

Dooryard Fruit Varieties¹

J. G. Williamson, J. H. Crane, R. E. Rouse, and M. A. Olmstead²

Many kinds of fruit can be grown successfully in the Florida home garden, including temperate fruits in the northern part of the state and tropical and subtropical fruits in the southern part of the state.

Fruit growing is an interesting and rewarding hobby that provides fresh fruit at the peak of its maturity. Fruit plants are also an attractive addition to many landscapes.

Selection of species and varieties is critical for fruit production, as plants that are not adapted to local conditions will generally fail to produce regardless of how much care and attention they receive. Weather is perhaps the single most important factor that determines where fruit crops can be grown. Winters may be too cold for some fruit or too short for others. Still other fruit may suffer from summer's heat and humidity. Consequently, species and varieties of fruits should be chosen on the basis of historical weather patterns. Some considerations of weather are discussed briefly in the following sections.

Chilling Requirement

Temperate-zone fruits go through the winter in a dormant state called the rest period. Generally, this rest period is associated with a loss of leaves, short days, and weather that is cool to cold. Exposure to cool winter temperatures for a certain length of time is required for proper flowering and prepares the plant to begin active growth again when temperatures are more favorable for growth.

For temperate-zone fruit, temperatures below 45°F (7°C) are described as chilling temperatures. The number of hours below 45°F accumulates through the winter months and constitutes total hours of chilling. The Florida Panhandle rarely has fewer than 500 hours of chilling. By contrast, South Florida rarely has more than 50–100 hours of chilling.

The chilling requirement of a species or variety is the amount of chilling needed to complete the rest period and resume normal growth. Species and varieties differ in their chilling requirement.

A plant that does not receive sufficient chilling to satisfy rest is usually delayed in bud break, leaf expansion, and blooming. Often the opening of flower and leaf buds will be scattered over a long period of time as a result of insufficient chilling. Plants will live only a very few years with insufficient winter chilling, which explains why so few temperate fruits are grown in South Florida.

By contrast, rather cold winters satisfy rest early, so the plants start growing with the first warm spell. Such early growth makes a plant subject to injury by later cold weather, particularly late frosts, which may destroy flowers or young fruit.

Some subtropical fruit species—such as lychee and longan—require exposure to cool winter temperatures to flower properly the following spring. Chilling temperatures

1. This document is FC23, one of a series of the Horticultural Sciences Department, UF/IFAS Extension. Original publication date March 1994. Reviewed January 2015. Revised June 2015. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
2. J. G. Williamson, professor, Horticultural Sciences Department; J. H. Crane, professor, Horticultural Sciences Department, and associate director, Tropical Research and Education Center; and R. E. Rouse, retired associate professor, Horticultural Sciences Department, Southwest Florida Research and Education Center; and Mercy Olmstead, assistant professor, Horticultural Sciences Department; UF/IFAS Extension, Gainesville, FL 32611.

for these crops are temperatures below 55°F to 60°F, respectively. Lychee and longan trees that do not receive sufficient chilling temperatures may flower poorly or not at all. In contrast, mature lychee and longan trees may be killed at temperatures below 24°F to 28°F, which explains why so few of these crops are grown in central Florida or in north Florida. (For general definitions of these regions, see the map below.)

Cold Hardiness

Cold hardiness refers to a plant's ability to withstand cold temperatures without serious injury. Cold damage to plants can occur in all parts of Florida and is often caused by temperatures that are not extremely low, but which occur when the plant is not in the best condition to withstand cold. One example is the December 25, 1983, freeze. It killed or severely damaged much of the citrus grown in north Florida and central Florida at that time.

Because of the conditions preceding this freeze, it was much more damaging than past freezes with comparable minimum temperatures. Minimum temperatures were unusually mild for a period of more than one week prior to the December 1983 freeze. However, on December 25, temperatures dropped dramatically, leaving citrus trees little time to acclimate to the cold weather. Both the low temperatures and the long duration of freezing temperatures killed thousands of acres of citrus.

In contrast to temperate-zone fruits, which are relatively cold hardy when dormant, subtropical and tropical fruit crops may be divided into three groups according to cold tolerance. Some subtropical fruits, such as kumquat and loquat, may withstand temperatures below 20°F. Other subtropical fruits—such as papaya, banana, and passion fruit—cannot withstand temperatures below 32°F. However, some tropical fruits—such as mango, lychee, and longan—may withstand short periods of temperatures as low as 25°F. Avocados vary in their cold tolerance with West Indian types damaged below 25-30°F, Guatemalan types below 25-28°F, and Mexican types damaged below 18-26°F.

