



# Propagating Fruit Trees from Cuttings

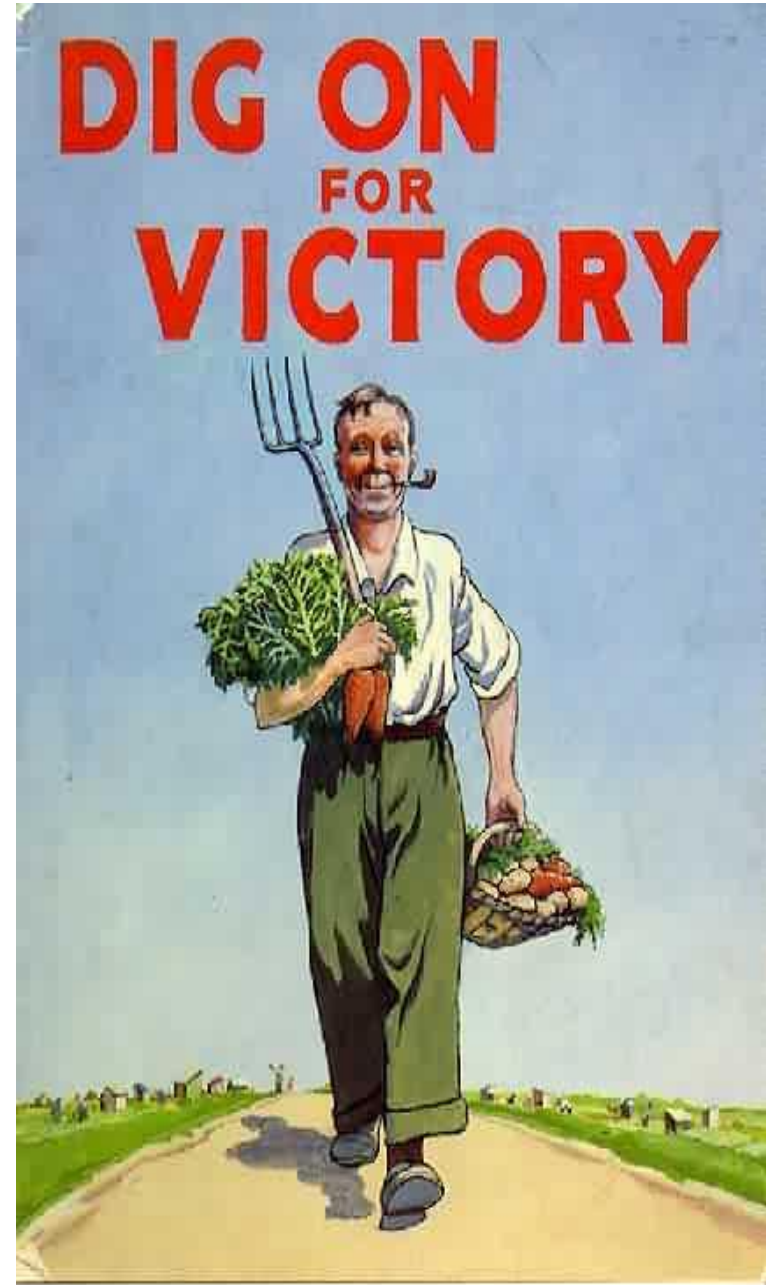
# Brandon Merchant

- Owner of Southwest Victory Gardens
- Pima County Certified Master Gardener
- SmartScape Certified
- Former President of Tucson Organic Gardeners

