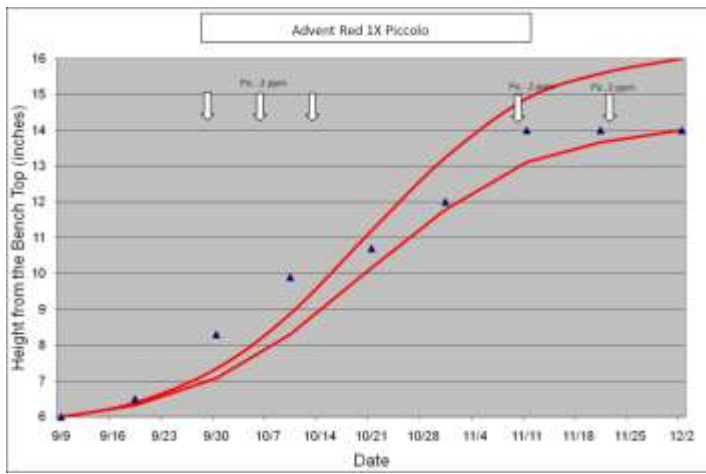
Prestige Early Red



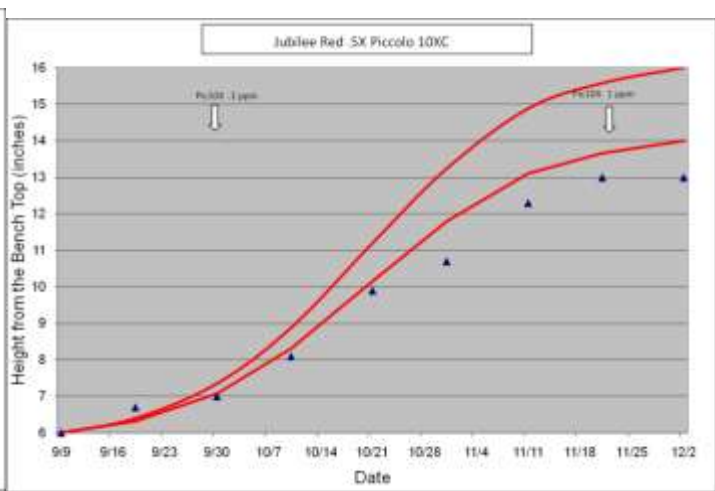
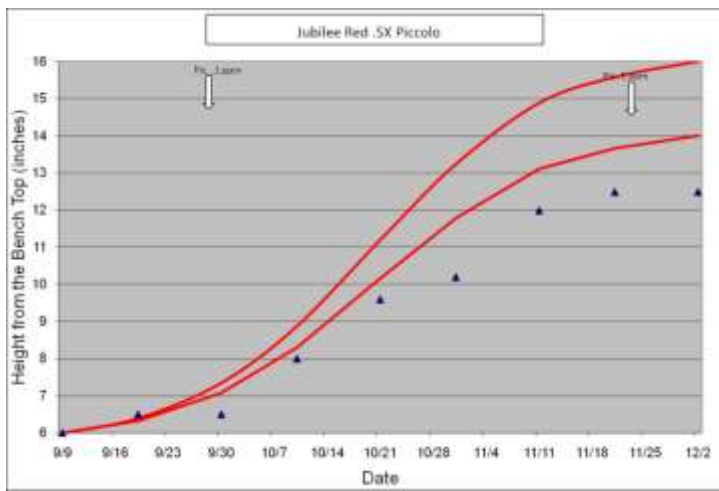
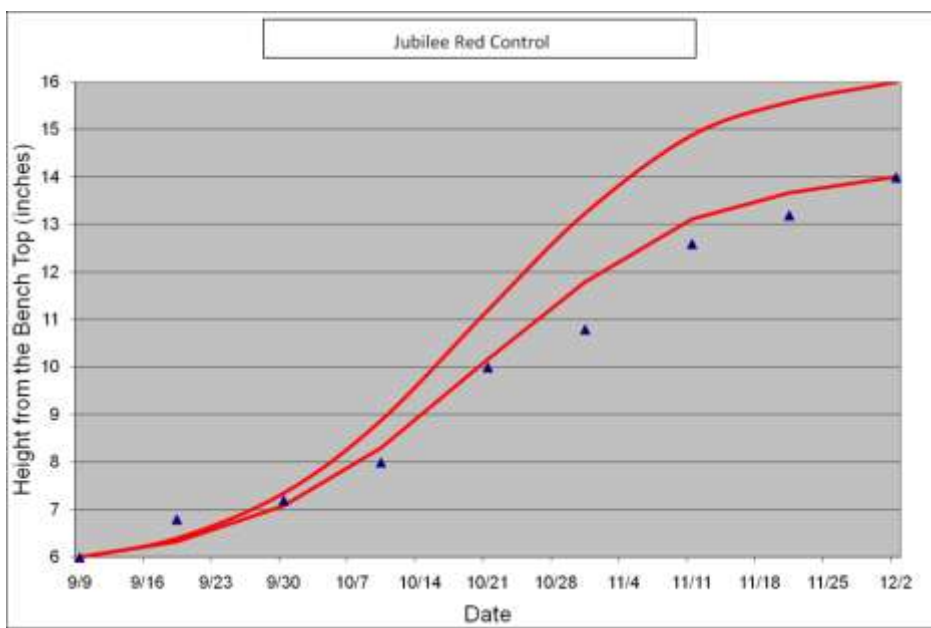


