

# BASIC PROPAGATION

cuttings

# Basic methods of propagation:

seeding and cloning: cuttings, divisions, layering, grafting.



# Cloning: Asexual reproduction

i.e. same genetic makeup as the parent plant



# This can be done by...

- ▣ Cuttings- short tips or side shoots.
- ▣ Divisions- dividing a clumping plant.
- ▣ Layering- rooting a shoot before cutting it off the parent plant.
- ▣ Grafting...



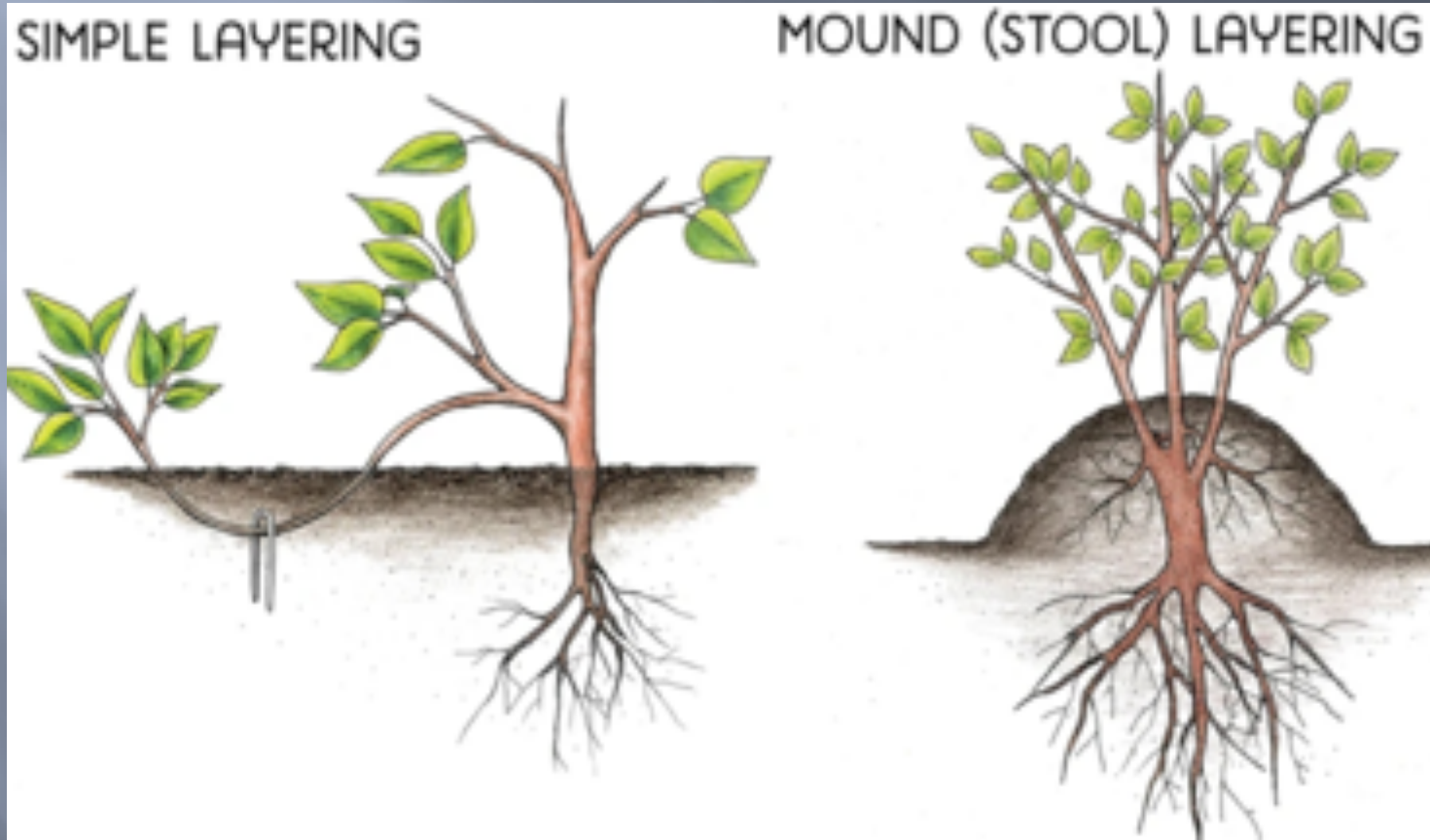
# Divisions...

Examples are: Hosta, Grasses, Raspberry,  
Ginger, Tumeric, Daylily.