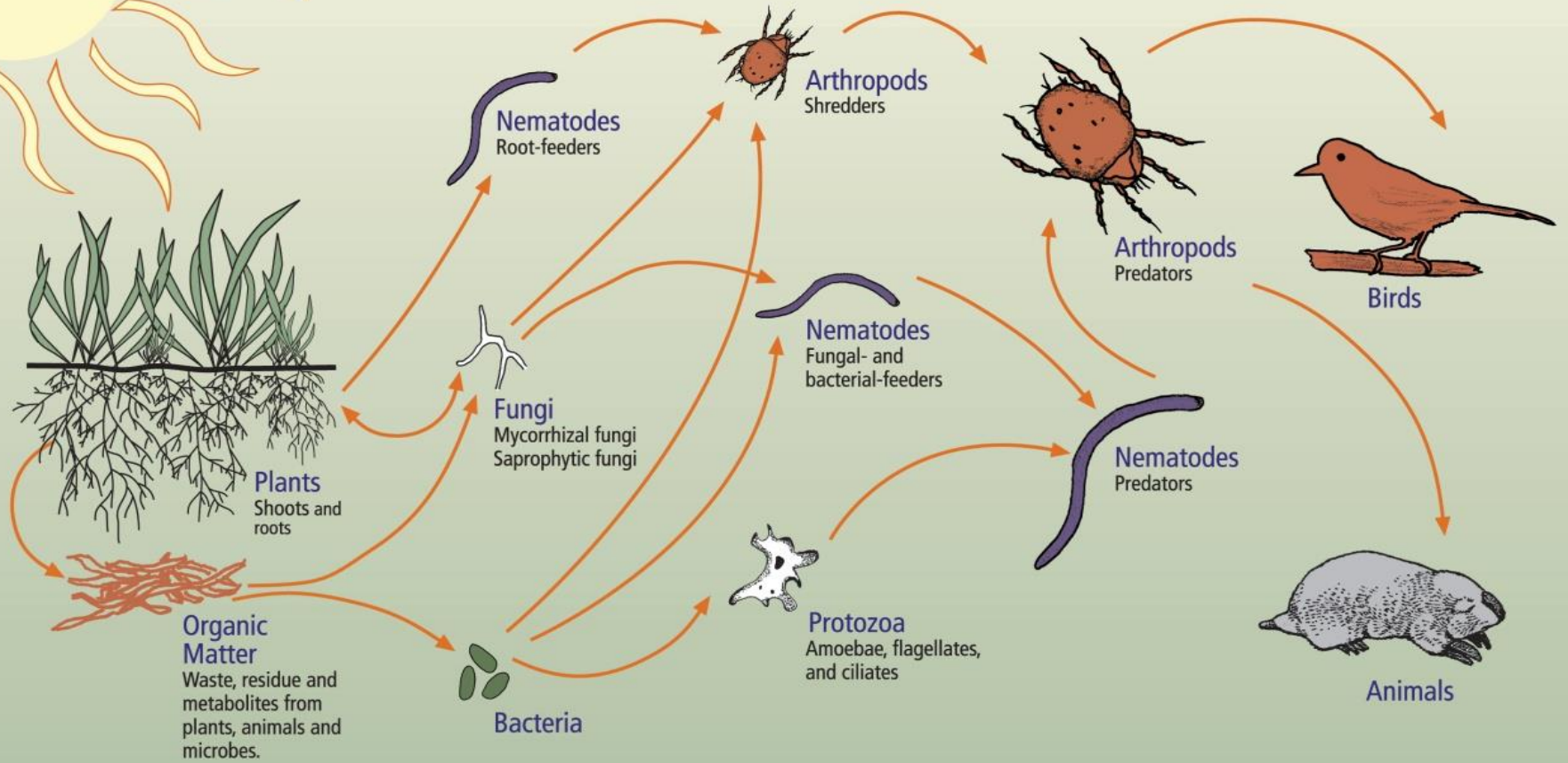


# Our Philosophy

- Healthy soil encourages healthy plants
- Healthy plants require fewer pesticides and fertilizers (inputs)
- Limit external inputs
- Reduce water usage
- Garden with our climate not against it
- Encourage a natural ecosystem



