

## FRUIT TREES FOR DESERT CLIMATES

STARNOTE 505 April 2013

## Choose wisely for best results

Deciduous fruit trees do surprisingly well here in the Desert. One factor to be considered is called "Winter Chill Hours" and are expressed as "Low (400 or less), Moderate (400 to 700) and High (over 700) hours of winter temperatures below 45 ° F. The lower the winter chill requirement for a tree is, the better the chance for high production in our climate. Warmer winters will negatively affect high chill requirement trees more than those with low chill requirement.

Temperatures in the range of 45 to 55 degrees also have considerable benefit toward fruiting. Conversely, temperatures above 70 degrees during the cooling period may be detrimental to fruit production. Production is also affected by proper watering and fertilizing as well as unusual hot or cold spells during the flowering period.

Follow proper planting and care instructions described by StarNote 500, *Fruit Tree Selection, Planting and Care* and you will be successful. If you have specific questions about any fruit tree, discuss them with a friendly sales associate at any Star Nursery location.

**POLLINATORS:** Some fruit trees need pollinators in order to produce fruit. Any tree needing a pollinator usually needs a <u>different variety of the same fruit.</u> Some, but not all; are listed below. Peaches and nectarines can cross pollinate within certain limits.

**VARIETIES:** The following fruits are most often available and commonly grown in our climate with varying degrees of success. Citrus varieties are listed in StarNote 510, *Growing Citrus in our Climate*.

**ALMONDS** are among the easiest to grow of all fruits or nuts in the desert. Most varieties benefit from a pollinator. Almonds are drought resistant and produce better with deep, infrequent irrigation.

**APPLES** have been grown in our climate for some time. Harder, more tart apples seem to take summer heat well without turning mushy. All apples benefit from a pollinator. Yellow Delicious and Dorsett Golden pollinate most other varieties. Fruit is produced on short branches called spurs. These occur on wood at least two years old. Spurs may be productive for many years so restrict pruning on mature trees to removal of weak or dead wood and crossing branches. Young trees may take 3-5 years after planting to develop fruiting spurs.

**APRICOTS** bloom early and generally grow best where late frosts seldom occur. They are dependable, heavy bearers in desert climates. All are self fertile; chilling requirements are not a factor. Thin fruit in early spring, as necessary, to prevent overloading branches. Most container stock produces fruit the first year after planting. When the birds start pecking, it's time to start picking!

**CHERRIES** will survive in hot climates but they do not thrive. All sweet and most sour varieties have <u>High Winter Chill</u> requirements which makes them better suited to cooler areas. On young trees, thin, tender bark is best protected with white latex paint which prevents sunburn, splitting bark and helps prevent invasion by borers. Prune to maintain good branch structure only. Fruiting spurs are long-lived and do not need to be renewed.

**FIGS** are among the easiest fruits to grow in desert and semi-desert climates. Though naturally large in size, some varieties reaching 40 feet or more, all can be kept small by pruning heavily. In cooler areas they may freeze back in severe winters, keeping them in large shrub form. Prune out dead wood or runaway shoots annually and avoid high nitrogen fertilizers. Figs make excellent container plants. All varieties grown here are self-fertile.

**GRAPES** are easily grown in our climate. They tend to be a little smaller, but much sweeter than those grown elsewhere. Pruning for maximum fruit production is a complicated affair, but remember that next year's fruit is produced from this year's wood. In most cases, plenty of grapes will be produced on vines used to cover an arbor. When planted in southern or western exposures, they can provide valuable shade as well. The grape-leaf skeletonizer is a native pest that can destroy leaves. Control with *Spinosad*® or Bacillus thuringensis (BT) products.

**NECTARINES** tend to be shorter lived in our climate but produce excellent fruit; well worth your efforts. Trees are not

well suited for lawns and need regular fertilizing and pruning for best production. Keep tops of trees pruned to control size if desired. Dwarf varieties give full-sized fruit on 5 to 6 foot trees and are well-adapted to container gardening. Plant different varieties for early, mid or late season fruit. Thin fruit in early spring to avoid branch breakage.

**PEACHES** also have a relatively shorter life span (about 8 years) but produce heavily and are easy to grow, especially if planted out of lawns. All benefit from regular fertilization and pruning. Dwarf varieties give full-sized fruit on 5 to 6 foot trees and make great choices for container gardening. Plant different varieties for early, mid or late season fruit. Thin fruit in early spring, as necessary, to prevent overloading branches. Stone fruits ripen from the inside out and may smell ripe while still hard. If birds start pecking the fruit, it's a pretty good indication that harvest time is at hand. Pick when colorful and full-sized and they will soften nicely indoors in 2 to 3 days while retaining all their flavor.