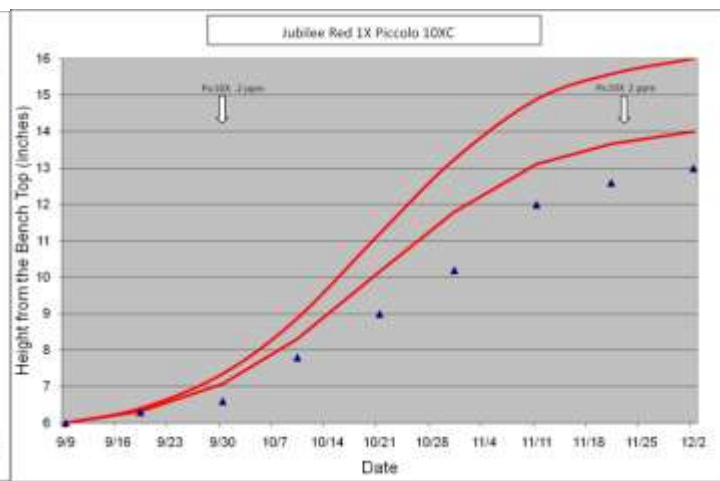
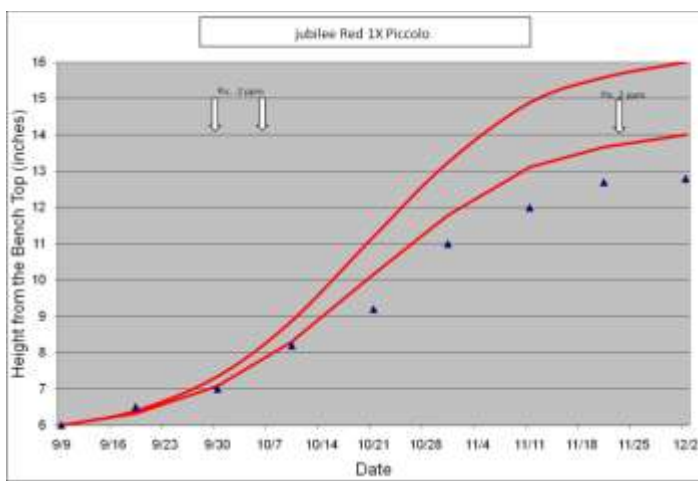
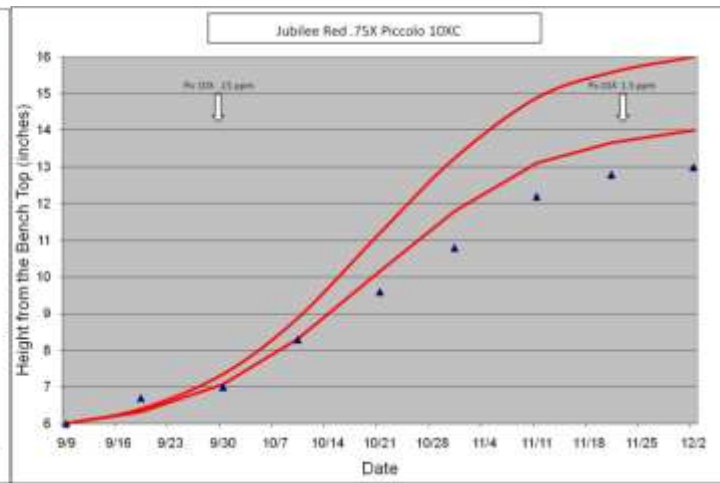
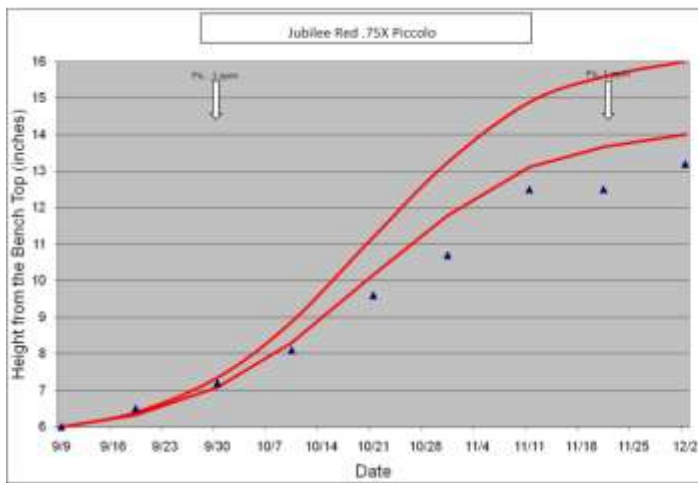
Advent Red