# The Soil Food Web



**First trophic level:**  
Photosynthesizers

**Second trophic level:**  
Decomposers  
Mutualists  
Pathogens, Parasites  
Root-feeders

**Third trophic level:**  
Shredders  
Predators  
Grazers

**Fourth trophic level:**  
Higher level predators

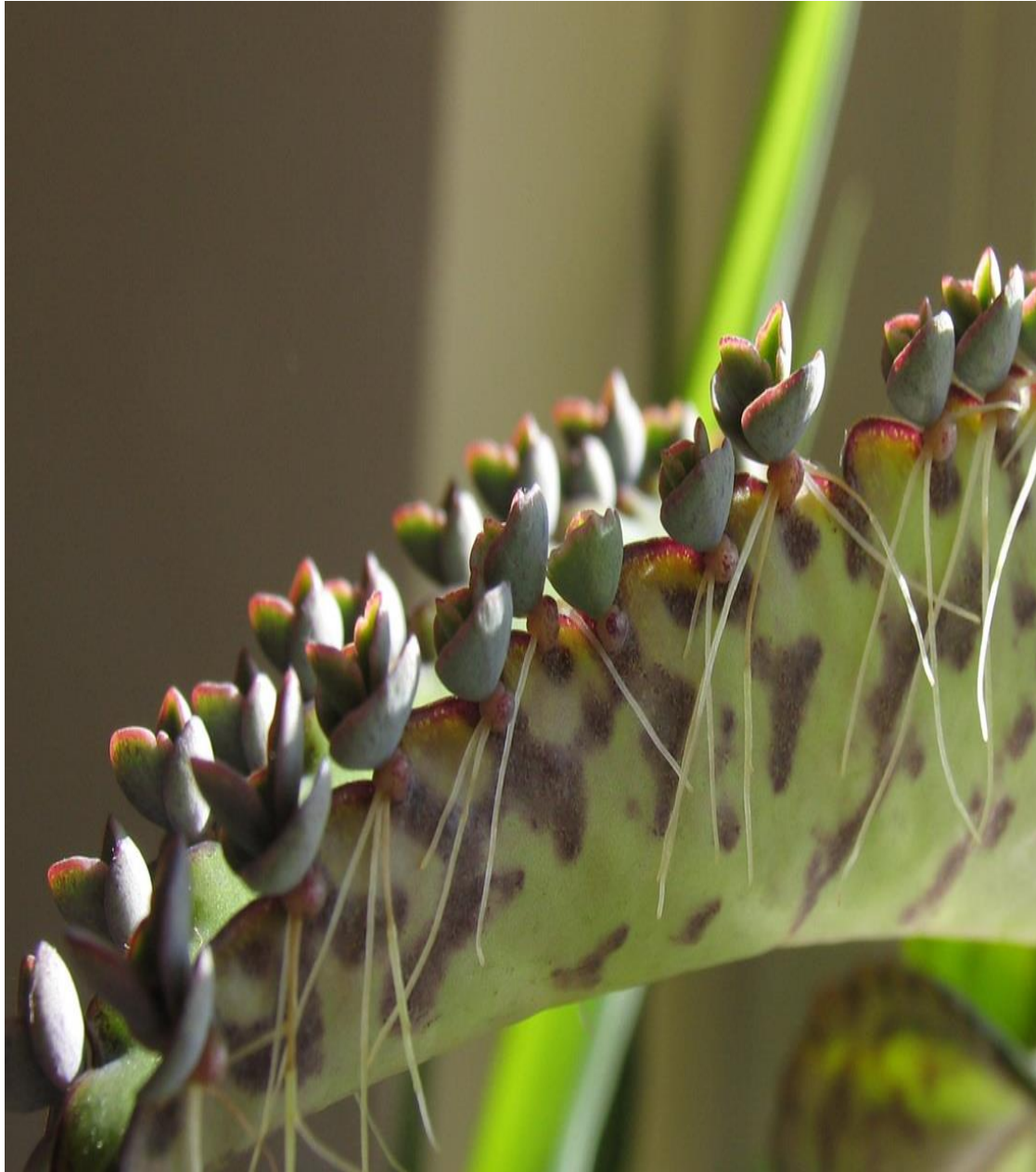
**Fifth and higher trophic levels:**  
Higher level predators

