Brazoria County Master Gardener Association
2013 Citrus and Fruit Guide

A Guide to Proper Selection and Planting Tips for Brazoria County Gardeners

B.E.E.S—Brazoria Environmental Education Station
B- Be aware of the environment
E- Endeavor to protect our natural resources
E- Educate our community
S- Serve as stewards of the Earth
FOREWORD

The Brazoria County Master Gardener (BCMG) program is part of the state organization affiliated with the Texas A & M Extension System. We are a 501C3 organization under IRS statutes. Monies collected from this sale supports the B.E.E.S. educational and demonstration gardens located at the end of CR 171. One of this years’ major projects is to build walkways which meet handicap standards and for our senior citizens. The gardens are open on Tuesdays and Fridays to the public. Special topic programs are offered on Saturdays for public attendance and are advertised in local newspapers and radio. The gardens include eating fruits (berries, fruit, etc.), herb garden, tropica ls, veggies, rose garden, two greenhouses other demo/experimental plants.

The contents of this brochure utilized multiple resources from leading agricultural universities, Texas and other state and national organizations. Fruit plants are selected on basis of Master Gardener feedback in our county as well as neighbor counties. Past demand & interviews of folks after each years’ February sale help us select new varieties and determine plant volume each year at the sale.

BCMG makes genuine efforts to provide the public with information on plants offered. Other than assuring the public that we use only licensed nurseries, BCMG cannot assure success.

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APPLES

Anna Apple—(*Malus domestica*) Fruit is attractive, large, light greenish-red, slightly acidic, sweet and crisp. Crop is light, but is a reliable fruit producer early on. Harvest time is mid-summer to late September. Apple candidates for cross pollination are: 'Liberty', 'EinSheimer', 'Dorsett Golden', 'Spartan', and 'Gala'. Adaptable in Houston area. Careful early training, annual pruning and shaping are required to insure healthy and productive trees.

Golden Dorset—Golden/Yellow with red blush. Requires a minimum of 150-250 chill hours. It ripens from the middle of June to mid July. The firm, crisp flesh is very sweet and tart at the same time. This makes it a superb choice when making pies, desserts and sauces. Well known for holding its flavor during any baking or cooking process. Needs a cross pollinator. This means that in order to blossom and then produce, it needs a different variety of apple tree to be planted close by (¼ acre radius) Some popular choices for the 2nd tree are the Anna or EinSheimer. Full sun.

AVOCADO—*Persea Americana*

First year care is most important. Plant in an elevated bed (8-10 inch) as they do tolerate wet feet. Cover with shade cloth through the first Texas hot summer months. Cold hardy avocados are a chance Texas discovery by folks in Devine, Pearsall and Uvalde. An entire industry was started as nurseries began to cross varieties and meet the demand. Freezing weather is not a major concern due to the cold hardiness of the tree. Tree death is rare, die back and loss of leaves does occur in severe freezes including 2010. Most folks tent cover their avocados and place heat source under canopy when a heavy freeze is predicted. Frost is the major mean guy. Cold hardy avocados produce thousands of blooms beginning in mid February. Late frosts will cause bloom drop. Covering avocados will prevent frost from reaching the blooms. Avocados mature on the tree. They ripen after you pick them and store in your home. Home A/C provides ideal ripening conditions. After a few days, the rock hard fruit begins to soften. The fat found in the creamy flesh is monounsaturated, the kind that you want for a healthy heart. There are three major groups: Guatemalan, Mexican and West Indian. Only cold tolerant Texas varieties will be offered as opposed to California avocados which require two plants for production. Each successive year produces more fruit as the tree grows. A “Joey” has produced over 100 fruits in its 6th year in Brazoria County.

Lila—"Lila" bears a medium-sized, dark green skin, pear-shaped fruit in the early spring season. The fruits of this cold hardy tree, which reaches heights of 10 to 15 feet with proper care, have a rich, pleasant taste and a high oil content. A Mexican variety and is cold hardy to the mid-teens.

