Home Fruit Planting Guide

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A home fruit planting carefully selected, properly located, and well managed can enhance the home landscape, provide high-quality fruits and serve as a satisfying hobby.

The home fruit garden requires considerable care. Thus, people not willing or able to devote some time to a fruit planting will be disappointed in its harvest.

Some fruits require more care than others do. Tree fruits and grapes usually require more protection from insects and diseases than strawberries and blackberries. Generally speaking, flowers and fruits of fruit trees must be protected by pesticide sprays from before blossom-time until harvest. In addition, sprays may be required to protect leaves, the trunk, and branches.

Small fruits are perhaps the most desirable of all fruits in the home garden since they come into bearing in a shorter time and usually require few or no insecticide or fungicide sprays.

Fresh fruits can be available throughout the growing season with proper selection of types and cultivars (varieties).

Soils and Sites

Avoid poorly drained areas. Deep, sandy loam soils, ranging from sandy clay loams to coarse sands or gravel mixtures, are good fruit soils. On heavier soils, plant in raised beds or on soil berms to improve drainage.

All fruit crops are subject to damage from late spring freezes. Hills, slopes or elevated areas provide better air drainage and reduce frost damages. Make certain that the air can move freely throughout the planting site and is not "boxed" in with surrounding terrain or tree borders.

Heat from houses, factories, and other structures in urban areas frequently keep the temperature 4 or 5 degrees warmer than surrounding rural areas.

Fruits do best in full sun. They can tolerate partial shade, but fruit quality will be lowered.

Size of Planting Area

Plan the planting to fit the area involved as well as family needs. A smaller planting, well cared for, will usually return more quality fruit and enjoyment to the grower than a larger neglected one. One-half acre or less planted to adapted cultivars of the best kinds of fruit is usually adequate for the average family.

Edible landscaping is becoming more widespread for large and small landscapes. Edible landscaping is the practical integration of food plants within an ornamental or decorative setting. For those with limited space in their landscapes, consider using fruit varieties that are dwarf, compact or columnar in form.

Plan Your Planting

Develop a planting plan well in advance of the planting season. Determine the kinds of fruits, cultivars, and quantities of each needed. Locate a source of plants and make arrangements for plants to be available at the desired time of planting.

Perennial weeds such as bermudagrass and johnsongrass compete heavily with young plantings and should be eliminated before planting. This can be done by spraying with a post-emergence herbicide such as glyphosate (Roundup®) in late summer the year before planting or by shading out weeds by growing hybrid sudangrass for the year prior to planting.

Strawberries especially should not be planted in newly turned under bermudagrass sod. Not only will the bermudagrass regrow and cause extreme competition problems because of the short height of the strawberry plants, but the white grubs that frequently infest bermudagrass sod can destroy the strawberry roots.

For best survival and production, supplemental water should be provided in the summer. Locate your plantings near a water source.

Planting

Plants received as bare root should be planted immediately after arrival. If roots are dry, completely immerse the roots in water for a few minutes or overnight before planting. Always water plants immediately after planting.

Never allow the roots to dry out or freeze. When planting is delayed several days, heel in trees by forming a mound of loose soil or mulching material. Place the roots into this mound, cover them, and moisten. The trees may be vertical or horizontal as long as the roots are covered. This protects them from drying or freezing.

Set trees about the same depth that they grew in the nursery row. Trim off broken and dried roots. Place topsoil around the roots and firm the soil to exclude air. Settle the soil with water and make sure the roots are left in a natural outward position. Leave a small basin one or two inches deep around the tree to aid in watering. Wrap the trunk from the soil line up to the first branches (or 18 inches above the ground) to protect the trunk from sunscald, rodent injury, insect damage, and drying out.

Cultural Practices

During the first summer, cultivate or mulch around the fruit plants to reduce competition from other plants and to conserve moisture and fertility. Irrigation is especially important in the first few years while the planting becomes established.

Information on pruning, spraying, and other cultural practices is available at your local county Extension office.

