

Proper Selection, Installation, and Establishment of Plants



Topics for Discussion

- Purchasing Plants
- Selection
- Site Preparation
- Planting Procedures
- Establishment



Visit Nurseries

- When choosing a nursery, look for:
 - Good Quality, Weed-free Plants
 - Labeled plants
 - Knowledgeable sales assistants
 - Product warranties
 - Cultural and environmental conditions at retail nursery



Selecting Plants to Purchase

- Carefully inspect plant shape and root ball
- Avoid plants with:
 - Unhealthy appearance
 - Obvious physical damage
 - Weak poorly formed trunks
 - Trees with co-dominant stems
 - Poorly-distributed branches
 - “Leggy” appearance



Selecting Plants to Purchase

- Avoid plants with leaves that are:
 - Abnormal size, texture, or appearance
 - Yellowing
 - Chlorotic
- Examine for:
 - Insects
 - Disease
 - Pot-bound roots



Selecting Plants to Purchase

- Root ball of container plants should be:
 - Well established
 - Remain intact when container is removed
 - Have even distribution of roots
- Roots should not be:
 - Growing in a circle
 - Protruding out of pot

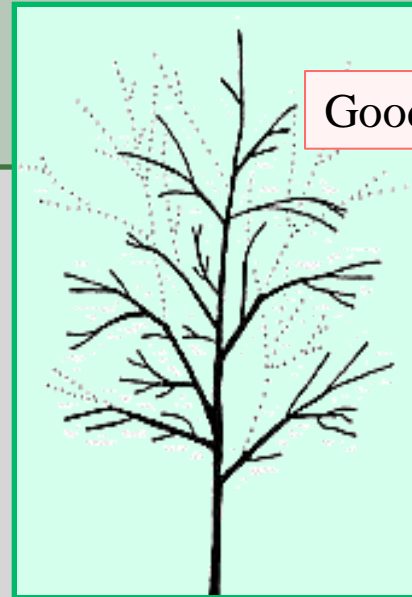


Look at Plants Carefully

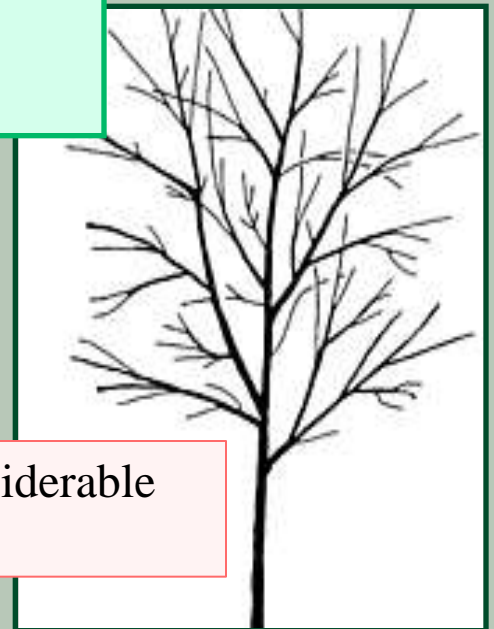


Select Trees Carefully

- Strong central leader (trunk)
- Straight trunk
- Well attached side branches
- Not root bound



Good tree form



Needs considerable pruning

Selecting Plants to Purchase

■ Balled and Burlaped Plants

- Moist soil firmly held around root ball
- Root balls greater than 18 inches in diameter should be secured with wire
- Broken or cracked root ball indicates rough treatment during shipment