Joey—Discovered by Joey Ricers in Uvalde, Texas. Joey is a medium sized avocado weighing approximately 6-10 ounces with a thin purplish-black skin and egg shaped. It is also known to be a heavy bearer. Cold hardy avocado mature trees have withstood temperatures as low as 15-18 degrees. Rich creamy smooth tasting.

Mexicola Grande—Hardy to mid 20’s. Turns to a deep purplish black at maturity. The flesh has a rich creamy texture. Its flavor is rich, nutty and smooth. Medium size and weighs an average of four to 6 oz. A consistent large bearer. Ripens August to October.

**BERRIES—BLACKBERRIES**

This fruit is not a true berry; botanically it is termed an aggregate fruit, composed of small drupelets. They typically have biennial canes and perennial roots. Blackberries and raspberries are also called cane berries or brambles. It is a widespread, and well known group of some 400 species. A & M developed the first Texas cultivar in 1959 called “Brazos”.

University of Arkansas & A & M are now the leaders of our southern berry. Researchers have known for quite some time that berries contain high levels of antioxidants. Blackberries typically peak during June in the South. No substantial common diseases observed. One of the most carefree fruits. The most common ‘pest’ is the mocking bird when the berry turns red in color.

**Kiowa Blackberry**—Released in 1996 Univ. Arkansas. Among the largest and productive in coastal Texas. 11–13 grams/berry, silver dollar size. Ripening begins in June and continues for 6 weeks. Brazoria County Master Gardener reports a consistent average of 6 lbs./week on 6 plants during the first year. Has thorns but makes some of the finest jelly, jams and pies.


**BERRIES—BLUEBERRIES**

The Brazoria County Master Gardeners have been growing “blues” at their experimental station for several years. One of the few fruits native to North America. Grouped into smaller species known as “Lowbush blueberries” (synonymous with “wild”), and larger species are known as highbush blueberries”. High in antioxidants and anthocyanins (blood pressure control). 4’ x 4’ area/plant. Southern highbush blueberries are the earliest blueberries to ripen in North America. With good pollination, berry yields of 2 to 5 pounds per plant may be expected by the 3rd or 4th year. Plant at least 20 ft. from any building. Blueberries require a soil pH of 4.0 to 5.5, very acid. Soil can be acidified by thoroughly mixing a small amount of granulated sulfur into the soil before planting and/or planting with sphagnum peat moss. Folks report good results with only peat moss but one needs to completely water and completely drain if planted in large containers. Must have 2 plants. 150–300 chill hours.

**Jewel Blueberry**—A southern highbush. Is a patented release from the University of Florida with a moderately low chilling requirement, very early ripening, and high berry quality. Harvest is mid-late spring.

**Misty Blueberry**—Southern highbush, 6 feet tall at maturity, fruit ripens early May, yields are high, fruit size is large (some 60 berries per cup), fruit quality very good, berries are firm, vigorous grower. Misty is often used to pollinate other blues. Self Pollinating.

**BERRIES—STRAWBERRIES**

It is NOT a berry as seed is on the outside. By botanical definition, fruits contain seeds, vegetables do not. That's why tomatoes are correctly fruits, not vegetables. Same with peppers, cucumbers, beans, and peas. So where does strawberry belong? It's an accessory fruit, or pseudofruit, by botanical definition.

