OKLAHOMA COOPERATIVE EXTENSION SERVICE HLA-6210

Apple and Peach Varieties for Oklahoma

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Of all the tree fruit crops, apples and peaches are the best adapted to Oklahoma conditions. Apples bloom later and are less susceptible to spring frosts than peaches, but with the selection of a good site, peaches can be reasonably regular producers and are favored over apples by Oklahoma consumers.

Site selection is of greater importance to the success of an orchard than cultivar selection and should not be neglected. Planting the orchard on higher elevations is the most practical method to reduce damage from spring freezes. Cold air is heavier than warm air and will flow into nearby lower areas. Choosing cold-tolerant cultivars will also help.

Peach roots cannot tolerate extended periods of water-logging, so only well-drained soils should be chosen for a peach orchard.

Apples

There are several different rootstocks available for apples. The most widely adapted rootstock for Oklahoma is MM.111, which is cold hardy, drought tolerant, well-anchored, and widely available. Trees on MM.111 are semi-vigorous, being about 30% smaller than trees on seedling rootstocks. Seedling rootstocks are well adapted to Oklahoma, but not recommended because of the large tree size and delay in coming into production compared to the clonal rootstocks. M.9 is fully dwarfing (6 to 8 feet tall at maturity) and induces production at an early tree age, but requires staking or trellising to provide support. M.27 shares the same good and bad points as M.9 and is even more dwarfing. M.7a is a semi-dwarfing, but will require staking at least for the first few years until the root system is established. MM.106 is an excellent semi-dwarfing rootstock, but lacks the drought tolerance of MM.111, and it is very susceptible to collar and crown rot on imperfectly drained soils. Interstem trees on MM.111 understock have not been tested under Oklahoma conditions, but may have promise. The M.9 or M.27 interstem provides an added degree of dwarfing, and the MM.111 understock provides excellent anchorage and drought resistance. Interstem trees should be planted with the lower graft union below ground and the upper graft union above ground. Single graft apple trees should be planted with the graft union 2 to 3 inches above the soil level.

Table 1. Recommended Apple Varieties for Oklahoma.

	Harvest Season (Central Oklahoma)	*Color*	*Use*	*Comments*
McLemore	July 10-25	Reddish	D,C	Released by OSU, 1968.
Gala	Aug 10-20	Orange-Red	D	High-colorsports preferred.
Jonathan	Aug 25-Sept 10	Red	D,C	Very susceptible to fireblightandcedar-applerust.
Red Delicious	Sept 1-10	Red	D	Very upright growing needs branch spreading for good tree structure.
Golden Delicious	Sept 10-20	Yellow	D,C	Very well adapted. Smoothee tends to russet less.
Fuji	Oct 10-20	Reddish	D	Disease susceptible. Very sweet.

Use: C=cooking D=dessert

Many of the apple cultivars are available in special strains, often patented by the various nurseries. These strains are "sports" or natural genetic mutants that differ from the original cultivar in small but perceptible ways. The most common sports are for spur-type (increased tendency to produce spurs which result in a 60 to 80 percent smaller tree as compared to a non-spur strain of that cultivar), increased red color (some 'Delicious' and 'Gala' strains) and decreased russetting (some 'Golden Delicious' strains).

Apples require cross-pollination to set a good crop consistently. Some cultivars will set some fruit by self-pollination, but the fruit quality, size and number of fruits will be increased by providing cross-pollination. Most crabapples can be used for cross-pollination as long as the bloom period overlaps. A few apple cultivars are triploid (having three sets of chromosomes rather than the normal two) and do not produce good pollen. With a triploid cultivar, three different cultivars are needed for pollination, one to provide pollen for the triploid cultivar, and a third to provide pollen for the first cultivar. Note: different strains of the same cultivar will *not* cross-pollinate each other.

Peaches

The current recommended rootstocks for peach trees in Oklahoma are either 'Lovell' or 'Halford' seedlings. Peach trees should be planted at the same depth that they were in the nursery.

Bacterial Leaf Spot is a serious disease of peaches in Oklahoma that can defoliate susceptible cultivars in wet rainy years. The only really effective control is to choose resistant or tolerant cultivars when planting the orchard.

Nectarines are peach cultivars that do not have fuzz. Most of the nectarine cultivars do not perform as well as the recommended peach cultivars.