# How to Plants Reproduce

- Sexual Propagation
- Asexual Propagation



# Vegetative Propagation



- Layering
- Division
- Bulbs and Corms
- Rhizomes & Stolons
- Grafting
- Cuttings

# Advantages

- Cloning
- Head Start
- Bigger, Stronger, Faster



# Bulbs, Corms

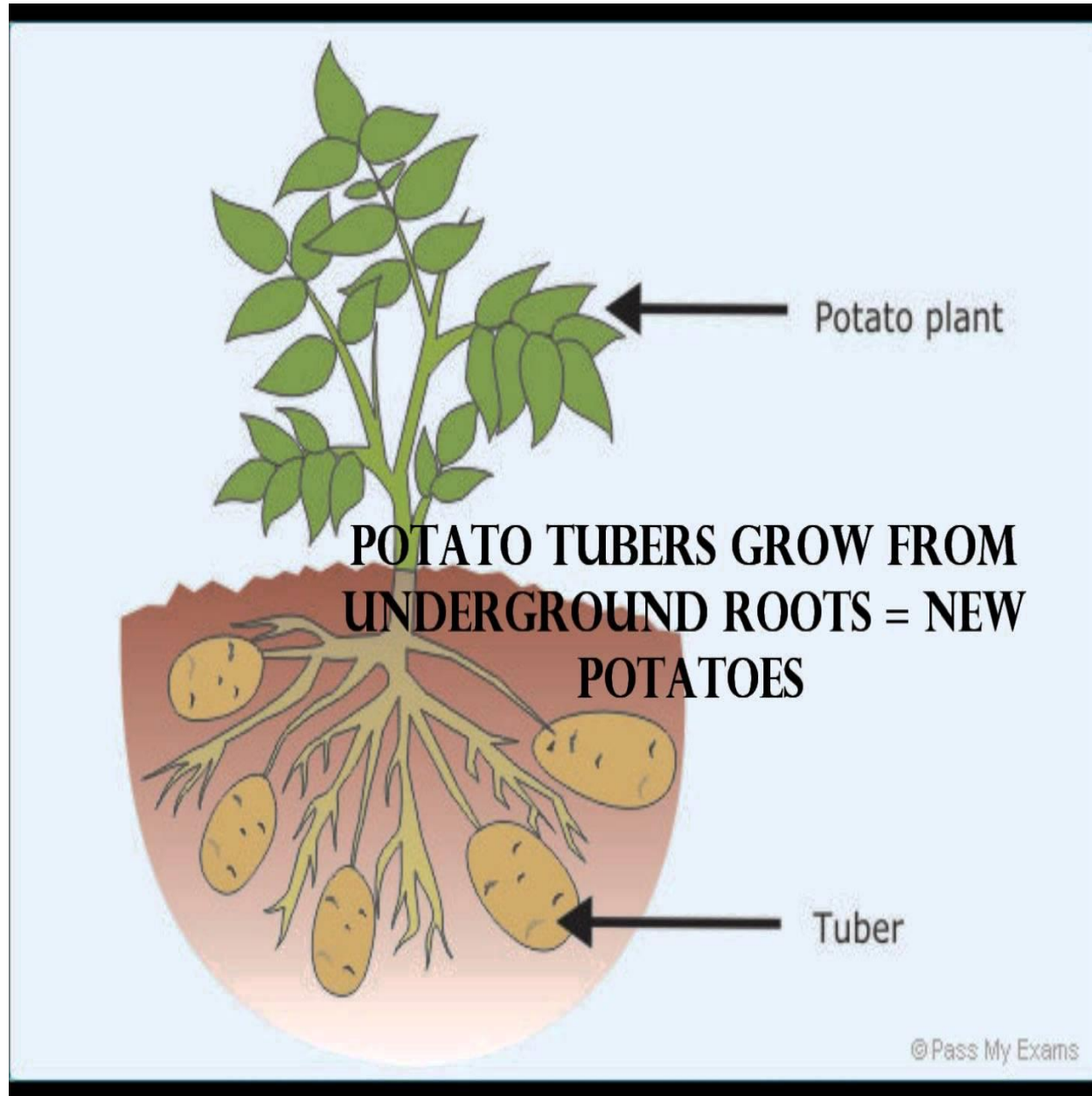


- Underground Storage Organs



# Rhizomes, Stolons, Tubers

- Modified Stems
- Traveling Roots



# Division

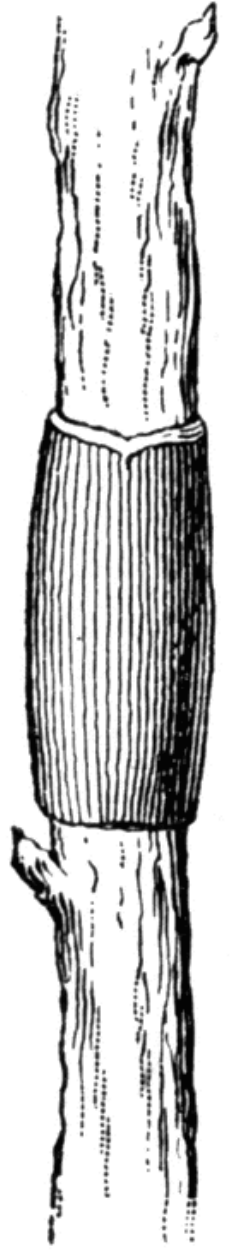


- Perennial Plants
- Divide Every Few Years

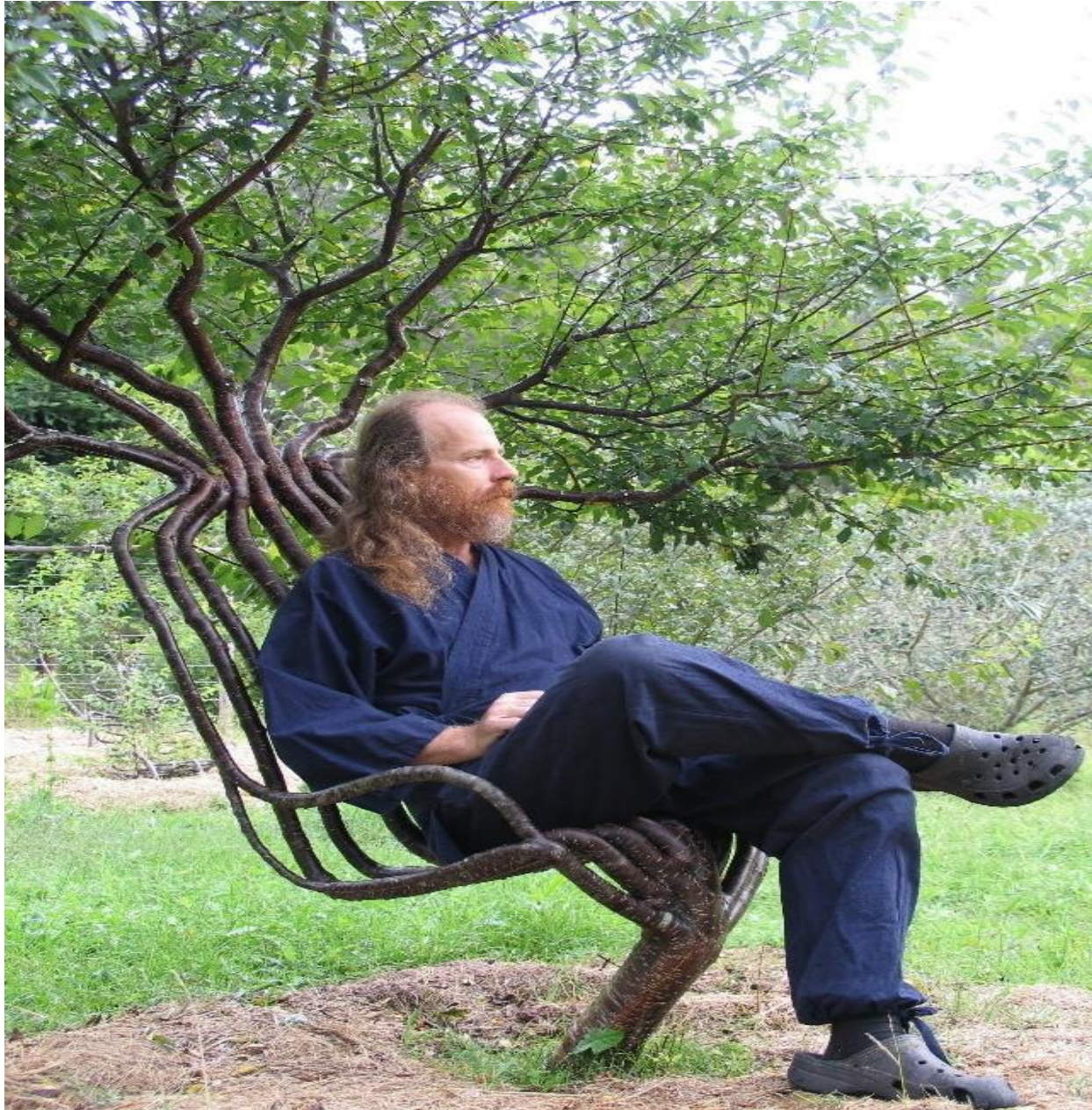
# Grafting

- Most Common Method of Propagation