**Eversweet Strawberry™**—Commonly called Eversweet. Bred for the South. Tolerates temperatures to 100°F and thrives in our humidity. Produces exceptionally sweet berries. Space 12 – 24 inches setting crown just below soil level in full sun. Self pollinating and blooms May – August. Yields 1 – 2 pints/plant. First crop in Spring with subsequent crops at 6 week intervals throughout summer. Unlike Junebearers this guy is not sensitive to length of day.
CITRUS

All citrus require full sun. Citrus are productive fruit trees for the homeowner, especially in Brazoria County. The fruit begins to mature in November. Normally one can pick and eat into February each year. Citrus stores well on the tree, and is easy picking through February. Any residual fruit that you have not given away can be made into glazes and delicious marmalade. One concern for home gardeners is the survival of trees after ‘hard freezes’. Our working definition of a ‘hard freeze’ is freezing temperatures lasting at least 3 continuous days. Brazoria County has had ‘hard freezes’ in 1989 and 2010. During 2010 temperatures of 19º to 32 º for 42 continuous hours were reported by a Master Gardener in northern parts of the county with no tree death. Tree age ranged from 4 – 10 years. Dieback was certainly (dead branches) noted and varied with the age of the tree.

There are four major groups of citrus: grapefruit, lemon, lime and oranges. Oranges are subdivided into sweet oranges (C. sinesis) and the mandarins/Satsuma/tangerine (C. reticulata). Over the past years, thousands of varieties have been developed.

Gardeners can choose from these multitude of citrus, however, most folks accept Trifoliata as THE rootstock of choice. Trifoliata is much more cold tolerant than citrus coming from the Texas valley where they use Sour Orange for rootstock. Miniature or dwarf citrus is achieved by grafting onto a different rootstock (Flying Dragon), a cousin to Trifoliata.

Folks frequently ask about planting their citrus seeds. About 95 % will come true, but you wait 6-7 years to eat your first fruit. Most choose to get a grafted tree and start enjoying yummy fruit the next year after planting.

**CITRUS—GRAPEFRUIT (C. paradise)**

Grouped according to pulp: white or red flesh (meat). Grapefruit was originally named the “forbidden fruit” of Barbados. These evergreen trees may achieve 10-12 feet tall in about 10 years with our temperatures and soil conditions. They were developed from a cross of the pomelo (Citrus maxima) with a sweet orange (Citrus sinensis). Excess fruit (not given to your neighbors) makes for top notch glazes.

**Cocktail Grapefruit**—Also known as Mandelo is a cross between Frua Mandarin and a pommelo. This exceptionally sweet and juicy fruit was developed by U.C. Riverside. It has a thin deep yellow skin, fragrant, and extremely succulent. Fruit is seedy. Juice is out of sight or use in cocktail, smoothie, jams or frozen desserts and taste of this unparalleled sub-acid flavor.

**Oroblanco (UCR) or Oro Blanco**—White flesh. Patented by U.C. Riverside, also called Sweetie. Cross of pomelo and white grapefruit. One of the real sweet of all grapefruits. Plants at 12 years are at 12-14 ft. Off the tree eating is a pleasant experience.

**Rio Red**—Red flesh. Derived from Ruby Red which started the Texas industry. Discovered as a chance mutation in the valley in 1929 and was the first fruit to receive a patent trademark. Rio Red is marketed as Rio Star. Rio Red has a smooth, thin yellow rind blushed with a red once mature. Flesh is deep red and juicy with few seeds. Ripens mid to late November. Holds well on the tree through February.

**CITRUS—LEMONS (C. limon)**

**Improved Meyer Lemon**—This is not a true lemon. Scientists believe the Meyer lemon is a cross between a lemon and an orange. Frank Meyer, a plant explorer for the USDA, found them growing near Peking and introduced them to the U.S. in 1908. This yellow lemon matures in October with a tart taste progressing to a rich golden color with an orange like sweetness come January Absolutely tasty in a homemade lemon pie. 8 to 10 feet tall.

**Lisbon**—Bright yellow, smooth thin skin. Considered seedless. Medium sized vigorous, dense growing tree with light green foliage and thorns. New growth is tinged bronzy purple. A bit more heat tolerant than Eureka. Homegrown fruit is medium to large size Eureka. Very juicy and highly acidic. Ripens in October and is slightly more juicy vs. Eureka.
CITRUS—LEMONS (*C. limon*) Continues

**Pink Variegated (Eureka) Lemon**—Green & yellow striped variegated skin, pink flesh with clear juice and wonderful lemon flavor. Has few seeds and a nice tartness. Well suited for desserts given their strong flavor and a magnificent lemonade. Grows 12—16 ft. and is self fruitful. Leaves are also variegated to make a beautiful display outdoor. Containers should be at least 24” if used as a patio plant.

