Magnolia Cutting Propagation at The Atlanta Botanical Garden-Gainesville
Timing for Deciduous Magnolia Cuttings

- Late May - Early August (Northeast Georgia, USA Zone 7b)

- Softwood? - can work
  - Semi-hardwood - most often used

- Most Success Overall June
Main Points to Remember When Taking Magnolia Cuttings

- Take earlier in the day if possible
- Look for growth lower on the plant or closer to the trunk
- Oldest, largest growth will always be harder to root
- Length of cuttings can be about 3 to 6 inches (7-15cm.) depending on shoot size
- Preparation and storage is critical
Media

1 Part Moist Peat or Fine Pine Bark
5 Parts Perlite
Types of Containers

Nursery Supplies Inc. Accelerator Liner Pot= 3” width, 4” depth, 28 cells in tray

Proptek Trays- various available
www.proptek.com
2.5” width, 4.75” depth, 36 cells in tray
Rooting Hormone

- IBA-K or Indole-3-butyric Acid Potassium Salt powder
- Water Soluble vs. Alcohol
- Less chance of burning cuttings
- www.phytotechlab.com
- Search Indole-3-butyric Acid

Mixing

- 10 grams powder/1 Liter of distilled water = 10,000ppm IBA-K
- 25 grams powder/0.5 Liter of distilled water = 50,000ppm IBA-K
**Dilution Table from 10,000ppm**

Starting with 1 Liter of 10,000ppm
Mixing into 0.5 liter or 500 ml

Example: to get 8000ppm
4 parts concentrate and 1 part water=
400 ml concentrate and 100 ml water

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The Final Cut
Dip It!
10-20 seconds
And Stick It!
Mist Timing

7-10 seconds every 7-10 minutes during daylight hours
15 seconds every 45-60 minutes at night
Takes anywhere from 4-8 weeks to root
Care of Cuttings in Mist Tent

- weekly to biweekly seaweed drenches (Saltwater Farms SeaCom-PGR)
  - my “Snake Oil”
  - provides various nutrients, minerals, and hormones
- remove any dead and melted cuttings ASAP to prevent spread of disease
- weekly to biweekly fungicide drenches
  - can help with water molds and other diseases but not 100% necessary
- Temperature - very important!, cuttings like warmth
  - we keep our greenhouse set between 70-80 degrees F, but on warmest summer days we are good to keep it between 80-90 degrees F
Success!
Rooting Study
Magnolia
‘Melissa Parris’
(tripetala x (trip. X obovata) x insignis
- upper terminal
- lower terminal
- lower lateral branches
Timing of Asian Evergreen Magnolia Cuttings

-Late November – Early January (early winter)

-Very weather dependent

-Like to have at least 2 good freezes prior to taking cuttings

-If you wait too late plants may shut down too much to root

-Some evergreens can be done similar timing as deciduous
“The Magic Box”...
Basic Set Up of the “Magic Box”

- box approximately 6-8” deep, other dimensions are up to you
- bottom heat, mats, coils etc...
- seal inside box with plastic
- can cover bottom with hardware cloth
- some sort of support for plastic, fencing/hog wire works fine
- thermostat for heat source
- plastic to cover
- shade cloth if needed
Media
- 50/50 coarse sand/perlite
- River sand works fine
- At least 4-6” deep

Temperature
- Set heat mat thermostat between 70-80 degrees F
- Maintain air temperature at max around 75 degrees F
- If temp. gets too high cuttings will start to grow and not root
- Outside of box needs to be cold, can be outside in shady location

Other Cutting Procedures
- Basically the same
- Same cutting method and hormone
- Row out cuttings
- After sticking cuttings water in with Seaweed
- Check every week for water needs and dead plant material

Timing In Box
- Cuttings usually root in 3-4 months
- We are usually potting up in March
- Try to pot before the cuttings start growing
Enjoy!
and
Have Fun!
Species Successfully Rooted
M. sapaensis
M. compressa
M. floribunda
M. kwantungensis
M. xinganensis
M. changhunntana
M. laevifolia
M. figo and figo v. crassipes
M. cavaleriei v. platypetala
M. yuyuanensis
M. kachirachirai

Species Unsuccessful
M. foveolata
M. insignis
M. lotungensis

(Though hybrids with insignis and foveolata have rooted)