Production of Floriculture Crops

HS 442
Spring 2003

Poinsettias
- Poinsettia, Christmas flower
- *Euphorbia pulcherrima*
- Euphorbiaceae
- Native to S. Mexico and N. Guatemala

Number one potted flowering plant in the US.
Major crop in Europe and Australia, minor elsewhere.
Also, hanging basket plant, cut flower, and landscape shrub.

Terminology
- Bracts
- Transition bracts
- Cyathia
- Nectaries
- ‘Flowers’

Cultivars
- Free-branching vs. restricted-branching
- Bract color

Cultivars
- Foliage color
- Height/vigor
- Response group (6.5 to 10)
- Postharvest life/leaf retention
- Series
Cut Flowers
- Renaissance Red

Propagation
- Seed only for breeding purposes.
- Terminal cutting propagation.
- Purchase cuttings vs. grow your own.
- Thick (1/4 in. thick), 2-3 in. long cuttings with one mature leaf and several immature leaves.
- Don’t forget about stock plants.
- LD

Sanitation
- 75 to 77°F media
- Less than 2000 fc light
- Foam vs. direct stick
- Rooting hormone (0.1% IBA)
- Tenting vs. misting

Two types of tenting

Cuttings ready to plant in 3.5 to 5 weeks.
Flowering Control
- SD plants
- 11.75 hr critical night length
- Artificial SD often from 5 pm to 7 am, 14 hrs
- Sept. 25 natural date of flower initiation
- Night temps above 70°F may delay flower initiation, above 75°F may delay development
- Continue SD until pollen shows

Temperature
- Propagation: 75 to 77°F media
- After propagation*: 65 to 68°F
- After pinch*: 62 to 65°F
- End of crop#: 55 to 60°F
* Use of DIF may determine day temperature
* Warm weather often results in higher temps than indicated
* Multiple crops often prevents lowering temps

Temperature
- Maximum temperatures: below 70°F night and 90°F day.
- Minimum: 55°F anytime.

Light
- Maximum light
  - 3500 to 4500 fc for dark leaved cultivars
  - 5000 to 6000 fc for light leaved cultivars
  - Full sun most of the time
- Shade for 1-2 weeks after planting if high temperature and/or low humidity
- Specific cultivars may need shading during production or at finish

Water
- Don’t allow to wilt, especially during hot sunny days.

Carbon Dioxide
- Not proven to be beneficial.