- Fruit Stocks Attached to Root Stock
- Requires More Skill and Special Tools





# Advantages of Grafting



- Easy
- Percosity
- Dwarfing
- Hardiness
- Disease Resistance
- Curiosities

# Air-Layering



- Long Rooting Process
- Bury Stem or Mimic Burial
- Large Branches

# Cuttings

- Stem of Mother Plant that Forms Roots When Cut
  - Versatile
  - Low Success Rate
  - Easy!



# What are Cuttings



- Section of Stem, Leaf, or Root
- Forms New Roots
- Eventually new Shoots



# Why Cuttings Work

- Adventitious Roots
- Latent Roots
- “De Novo” Roots



# Cuttings from Fruit Trees



- Not all Trees are Recommended for Cuttings
- Figs, Olive, Pom, and Quince do Best.

# Some Cutting Tips



- Prep Materials Beforehand
- Be Clean
- Select Appropriate Varieties
- Take Hardwood Cuttings in Winter

# More Cutting Tips

- Use Rooting Hormone
- Keep Humid
- Maintain Moisture
- Trim Leaves
- Keep Constant



# Preparing a Stem Cutting

- Take Hardwood Cuttings when Dormant
- Remove Leaves from Evergreen Cuttings
- Thickness of a Pencil
- Pay Attention to Direction of Stem



# Growing Medium

- Must Support Root Growth
- Not Hold too Much Moisture
- Nutrients not Important
- 50% Coco Chips and Fiber
- 50% Perlite



