

# Home Fruit Production Instructional Outline

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Educating People to Help Themselves

# **Apple**

## **Recommended Varieties**

- ♦ Liberty, Freedom, Goldrush, Priscilla, Prima Scab Immune
- ♦ Red Delicious, Golden Delicious, McIntosh, Cortland, Royal Court, Redcort, Jon De Coster, Crown Empire, Goldrush Traditional Varieties, High Quality Fruit with Some Fire Blight Tolerance
- ♦ Gala, Fuji, Rambo, Ginger Gold, Paula Red, Mutsu, Braeburn, York Imperial, Rome Beauty, Yataka, Granny Smith All have Superior Fruit Quality; Although Fire Blight Susceptible

#### **Recommended Rootstocks**

♦ G-30, EMLA-7, EMLA-7A, EMLA-111 – Semi-Dwarf 20 Year Tree

**Clonal Rootstock History:** 

Malling (M) - First Clonal Stocks from England, Vegetative Propagation

MM (EMLA) -111 – Malling X N Spy var.—for wholly apple aphid resistance

MAC-9 – Michigan Apple Clone #9 – Malling 9 X Malling 26

MARK - Virus Free MAC-9

BUD - A Hardier M-9 Release from Russia

GENEVA (G) - Recent Fireblight Resistant Releases from New York

♦ M-9, BUD-9, G-16, EMLA-26, MARK – Dwarf 15 Year Tree

Fireblight Susceptible (Except G-16)

**Trees Must be Supported** 

## **Ripening Dates**

♦ August 5 – November 5

## **Training Systems**

- ♦ Free Standing Central Leader Heinike Spread & Head System
- ♦ HYTEC; Hybrid Tree Cone
- **♦** Vertical Axis
- ♦ Slender Spindle

## **Pruning**

- ♦ Head At Planting 28" Whips
- **♦** Prune Annually During Dormancy
- **♦** Remove Damaged or Blighted Wood Immediately
- **♦** Carefully Follow Training System

## **Planting Instructions, Densities & Pollinators**

- ♦ Plant in the Spring, Trim and Spread Roots, Place the Majority of Roots & Lowest Scaffold Limb Towards Prevailing Wind
- ♦ 250 800 Trees/Acre; In Row Spacing 8–12'& Between Row 16–20'
- **♦** Position Pollinator Trees Strategically

## **Major Pest Problems**

- Diseases Fire Blight, Leafspot, Scab, Rust, Powdery Mildew
- ♦ Insects Aphids, Scales, Mites, Leafrollers, Plant Bugs, Plum Curculio, Codling Moth, Pear Psylla, Apple Maggot

## Pear

## **Recommended Varieties**

- ♦ Magness, Potomac, Moonglow Fire Blight Immune
- ♦ Seckel Sugar Pear, Small but excellent quality, Pest Resistance
- ♦ Asian Pear Varieties: Hosui, Olympic, Shinseiki, Yoinashi High Pest Resistance but Fireblight Susceptible

## **Recommended Rootstocks**

♦ Standard Tree – Domestic Bartlett Seedling

#### **Ripening Dates**

♦ August 25 – September 20

## **Training Systems**

**♦** Free Standing Co-Dominate Central Leaders

#### **Pruning**

- ♦ Head At Planting 30' Whips
- **♦** Prune Annually During Dormancy
- **♦** Remove Damaged or Blighted Wood Immediately

## **Planting Instructions, Densities & Pollinators**

- ♦ Plant in the Spring, Trim and Spread Roots, Place the Majority of Roots & Lowest Scaffold Limb Towards Prevailing Wind
- ♦ 200 Trees/Acre; In Row Spacing 15'& Between Row 20'
- ♦ Position Pollinator Trees Strategically; At Least Three Varieties Required

## **Major Pest Problems**

- ♦ Diseases Fire Blight, Leafspot, Scab, Rust, Powdery Mildew
- ♦ Insects Aphids, Scales, Mites, Leafrollers, Plant Bugs, Plum Curculio, Codling Moth, Pear Psylla, Apple Maggot

# Peach, Nectarine, Plum

## **Recommended Varieties**

- ♦ Peaches: Candor, Garnet Beauty, Red Haven, Reliance, Canadian Harmony, Raritan Rosa, Loring, Bounty, New Haven, Flamin Fury, Crest Haven, Summerglo, Sunhigh, Redskin, Red Rose, White Hale, White Lady, Autumglo
- ♦ All Nectarine Varieties are Highly Susceptible to Brown Rot: Easternglo, Sunglo, Fantasia
- Plums: European Varieties: Bluefre, Italian Prune Stanley Prune Type Japanese Varieties: Methley, Shiro, Santa Rose, Ozark Premier – Sweet & Juicy

