Dooryard Deciduous Fruit for Central Florida

Orange/Osceola Master Gardener Training
November 10, 2009

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Sumter County Extension
Dooryard Deciduous Fruit for Central Florida

- Fruit Availability Chart
- Chilling Requirement
- Pruning and/or Training
- Pruning Demonstration
- Espalier
- Deciduous Fruit
- Micro-Irrigation
- Questions
Chilling Requirement

- Hours of 32-45 deg. F during dormant period

http://edis.ifas.ufl.edu/MG374
Pruning and/or Training
Training and Pruning Florida Peaches, Nectarines, and Plums

J. Ferguson

Fruit from Florida's early maturing peach, nectarine *Prunus persica* (L.) Batsch, and Japanese plum cultivars (*Prunus salicina* Lindl.) mature in April and May. However, after fruit is harvested, trees grow vigorously until about November. Trees must therefore be pruned annually to enhance tree growth, reduce fruit thinning costs and adjust crop load for the underlying recommended tree training and pruning as well as related fruit thinning practices.
Aid in the establishment of newly planted trees
Promote development of a strong framework
Enhance early productivity
Aid in the development and maintenance of desirable tree size and shape
Pruning and/or Training

Benefits Continued

- Increase fruit size and enhance fruit quality
- Promote flower bud development throughout the tree canopy
- Increase tree vigor and promote development of new fruiting wood needed to maintain productivity
- Reduce the tendency for biennial bearing
Pruning and/or Training

Benefits Continued

- Reduce incidence and spread of certain diseases
- Facilitate other horticultural practices, such as spraying, thinning and harvesting
When to prune

- Generally during the dormant period
- Late winter or early spring past chance of freezing temperatures
- Summer pruning usually minor
- Blueberry
Types of Cuts

- Heading-back cuts which consist of cutting a terminal shoot back to a bud on 1-year-old wood
- Thinning-out cuts which are the complete removal of shoots or limbs at their points of origin
- Cutting-back to lateral shoots, which consist of cutting terminals back to existing lateral shoots or branches
Training Systems

- Modified Central Leader

Before

After
Training Systems

- Open-Center (Vase)
Fruit Thinning

- **Plum**
  - About 1 month after flowering (1 month)
  - Remove 3/8 to ½ inch diameter
  - 1 Fruit every 3-6 in.
  - Remove all but 20-40% 2 yr. spurs

- **Peach**
  - A few weeks after bloom
  - Remove marble size fruit
  - One fruit every 5-6 inches
Pruning Demonstration
Espalier

http://hort.ifas.ufl.edu/gt/espalier/espalier.html
Deciduous Fruit

- Muscadine
- Blackberry
- Persimmon
- Blueberry
- Plum
- Raspberry
- Fig
- Apple
- Nectarine/Peach
Muscadine

Culture cont.
- 12-20 ft between plants
- Train vines on wire
- Prune in mid February
- pH 5.5-6.5, fertilize Apr, June & Aug.
- Control weeds
- Few insect or disease pests
Raspberry
Raspberry

- Cultivars
  - Dorman Red (perennial)
  - Heritage (annual)

- Culture
  - Well drained site, pH 5.6-6.5
  - Bare root plants 3-5 ft. apart Dec-Feb.
  - Fertilize late spring
Blackberry

Trellis system
Blackberry

- Cultivars
  - Thornless (Apache, Arapaho & Navaho)
  - Thorny upright (Brazos)
  - Thorny trellis (Ocklawaha & Flordagrand)

- Culture
  - See raspberry
  - Cross pollination?
Fig
Fig

- Cultivars
  - Celeste, Brown Turkey & Green Ischia

- Culture
  - Plant late winter in well drained site
  - Prune only to maintain bush size
  - Little known about fertility
  - Control weeds
Persimmon
Persimmon

- Cultivars
  - Izu (early)
  - Matsumoto Wase Fuyu (mid)
  - Fuyu (late)

- Culture
  - Plant in well drained site Dec-Feb. 20 ft.
  - Fairly drought tolerant
Persimmon