# Maintaining Cuttings



- Oxygen Exchange Important
- Low Light Ok
- Keep Warm
- Maintain Humidity

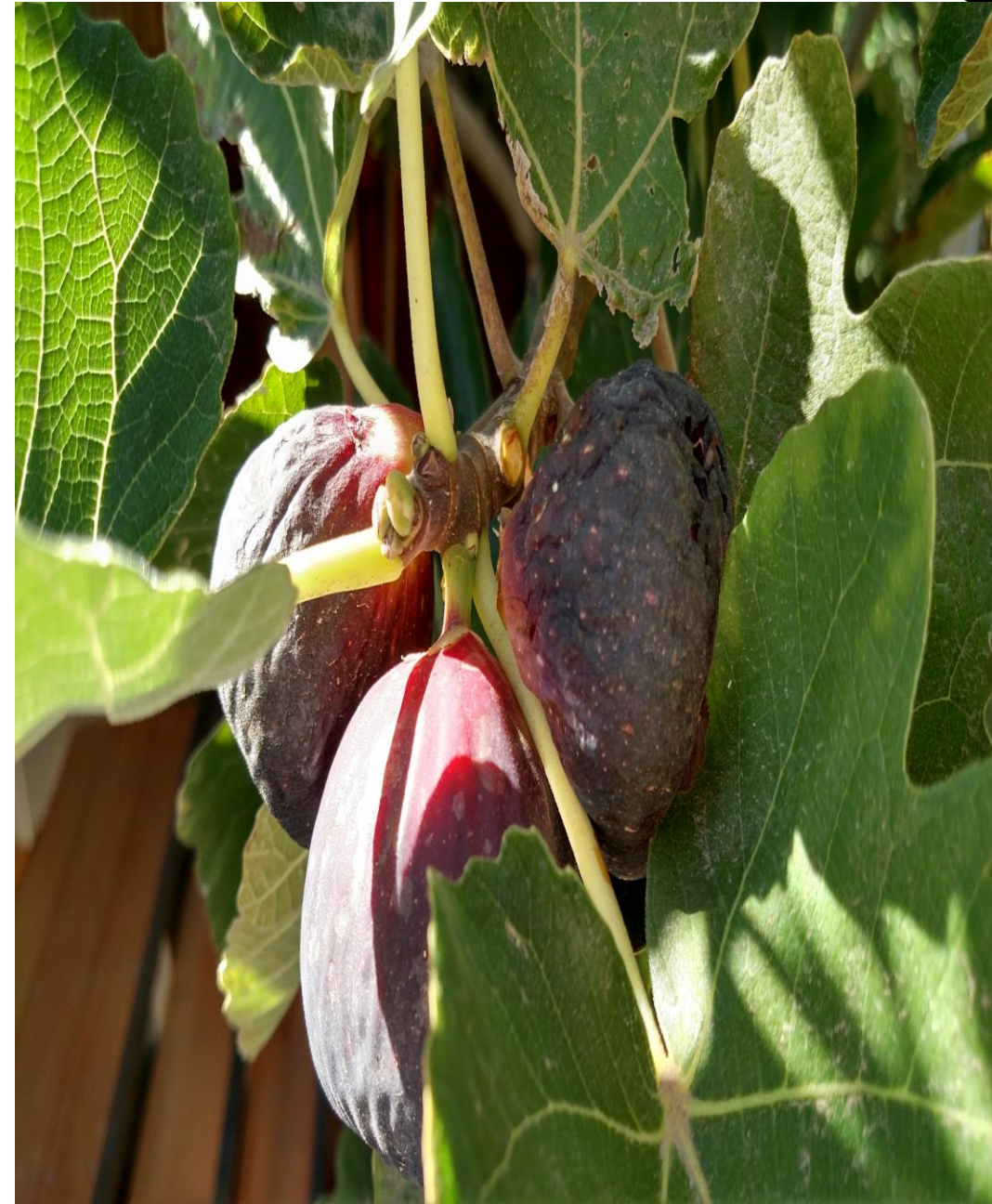
# Moisture

- Use Cover or Create Humidity Chamber
- Mist Daily
- Gas Exchange Important





# Hardening Off



- Gradually Decrease Misting
- Transfer to Potting Soil
- Move Outdoors

# Resources

- Mission Garden
- EcoGro
- Reading List
- Community Food Bank
- Local Businesses
- Friends and Family





Thank you!

[www.southwestvictorygardens.com/Documents](http://www.southwestvictorygardens.com/Documents)

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