**PEARS** grow remarkably well in our climate; not grown as much as they should be. Most varieties take lawn conditions better than many other fruit trees and have a greater tolerance for wet, heavy soils. Fruit is best if harvested **before** ripe and allowed to ripen indoors.

**PECANS** grow easily in the southwest, contrary to popular belief. However, container stock is sometimes difficult to find. They make excellent shade trees in large yards. Excellent soil drainage is required. Be sure to plant western varieties which are suited to hotter climates and alkaline soils. Most bear without a pollinator but all benefit from one. Mahan and Mohawk may be best since both are smaller and bear young.

Popular varieties. Cheyenne, Choctaw, Mahan, Mohawk, Navajo, Pawnee, Sioux, Tejas, Western Schley.

**PERSIMMONS** are highly ornamental and Asian varieties do quite well here. They will perform better with afternoon shade and amended, well-drained soil. The popular varieties most often sold are Fuyu and Hachiya.

**PLUMS** occur in Japanese and European varieties. Japanese strains typically have larger, juicer fruit and are used primarily for fresh eating. European plums include prunes which have higher sugar content and are good fresh or dried. Most varieties are well adapted to our climate and are self fertile except as noted. Prepare your soil well, make sure the drainage is good and give an iron supplement like *Ironworker* each year to control chlorosis.

**PISTACHIOS** grow very well here in the desert. If you enjoy eating them, you will need to plant a male (Peters) and a female (Kernan) in order to get fruit. The male will not fruit, but it's pollen is vital.

**POMEGRANATES** are among the prettiest, strongest and most productive fruits for dry climates. They tolerate heavy, alkaline soils, are extremely drought tolerant when established and make nice ornamental trees as well. Fruit is produced on new wood so prune to shape as desired. As fruit matures, watch for leaf footed bugs that can sour the fruit. Treat with Sevin® as needed. Dwarf flowering varieties produce no edible fruit but make a colorful, ever blooming accent to any dry landscape.

**Varieties.** <u>Utah Sweet</u> – reddish pink flowers spring through fall followed by lots of tasty, pink fleshed fruit on a short, bushy tree. <u>Wonderful</u> – bright, orange red flowers followed by sweet, reddish purple fruit on a fountain shaped tree to 10 feet or more.

## **REASONS TREES DO NOT FRUIT:**

**Age**: Many varieties need to be 3 to 4 years old or even older in the case of Pecans. Most container stock is fruiting age or within one season of fruit bearing age. Older trees may need pruning or proper fertilizing to produce.

Frost: Late frosts during blooming period, especially after a late winter warm spell.

Pollination: If you're buying a single variety, make sure it is self-fertile. Rains or strong winds can affect blooms and fruit

**Pruning:** Removal of fruiting wood or spurs or pruning at the wrong time will have severe impact on fruit production. Read Starnote 105, *Principles of Pruning* or ask a friendly Star Nursery sales associate.

**Location:** Planting in high wind areas can cause fruit loss. Chilling hours can be affected by how close the tree is planted to a warm object like a building or block wall.

**Watering/fertilizing:** Over-watering can cause premature fruit drop. Failure to use deep, infrequent watering techniques can also cause fruit drop. Lack of fertilizer at critical times, especially fall, or excessive nitrogen can negatively affect fruit production next year.

**Proper Planting or Drainage:** If a tree has been planted too deeply (soil over the root-ball) or the hole has bad drainage, there will be insufficient oxygen for the roots to properly respire (a vital process for a plant to convert sugars into energy), the tree is likely not to produce many (or any) blooms and often the fruit the sets will not grow properly. Watering too frequently will cause similar symptoms.

The following pages have more specifics on popular desert fruit tree varieties. Most are typically in stock at our stores, however availability can be seasonal.

Variety	Fruit Season	Skin Color Flesh Color	Chill Hours	Remarks
Almond, All- in-One	September	Brown shell White kernel	400	Self fertile. Sweet, soft shelled nut.  Dwarfing character. Good pollinator for other varieties.
Almond, Ne- Plus Ultra	September	Brown shell White kernel	250	Pollinate with Nonpareil. Sweet, large, soft shelled nut.
Almond, Nonpareil	September	Brown shell White kernel	400	Pollinate with All-in-One or Ne-Plus. Large soft shelled nut.
Almond, Mission	October	Brown shell White kernel	500	Pollinate with Nonpareil. Hard shelled nut.
Apple, Anna	June to July	Yellow white	200	Self-Fertile, but produces better with pollinator. Early season, crisp, flavorful fruit. Bears when young.
Apple, Dorsett Golden	June to July	Yellow white	100	Self-fertile. Medium sized fruit is sweet and firm.
Apple, Fuji	August to September	Green-red Cream-white	400	Self-fertile. Outstanding variety from Japan. Fruit is sweet and crunchy.
Apple Gala	July to August	Yellow-orange White	500	Self-Fertile. Excellent mid-season choice. Crisp, aromatic. Keeps on shelf well.
Apple, Yellow Delicious	September to October	Yellow white	500	Self-fertile. Excellent pollinator. Delicious, firm and crisp. Vigorous, early bearing tree.