Pollination

Pay close attention to the pollination requirements of the different fruits to avoid disappointment. Many fruits require that the flower is pollinated with pollen from a different cultivar of the same fruit or the fruit will not develop. Planting only one cultivar of these fruits often results in masses of blooms in the spring, but few or no fruits. Different strains of the same cultivar (e.g. two spur strains of 'Delicious') will not provide proper cross-pollination.

There are a few cultivars of apple and pear that do not produce viable pollen. If one of these cultivars is planted, two other cultivars will need to be planted (a total of 3) to provide adequate pollen for all. Sometimes some apple cultivars are listed as self-fertile in nursery catalogs, but for consistent production of the best quality fruit, cross-pollination with another cultivar should always be provided.

Duke cherries are hybrids between sweet and sour cherries. They can be cross-pollinated by either sweet or sour cherries, but Duke cherries should not be counted on to cross-pollinate sweet cherries.

All fruits in the accompanying table that are not marked as requiring cross-pollination are self-fertile, meaning that a cultivar of those fruits can set fruit with its own pollen.

Highbush blueberries will set much better crops if cross-pollination is provided. Rabbiteye blueberries require cross-pollination. Highbush and rabbiteye blueberries will not pollinate each other.

Dwarf Trees

Dwarfing rootstocks enable fruit trees to be grown in much smaller areas than standard-sized trees. The term 'dwarfing' refers to a tree smaller than when grown on seedling rootstocks, even if only 10 to 15 percent smaller. The degree of dwarfing varies with the rootstock. In general, semi-vigorous rootstocks will produce a tree about 3/4 the size of a standard tree, semi-dwarf about 1/2 sized, and fully dwarfing rootstocks produce trees 1/3 of standard size or smaller.

Genetic dwarf fruit trees are available but generally are not satisfactory. 'North Star' sour cherry is an exception.

Types of Fruit

Apples—M.9 and M.27 rootstocks produce fully dwarfed trees (6-8' tall and 4-6' tall respectively). Both produce shallow, weak root systems and require staking or trellising, and regular watering. Dozens of other size-reducing apple rootstocks exist, but the best for Oklahoma is MM.111. MM.111 will produce a tree that is 25 percent smaller than on seedling rootstock, but very well anchored and drought resistant.

Interstem trees, with a MM.111 root system, 8 to 10 inches of trunk of M.9 or M.26 and with the fruiting cultivar grafted on top combine the anchorage of the MM.111 with the dwarfing of M.9 or M.26 to produce a tree 8 to 10 feet tall that will not need support. Interstem trees are more costly and less available than single graft trees.

Spur-type strains of apple cultivars have more spurs and fewer long branches than the non-spur strains. They are smaller growing and preferred where available.

Pear—Quince is the standard dwarfing rootstock for pears, but will require support. Quince rootstocks are less cold hardy than pear, and are very susceptible to fireblight. Quince C is the most dwarfing, producing a 1/4 to 1/3 size tree. A new series of pear rootstocks, the OHXF series (from a cross between 'Old Home' and 'Farmingdale'), is entering the nursery trade, and offers a variety of tree sizes from 1/4 to 3/4 standard size.

Pears are very susceptible to the bacterial disease, fireblight. Only cultivars with known resistance to this disease should be planted. Even with blight resistant cultivars, pruning out infected shoots 12-18 inches below the infection as soon as they appear will be necessary to prevent disease buildup. Pruning shears should be sterilized between cuts. More information on fire blight control is available at your local county Extension office. The 'Magness' cultivar should be planted with two additional cultivars since it does not produce viable pollen.

Peach—There are no satisfactory dwarfing rootstocks for peach at present; however, 'Halford' or 'Lovell' are good choices. Many nurseries use *Prunus besseyi* seedlings, but often there is delayed graft incompatibility and tree death. Tree height on peaches can be kept to 6-8' by judicious annual pruning. Well-drained, deep, open-type soils of reasonable fertility are preferred. A spray program for insects and diseases beginning with a dormant application and continuing through fruit growth is required to produce clean fruit. Peach tree borer control is a necessity.