Warm Weather Adaptability

Some species of fruit, such as olive, pistachio, and date, will often grow satisfactorily in Florida, but due to the hot, humid weather that prevails throughout the state during summer months will not consistently produce adequate crops of good quality fruit. Growth is usually satisfactory for plants with poor tolerance for the Florida summertime climate, but fruit production is minimal for such plants.

Variety Adaptation

As the foregoing discussion indicates, climatic conditions dictate which fruit species and varieties can be grown in a given area. Many of the species—and all varieties—that are common in the northern United States are not adapted to the weather conditions that prevail in Florida. Indeed, some of the species and many varieties that grow in the northern United States will not grow and fruit well in south Florida.

For the purposes of this publication, the Florida map in Figure 1 is divided into three climatic zones. These zones correspond closely, but not completely, with the standard U.S. Department of Agriculture (USDA) Plant Hardiness Zone Map. The shaded areas along the coasts of south Florida represent the area where most tropical and subtropical fruits can be expected to succeed.



Figure 1. Florida's three climatic zones

The separation lines between zones are not rigid, but should be considered transition areas. In such an area, varieties from either zone may succeed due to slight variations in climate within a particular area. For example, large bodies of water, large cities, and elevation can modify temperatures by several degrees. There are naturally occurring cold pockets and warm locations throughout the state. When in doubt about whether a particular fruit variety or species will do well in a local area, consult your local UF/IFAS Extension Office.

The variety recommendations in Table 1 are based on the generally prevailing climate in these three regions, as well as on knowledge of what has succeeded for other gardeners

in these areas. However, county Extension faculty will have more specific knowledge of individual county situations.

Deciduous Fruit Varieties

Deciduous fruits enjoy greatest success in north Florida, but some varieties are recommended for all climatic zones.

Citrus Varieties

The expectation of most homeowners in Florida is to grow and pick citrus fruits from their own trees. However, citrus is a subtropical fruit tree and is limited to areas that do not regularly experience freezing temperatures. The home gardener can grow most citrus trees throughout central Florida and south Florida. Careful consideration should be given to site selection and choice of variety. Some citrus types, such as satsuma and kumquat, may be grown in warm, protected locations in north Florida. Due to the possibility of freezing weather in the northern part of central Florida, most citrus grown in that area should be planted in protected locations, such as the south side of building.

Varieties can be selected with different seasons of maturity to provide fruit over the entire citrus season, from October through June. Sweet oranges and grapefruit are distinctive types and are often consumed as juice or eaten in some form practically every day. The mandarins (tangerines and tangerine hybrids) are specialty fruits that are excellent when eaten fresh. The acid fruits (limes, lemons, and other fruit with high citric acid content) are used for thirst-quenching drinks, garnishes, and ingredients for refreshing pies and delicious cakes.

Some of the most popular varieties, as well as the season of maturity for each variety, are listed in Table 2. For additional information on specific varieties and growing practices in the home landscape, see EDIS Publication HS867, *Citrus Culture in the Home Landscape*, <http://edis.ifas.ufl.edu/HS132>.

Subtropical and Tropical Fruits

The ability to grow tropical fruits distinguishes Florida from the rest of the continental United States. Although tropical and subtropical fruits are most prominent in the tropical areas of south Florida, some of these fruits may be grown in protected areas in the coastal areas of central Florida.

The listing in Table 3 is by no means complete, but represents some of the most popular fruits. In some cases, no varieties are listed, as named varieties are not available. Instead, seedlings or cuttings are grown.

Acknowledgements

The authors are grateful to Wayne Sherman, Seymour Goldweber, and Carl Campbell for their previous input and suggestions and for their assistance in the preparation of this fact sheet.

Table 1. Variety Recommendations for Dooryard Planting.

