SUBTROPICAL FRUITS IN THE LANDSCAPE¹

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Abstract. There has been a recent increase in interest in using edible plants around private residences. Fruit trees are often lined out in grove form, but could equally well be incorporated into the landscape in place of other plants. Design qualities and cultural needs are discussed, and lists given of fruiting plants recommended for various uses.

The opportunities for gardening in south Florida range from container growing on terrace or balcony to multi-acre estates or communally owned areas. Most people have to be content with a relatively small lot, but whatever the situation there is a special interest that comes from growing

something that may be eaten.

Fruit trees and small fruits have traditionally been grown in groves or rows following the cultural techniques developed for commercial operations. However, the needs for labor-saving methods, mechanization of jobs, flawless fruit, or complete pest control which the commercial operator faces do not necessarily apply to the home gardener. This removes artificial design constraints, and the fruiting plants may be grown anywhere in the landscape in which their form or size, leaf or flower color, or other design characteristic makes them particularly suitable. They may then be pruned, watered, or fertilized individually, if necessary, in consideration of their "bonus feature" of yielding a crop of fresh fruit.

Landscape design with subtropical fruits follows the same process as with any other plants. Consideration of the needs of the owner and his family establishes what features would ideally be fitted into the site, and an inventory of the site's good and bad points establishes the design possibilities. As these features are put together, the form and overall character of the planting emerges allowing modification until the most pleasing aesthetic effect is achieved. (For further reading see, for example, 1, 3).

It is only now that decisions on specific plants for each part of the plan need to be made. The variety of tropical fruits is so great that the question of what plants to use in each spot really becomes "why use plants that do not have edible parts when there are more than 300 types of fruit that will do well in south Florida?" Many of the tropical fruits are also outstanding in some other respect: mango (Mangifera indica L.), for example, is a spectacular flowering tree; jaboticaba (Myrciaria cauliflora (Mart.) Berg and cattley guava (Psidium littorale Raddi) have bark and trunk characters that make them first choice for areas in which these are desirable features; and citrus flowers all share a favorite fragrance that adds another dimension to the enjoyment of a garden or patio.

The special maintenance needed for fruit trees is minor. When small, their fertilizer requirements would be similar

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to any other plant, and it is only as they reach flowering and fruiting size that their nutrient requirements change. The requirement for nitrogen relative to those for phosphorus and potassium decreases, and the analysis of the fertilizer should reflect this (with the exact analysis and rates of application determined by an analysis of the soil and recommended rates for the plant).

Some special pruning techniques may improve the crop: citrus, for example, which bears on young growth, may be kept to a desired shape or size by careful cutting in the winter after the fruit is picked. The new growth resulting from these cuts will usually flower normally and bear fruit the following season. Jaboticaba and carambola (Averrhoa carambola L.) which flower and fruit right out of old trunks and branches, will usually ripen fruit better if the center of the trees are thinned to allow light to penetrate. This may often be done so as to show off the fruit or the trunks themselves, adding to the attractiveness of the plant. Other than this type of special care the maintenance and pruning would be the same as for any other landscape plant. With regard to disease and insect control, the difference between the requirements for commercial and dooryard production are very marked. Dowell et al. (2) summed up the situation for pest control on dooryard citrus by saying that the main reason for any spraying would be cosmetic, and that no major chemical control program should be needed.

The one problem that may be encountered with fruit trees used throughout the garden is related to the growth requirements of some plants. Citrus is a good example: Most members of this group have an aversion to wet situations, and if they are to be planted as trees in a lawn, they must be put in on slightly mounded beds so that their

roots remain in well drained soil.

The lists that follow give details of the form and characteristics of subtropical fruits to show where they would best fit into the landscape. The list includes plants that bear fruit in each season so that with enough space available for planting it would be possible to enjoy fresh fruit of some description from the garden throughout the year. The list is tabulated to show the landscape purposes for which the plants are suited using standard designations. Framing trees are used to focus attention on a view or on the house; shade trees, obviously are used to cast shade on a large or small area; background trees are those usually viewed beyond a building or other garden feature; while screens and hedges form space dividers or walls to enclose garden spaces. Foundation, border and groundcover plants serve to tie structures down visually and as ornaments and decoration for the garden. Some of the plants are striking enough in their form, flower or fruit color, or perhaps trunk or bark characters that they are used as specimens or features of the landscape. The main season of fruit production is given in the list: a "z" in this column indicates that there is also minor fruit production at other times of year. Further information on a number of species is available in the series "Fruit Crops Fact Sheet" published by the Florida Cooperative Extension Service.