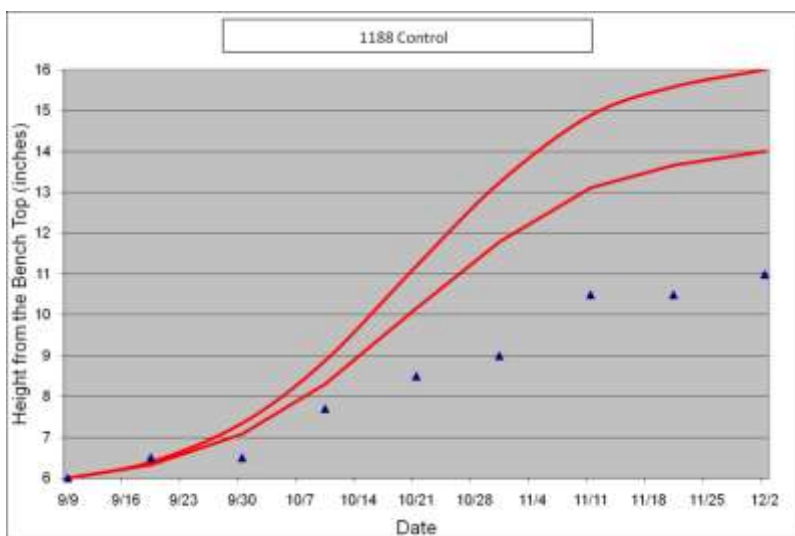


Jubilee Red (Formerly 1139)





1188



Comments and Observations

Piccolo 10XC is slightly more active than Piccolo at the same concentration. I think 10XC will be a valuable product to control high vigor poinsettia varieties around the country and all varieties in the warmer climates. Advent Red is probably the best example from this study. We were able to control this highly vigorous and relatively low PGR response cultivar with fewer drenches of 10XC than standard Piccolo.

Slight bract puckering was observed on plants treated with both Piccolo and Piccolo 10XC early drenches. The late drench 1 week before shipping did not noticeably increase the bract puckering. In my opinion these plants would still be marketable.

Bract Puckering Examples on Freedom Red:



Control: No PGR



Left: Freedom Red following 2 early drenches with Piccolo 10XC at .075ppm and a late drench at .75 ppm
Right: Freedom Red following 2 early drenches with Piccolo at .075ppm and a late drench at .75 ppm

Post Production Trial Procedures

On Ship Date:

- Watered to field capacity
- Pot cover and sleeve applied
- Packed on shipping racks and shrink wrapped
- Rolled for approximately 20 minutes

Shrink wrap removed after 24 hours

Removed from racks for arrival data collection 3 days after ship date

Sleeves pulled down for weekly data collection then replaced

All plants on placed on tables at $75\pm 1^\circ\text{F}$ and 0.5 mol/day DLI

No water applied during post production

Data Collected During Post Production

On ship date:

Plant height

On the uppermost lateral branch:

- Number of leaves
- Number of cyathia on the uppermost lateral branch
- Number of cyathia showing pollen (All cultivars and treatments had 1-4 cyathia showing pollen at the time of shipping)
- Total Number of bracts
- Number of damaged bracts (BEB or bruising)

On arrival date (3 days post ship) and weekly thereafter:

Number of lateral branches

Number of dropped leaves

Wilting

On the uppermost lateral branch:

- Number of dropped cyathia
- Number of damaged bracts

Data Calculated

Percent leaf drop

Percent cyathia drop

Results

No significant difference in leaf or cyathia drop for any of the cultivars 17 days after shipping

Most plants were still marketable 10 days after shipping and most had wilted by 24 days after shipping

Table: The average height on the ship date (inches from benchtop), percent leaf drop, and cyathia drop 17 days after shipping with a Piccolo late drench or plain water applied 7 days before shipping.

Cultivar	Late Drench	Height	% Leaf Drop	± Std Err	% Cyathia Drop	± Std Err
Freedom Red	0 ppm	16.2	56.0	27.2	75.1	9.5
	1.5 ppm	14.9	57.6	17.3	71.4	17.5
Prestige Early Red	0 ppm	14.1	66.4	31.6	87.1	15.2
	1.5 ppm	13.6	55.2	27.8	83.2	18.1
Advent Red	0 ppm	16.1	66.2	25.3	14.0	21.3
	2.0 ppm	15.8	56.4	15.0	15.3	12.6
Jubilee Red	0 ppm	14.1	74.3	31.0	64.3	26.8
	2.0 ppm	13.9	51.6	17.1	67.3	22.1
1188	0 ppm	11.4	27.6	27.6	58.4	28.5
	1.0 ppm	11.5	31.6	18.9	70.1	25.0

