Stock Plant Management

James L. Gibson
University of Florida-Milton
Floriculture Research

Ethylene

- 3 to 7 days
- 38 to 65°F
- Cooled to 38°F
- Prevent >50°F
- Unpack and re-hydrate immediately
What to do when problems occur?

- Shoot it
- Report it
- Dispose of it

Propagation Environment

- Separate from production
- Screening and barriers
- Rigid flooring
Propagation Environment

- Thermometers check hot/ cold spots
- Mist risers- 24” above bench
Sanitation

- Greenshield®
  - 12 fl oz / 25 gal.
- Basins
  - Bleach and soap
  - 2 caps bleach + 1 Tbsn. soap/ 5 gal.
- Footbaths (QACs)

Which rooting substrate should I use?

- 50/50 peat:perlite
- IHT
- Ellipot
- Ener-G System
- Fertiss
- Jiffy
- Oasis or Agri-foam
- Plug mix
- Preforma
Which type of rooting tray should I use?

Deeper the cell, better the drainage

Rooting Hormones???

- IBA (1,000 to 3,000 ppm)
- K-IBA (water soluble)
- NAA (500 ppm)
- Quick-dip
- Species
  - Bracteantha
  - Mimulus
  - Osteospermum
Florel

- Flowering- 6 to 8 weeks from application
- Can be applied during propagation
- 250 to 500 ppm

Be aware of stock plant management issues.
Be aware of stock plant management issues.

Be aware of stock plant management issues.
Pinching during propagation prevents legginess.

Management of Stock Plants to Maximize Cutting Propagation

- Selection and maintenance of source material that is easy-to-root
- Type of wood selected
- Wounding
Management of Stock Plants to Maximize Cutting Propagation

- Manipulation of environmental conditions and physiological status of stock plant in relation to:
  - Water status
  - Temperature
  - Light
  - Stock plant etiolation
  - Girdling
  - CO₂ enrichment
  - Carbohydrates
  - Managing carbohydrate/nitrogen levels

Maximized Rooting of Woody Ornamentals

- Easy-to-root
- Juvenile
  - Physiological age
  - Chronological age
- Shearing/Hedging
This azalea plant has been selected for cutting production because of its outstanding flowering traits.

Stock plant of live oak
Magnolia propagation