Apple, Red Delicious	September to October	Red white	800	Partly self-fertile. Pollinate with Yellow del. Distinctive flavor.
Apricot, Royal	June to July	Orange orange	500	Self-fertile. Reliable heavy producer of sweet & flavorful fruit.
Apricot Moorpark	July	Yellow	600	Self-fertile. Rich flavor and aroma. Heavy producer.
Apricot Dwarf Garden Annie	Early June	Yellow	600	Self-fertile. Full sized fruit with excellent taste.
Apricot Tilton	Early July	Yellow Yellow	600	Self-fertile. Medium to large, rich flavor.
Cherry, Bing	Early June	Red red	700	Pollinate with Black Tartarian or Stella. Sweet dark red fruit.
Cherry, Stella	Late June	Red red	700	Self-feretile. Pollinates all sweet cherries.
Fig, Black Jack	June to August	purplish red	100	Self-fertile. Large fruit with sweet juicy taste. Grows to 10 ft.
Fig, Black Mission	June to August	Purplish Light red	100	Self-fertile. Medium fruit – good flavor. Tree grows to 25 ft.
Fig, Brown Turkey	June to August	Brown	100	Self-fertile. Medium sweet fruit. Eat fresh. Grows to 15 ft.

Variety	Fruit Season	Skin Color	Chill Hours	Remarks
		Flesh Color		
Nectarine Goldmine	July to August	Red blush white	400	Self-fertile. Favorite! Vigorous, heavy producer. Sweet aromatic and juicy. Freestone.
Nectarine, Dwarf Necta Zee	Mid-June to Early July	Yellow Yellow	500	Self-fertile. Grows to 6 ft. semi-cling fruit.
Nectarine, Panamint	Late July to Early August	Red	250	Self-fertile. Freestone. Aromatic and intense flavor.
Nectarine, LeGrand	Early August	Yellow-red blush yellow	700	Self-fertile. Clingstone. Bears consistantly
Peach, Belle of Georgia	August	Yellow White	600	Self-fertile. Large delicious, heavy producer. Freestone
Peach, Desert Gold	May	Yellow	350	Self-fertile. Medium tasty fruit. Heavy producer. Freestone
Peach, Dwarf Bonanza	June	Yellow	250	Self-fertile. Large freestone. Delicious flavor.
Peach, Dwarf Bonfire	June to July	Yellow	250	Self-fertile. Grows to 6 ft. Large freestone fruit.
Peach, Early Elberta	Early July	Yellow-red blush yellow	400	Self-fertile. Rich sweet freestone fruit.
Peach, Elberta	Late July	Yellow	600	Self-fertile. Rich sweet freestone fruit.
Pear, Bartlett	August to September	Yellow white	500	Self-fertile. Vigorous growth, sweet fruit.

Pear, Keiffer	October to November	Green-yellow white	400	Self-fertile. Coarse, crisp and juicy fruit. Stores well.
Pear, Shinseiki	Late July to Mid-August	Yellow	350	Semi-self fertile. Pollinate with 20 <sup>th</sup> Century for better production.
Pear, 20 <sup>th</sup> Century	Late July to Mid-August	Green	400	Semi-self fertile. Pollinate with Shinseiki for better production.
Persimmon, Fuyu	October to November	Orange Light orange	200	Self-fertile. Most popular persimmon. Flat fruit, not astringent.
Persimmon, Hachiya	November to December	Orange-red orange	200	Self-fertile. Commercial variety. Astringent until soft.
Pistachio, Kerman (fe)	September	Brown Reddish	200	Pollinate with "Peters" flowers are dioecious. Sweet tasty nuts.
Pistachio, Peters (male)	September	none	200	Pollinate with "Kernan" flowers are dioecious. Does not fruit.
Plum, Green Gage	July	Yellow-grn amber	500	Self-fertile. Rich flavor, great for eating or cooking.
Plum, Howard Miracle	Late July	Yellow Amber	400	Pollinate with Santa Rosa. Delicious freestone fruit.
Plum, Santa Rosa	Mid-June	Purple red	400	Self-fertile. Delicious freestone fruit. Good pollinator for other varieties.

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