CITRUS—LIMES (*C. aurantifolia*)

There are two major acid, or sour limes in world trade, Mexican and Tahiti or Persian. The one best known and most widely cultivated is the Mexican, West Indian, or Key lime, *Citrus aurantifolia*. In Florida it is called Key lime. There is now a thornless lime available. Size of fruit can vary from large walnut size to lemon.

**Key Lime Thornless**—Compact enough even for urban balconies and limited-space gardens, Key Lime will begin bearing small, juicy, thick-skinned fruit at an early age! Even if there were no fruit at all, this evergreen would be attractive enough to grow as an ornamental. Mature fruit is small, green to yellow green ripening in July to December.

**Mexican Lime**—Is more sensitive to cold than the lemon, and can be grown only in protected locations. Most homeowners prefer to pot in a large container which can be brought inside during freeze warnings. The Mexican lime blooms/fruits multiple times during the year which provides almost year round fresh fruit.

**Persian or Tahiti**—The large, green, seedless limes found in your supermarket is the Persian or Tahiti Lime (*Citrus latifolia*) a hybrid developed in the early 20th century. The fruit is larger than the Key Lime, more resistant to disease and pests, and has a thicker rind. Commercially, are picked slightly immature, while they are still green in color (they turn yellow when fully ripe, and might be confused with lemons). The nearly-thornless trees grow vigorously to a medium-large size with a spreading form and have white blossoms. Persian lime trees are more cold-hardy than Mexican lime trees.

CITRUS—MANDARIN ORANGES (*C. reticulata*)

This group, botanically classified as *Citrus reticulata*, includes such varieties as Owari, Miho and Brown Select Satsumas, Dancy tangerine and tangerines in general. Most are sweeter than their other citrus cousins, have a bright orange skin that is easy to peel, and inner segments that are easily separated. The fruit is oblate, rather than spherical, and roughly resembles a pumpkin in shape. Of all citrus, Satsuma have shown the highest quality and most cold tolerance in field research by the Texas Cooperative Extension. “Satsuma’s cold tolerance extends to the mid-20s.”

**Brown Select Satsuma**—Fruit is yellow-orange in skin color when mature. Trees are very productive and have an open spread-branching pattern. Harvest from mid-October into early November. Ripens one to two weeks before the Owari (early to mid October). Fruit of the Brown select is often ready to eat when rind is changing color. Fruit holds well on the tree until end of December. Medium to large tree.

**Owari Satsuma**—Medium sized, bright orange fruit, often with a slightly bumpy rind. Fruit has an extremely sweet, sprightly flavor and is seedless. Very easy to peel and breaks off into segments. Ripens mid to late October and is often ready to eat when rind is still green. Fruit holds well on the tree until late December, early January. The primary Satsuma cultivar commercially grown worldwide. Typically grows to 8 ft.

**Atlas Honey Mandarin (Murcott)**—Murcotts are among those citrus that mature ("ripen") independently of skin color. The peel color change is triggered by chilly night-time temperatures. Nights below 55F and above freezing create the orange color.
CITRUS—MANDARIN ORANGES (C. reticulata) Continued

**Mandarin: Kishu Seedless**—This tiny mandarin, originally from China by way of Japan, is one of the first to ripen in the fall and holds on the tree well into the new year. Usually no bigger than a golf ball, they are like eating citrus candy. As the name implies, they are totally seedless, delicious, and super easy to peel. You can enjoy this gourmet treat.