Variety	Zone ¹			Variety	Zone ¹		
APPLE				PEAR			
TropicSweet ²	N	C		Ayers	N		
Anna ²	N	C		Baldwin	N		
Dorsett Golden ²	N	C		Kieffer	N		
BLACKBERRY				Floradahome	N	C	
Brazos	N	C	S	Orient	N		
Tupi		C		Hood	N	C	
Kiowa	N			Pineapple	N	C	
Natchez	N			Tenn	N		
Ouachita	N			PLUM			
Osage	N			Early Bruce	N		
Flordagrand ³		C	S	Excelsior	N		
Oklawaha ³		C	S	Kelsey	N		
BLUEBERRY				Methley ⁹	N		
Rabbitege				Ozark Premier	N		
Climax ⁴	N			Gulfbeauty	N	C	
Brightwell ⁴	N			Gulfblaze	N	C	
Powderblue ⁴	N			Gulfrose	N	C	
				GRAPE			
				Blue Lake	N	C	
Chaucer ⁴	N	C		Conquistador	N	C	
Woodward ⁴	N	C		Daytona	N	C	
Southern highbush				Blanc Du Bois	N	C	
Emerald ⁵		C	S	Lake Emerald	N	C	
Jewel ⁵		C	S	Stover	N	C	
Windsor ⁵		C		Suwannee	N	C	
Springhigh ⁵		C		GRAPE, MUSCADINE - BLACK			
Star ⁵	N	C		Southern Home	N	C	S
Sweet crisp ⁵	N			Black Beauty	N	C	
Farthing ⁵	N			Black Fry	N	C	
FIG				Polyanna	N	C	
Alma		C	S	Supreme	N	C	
Brown Turkey ⁶	N	C	S	Nesbitt	N	C	
Celeste	N	C	S	GRAPE, MUSCADINE - RED OR PURPLE			
Green Ischia	N	C	S	Alachua	N	C	
Magnolia	N	C	S	Noble	N	C	S
San Piero	N	C	S	PEACH⁸			
GRAPE, MUSCADINE - BRONZE				Spring Crest	N		
Carlos	N	C		June Gold	N		
Doreen	N	C		Flordaking	N		
Fry ⁷	N	C	S	Flordacrest	N		
Granny Val	N	C		Gulfcrest	N		
Higgins ⁷	N	C		Gulfcrimson	N		
Summit ⁷	N	C	S	Gulfking	N		
Welder	N	C		Gulfprince	N		

Tara	N	C		UFSharp	N		
Sweet Jenny	N	C		UFBeauty		C	
Pam	N	C		UFBlaze		C	
NECTARINE⁸				UF2000		C	
Suncoast	N			UFGold		C	
Sunraycer		C		UFO		C	
Sunbest		C		Flordadawn		C	
UFRoyal		C		Flordabest		C	
Sunmist		C		Tropicbeauty		C	S
UFQueen		C		UFSun		C	S
PECAN				Flordaglo		C	S
Elliot	N			Flordaprince		C	S
Stuart	N						
Curtis	N	C					
Desirable	N	C					
Moreland	N	C					
RASPBERRY							
Dorma Red	N						
Mysore			S				
PERSIMMON							
Fuyu (Fuyugaki)	N	C					
Hachiya	N	C	S				
Izu	N	C					
Jiro	N	C					
Matsumoto Wase Fuyu	N	C					
O'Gosho	N	C					
Saijo	N	C	S				
Tanenashi	N	C	S				

¹ N = North Florida, C = Central Florida, S = South Florida

² Requires pollenizer variety.

³ Self-unfruitful, must be planted together.

^{4,5} Requires two or more varieties (with the same number) for best results.

⁶ Do not plant 'California Brown Turkey'.

⁷ Female variety, requires a non-female variety for pollination.

⁸ Must have 'Flordaguard' rootstock.

⁹ Western Florida Panhandle only.

Table 2. Suitable Varieties of Citrus* for Dooryard Planting.

Variety	Season	Seeds
ORANGES		
Navel ¹	Very early	Very few
Cara Cara (Red Navel)	Early (Oct–Jan)	Very few
Hamlin	Early (Oct–Jan)	Few
Parson Brown	Early mid-season (Oct–Jan)	Many
Pineapple	Mid-season (Oct–Feb)	Many
Valencia	Late (Mar - June)	Few
GRAPEFRUIT		
Duncan	Mid-season (Dec–May)	Many
Marsh	Mid-season (Nov–May)	Few
Thompson	Mid-season (Dec–May)	Few
Redblush (Ruby)	Mid-season (Nov–May)	Few
Ray Ruby	Mid-season (Nov–May)	Few
Flame	Mid-season (Nov–May)	Few
Rio Red	Mid-season (Nov–May)	Few
Star Ruby	Mid-season (Nov–May)	Few
Pumelo	Mid-season (Nov–Apr)	Many
SPECIALTY		
Satsuma ² mandarin	Very early (Sept–Nov)	Very few
Robinson tangerine	Very early (Oct–Dec)	Varies
Sunburst tangerine ³	Mid-season (Nov–Dec)	Varies
Orlando tangelo ³	Mid-season (Nov–Jan)	Varies
Dancy tangerine	Mid-season (Dec–Jan)	Few to many
Minneola tangelo ³ (Honeybell)	Mid-season (Dec–Feb)	Varies
Temple tangor (Temple Orange)	Late mid-season (Jan–Mar)	Few to many
Murcott (Honey tangerine)	Late mid-season (Jan–Mar)	Few to many
Ponkan	Mid-season (Dec–Jan)	Few
Pummelos	Mid-season (Dec–Jan)	Few to many
ACID⁴		
Tahiti ('Persian') lime ^{4,5}	Everbearing (most June–Sept)	None
Key lime (Mexican lime) ^{4,5}	Everbearing (Jan–Dec)	Few
Meyer lemon ^{4,5}	Everbearing (Nov–Mar)	Few to many
Other lemons ^{4,5}	Everbearing (most July–Dec)	Few
Calamondin	Everbearing (most Nov–Apr)	Few
Kumquat ²	Everbearing (most Nov–Apr)	Few
Limequat ²	Everbearing (most Nov–Mar)	Few