Culture cont.
- Fertilize March, June & late August
- Prune mid winter first 3 years
- Pollinator variety required
- Scale insects
- *Cercospora* late summer
<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Harvest season</th>
<th>Fruit shape</th>
<th>Fruit size</th>
<th>Tip cracking</th>
<th>Pollination type</th>
<th>Tree vigor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuyu</td>
<td>November to Early Dec.</td>
<td>Oblate</td>
<td>M-L</td>
<td>no</td>
<td>PC</td>
<td>M</td>
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<tr>
<td>Gosho</td>
<td>November</td>
<td>---</td>
<td>M</td>
<td>some</td>
<td>PC</td>
<td>M</td>
</tr>
<tr>
<td>Hana Fuyu</td>
<td>October</td>
<td>Oblate</td>
<td>M-L</td>
<td>no</td>
<td>PC</td>
<td>M</td>
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<tr>
<td>Hanagosho</td>
<td>Mid-Oct. to Mid-Nov.</td>
<td>Round conic</td>
<td>M</td>
<td>some</td>
<td>PC</td>
<td>V</td>
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<tr>
<td>Ichikikei Jiro</td>
<td>Mid-Oct. to Mid-Nov.</td>
<td>Oblate</td>
<td>M-L</td>
<td>some</td>
<td>PC</td>
<td>L</td>
</tr>
<tr>
<td>Izu</td>
<td>Late-Sept. Mid-Oct.</td>
<td>Oblate</td>
<td>M-L</td>
<td>no</td>
<td>PC</td>
<td>L-M</td>
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<tr>
<td>Jiro</td>
<td>Mid-Oct. to Mid-Nov.</td>
<td>Oblate</td>
<td>M-L</td>
<td>some</td>
<td>PC</td>
<td>M</td>
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<td>Makawa Jiro</td>
<td>Mid-Oct. to Mid-Nov.</td>
<td>Oblate</td>
<td>M-L</td>
<td>some</td>
<td>PC</td>
<td>L</td>
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<td>Matsumoto Wase Fuyu</td>
<td>Mid-Oct. to Mid-Nov.</td>
<td>Oblate</td>
<td>M</td>
<td>no</td>
<td>PC</td>
<td>M</td>
</tr>
<tr>
<td>Midia</td>
<td>Late-Oct. to Mid-Nov.</td>
<td>Round Conic</td>
<td>L</td>
<td>no</td>
<td>PC</td>
<td>M-V</td>
</tr>
<tr>
<td>Ogosho</td>
<td>Mid-Oct. to Mid-Nov.</td>
<td>---</td>
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<td>---</td>
<td>PC</td>
<td>---</td>
</tr>
<tr>
<td>Okugosno</td>
<td>November</td>
<td>---</td>
<td>M</td>
<td>some</td>
<td>PC</td>
<td>V</td>
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<tr>
<td>Shogatsu</td>
<td>Late-Oct. Mid-Nov.</td>
<td>Oblate Conic</td>
<td>M</td>
<td>some</td>
<td>PV</td>
<td>V</td>
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<tr>
<td>Suruga</td>
<td>November-early Dec.</td>
<td>Oblate Conic</td>
<td>M-L</td>
<td>no</td>
<td>PC</td>
<td>M</td>
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<td>Tenjigosho</td>
<td>October</td>
<td>---</td>
<td>M-L</td>
<td>some</td>
<td>PC</td>
<td>L-M</td>
</tr>
</tbody>
</table>

\(^{2}\) M=Medium; L=Large  
\(^{y}\) PC=Pollination Constant; PV=Pollination Variant  
\(^{x}\) L=Light; M=Medium; V=Vigorous
Apple

- **Cultivars**
  - Tropic Sweet, Dorsett & Anna (pollination)
  - 250-300 Chill Hours

- **Culture**
  - Plant bare root Jan-Feb. 20 ft.
  - Irrigate, fertilize Jan & Jun. (Zn)
  - Train & prune, 5-6 scaffold branches
Blueberry

Cultivars
- Southern Highbush (Star, Millennia, Jewell, Emerald, Windsor & Sharpblue)
- Rabiteye (Climax, Bonita & Chaucer)

Culture
- Well drained site, pH 4-5.5
- Good organic matter, pine bark mulch
Nectarine/Peach
Nectarine/Peach

Peach cultivars for Central Florida

- Flordaprince
- Tropic beauty
- Flordaglo
- UFO
Nectarine/Peach

- Nectarine cultivars for central Florida

- Sunmist
- Sunracer
Nectarine/Peach

Culture

- Well drained soil, pH 6.0-6.5
- Plant bare root Dec, 20 ft. spacing
- Control weeds & other pests
- Fertilize Feb, May & July (Zn & B)
- Pruning & thinning
- Irrigation
# Nectarine/Peach

Table 1. Tree, flower, and leaf characteristics of low- and medium-chill peach and nectarine cultivars adapted to north and north-central Florida.