**Mandarin: Ponkan** (C. reticulata Blanco)—Probably the most grown mandarin worldwide. An upright and vigorous grower which attains a medium size (15 ft.) at maturity. Fruits are oblate in shape and easy peel “zip” skin (light orange). Orange flesh is tender, juicy with a mild pleasant flavor. Aromatic.

**Nules Clementine**—The most popular Clementine in the world. They are seedless or near seedless and are readily grown as container plants. Ground planting to 8 ft.. A favorite for the organic folks. Often called a “lifetime of sweetness”.

CITRUS—SWEET ORANGES (C. Sinesis)

Columbus is credited with bringing sweet orange, lemon and citron seeds to Haiti during his second voyage in 1493. In 1513, Juan Ponce de Leon brought sweet orange and lemon seeds to what is now Florida. Sweet orange cultivars can be categorized into four distinct groups: round oranges, navel oranges, blood oranges, and acidless oranges (small group). Red pigmentation varies with climate and can be intense when blood oranges are grown in regions with large diurnal fluctuations in temperature.

**Moro (Blood)**—The Texas mid-coast has a good temperature variance which produces a rich ‘redness’. Small to medium with a thin orange rind becoming bright red blushed at maturity. Flesh is juicy with few seeds and can range from light orange/red early to red later in the season. Flavor is rich and distinctive at peak maturity with a very distinctive aroma. Ripens early to mid January. Holds well on the tree until March.

**Murcott**—The Murcott orange is the first fruit of its kind to be sold by the product name of honey tangerine. Considered as a tangerine by many, it is a tangor (C. sinesis X C. reticulata). The fruit is yellow-orange, smooth and glossy. It has thin, easy to peel skin and ripens December -January. Murcott can readily be grown in containers inside or outside.

**Navel**—Characterized by growth of a second fruit at the apex which protrudes and looks sort of like a human navel. Long growing season make them very popular. Considered by many as the best in the world for eating off the tree. Meaty flesh, thick rind, easy to peel segments separate easily and are seedless. The navel is the hardiest of the oranges with a fruit that is medium to large in size. It is an attractive and heavily bearing tree with fruit ripening in the fall. Hardy to about 24 deg. F.

**Pineapple Orange**—An orange with a slight pineapple tropical kick, 'Pineapple' orange originated from seedlings planted about 1860 near Citra, FL. Fruit are medium large, somewhat flattened on both ends, with a moderately thick, smooth peel that develops good orange color under cool night conditions. Juice color and quality are very good. It usually contains 15-25 seeds. 'Pineapple' matures about Thanksgiving in the Valley.

**Republic of Texas**—First citrus reported in Texas, at Angleton (1847). Grows to 15x15 ft. Survived the 2010 severe freeze when temperatures were below freezing for 42 continuous hours down to 19 F. Produces a nice size orange, very sweet, juicy, highly flavorful and slightly seedy.

**Valencia**—Considered as seedless (0-7). The most planted orange world wide. "King of the orange juices". Popular late season orange, late Spring to early Summer, when navels are out of season. Easy to peel. Nice orange flesh, skin turns from yellow to golden at maturity.
FIGS (*Ficus carica*)

The edible fig is one of the first plants that were cultivated by humans and originated in what is now known as Iran and has been cultivated since as early as 5,000 BC. Introduced to the Americas in 1575 by Spanish explorers in Florida. Figs are a deciduous fruit tree growing 8 to 10 feet tall and 10 to 12 feet in width. They grow best in full sun, with a western or southern sun exposure. Containerized figs have same requirements, but must be watered more often. A blend of figs makes preserves as good as grandmas. We did our last canning in December.

**O’Rourke or Improved Celeste**—Developed By Dr. O’Rourke at LSU. Produces a small-to-medium-sized fruit, brown in color with tan pulp. The eye is partially closed with the aid of a honey-like substance. Fruit ripening is early July. Fruit is of good quality for eating fresh and for preserving. Matures 8 X 10 ft.