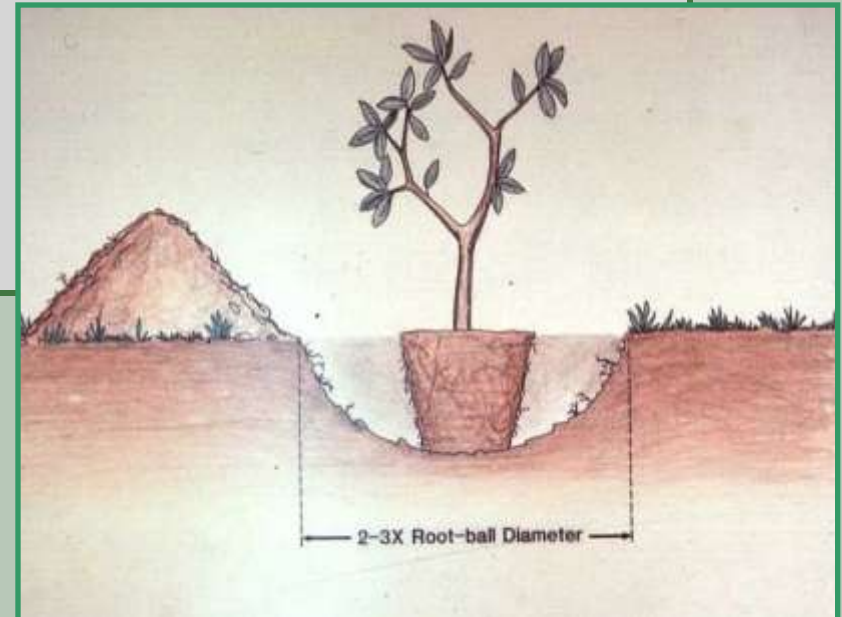
Site Preparations

- Proper site preparations can include:
 - Grading
 - Dealing with soil compaction
 - Managing runoff
 - Checking pH
 - Soil amendments can:
 - Moderate pH
 - Increase organic matter
 - Retain moisture
 - Provide aeration



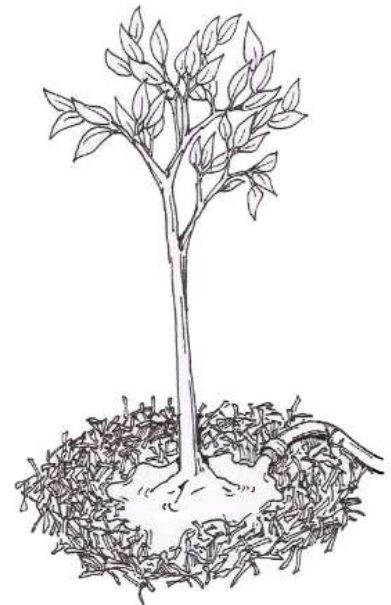
Planting Procedure: Container Grown

- Plant any time of year
- Dig a hole wider but not as deep as the container
- Place the plant in the hole
- Top of the roots at or slightly above soil surface
- Fill with soil from hole



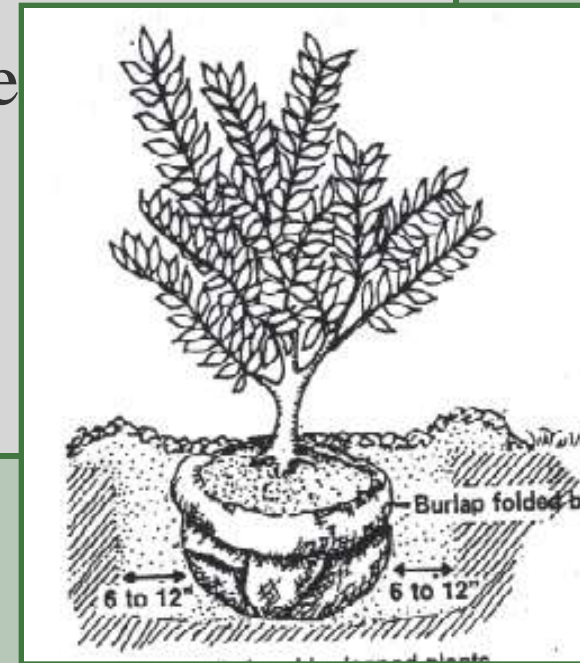
Planting Procedure: Container Grown

- Add water as you add soil
- Gently firm soil
- Form a catchment basin at the edge of root ball 3” high
- Mulch with a 3” layer of organic material