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Estimated chill units</th>
<th>Mean January temperature$^a$</th>
<th>Flower type$^b$</th>
<th>Bacterial spot resistance$^c$</th>
<th>Leaf glands$^d$</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>(F)</td>
<td>(C)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Low Chill - Peach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flordaprice</td>
<td>150</td>
<td>64</td>
<td>17.8</td>
<td>S</td>
<td>4</td>
</tr>
<tr>
<td>Flordaglo</td>
<td>150</td>
<td>64</td>
<td>17.8</td>
<td>S</td>
<td>8</td>
</tr>
<tr>
<td>UFSun</td>
<td>100</td>
<td>64</td>
<td>18.0</td>
<td>S</td>
<td>10</td>
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<tr>
<td>UFBeauty</td>
<td>200</td>
<td>62</td>
<td>16.7</td>
<td>S</td>
<td>10</td>
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<tr>
<td>UFBlaze</td>
<td>300</td>
<td>59</td>
<td>15.0</td>
<td>S</td>
<td>10</td>
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<tr>
<td>UFGold</td>
<td>200</td>
<td>62</td>
<td>16.7</td>
<td>S</td>
<td>8</td>
</tr>
<tr>
<td>TropicBeauty</td>
<td>150</td>
<td>64</td>
<td>17.8</td>
<td>S</td>
<td>5</td>
</tr>
<tr>
<td>UFO</td>
<td>250</td>
<td>61</td>
<td>16.0</td>
<td>S</td>
<td>10</td>
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<td></td>
<td></td>
<td>Nectarine</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sunbest</td>
<td>250</td>
<td>61</td>
<td>16.0</td>
<td>NS</td>
<td>10</td>
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<tr>
<td>Sunmist</td>
<td>275</td>
<td>60</td>
<td>15.5</td>
<td>S</td>
<td>8</td>
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<tr>
<td>Sunraycer</td>
<td>250</td>
<td>61</td>
<td>16.0</td>
<td>NS</td>
<td>10</td>
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<tr>
<td>UFGueen</td>
<td>250</td>
<td>61</td>
<td>16.0</td>
<td>NS</td>
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<td></td>
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<td>Medium Chill - Peach</td>
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<tr>
<td>Flordadawn</td>
<td>300</td>
<td>59</td>
<td>15.0</td>
<td>S</td>
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<tr>
<td>Flordaking</td>
<td>400</td>
<td>58</td>
<td>14.4</td>
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<td>10</td>
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<tr>
<td>Floracrest</td>
<td>350</td>
<td>58</td>
<td>14.4</td>
<td>S</td>
<td>7</td>
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<tr>
<td>Gulfking</td>
<td>350</td>
<td>59</td>
<td>14.4</td>
<td>S</td>
<td>10</td>
</tr>
<tr>
<td>Gulfcrest</td>
<td>525</td>
<td>56</td>
<td>12.5</td>
<td>NS</td>
<td>10</td>
</tr>
<tr>
<td>Gulfprince</td>
<td>400</td>
<td>58</td>
<td>14.4</td>
<td>S</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nectarine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suncoast</td>
<td>375</td>
<td>58</td>
<td>14.0</td>
<td>NS</td>
<td>10</td>
</tr>
</tbody>
</table>

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$^a$ Adapted from Weinberger, 1956; Sharpe, 1970. Areas with this average January temperature, or a lower one, will provide sufficient chilling to grow this cultivar successfully.

$^b$ S=showy, NS=nonshowy

$^c$ 1=least resistant to 10=most resistant

$^d$ R=reniform, G=globose
Nectarine/Peach Insects

- White peach scale
- Plum curculio
- Stink bugs
- Caribbean fruit fly
- Borers
Nectarine/Peach Diseases

- Scab
- Bacterial Spot
- Brown rot
- Rust
- Mushroom root rot
- Phony peach (wild plums)
Plum

Low Chill Cultivars

Gulfrose

Gulfruby

Gulfblaze

Gulfbeauty
Plum

Culture

- Well drained, bare root plants Dec.-Jan.
- Soil pH 5.5-6.5, plants 20 ft. apart
- Prune when dormant, thin fruit
- Irrigation, fertilize bud break, Jun & Aug.
- Bacteria resistant cultivars
- Cross pollination
**Table 1. Estimated chill hours for the 'Gulf' series plums.**

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Time (hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'Gulfbeauty'</td>
<td>225</td>
</tr>
<tr>
<td>'Gulfblaze'</td>
<td>250</td>
</tr>
<tr>
<td>'Gulfrose'</td>
<td>275</td>
</tr>
<tr>
<td>'Gulfruby'</td>
<td>225</td>
</tr>
<tr>
<td>'Gulfgold'</td>
<td>250</td>
</tr>
</tbody>
</table>
Plum Insects

- Plum curculio
- San Jose Scale
- Borers
- Spider mites
- Stink bugs, etc.
- White peach scale
Plum Diseases

- Bacterial spot
- Bot rot
- Brown rot
- Oak root rot
- Plum leaf scald
Welcome to Fruitscapes

Fruit trees are a wonderful way to enhance the beauty and value of your landscape. They provide nutritious food to eat and share with friends, neighbors, and wildlife; they provide shade, and are aesthetically pleasing.
FruitScapes
The source for information on temperate, subtropical, and tropical fruit crops in the Florida landscape.