**Texas Everbearing**—Also called Brown Turkey. Produces a large crop of succulent brownish-purple fruit, with deep burgundy pulp. The early crop ripens in May; the main crop ripens in late June and continues to ripen into August. Fruit has a mild sweet flavor. Moderately closed eye. Ideal for preserves or eating fresh. Matures 12 X 12.

**Italian Honey**—Also called Italian Everbearing Fig. A large, reddish-brown fig with pink, sweet flesh. It is a very prolific bearer and will set a new crop after the previous one. Incredible sweet flavor pulled right from the tree.

**Golden Celeste**—A product of the LSU fig breeding program in the 1950’s developed by Dr. E. O’Rourke. Also called Champagne, a splendid deep yellow to gold skin with tan to caramel flesh. Tight eye which resists spoilage in inclement weather (rainy).

JUJUBE

The Jujube, also called Chinese Date, originated in China some 4,000 years ago and made its way to the U.S.A. in 1837. This fruit can tolerate the hottest summertime temperatures and winters down to −28 F. It requires low chill hours to set fruit. This naturally drooping deciduous tree may reach 30 ft. in 30 years in year round warm climates. The shiny 2 inch bright green leaves turn to a bright yellow come Fall. It has a thin skin which is edible along with flesh. Usually has a single stone or pit.

**Sugar Cane Jujube**—This self fruitful delight reaches 15-20 ft. in height and same spread at maturity. The very sweet, round to slightly elongated fruit has an apple like texture. Heat tolerance into 100’sF, excellent humidity tolerance, adaptable to many soil types and one of the few fruits with a good deer resistance. 150 chill hours.

KIWI

Known as kiwifruit, is native to southern China. Referred to as Chinese Gooseberry in New Zealand and became exceedingly popular with American servicemen in New Zealand during WWII. This fuzzy, edible berry fruit prefers our summer heat and needs heavy pruning (as grapes do) due to vigorous growth. Like grapes, it needs structure for supporting its thin runners. Fruit is borne on one year or older canes. Canes should be pruned after the third year of production, Hardy Kiwi (*A. arguta*) is smaller than the typical super market kiwi (*A. kolomikta*).

**Issai Kiwi**—A hardy variety (25 F) and self fruitful requires 150 days (5 months) of growing season. Needs a trellising system. Produces elongated 1 1/2 inch fruit one year after planting. Very good to excellent heat and humidity tolerance., Creamy white flowers (male & female) in June produce grape sized smooth skinned fruit which can be eaten straight from the vine. Contains eight times more vitamin C than oranges.
**KUMQUATS (Fortunella spp)**

Kumquats are not citrus but belong to another genus, *Fortunella*, “cousins” to the citrus. Kumquats are a group of small fruit-bearing trees that are slow growing, evergreen shrubs, or small trees with dense branches. Kumquats originated in China and have long been cultivated in Japan. They were introduced to Europe in 1846 by Robert Fortune. The Kumquat was shortly thereafter introduced into North America.

**Meiwa**—The most popular kumquat for eating out of hand. It is the best all around natural kumquat, especially when it comes to sweetness. A short, oblong to round fruit, about 1 1/2 in wide; peel is orange-yellow, thick, sweet and yummy to eat.

**MULBERRY (Moraceae)**

An aggregate fruit similar to blackberry, therefore not a true berry. Succulent, tart and sweet. The red or American mulberry is native to eastern United States from Massachusetts to the Gulf coast. The black mulberry is native to western Asia and has been grown for its fruits in Europe since before Roman times. Many old Texas farms and homesteads have an old mulberry trees where grandma would have choice words when someone tracked purplish stuff on her clean mopped floor. Hybrids are a terrific advance in flavor.

**Pakistan Mulberry** The “oh my gosh what is that fruit” tree. Most folks Used to consider this fruit for birds rather than humans. This recent hybrid grows berries some 2 1/2” to 4” long and 3/8” diameter. The fruity flavor has a nice balance of sweetness and acidity. Just grab a stem and strip the flesh off with your teeth. Even more amazing, the juice does not stain. Flesh is firmer than most other cultivars. Sweet with a nice balance of flavors. Large heart-shaped leaves. Recommended for the deep South and mild winter areas.

