



*Welcome to...*

# **Choosing the Right Apple Tree**

*Presented by:*

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# What We'll Cover

- Site Selection
- Characteristics
- Proper Planting
- Pest Control
- Pruning
- Training
- Suggested Varieties



# Site Selection

- Sun - 8+ hours/day
  - Fruit production
  - Sanitation
  - Consider mature tree size
- Avoid Low Areas
  - Frost settles
  - Cooler
  - Wetter
  - Less air movement
- Well Drained Soil
  - Standing water (after the frost is out) is bad
  - Some water retention
  - Amend poor soil a year before planting
- Avoid South Facing Areas Near Buildings
  - Warm too early in the Spring
  - Freeze/thaw cycling



# Tree Characteristics

- Hardiness
- Apple Characteristics
  - Fresh Eating/Baking
  - Storage life
  - Size
  - Ripening time
- Mature Tree Size
  - Root stock
    - Standard
    - Semi-Dwarf
    - Dwarf
- Pest and Disease Resistance



# Proper Planting

- Time
  - Soil temp hits 45°F
  - Dormant/Bare Root- Anytime
  - Leafed Out- Cool, calm, overcast
- Digging the hole
  - Remove turf 3-4' diameter
  - Shallow is far better than too deep
  - Loosen soil out, not down
  - Do not add fertilizer unless a soil test suggests it for fruit



# After Planting

- Water
  - Everyday for new plants
  - One inch/5 gallons per week
  - Drip irrigation
  - Thumb check
- Mulch
  - Weeds & Water & Frost & Heat & Nutrients
  - Wood chips, grass clippings, straw
  - 4" finely shredded, 6" max for wood chip and bark nuggets



# Four Types of Pest Control - Insects, pathogens, and animals



- Cultural Controls
  - Sun/Wind
  - Sanitation
  - Pruning
  - Watering
  - Mulch
  - Fertilize
- Mechanical and Physical Controls
  - Bagging
  - Netting
  - Traps
  - Tree Guards
  - Fencing
- Biological Control
  - Create a diverse environment
  - Favorable Predator/Parasite Environment
    - Parasitoid Wasps
- Chemical Control
  - Pesticides, Herbicides, Fungicides, etc
  - READ THE LABEL
  - Organic?
  - When to Spray
  - What to Spray

# Pest Control - Insects

Insect	Damage	Cultural	Mechanical	Biological	Chemical
Apple Maggot	Burrow into the fruit	Remove windfall	<ol style="list-style-type: none"> <li>1) Bag the apples before July 1st</li> <li>2) Hang a red delicious, coated in tangle foot, to trap the adults</li> </ol>	Diverse environment	Esfenvalerate, carbaryl, and spinosad starting July 1st
Codling Moth	Burrow into the fruit	Remove windfall	<ol style="list-style-type: none"> <li>1) Tent trap adult males to determine the need for chemical control</li> </ol>	Diverse environment	Esfenvalerate and malathion at petal fall and 7-10 days
Plum Curculio	Cosmetic damage and wound entry point	Remove windfall	<ol style="list-style-type: none"> <li>1) Band the tree trunk with tanglefoot</li> <li>2) On cool morning shake the trees/branches onto a sheet</li> </ol>	Diverse environment	Esfenvalerate and malathion at petal fall and 7-10 days
Aphids and Scale Insects	Suck sap on leaves and branches		<ol style="list-style-type: none"> <li>1) Squish them</li> <li>2) Spray with a hose</li> </ol>	Diverse environment	<ol style="list-style-type: none"> <li>1) Dormant oil spray</li> <li>2) Insecticidal soap</li> </ol>
Blister Beetle and other leaf eaters	Defoliate		<ol style="list-style-type: none"> <li>1) Squish them (careful they really can cause blisters)</li> </ol>	Diverse environment	Permethrin, esfenvalerate



