

Poinsettias



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Poinsettias

- History
- Varieties
- Scheduling
- Growing Media
- Vegetative Growth
- Water
- Nutrition
- Height control
- Flowering
- Pests of Poinsettia



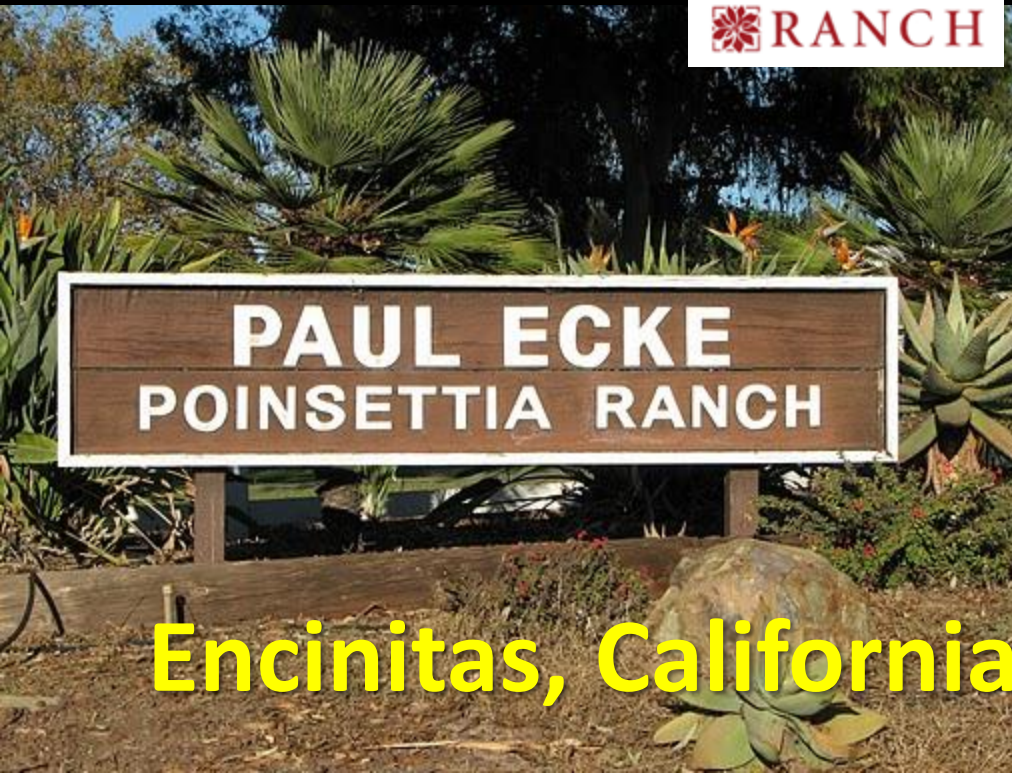
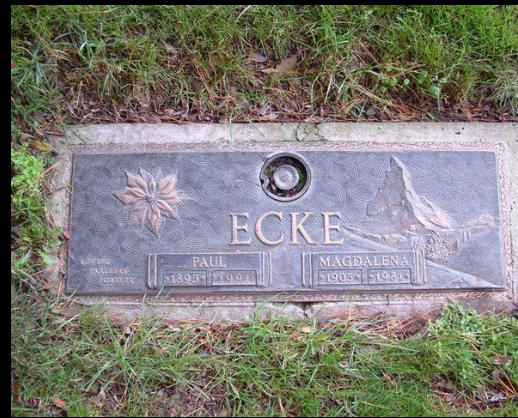


Poinsettia History

- Joel Roberts Poinsett, first U. S. ambassador to Mexico
- Shipped cuttings of the native Mexican plant to his Greenville, South Carolina greenhouse
- Propagated the plants and sent them to friends and botanical gardens around the country (1828)
- Hometown of Greenville, South Carolina