## **Recommended Rootstocks**

- ♦ Peach & Nectarine: Standard Tree Domestic Lovell, Halford Seedlings
- ♦ Plum: Myro 29C (Myrobalan)

## **Ripening Dates**

♦ July 5 – September 25

#### **Training Systems**

**♦** Free Standing Open Center

## **Pruning**

- ♦ Head At Planting to 24"Whips, Determine Scaffold Limbs for 18" Crotch & Headback Scaffolds in Second Year
- ♦ Prune Annually During Dormancy in Late Winter, Remove Dead Wood

#### **Planting Instructions, Densities & Pollinators**

- ♦ Plant in the Spring, Trim and Spread Roots, Place the Majority of Roots & Lowest Scaffold Limb Towards Prevailing Wind
- ♦ 200 Trees/Acre; In Row Spacing 15'& Between Row 20'
- ♦ Self-Fruitful

## **Major Pest Problems**

- ♦ Diseases Peach Leaf Curl, Brown Rot, Peach Scab, Cherry Leafspot, Plum Black Knot, Cytospora Canker
- ♦ Insects Scale, Plant Bugs, Stink Bugs, Aphids, Oriental Fruit Moth, Plum Curculio, Peach Tree Borer

# Cherry

## **Recommended Varieties**

- Hedelfingen, Schmidt, Ulster, Emperor Francis, Van, Sam, Stella, Lapins, Starkrimson, Royal Ann Sweet Varieties
- ♦ Montmorency, Meteor, Northstar Tart Cherry

## **Recommended Rootstocks**

- ♦ Mazzard Sweet Cherry
- ♦ Mahaleb Tart Cherry

## **Ripening Dates**

♦ June 25 – July 20

## **Training Systems**

**♦** Free Standing Open Center

## **Pruning**

- ♦ Head At Planting to 24"Whips, Determine Scaffold Limbs for 24" Crotch & Headback Scaffolds
- ♦ Prune Annually During Dormancy in Late Winter
- ♦ Remove Dead Wood

#### Planting Instructions, Densities & Pollinators

- ♦ Plant in the Spring, Trim and Spread Roots, Place the Majority of Roots & Lowest Scaffold Limb Towards Prevailing Wind
- ♦ 200 Trees/Acre; In Row Spacing 15'& Between Row 20'
- ♦ Sweet Types Require Pollinator, Tart Types are Self-Fruitful

#### **Major Pest Problems**

- ♦ Diseases Peach Leaf Curl, Brown Rot, Peach Scab, Cherry Leafspot
- ♦ Insects Scale, Plant Bugs, Stink Bugs, Aphids, Oriental Fruit Moth, Plum Curculio, Peach Tree Borer

# Grape

## **Recommended Varieties**

- ♦ Concord, Niagara, Catawba, Cayuga, Buffalo, Steuben, Alden, Norton Seeded Labrusca (American) Varieties, All Purpose
- ♦ Canadice, Himrod, Saturn, Mars, Reliance, Vanessa Seedless Table and Juice Grapes
- Concord, Niagra Seeded Table and Juice Grapes
- ♦ Cabernet Franc, Chardonnay, Pinot Noir, Pinot Gris, Merlot, Nebbiolo, Petite Verdot Vinifera (European) Wine Grape Varieties
- ♦ Vidal, Seyval, Foch, Chambourcin, Chancellor Lambrusca X Vinifera Hybrid Wine Grape Varieties

## **Recommended Rootstocks**

- ♦ Labrusco & Hybrids are Self Propagating
- ♦ Caudoroc 3309, S04, 5BB for Vinifera Varieties

## **Ripening Dates**

♦ Veraisen – August 25 – October 15

#### **Training Systems**

♦ Cordon Support Trellis Systems: Bilateral Cordon with Vertical shoot Positioning (VSP) or Smart-Dyson Divided Canopy (1 Wire); Horizontal Arm-Spur (2 Wire); Geneva Double Curtain (2 Wire); Six-Cane Kniffen System (3 Wire)

#### **Pruning**

- ♦ Remove Old Fruit Wood to Cordon Wood After fruiting
- **♦** Renewal Spurs are Trained Every Season