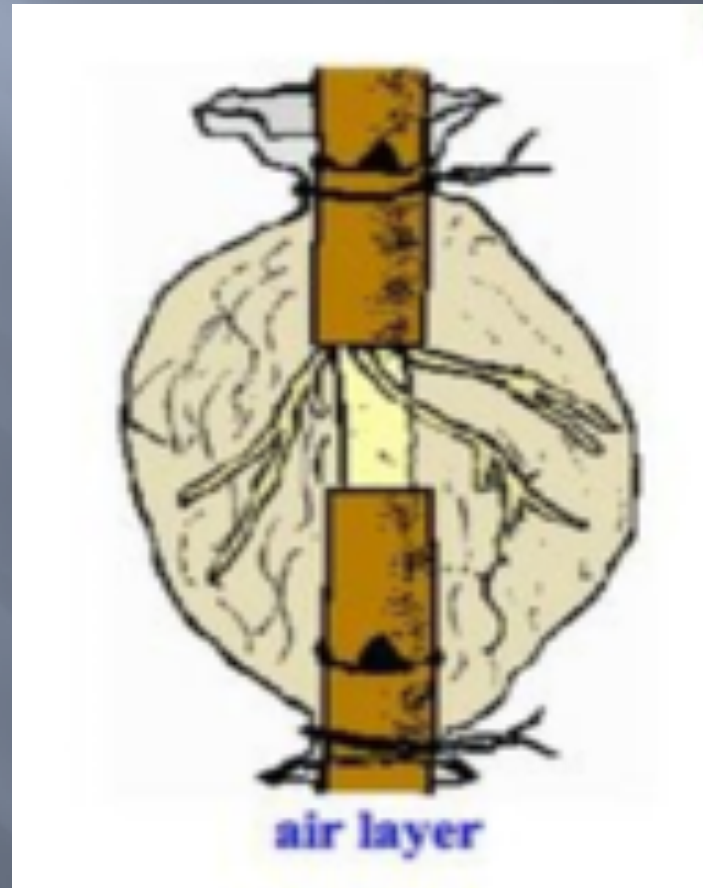


# Layering...

Figs, Blueberry, Currents, Root stock for grafting



## Layering cont.



# Back to cuttings...

- ▣ Herbaceous Vs. Perennials (woody)
- ▣ Rooting hormone
- ▣ Tools
- ▣ Tray sizes
- ▣ Environmental conditions
- ▣ Mothers stock
- ▣ Timing



# Herbaceous. (annuals, perennials)

½" - 2" long, new growth, large first shoots of spring are the best.





# Like this

Notice the fresh new growth



# Examples:

- ▣ Basil, Catnip, Chamomile, Fuchsia, Lavender, Lemon Balm, Lemon Verbena, Marjoram, Mint, Oregano, Rosemary, Sage, Winter savory, Stevia, French Tarragon, Thyme, Ornamental Potato Vine, Lots of perennials... (Roses, Hibiscus...)



**Leaf node**

## Geraniums and other thick stemmed plants

Use a knife to cut stem to avoid damage...





# Woody Perennials

2" -4" long, Cut 1/4" - 1/2" onto the brown woody growth and scarify.



/ ARS Small Hand Shears 7-inch Length





This is what it might look like...



# Examples of woody perennials

- ▣ Shrubs- Arborvitae, Boxwood, Grapes, Juniper, Euonymus, Spirea, Laurel...
- ▣ Grapes are a bit different....

# And speaking of tools...

The best herbaceous cutting snips look like this:



Amazon.ca

Visit

Fiskars F9495 | Micro-Tip  
Thread Snip Scissors | ...  
4 ★★★★★ (703)

Brand: VARWANEO ★★★★★ 372  
DEEINN 4.1inch Sewing Scissors Yarn  
Thread Cutter Small Snips Trimming  
Nipper - Great for Stitch, Mini DIY  
Supplies (Multicolored-1)



VIVOSUN 1-Pack Gardening Hand Pruner  
Pruning Shear with Titanium Coated  
Curved Precision Blades





# Rooting Hormone

Liquid or powder



# Cutting plug trays

Plug cells are about  $1/4^{\text{th}}$  of final pot size...







# Rooting media

Finer texture soil for seedlings and plug trays: often sold as “plug mix”





# Environmental conditions...

...that favor root growth.



# A different setup for misting...



# Misting nozzles



Dramm 60-12344 12344 1 GPM Fog-It Nozzle Fine Heavy Duty Brass



 Greenhouse Megastore  
Phyto-Mist Brass Nozzles



Greenhouse Megastore  
Phyto-Mist/Watering  
Nozzles

[Visit](#)



# Timers...

Down to 3 -5 seconds on at a time and  
as often as 20 - 30 minuet intervals



# Timers...



# Root zone heating...





# And finally timing...

A look at the calendar...







White  
African  
Purple  
Lemon  
5-19-16



I wait till they look like  
this...









# A word about tagging...



5-4-76

french tarragon  
greek oregano  
lemon verbena  
heartwage yucca  
Regonia

# Misc. cuttings

Crains bill (perennial geranium), perennial  
poppies...











# Mother stock plants.

- ▣ Things to consider: in ground plants or potted plants.
- ▣ Note how many cuttings you can get from a stock plant and have the number of plants you need to provide the cuttings you'll want.
- ▣ Stock plants in someone else's garden, in another state...
- ▣ You can do it!!!