Paul Ecke Sr., Jr., III

- Control 70% of the domestic market and 50% of the worldwide market (2008)



Encinitas, California

Variety Selection

Early varieties

Freedom

Prestige

Fisher/Syngenta

Medium varieties

Late varieties

Be careful

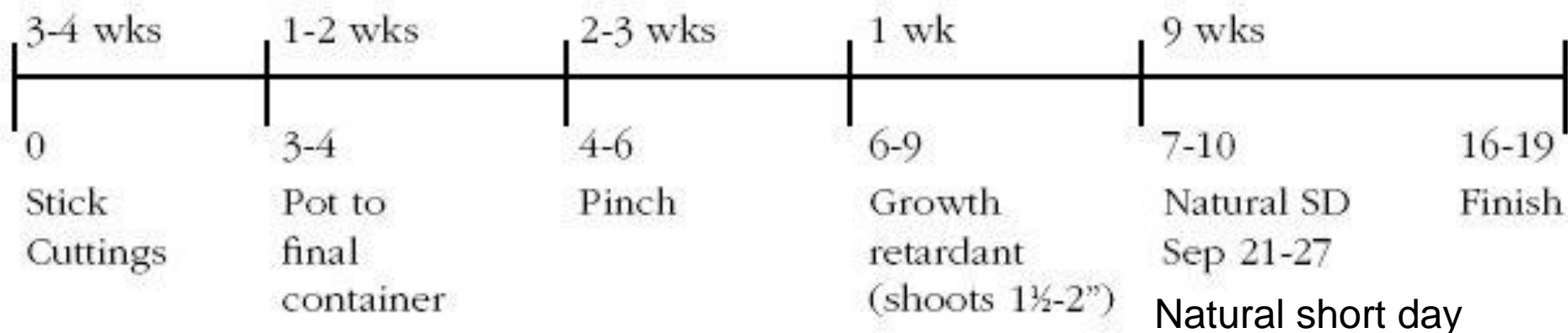


Prestige Red

Eckes Freedom Red

Non-rooted Poinsettia Scheduling

Figure 1. Scheduling Time Line for 6-inch Pinched Poinsettia



Variety selection

Planting date

Desired Height

Schedules

Pots size

Pinch (98%) or no pinch (2%)

Number of plants per pot

Poinsettia Schedule

Pot Size	Plants per Pot	Pot Date	Pinch	Start Short Days
8 inch	3	7/25	8/25	9/20
7 inch	2	8/5	9/5	9/20
6 inch	1	8/15	9/15	9/20
4 inch	1	9/5	9/25	9/20

Growing Media

- **Buy the best**
- **pH 5.8 to 6.5**
- **Some growers use
composted pine
bark**



Propagation of Cuttings

- High quality finished crop begins with the stock plant
- Schedule is important
- Date is determined by when you want to market them
- Usually July & August
- 4 weeks to develop a well-rooted cutting



Poinsettia Cuttings Options

- **Cuttings**
 - Takes 5 to 10 day to form callus
- **Callus cuttings**
 - Takes 5 to 10 days for root initiation
- **Rooted cuttings “Oasis wedges”**
 - Key is to keep wedges wet until root penetration into soilless media ~ 7 days



Rooted Oasis Wedge Cuttings



Vegetative Growth

- Primary goal is to build foundation of the blooming plant
- Root penetration
- Proper pinching
 - 1st week September
- Controlling elongation
- Reaching target height



Water

- Responsible for leaf expansion
- Responsible for Stem elongation
- Wet – Dry Cycles
- Couch potato

Nutrition

- Nitrates
- pH
- Temperature and sunlight
- Avoid High Phosphorous
- Magnesium deficiency (chlorotic on leaf edges)
- Calcium (black ring around leaf edges)
- Use Cal-Mag fert