All the peach and nectarine cultivars in this publication are self-fertile, and therefore do not require cross-pollination. The peach cultivars are grouped according to harvest time in weeks before and after 'Redhaven'.

The average ripening date of 'Redhaven' at the Oklahoma Fruit Research Station, Perkins, Oklahoma (central Oklahoma) is July 12-16. Depending on the season, 'Redhaven' will ripen 2-5 days earlier in the southern areas of the state. Likewise, the ripening of 'Redhaven' can be delayed at locations north of Perkins, Oklahoma.

Table 2. Recommended Peach Cultivars.

Weeks before or after *'Redhaven'*	*Cultivars*	Weeks before or after *'Redhaven'*	*Cultivars*
	Yellow Fleshed		**White Fleshed**
- 2	Candor	- 1	Erly-red-fre
- 1	Garnet Beauty, Sweethaven, Earliglo, Rubired	+1	Summer Pearl
		+2	Nectar
		+6	White Hale
- 0.5	Sentinel		
0	Redhaven, Clayton, Cullinan		**Nectarines**
		0	Earliblaze
+0.5	Newhaven	+2	Redchief
+1	Ranger	+3	Cavalier
+2	Glohaven, Bounty	+4	Sunglo
+3	Jayhaven, Loring	+5	Redgold
+4	Cresthaven, Biscoe, Jefferson		
+5	Autumnglo		
+6	Ouachita Gold		
+7	Stark Encore		
+8	Parade, Flameprince		
+9	Fairtime		

Table 3. Peach and Nectarine Summaries.

Cultivar	*Ripening Season*	*BLS Resistance*	*Flesh Color*	*Flesh Adherence*	*Fruit Quality*	*Fruit Size*	*Cold Tolerance*
Peaches							
Candor	-2	R	Y	SC	4	Good	Good
Earliglo	-1	T	Y	SF	3	Good	—
Garnet Beauty	-1	T	Y	SF	4	Good	Fair
Rubired	-1	R	Y	C	3	Fair	Good
Sweethaven	-1	R	Y	SF	4	Fair	Good
Erly-red-fre	-1	T	W	SF	3	Good	Fair
Sentinel	-0.5	R	Y	F	4	Good	Good
Clayton	0	R	Y	F	3	Good	Good
Cullinan	0	T	Y	F	4	Good	Fair
Redhaven	0	T	Y	F	4	Fair	Good
Newhaven	+0.5	R	Y	SF	3	Fair	Exc.
Ranger	+1	R	Y	F	5	Exc.	Good
Summer Pearl	+1	S	W	F	3	Good	Good
Glohaven	+2	R	Y	F	3	Exc.	Good
Bounty	+2	T	Y	F	4	Exc.	—
Nectar	+2	T	W	F	3	Exc.	Good
Jayhaven	+3	R	Y	F	4	Exc.	Good
Loring	+3	R	Y	F	5	Exc.	Fair
Biscoe	+4	R	Y	F	4	Good	Exc.
Cresthaven	+4	T	Y	F	4	Exc.	Good
Jefferson	+4	R	Y	F	4	Exc.	Fair
Autumnglo	+5	T	Y	F	4	Exc.	Exc.
Ouachita Gold	+6	T	Y	F	3	Exc.	Fair
White Hale	+6	T	W	F	3	Exc.	Fair
Stark Encore	+7	T	Y	F	5	Exc.	Good
Parade	+8	T	Y	F	4	Good	Good
Flameprince	+8	T	Y	F	4	Exc.	—
Fairtime	+9	T	Y	F	4	Good	Exc.
Nectarines							
Earliblaze	0	T	Y	SF	—	—	—
Redchief	+2	R	W	F	—	—	—
Cavalier	+3	T	Y	F	—	—	—
Sunglo	+4	T	Y	F	—	—	—
Redglo	+5	T	Y	F	—	—	—

Season: Weeks before or after 'Redhaven'.
BLS (Bacterial Leaf Spot): R=resistant (little or no defoliation), T=tolerant (some defoliation, but not severe), S=susceptible (requires spraying most years).
Flesh color: Y=yellow, W=white. Flesh adherence: C=cling, SC=semi-cling, SF=semi-free, F=free. Fruit Quality: 1=worst to 5=best. A rating of 3 is acceptable quality.

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