**OLIVE TREES (Olea europaea)**

History goes back to Greeks and Romans. Probably introduced to the Tejas (Texas) area by the Spanish via Mexico in the 17th-18th Centuries. A & M show pioneering work in the 1930’s. Unlike other fruit trees such as the peach, the olive does not set fruiting buds in the fall. Instead, the olive will only set flower buds after being exposed to cool night and warm day temperatures during the winter. The Olive tree is the most cold hardy of all subtropical fruit trees. There has been an olive orchard in nearby Danbury for several years. The graceful slender green with silver underside leaves lends a beautiful sight during any breeze. Some folks say that if you soil is good for nothing, plant olives! Normal fruiting is 3 years post ground planting.

**Arbequina (Spain)**—Self fruitful and grows to 12-15 ft. high. Cold hardy to 22-25 F. Will produce at the 3rd year post ground planting. The fruit is highly aromatic, small, symmetrical and dark brown. Adaptable to different conditions of climate and soil, although it does best in alkaline soils. Thrives in long, hot, dry summers, but is frost-hardy and pest-resistant. Matures in November

**Arbosana (Spain)**—Pollinator of choice is Arbequina. Bears in alternate years. Cold hardy in our area (22-25 F.) and grows to 12-15 ft. Olive trees start producing olives after two years, and reach full fruiting in five years. Greenish with yellow overtones at maturity late November. Similar characteristics as Arbequina.

**Pendilino Olive (Italy)**—Also known as Tiny Kalamata. This Italian heritage weeping tree is slow growing. Partially self fruitful, and used extensively as a pollinator. Olives are green and black, depending on when you pick them. Matures to 30 ft. high. Fruit matures in November. Cold hardy in our area.
PEACHES (*Prunus persica*)

The **Peach** is native to China and are stone fruits (drupes). Do not buy a peach tree unless you know the variety. Each variety has a known annual chill hour requirement, winter between 33° to 45° F. Each variety has to break dormancy and induce normal bloom and vegetative growth. Texas A&M has established that Brazoria County is in the 450 chill hour or less zone. Translation: buy peach trees with 450 hrs. OR less. The Master Gardener weather station in Angleton keeps records of chill hours. *Chill hour average for 2009 & 2010 was 712 hours. We had feedback of bumper crops of peach and plum varieties.* The cold winter weather of 2012-13 should yield a bountiful stone fruit crop. Peaches are the leading deciduous fruit crop in Texas. Peach varieties requiring 200 or less chill hours include: Earligrande, FlordaGrande, Flordaglo, Flordaprince, May Pride, Mid Pride, Tropic Beauty, Tropic Snow, Tropic Sweet and Valle Grande. Those that require 225 – 450 chill hours include Flordacrest, Florida King and Flordestar, Red Baron. Spacing minimum of 10-25 feet. Mature height 10 to 20 feet.

**3-1 Peach**—At press time we did not know which three peaches would be on this single delight. The nursery has assured us that all varieties grafted onto this tree would have low chill hour varieties consistent for Brazoria County. Varieties will be available come sale date. Can you imagine the blossom show time this Spring and then the munchy, yummy delight of three different peaches!!!

**May Pride**—Very early ripening peach for our coastal area. Add this delicious tangy, sweet yellow semi-clingstone, red fuzzy prize to your yard collection. This large showy pink blossoms and self fruitful peach will have juice running down your mouth come Man/June. (175-200 chill hours)

**Mid Pride**—Yummy dessert quality of exceptional flavor. It is yellow freestone that ripens mid June and is self fruitful. Heavy bearer and Gardener needs to thin baby fruits or have multitudes of small fruit rather than dozens of large fruit.250 chill hours.