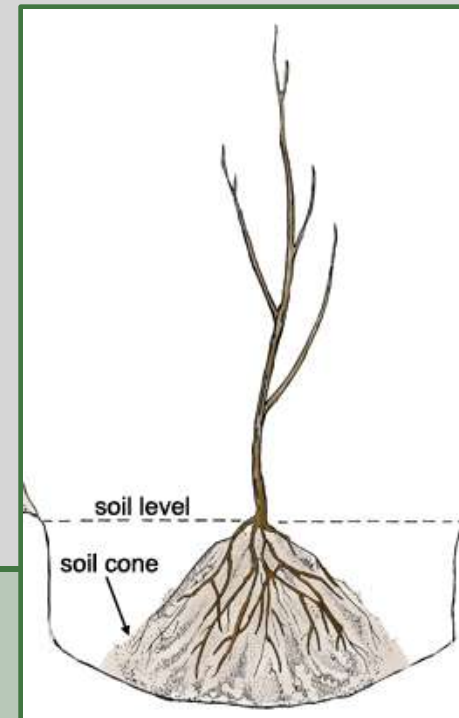
Planting Procedure: Balled and Burlaped

- Transplant during cooler months
- Always move the plant by root ball
- Do Not remove burlap prior to planting
- Pull back 2/3 of burlap
- Remove woven plastic wraps & rope
- Do not allow root ball to dry out
- Same techniques as containerized planting



Planting Procedures: Bare-Root

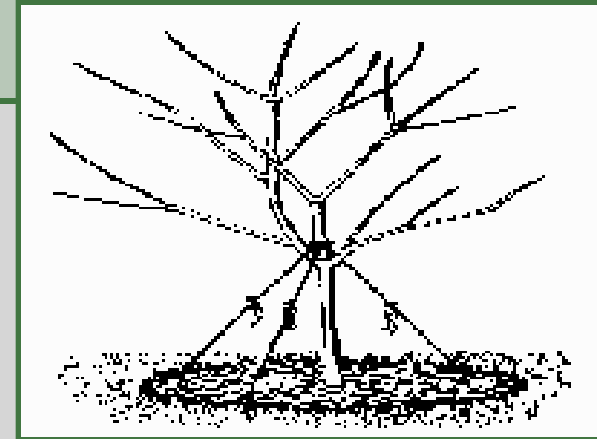
- Protect plant roots from drying out
- Dig a hole 1 foot wider than the root spread
- Inspect root system and cut off damaged roots
- Make mound of soil in hole
- Hold plant upright
- Work the soil around the plant with water
- Form catchment basin
- Water well



Staking Trees

Three Types of Staking:

- **Protective Staking:** protects tree from injury during landscape maintenance
- **Anchor Staking:** holds tree upright until roots grow sufficiently
- **Support Staking:** holds a trunk straight and upright
- **Remove** after one year



Fertilization

- NOT recommended at planting time
- Apply small amount of fertilizer to the root ball and surrounding soil 4 to 6 weeks after planting.

Slow-release Fertilizers

When fertilizer nutrients are in "slow release" forms, they are available to plants over a longer period of time and less nutrients are wasted or lost as pollutants. Look for these terms on the product or fertilizer tag:

- Timed-release, slow-release or controlled-release.
- Water insoluble nitrogen, Activated sludge, Sulfur-coated urea (SCU), IBDU, Ureaform (UF), Nitroform, or Polymer/Plastic/Resin-coated urea.

Pruning at Planting

- Pruning at planting time is NOT recommended
- Begin pruning 6 to 12 months **AFTER** planting



Mulching

- Apply and maintain a 2 to 3 inch layer of mulch around plants
- Keep mulch 2 inches from base of plants
- Organic mulches preferred:
 - Leaves
 - Ground wood & wood chips
 - Pine straw
 - Bark
 - Recycled (Yard Wastes)



Pitfalls

- Two of the most common causes of poor plant establishment are:
 - **Planting too deep**
 - **Under or Over watering**



Watering Recommendations

- Water thoroughly after planting.
- Strive to maintain constant moisture in root ball.
- Establishment period varies:
 - Trees: 6 to 12 months/inch trunk diameter
 - Shrubs & ground covers: few months to a year
 - Grass: 1 month
- After establishment, water as needed



Questions ??