Plum—There are no satisfactory dwarfing rootstocks at present for plums. General cultural requirements are similar to peaches. The Japanese plums bloom earlier than the European types and are more subject to late spring frost damage. European and Japanese plums should not be depended upon to pollinate each other.

Cherry—There are no satisfactory dwarfing rootstocks at present for cherries. Many sweet cherries are not adapted to a hot, dry climate. Cherry leaf spot, plum curculio and poorly drained soils are the major obstacles to successful cherry production in Oklahoma. The diseases and insects can be controlled successfully with a series of sprays. Sour cherries

are generally better adapted than sweet cherries. Sweet cherries in general require cross-pollination; but two cultivars, 'Stella' and 'Lapins', are self-fertile.

Apricot—There are no satisfactory dwarfing rootstocks at present for apricot. Apricots bloom early and are usually killed by late spring frosts. The tree is very ornamental when in bloom, and tree-ripened apricots are delicious, but do not expect consistent production.

Strawberry—Strawberry roots are usually found in the 12 to 18 inch top layer of the soil. Most of the root system is in the first 6 to 8 inches of soil. This stresses the importance of supplemental irrigation and mulching for this crop. For continued good production, strawberry plantings should be renovated each year after harvest. Purchase virus-tested plants only. A production of one to two quarts of berries per three foot section of row should be possible each year.

Blueberries—Blueberries require a soil pH of 5.0 to 5.2. Highbush blueberries are best adapted to northeastern Oklahoma. They will do best when protected from hot, drying winds. Rabbiteye blueberries are best adapted to southeastern Oklahoma. Highbush blueberries must have supplemental irrigation and mulch of woodchips, sawdust or pecan shells to survive. Rabbiteye blueberries also need irrigation and will benefit from mulch.

Raspberries—Raspberries, generally, are not too productive because of the fluctuating temperatures during winter. Black raspberries, if well watered and mulched, can be successful.

Blackberries—Erect thorny blackberries are the most commonly grown and do not require trellis support. Care must be taken to maintain the rows no more than one to two feet wide to facilitate harvesting. Sucker plants that come up between the rows may be dug and moved into the row or merely removed as soon as they emerge.

Trailing thornless blackberries have smooth, arching canes, and require support on a trellis. Fruit quality is improved if the fruit are allowed to ripen to a dull black rather than a glossy black color.

Grapes—Grapevines will require support on a trellis, arbor or fence. Planting in north-south rows will increase production. Some protection from southwestern winds is desirable. Occasional supplemental watering during the fruit ripening period will improve fruit quality. Annual pruning is necessary to maintain a balance between plant growth and fruit production. It is common to remove 95 percent of the previous season's growth when pruning.

Persimmon—Oriental persimmon trees will bear fruit without pollination. Oriental and American persimmon trees will not cross-pollinate. Oriental persimmons may not be winter hardy in northern parts of Oklahoma.