Poinsettia Growth Phases

- **Propagation – Sticking to root initiation**
 - low EC & 10 to 150 ppm N after roots initially appear
- **Initial Growth – Transplant to 2 weeks after pinch**
 - 100 to 150 ppm N
- **Rapid Growth – 1 inch per week**
 - 200 to 300 ppm N + Ca, Mg if needed
- **Flowering – bracts expanded, flowers develop**
 - 100 ppm N

Height Control

Pinching

Timing

Program pinch





Pinch height



Height Control

Graphical tracking

Growing journal

Weekly pictures

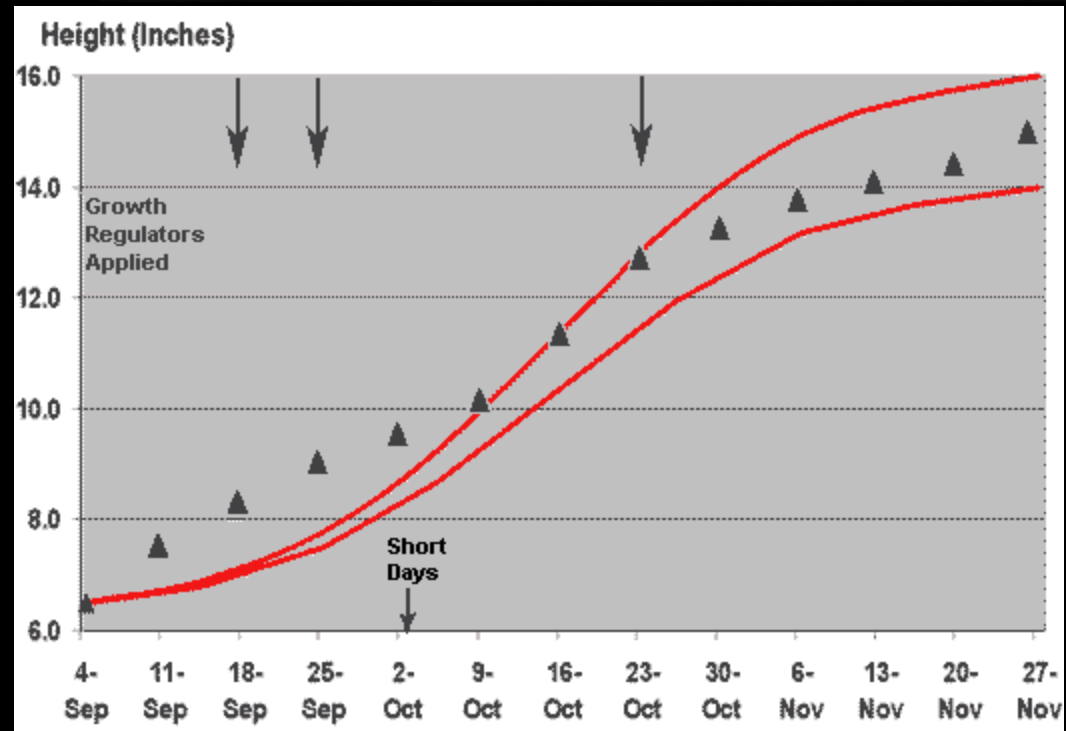
Start of short days

Pinching

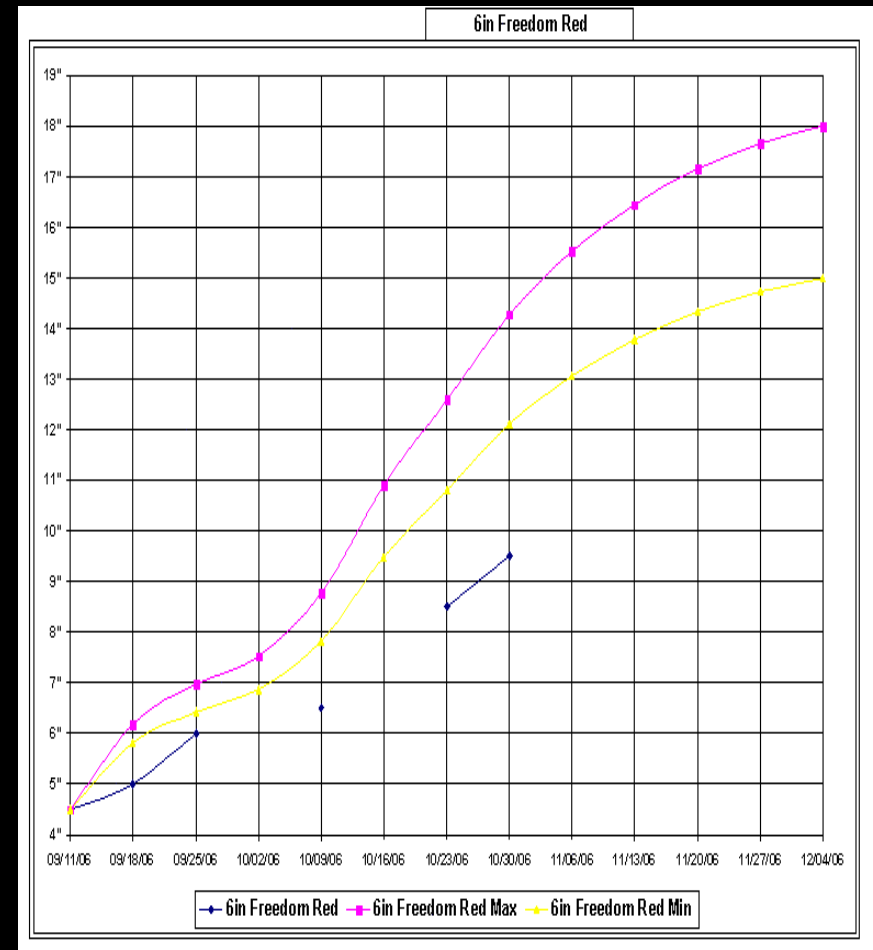
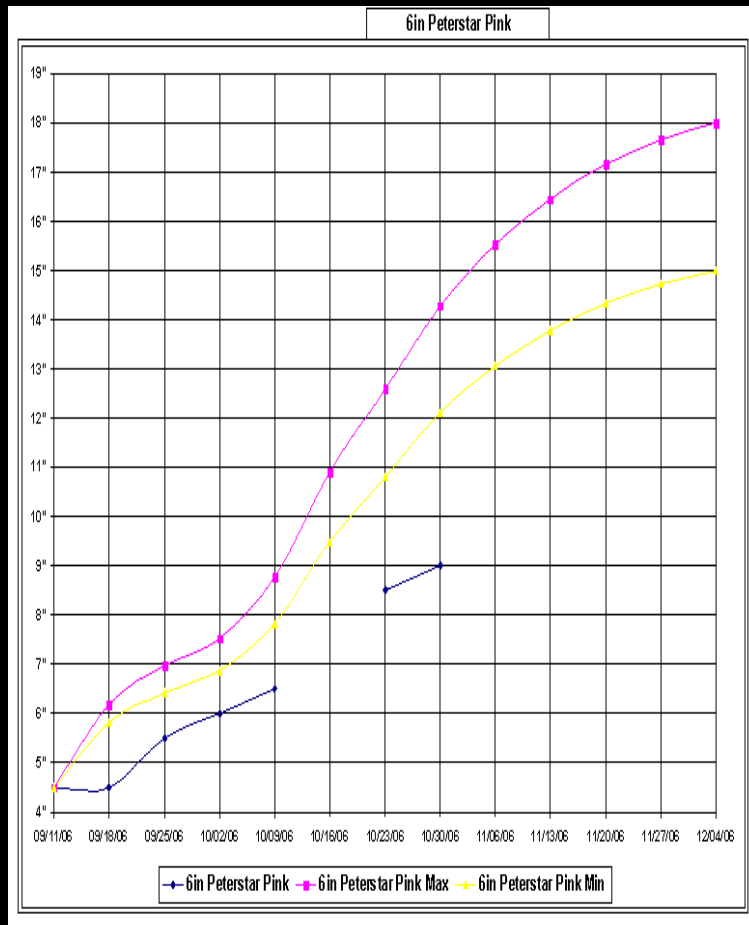
Watering