## **Planting Instructions & Densities**

♦ Plant Vines 8' In Row by 12' Between Row

## **Major Pest Problems**

- ♦ Diseases: Black Rot, Crown Gall, Downy Mildew, Gray Mold or Bunch Rot, Powdery Mildew
- ♦ Insects: Grape Berry Moth, Flea Beetles, Japanese Beetles, Phylloxera

# **Blueberry**

## **Recommended Varieties**

- ♦ Bluecrop, Blueray, Coville, Darrow, Duke, Elliott, Jersey, Patriot, Spartan-Northern Highbush Varieties
- ♦ O'Neal, Legacy, Star Southern Highbush
- ♦ Premiere, Brightwell, Climax, Tiftblue Rabbiteye Varieties

## **Recommended Rootstocks**

♦ Propagated Cuttings – Certified Virus free

#### **Ripening Dates**

♦ June 25 – August

## **Training Systems**

♦ Spreading High Bush

## **Pruning**

- ♦ No Pruning for 3 Years Except of Dead Wood
- ♦ Prune Out 5 Year Wood Annually

## **Planting Instructions & Densities**

- ♦ Plant All Roots Shallow Within the Top 6" Plow Layer
- ♦ Amend pH to 4.5-5.0 Range
- ♦ Space 5' By 10'

#### **Major Pest Problems**

- ♦ Diseases: Botrytis Twig & Blosom Blight, Mummy Berry
- ♦ Insects: Fruitworms, Blueberry Maggot, Plum Curculio, Japanese Beetle, Scale, Yellow Necked Caterpillars

# Blackberry, Raspberry

## **Recommended Varieties**

- ♦ Blackberry: Dirksen, Hull, Chester, Navaho, T ripple Crown -- Thornless Varieties; Darrow, Cherokee, Shawnee Thorny Varieties
- ♦ Raspberry: June Bearing (Floracanes): Bristol, Haut, Jewel, Allen–Black Varieties; Royalty, Brandywine – Purple Varieties; Latham, Nova, Hilton, Titan, Amos-H, Citadel, Lauren, Gel-20 – Red Varieties
- ♦ Raspberry Fall Bearing (Primocanes): Heritage, Autumn Bliss, Caroline, Josephine Red Varieties; Fall Gold, Anne Yellow Varieties

#### **Recommended Rootstocks**

♦ Propagated Cuttings – Certified Virus free

#### **Ripening Dates**

- **♦** June 15 July 15 for Floracanes
- **♦** July; September- Frost for Primocanes

## **Training Systems**

♦ Wire Trellis, or Cross-Arm

#### **Pruning**

- **♦** Remove all Fruited Canes to the Crown After Harvest
- ♦ Cut Renewal Canes to 4-5' Length
- ♦ Mow to Ground Primocane Raspberries After Harvest for Fall Only Production

## **Planting Instructions & Densities**

- ♦ Space Blackberry Plants 3-6' In Row By 8-10' Between Row
- ♦ Space Raspberry Plants 2-4' In Row By 8-10' Between Row

## **Major Pest Problems**

- ♦ Diseases: Anthracnose, Cane Blight, Spur Blight, Gray Mold, Orange Rust
- ♦ Insects: Blackberry Psyllids, Japanese Beetle, Plant Bugs, Cane Borers, Scale & Spider Mites

# **Strawberry**

## **Recommended Varieties**

- ♦ Earliglow, Annapolis, Cavendish, Delmarvel, Jewel, Allstar, Eros, Primetime, Surecrop, Lateglow, Latestar, Honeoye, Ovation, Daraselect − June Bearing Varieties
- ♦ Chandler, Sweet Charlie, Annual Plasticulture System
- ♦ Seascape, Albion, Tristar, Tribute Everbearing; Day-Neutral

## **Recommended Rootstocks**

**♦** Propagated From Certified Virus-Free Runners

## **Ripening Dates**

♦ Mid May - Mid June

## **Training Systems**

- **♦** Matted Row
- ♦ 5400 Plants/A at 24" In Row By 4' Between Row Spacing

## **Pruning**

♦ Annual Renovation Following Harvest – Mowing & Cultivating

## **Major Pest Problems**

- ♦ Diseases: Botrytis Rot, Black Rot, Anthracnose, Powdery Mildew, Leaf Spot, Leaf Scorch, Leaf Blight, Red Stele
- ♦ Insects: Strawberry Clipper Beetle, Spittlebug, Tarnished Plant Bug, Aphids, Spider Mites