# Pest Control - Pathogens

Disease	Type	Biology	Signs	Prevention	Treatment
Apple Scab	Fungus	Needs moisture		<ol style="list-style-type: none"> <li>1) Remove fallen leaves and fruit</li> <li>2) Proper pruning for air flow and sunlight</li> </ol>	Captan at "half-inch green tip," and monitor after June 1st
Fire Blight	Bacteria	<p>Needs moisture and +60 degrees</p> <p>Shepherds Crook branches and brown to black leaves</p> <p>Often infects fast new growth</p>		<ol style="list-style-type: none"> <li>1) Proper pruning for air flow and sunlight</li> <li>2) Don't fertilize with nitrogen</li> </ol>	Prune immediately upon detection 10" back on the branch Discard infected materials in the trash. Sanitize pruners between cuts (10% bleach solution)

# Pest Control - Four Legged Critters

- Tree Guards
  - White spiral
  - Early Fall
  - Remove in late Spring
- Fence
  - 4 feet tall
  - 1" x 4" cells
  - 12' gives you around 4' diameter



# Pruning

- At Planting - Developing a strong foundation for later fruit production
  - Competing leaders
  - Low branches
  - Damaged roots and branches
  - Small/Weak branches
- Dormant/Early Spring
  - Air and light- pests and disease control
  - Horizontal branching
  - Maximize light for fruit production
- Year Round
  - Water sprout and Sucker removal
  - Disease removal
  - Broken branches



# Training

- Horizontal branching
  - Fruiting
  - Lateral branching
- Spacers/weights
  - Nails
  - Clothes pins
  - Toothpicks
  - Branch spreaders
  - Bags of rocks
  - Balers twine



# Specific Varieties

<u>Variety</u>	<u>Ripening time</u>	<u>Description</u>	<u>Uses</u>	<u>Storage</u>	<u>Zone</u>
Centennial	Mid- August	Large, red-orange crab apple is crisp, juicy, and sweet.	Fresh eating, sauce	2 to 3 weeks	3a
Dolgo	Mid-August	1" Oval Red/Purple juicy, tart fruit. Often sold as an ornamental due to prolific flowering and attractive fruit. Super cold hardy.	Baking/Sauce	2 weeks	2
Zestar	Late August	Large, with red blush or stripes. Crunchy, juicy, with balanced sweet-tart flavor.	Fresh eating, cooking	6 to 8 weeks	3b
Chestnut	Early September	Large crab apple with russeted skin. Rich, intense, nutty flavor. Natural semi-dwarf with broad canopy.	Fresh eating, sauce	4 to 5 weeks	3a
Sweet Sixteen	Mid- September	Medium to large, rosy red fruit is crisp, juicy, very sweet with spicy, cherry candy flavor.	Fresh eating	5 to 8 weeks	3b
Honeycrisp	Late September	Extremely juicy and "explosively crisp." Well-balanced, sweet-tart flavor. Flesh is slow to brown when cut.	Fresh eating, salad, cooking	7+ months	3b
Haralred/ Haralson	Early October	Medium size, striped red fruit. Firm texture, full-flavored, tart. Haralred is a redder form of Haralson that ripens later.	Fresh eating, cooking (esp. pies)	4 to 5 months	3b
Fireside/ Connell Red	Mid-October	Large fruit has sweet flavor and fine-grained flesh. Connell Red is a redder form of Fireside.	Fresh eating, cooking	3 to 4 months	3b

*Thanks for Coming!*

*For More Info, please visit:*



*\*Sign up for our Healthy Grow Reminders by emailing  
info@goodtogrowtrees.com*

- Ask a U of M Extension Master Gardener or MN Tree Advocate
- References & Helpful Information Sources:
  - <http://www.extension.umn.edu/garden/yard-garden/fruit/>
  - <http://www.fruitedge.umn.edu/>
  - <http://www.fruit.cornell.edu/>
  - <http://hort.uwex.edu>
  - <http://plants.usda.gov/plantguide/>
  - <http://ipm.ucanr.edu>
  - <https://www.orangeippin.com/>

Abrianna Lynn Kangas  
HELPED WITH THIS  
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daughter.