Subtropical fruit crops
- Guava

Tropical fruit crops
- Mango

Videos

Useful Links

HOME

Temperate fruit crops: FACTSHEETS
Click on the topic below for more information
- Apple
- Blackberry and Raspberry
- Blueberry varieties for Florida
- Blueberry gardener's guide
- Pruning blueberry plants in Florida
- Reproductive growth and development of blueberry
- Protecting blueberries from freezes in Florida
- Bunch grape
- Chinese jujube
- Deciduous fruits for central Florida
- Deciduous fruits for north Florida
- Dooryard fruit varieties
- Figs
- Growing fruit crops in containers
- Muscadine grape
- Nursery List for deciduous fruit trees
- Low chill apple cultivars for north and north central Florida
- Peaches and nectarines for Central and North Florida
- Peaches and nectarines for Florida

Avocado Cultivar Viewer
Click the Avocado picture (above) to view avocado cultivars.

FruitScapes Poster
Interested in this poster? - Click Here

Specific Growing Zones
Micro-Irrigation

- Uses less water (efficient)
- Less pest problems
- Easy to install
- Adaptable to changing plant water needs
- Minimize erosion
- Compliance with local codes – usually exempt from restrictions
Types of Micro-Irrigation
Types of Micro-Irrigation
Types of Micro-Irrigation

- Bubbler
Types of Micro-Irrigation
Other Micro-Irrigation Components

- Back Flow Prevention
- Timer
- Filter
- Pressure Regulator
A Guide to Micro-Irrigation for West-Central Florida Landscapes
<table>
<thead>
<tr>
<th>Type of Plant</th>
<th>Establishment Period</th>
<th>Watering Schedule&lt;sup&gt;A&lt;/sup&gt;</th>
<th>Recommended Amount of Water&lt;sup&gt;B&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees with less than 2&quot; trunk diameter</td>
<td>3 to 6 months</td>
<td>1. Daily for 2 weeks 2. Every other day for 2 months 3. Then weekly until established</td>
<td>2 to 3 gallons per inch of trunk diameter</td>
</tr>
<tr>
<td>Trees with 2&quot; to 4&quot; trunk diameter</td>
<td>6 to 12 months</td>
<td>1. Daily for 1 month 2. Every other day for 3 months 3. Then weekly until established</td>
<td>2 to 3 gallons per inch of trunk diameter</td>
</tr>
<tr>
<td>Trees with over 4&quot; trunk diameter</td>
<td>12 or more months</td>
<td>1. Daily for 6 weeks 2. Every other day for 2 months 3. Then weekly until established</td>
<td>2 to 3 gallons per inch of trunk diameter</td>
</tr>
<tr>
<td>Shrubs in 1-gallon containers</td>
<td>3 to 6 months</td>
<td>1. Every day for first few weeks after planting 2. Gradually decrease to every other day to every third day until established</td>
<td>1 quart</td>
</tr>
<tr>
<td>Shrubs in 3-gallon containers</td>
<td>6 to 12 months</td>
<td>1. Every day for first few weeks after planting 2. Gradually decrease to every other day to every third day until established</td>
<td>2 quarts</td>
</tr>
<tr>
<td>Shrubs in 7-gallon containers or larger</td>
<td>1 to 2 years</td>
<td>1. Every day for first few weeks after planting 2. Gradually decrease to every other day to every third day until established</td>
<td>1 gallon</td>
</tr>
</tbody>
</table>

Notes:  
<sup>A</sup> Frequency may be reduced when plants are installed during the cooler months or during periods of frequent rain.  
<sup>B</sup> Do not water if the root ball is saturated.
Questions???
Resources

- Pruning and Training Deciduous Fruit Trees for the Dooryard
  http://edis.ifas.ufl.edu/MG345
- Peaches and Nectarines for Central and North Florida
  http://edis.ifas.ufl.edu/MG374
- Growing Plums in Florida
  http://edis.ifas.ufl.edu/HS250
Resources Continued

- Blackberry and Raspberry  
  http://edis.ifas.ufl.edu/HS104

- Oriental Persimmons in Florida  
  http://edis.ifas.ufl.edu/MG242

- Low Chill Apple Cultivars for North and North Central Florida  
  http://edis.ifas.ufl.edu/MG368
Resources Continued

- Blueberry Gardener's Guide
  http://edis.ifas.ufl.edu/MG359
- Blueberry Varieties for Florida
  http://edis.ifas.ufl.edu/HS215
- Cultural Practices for Low-Chill Peaches in South Florida
  Dr. Bob Rouse Power Point Presentation
Resources Continued

- Training and Pruning Florida Peaches, Nectarines, and Plums
  
  http://edis.ifas.ufl.edu/HS365

- Espaliers
  
  http://edis.ifas.ufl.edu/MG273#TABLE_1
gke@ifas.ufl.edu