DIF

Growth regulators



Graphical Tracking ecke.com



6 to 6.5 inch pot

DIF

“Plant height was much more strongly dependent on the difference between day and night temperature than on the absolute value of either (Karlsson et al, 1989).”

To explain the effect she coined the term DIF

Day temperature regulates photosynthesis

Night temperature regulates respiration

Hormone development

Maturity

Temperatures

- 65 F air temperature at night
- 75-85 F air temperature during day
- Cooler mornings

Growth Regulators

Cycocel/B-nine - Until Oct 10

Late Bonzi drench - Be careful



Photo Sequence

Prestige Early Red - spray



Cycocel



halo

Small Bracts



The Role of Short Days

Flower initiation

Must be more than 12 hours of dark

For early varieties Sept 12

For others Sept 20

For schools

**Probably the best variety is Prestige
because of its early finishing time**

Poinsettia Pests

Insects

Excellent crop for IPM

Monitoring great tool for learning

Marathon is safe and effective

REI = 12 hours

Whiteflies



WF TR Program for schools



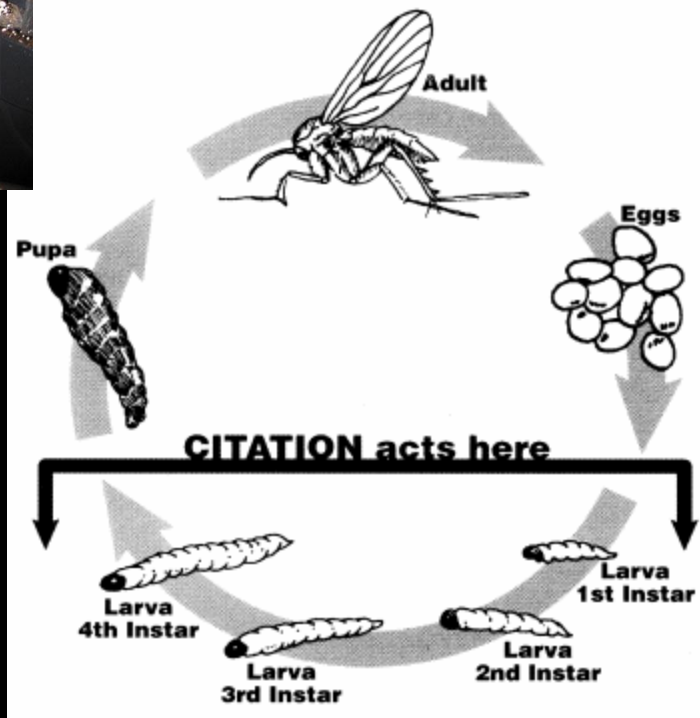
Stage	Day 1	Day 7	Day 14	Comments
Adults	Space Mix Preclude TR & Tame/Orthene TR	Tame/Orthene TR	Space Mix Preclude TR & Tame/Orthene TR	
Immatures	Ultra-Pure Oil	Preclude TR & Ultra-Pure Oil		Do not apply Ultra-Pure oil if plants are in bloom
Eggs	Ultra-Pure Oil	Ultra-Pure Oil		Do not apply Ultra-Pure oil if plants are in bloom



Fungus Gnats



UGA1455144



Yellow Sticky Cards



Disease

Use environmental controls first

Temperature

Air Flow

Fungicides have long REI

Scab



Botrytis







The Ecke Poinsettia Manual