*Note: All citrus varieties are susceptible to a bacterial disease called Huanglongbing (HLB; also referred to as citrus greening). HLB affected trees become unproductive and decline within few months to couple of years of infection. Fruit produced by HLB affected trees are often of poor quality and visually unappealing. Currently, there is no cure or solution for HLB; therefore, homeowners are encouraged to consider alternative fruit trees for planting (T. Vashisth, personal communication). More information on HLB can be found at <http://www.crec.ifas.ufl.edu/extension/greening/index.shtml>

¹ Does not produce large yields of fruit.

² Considered cold hardy and can be grown in protected locations of north Florida.

³ Cross-pollination may increase size, yield and seed number when at least two of these varieties are planted together.

⁴ Acid citrus bears the largest crop in late summer, but some fruit ripen all year.

⁵ Not considered cold hardy and should be restricted to south Florida, except 'Meyer' lemon.

Table 3. Varieties of Tropical Fruits for Dooryard Planting.

Fruit	Plant Type	Cold Hardiness ¹	Varieties
Akee	Medium tree	1	
Atemoya	Small tree	1	Gefner, African Pride, Page
Avocado	Large tree	1-2	Many ²
Banana	Herbaceous "tree"	1	Gold finger, Mona Lisa, FHIA17, others
Barbados cherry	Shrub	1	Florida Sweet, B-17
Bignay	Small tree	1	
Black sapote	Medium tree	1	Reineke, Maher, others
Carambola	Medium tree	2	Arkin, Fwang Tung, Kary, others
Carissa	Shrub	2	
Cattley guava	Shrub	3	
Cherimoya	Small tree	1	
Ceylon gooseberry	Large shrub	2	
Coconut	Palm tree	1	Mayapan hybrid, Fiji Dwarf
Date	Palm tree	3	
Canistel (Egg Fruit)	Medium tree	1	
Feijoa	Shrub	3	Choiceana, Coolidge Superba
Governor's plum	Shrub	2	
Guava	Small tree	1	Homestead, Patillo, Asian white
Jaboticaba	Small tree	2	
Jakfruit	Medium to large tree	1	Chenna, Golden Nugget, J-30, NS-1, others
Jujube	Small tree	3	
Kei-apple	Shrub	2	
Kiwi ³	Vine	3	Abbott, Allison, Bruno, Hayward
Longan	Medium tree	2	Kohala
Loquat	Medium tree	3	Wolfe, Oliver, Tanaka, others
Lychee	Large tree	2	Mauritius, Brewster
Macadamia	Medium tree	2	
Mamey sapote	Large tree	1	Key West, Magana, others
Mango	Large tree	1	Many ⁴
Miracle fruit	Small tree	1	
Monstera	Foliage plant	1	
Papaya	Herbaceous "tree"	1	Seedlings
Passion fruit	Vine	2	Possum Purple, Whitman's Yellow
Pineapple	Bromeliad	1	Red Spanish, Smooth Cayenne
Pitaya cactus	Vine	1-2	Numerous Varieties
Plantain	Herbaceous "tree"	1	
Pomegranate	Small tree	3	
Prickly pear	Cactus shrub	3	
Sapodilla	Large tree	2	Alano, Hasyá, Morena, Tikal, others
Sea grape	Medium tree	1	
Spanish lime	Large tree	1	
Soursop	Small tree	2	
Sweetsop	Small tree	1	
Surinam cherry	Shrub	2	
Tamarind	Large tree	1	

Velvet apple	Medium tree	1	
Wampi	Small tree	2	

¹ **Cold hardiness:**

² **Varieties with good cold hardiness for central Florida:** 'Day', 'Duke', 'Mexicola', 'Winter Mexican'.

Varieties with moderate cold hardiness for south Florida: 'Booth 7', 'Booth 8', 'Brogdon', 'Choquette', 'Hall', 'Lula', 'Monroe', 'Taylor', 'Tonnage', 'Pollock', 'Simmonds'.

³ Kiwi usually will not fruit in Florida.

⁴ **Varieties with fair anthracnose resistance and good quality:** 'Carrie', 'Early Gold', 'Florigon', 'Glen', 'Saigon'.

Varieties with good quality and good anthracnose resistance: 'Irwin', 'Keitt', 'Kent', 'Palmer', 'Sensation', 'Tommy Atkins'. (Numerous other varieties available.)