OKLAHOMA HOME FRUIT PLANTING GUIDE

Kind	*Suggested Varieties* * **	*Season of Harvest Central Oklahoma or adapted areas*	*Remarks*	*Suggested Planting Distance In Feet*	*What to Buy*	*When to Plant*
APPLES	* Lodi	June 25-July 6	Yellow, soft, cooking only.	Standard 25 to 30 or Semi-Standard 18 to 25 or Semi-dwarf 15 to 20 Spur-Types 15 to 22 or	One year old trees	Fall or Spring
	* McLemore	July 10-July 25	Red, dessert and cooking			
	* Gala	Aug 10-20	Orange-red, dessert only.			
	* Jonathan	Aug 25-Sept 10	Red, dessert & cooking. Very susceptible to fireblight and cedar-apple rust.			
	* Delicious (red)	Sept 1-10	Red, dessert only.			
	Liberty	Sept 1 -10	Red, dessert and cooking very disease tolerant			
	Freedom	Sept 1 -10	Red, dessert and cooking very disease tolerant			
	Arkansas Black	Sept 10-20	Purplish-red with yellow flesh, dessert and cooking, tolerant to cedar apple rust			
	* Golden Delicious	Sept 10-20	Yellow, dessert & cooking. Well adapted.	Dwarf 8 to 14		
	* Braeburn	Sept 10-20	Orange/red blush over yellow, dessert and cooking			
	* Fuji	Sept 10-20	Yellow, dessert and cooking			
PEACHES	Candor	June 18-24	Yellow, semi-cling	20x20	June bud trees from the south or dormant bud (one yr.) trees from the north	Fall or Spring
	Sentinel	June 28-July 3	Yellow, freestone			
	Redhaven	July 2-7	Yellow, freestone			
	Reliance	July 4-9	Yellow, freestone			
	Ranger	July 8-13	Yellow, freestone			
	Glohaven	July 15-20	Yellow, freestone			
	Nectar	July 15-20	Yellow, freestone			
	Jayhaven	July 21-27	Yellow, freestone			
	Cresthaven	July 28-Aug 3	Yellow, freestone			
	Autumnglo	Aug 6-10	Yellow, freestone			
	Ouachita Gold	Aug 13-17	Yellow, freestone			
	White Hale	Aug 13-17	Yellow, freestone			
	Starks Encore	Aug 20-25	Yellow, freestone			
	Fairtime	Sept 13-20	Yellow, freestone			
NECTARINES	EarliBlaze	July 3-9	Yellow, semi-freestone	20x20	June bud trees from the south or dormant bud (one yr.) trees from the north	Fall or Spring
	Redchief	July 15-20	White, freestone			
	Cavalier	July 21-27	Yellow, freestone			
	Sunglo	July 27-Aug 2	Yellow, freestone			
	RedGold	Aug 6-11	Yellow, freestone			

PLUMS							
(European)		Stanley	Aug. 20-Sept. 10	A prune plum, self-fruitful	20x20	One year old	Fall
	*	Bluefre	Sept 1-15	Stanley x President cross		trees	or Spring
	*	President	Sept 10-20	Large, late ripening			
(Japanese)	*	Methley	June 15-25	Red flesh, partly self-fruitful	20x20	One year old	Fall
		Bruce	June 15-25	Very productive, self-fruitful		trees	or Spring
	*	Ozark Premier	Aug. 10-20	Large, yellow flesh			
CHERRIES		Early Richmond	May 20-June 1	The standard of sour or pie cherry,very consistent	20x20	One or two year old trees	Fall or Spring
	*	Kansas Sweet	May 22-June 5	Duke cherry (semi-sweet)			
		Montmorency	June 3-15	The standard of sour or pie cherry, very consistent			
		Northstar	June 5-20	Sour or pie			
		Meteor	June 5-20	Sour or pie (resistant to leaf spot)			
		Stella	June 5-20	Sweet (self-fertile)			
APRICOTS		Tilton	June 25-July 5	Commercial production should not be attempted	20x20	One year old trees	Fall or Spring
PEARS	*	Moonglow	Aug 10-Aug 25	Fireblight resistant	25x25	One year	Fall
	*	Maxine	Aug 25-Sept 5	Fireblight resistant		old trees	or Spring
	**	Magness	Sept 5-Sept 15	Fireblight resistant			
STRAWBERRIES		Earliglow	May 5-June 5	Incorporate organic matter	2x4	One year	Fall
		Sunrise	May 5-June 5	ahead of planting strawberries;		old plants	or Spring
		Atlas	May 10-June 10	select virus indexed plants			
		Allstar	May 10-June 10				
		Cardinal	May 10-June 10				
		Delite	May 15-June 15				
		Marlate	May 15-June 15				
BLACKBERRIES							
(Erect)		Choctaw	July 1-10	Very sweet	3x8	One year old	Fall or
		Womack	July 1-10	Very sweet		root cuttings	early spring
		Cheyenne	July 10-30	Large very sweet			
		Cherokee	July 10-30	Medium large, very sweet			
		Shawnee	July 10-30	Latest ripening, high yields			
		Brazos	July 10-30	Good flavor. Southern Oklahoma only.			
(Erect Thornless)		Navaho	July 20-Aug 5	Sweet	3x8	One year old	Fall or Spring
		Arapaho	July 20-Aug 5	Sweet	3x8	root cuttings	
(Trailing)		Boysen	July 10-30	Trellis or other support	8x12	Tip layers	Early Spring
		Young	July 1-20	required			
(Trailing Thornless)		Hull	July 20-Aug 5	Trellis or other support required6x10		One year old	Fall or Spring
		Chester	July 20-Aug 5	Trellis or other support required		plants	