Literature Cited

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Trees							
Species Common name	Fruiting season	Pot	Flower	Framing	Shade	Background	Screen
Anacardium occidentale L.	May-June		•	x			
Cashew Nut Annona muricata L.	June, July, Dec. Jan.			x			
Soursop							
Annona reticulata L. Custard Apple	Apr-June			x			
Annona squamosa L. Sugar Apple	July-Nov	x		x			
Annona squamosa L. X A. cherimola Mill. Atemoya	July-Dec			х	x		
Antidesma bunius (L.) Spreng Bignay	Aug-Nov			x			x
Artocarpus heterophyllus Lam. Jackfruit	All Year			x	x	x	
Artocarpus hypargyraea Hance Kwaimuk	Sept-Oct			x		x	x
Averrhoa carambola L.	June-Mar ^z	x	x	x	x		x
Carambola Blighia sapida Konig	June-Nov			x	x	x	
Akee Butia capitata (Mart.) Becc.	May-Aug		x	x			
Jelly Palm Calocarpum sapota (Jacq.) Merr.	May-Julyz	x		x	x	x	
Carica papaya L. Papaya	All Year	x	x	x			
Casimiroa edulis Llave & Lex. White Sapote	May-July				x	x	x
Gecropia peliata L. Yagrumo	All Year				x	x	
Chrysophyllum cainito L. Star Apple	Mar-June			x	x	x	x
Citrus spp.	Oct-June May June	x	x	x	x	x	x
Clausena lansium (Lour.) Skeel Wampi	May-June		x	x		x	x
Diospyros digyna Jacq. Black Sapote	Aug-Oct			x	x	x	x
Diospyros discolor Willd. Eriobotrya japonica (Thunb.) Lindl	Oct-June Dec-Mar	x	x	x x	x	x x	x x
Loquat Euphoria longan (Lour.) Steud.	July-Aug			x	x	x	x
Longan Litchi chinensis Sonn.	June-July		x	x	x	x	
Lychee Macadamia integrifolia Maiden & Betche	Aug-Nov		x	x	x	x	
Macadamia Nut Mangifera indica L.	May-Oct		x		x	x	
Mango Manilkara zapota (L.) Van Royen	May-Junez			x	x	x	
Sapodilla Melicocca bijuga L.	Aug-Sept			x	x	x	
Spanish Lime Morus spp.	Apr-June	x			x	x	
Mulberry Muntingia calabura L.	May-Dec	x	x	x	x	x	
Strawberry Tree	All Year				•	^	
Musa hybrids Banana		x		X			x
Persea americana Mill. Avocado	July-Mar	x		x	x	х	
Pouteria campechiana (HBK.) Baehni Canistel	Nov-Junez	x		x	x	x	x
Psidium guajava L. Guava	Aug-Oct ^z	x		x		x	
Rollinia deliciosa Saff. Corosol	June-Aug			x	x	x	
Spondias cytharea Sonn. Golden Apple	July-Oct			x	x	x	
Spondias mombin L. Yellow Mombin	Aug-Nov			x	x		
Syzygium javanicum Hort.	Sept-Oct June-July		x	x	x x	x	
Syzygium malaccense (L.) Merr. & Perry Malay Apple The state of the st			•	^		v	
Tamarindus indica L. Tamarind	Sep-Nov				x	x	
Zizyphus mauritiana Lam. Jujube	Oct-Nov			x	x	x	

	Shrubs						
Species Common name	Fruiting season	Pot	Hedge	Flower	Foundation	Border	School
Carissa carandas L.	Sept-Jan	<u>P4</u>	<u>ж</u>	X			
Karanda				А	x	x	2
Carissa macrocarpa A. DC. Natal Plum	All year		х	X	x	x	3
Cereus spp. Dovyalis abyssinica (A. Rich.) Warb. Koshum	June-Oct Nov-May	x	x x	x	x	x x	2
Dovyalis caffra (Hook. & Harv.) Warb.	May-July		x		x	x	3
Kei Apple Dovyalis hebecarpa (G. Gardn.) Warb. Ceylon Gooseberry	Oct-June		x			x	,
Dovyalis hybrid Elaeagnus phillipensis Perr.	Sept-May Dec-May		x x	x	x x	x x	3
Lingaro Eugenia aggregata (Vell.) Kiaersk Cherry-of-the-Rio-Grande	May-June	x	x	x	x	x	3
Eugenia braziliensis Lam.	May-June	x	x	x	x	x	3
Grumichama Eugenia luschnathiana O. Berg	May-June	x	x	x	x	x	3
Pitomba Eugenia uniflora L.	Apr-Julyz			-			
Surinam Cherry		x	x		x	x	3
Feijoa sellowiana O. Berg Pineapple Guava	Oct-Dec	x	x	x	x	x	3
Ficus carica L. Fig	June-Decz	x			\mathbf{x}	x	
Flacourtia indica (Burm. f.) Merr.	July-Nov		x		x	x	:
Governor's Plum Garcinia livingstonei T. Anders. Imbe	Apr-Augz	x			x	x	
Malpighia glabra L. Barbados Cherry	May-June Sept-Nov						
Musa hybrids	All Year	x x	x	х	x x	x x	:
Banana Myrciaria cauliflora O. Berg in Mart. Jaboticaba	Jan-Junez	x	x		x	x	3
Psidium littorale Raddi	June-Oct	x	x	x	x	x	2
Cattley Guava Punica granatum L.	Oct-Nov*	x	x	x	x	x	
Pomegranate Punica granatum nana	Oct-Nov	x	x.	x	x		
Dwarf Pomegranate Rhodomyrtus tomentosa (Ait.) Hassk.	July-Aug	x	x	x	x	x	
Downy Myrtle Rubus albescens Roxb.	Dec-June	x	x				
Mysore Raspberry	•		^			x	
Rubus hybrid Synsepalum dulcificum (Schumach. & Thonn.) Daniell	Mar-June	x	х			x	
Miracle Fruit Triphasia trifolia (Burm. f.) P. Wils. Limeberry	All Year June-Sept	x	x		x x	x x	3
	Vines						
Species Common name	Emiting						
Common name Monstera deliciosa Liebm.	Fruiting season						
Monstera	July-Nov						
Passiflora edulis Sims f. flavicarpa segener Yellow Passion Fruit	May-Nov						
Passiflora quadrangularis L. Granadilla	Apr-June						
Vitis spp. Grape	July-Sept						
	Ground Covers	<u>. </u>					
Species Common name	Fruiting season						
Ananas comosus Mill.	All year	·					
Pineapple Carissa macrocarpa A. DC. Dwarf cultivars	All year						

²Minor fruit production at other times of year.