GRAPES	Venus	July 15	Red, table-seedless			
(Bunch)	Aurora (S 5279)	Aug 1	White, wine type	8x10	One or two	Spring
	Seyval Blanc (SV 5276)	Aug 8	White, wine type			
	Villard Blanc (SV 12-375)	Aug 18	White, wine type			
	Rougeon (S 58908)	Aug 10	Blue, wine and juice			
	Delaware	Aug 15	Red, wine and table			
	Catawba	Sept 1	Red, wine and table			
	Verdelet (S 9110)	Aug 10	White, table			
	J.S. 16-104	Aug 1	Red, table			
	Romulus	Aug 20	White, table-seedless			
	Himrod	Aug 15	White, seedless			
	Fredonia	Aug 8	Blue, table and juice			
	Niagara	Aug 20	White. table and juice			
	Carman	Aug 22	Blue, juice, for southwest Okla.			
	Saturn	Aug 15	Red, table seedless			
	Reliance	Aug 15	Red, juice, jam, seedless			
	Mars	Aug 15	Blue, table, juice, jam, wine, seedless			
	(Muscadine)	Adapted for McCurtain and Choctaw counties only. Variety information available upon request.		14x10	One year old vines	Fall or Spring
BLUEBERRIES	* (highbush)					
	Collins	June 5-June 19	Soil must be quite acid	4x6	12" to 18" well	Early
	Spartan	June 7-June 21	(pH 5.0). May require		rooted plants	Spring
	Blueray	June 12-June 28	sulfur to change			
	Bluecrop	June 15-July 1				
	* (Rabbiteye)					
	Premier	July 5-July 19				
	Climax	July 10-July 30				
	Tifblue	July 20-Aug 3				
PERSIMMON						
(American)	Early Golden	September	For pollination, a male tree (pollen bearing) should be included in the planting or graft a male branch into a female tree	15 to 18	One or two year old trees	Spring
(Oriental)	Huchiya	November	Non-astringent when fully ripe	12 to 15	One or two year old trees	Spring
	Fuyugaki	November	Non-astringent			
	Tamopan	November	Astringent			
	Tanenashi	November	Astringent			
FIG	Ramsey (Texas Everbearing)	July to frost	For milder southern counties; have been grown in protected areas of Tulsa and Okla. City	8 to 10	One year old trees	Spring
	Brown Turkey	Aug. to frost				
JUJUBE						
(Chinese Date)	Lang	September	Used as sweet pickles, preserves, dried confections and fruit butter	18 to 20	One or two year old trees	Fall or Spring
	Li	September				
CRABAPPLES	Florence	August	Jelly and spice	20 to 25	One or two year old trees	Fall or Spring
	Dolgo	August	Jelly and spice			

*Needs cross pollinator. Those cultivars not marked with an asterisk are self-fertile.
**Pollen sterile
***Space does not permit listing of other satisfactory varieties. OSU Extension F-6210 contains additional recommended apple and peach varieties.

The Oklahoma Cooperative Extension Service
Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.
- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs. Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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