**Red Barron**—A patented variety of unsurpassed excellence. Delicious 3” diameter fruits ripen over an extended period of time from July to mid-August. Not only is the fruit a large, beautiful red skin, but the tree itself is prized for its large double red blossoms that cover the tree for several weeks in early spring. Yellow flesh freestone. Low 250-300 chill hours.

**Tex King**—Large freestone, firm yellow flesh oozing with sweetness. Ripens May to June. Texas A&M introduction. Certainly one of the most planted peaches by home gardeners. Shipped bare root and mulch packaged. See “planting tips” section.400 chill.

**Tropic Snow**—White flesh semi-freestone ready to eat mid May - June. This peach has become so popular that local retail nurseries sell out fast. Has been very successful in Brazoria County A sweet, low acid peach. A ‘you gotta have one’ variety. 200 chill hours.

PEARS (*Pyrus* species)

The cultivation of the pear extends to antiquity. A pear tree is a medium sized tree reaching 10–20 ft. tall, often with a tall, narrow crown. They are medium-sized trees, some reaching 25 ft., narrow crown to 8 ft. wide. Pears in bloom is a snow storm of glistening white. Most pears are deciduous and are cold-hardy. Pear production is best where two different varieties are in close proximity. (Same 1/2 acre). Distinctive bell shape. The skin ranges in color from green, yellow, red, brown, pink, or a combination of these. Pear flesh is white and juicy and grainy in texture. Of all the deciduous fruit tree species, pears are the most tolerant of wet soil conditions. But they perform best on deep, well-drained sites. Generally take three years to achieve full production.

**Acres Homes**—A very large fruit with a red blush on the exposed side. It bears heavily every year after three years and consistently. Acres Home makes a showy landscape tree. Pollinate with Southern Bartlett (S.Queen, Tennessee) 300 to 350.
PEARS (Pyrus species) Continues

**Hosui Pear**—This golden russet (white speckled) skin jewel is a consistent taste test winner. Hosui is an apple shaped juicy, sweet white flesh that ripens in August and stores well on the tree come the Fall. Has a vigorous spreading habit, unlike other columnar pear and matures to 10-15 ft. in height and 8-12 ft. spread. Fruit can be stored 4-6 weeks in the fridge. Not self fruitful, Bartlett is a good pearing partner. 450 chill hours.

**Southern Bartlett**—Exceptionally juicy and keep relatively well -- up to 2 months after maturing in August. Derived from Bartlett, the #1 variety world wide. Gets somewhat taller than Acres Home. Pollinating partner is Acres Homes and slightly smaller. 400-450 chill hours.

NECTARINE (P.persica var.nucipersica)

The history of the nectarine is unclear; the first recorded mention in English is from 1616. They differ from by one single gene, the gene for skin texture. Often erroneously believed to be a crossbreed between peaches and plums. They belong to the same species as peaches. Some have arisen from peach trees, often as bud sports. Ranges in skin color from white, pink, red, to yellow. White or yellow flesh and clingstone or freestone.

**Arctic Star**—Early-season, super sweet, white fleshed nectarine. Low in acid, no tartness. Rave reviews in trial tastings. Semi-freestone with beautiful dark red skin. Harvest in June. Self-fruitful. Patent #9332. (Zaiger family has developed a series of the Arctic nectarines.) Low chill, 300 hours.

**Panamint Nectarine**—Fruit is medium to large, freestone, bright red skin with excellent flavor. Midseason bearing. Most adaptable of all fruit trees for home gardens. Space to allow a spread of 20 to 25 feet. They begin to bear large crops at 3-4 years of age and reach peak productivity at 8 to 12 years. To maintain size and encourage new growth, heavy pruning is needed. (I use Herman Auer’s 40 % post harvest).250 chill hours. Matures July/August.

PERSIMMONS (Diospyros)

American persimmons are native American derived from an Algonquian word and is the only ebony wood native to America. A premier fruit that can be grown in the greater Houston area. They generally are light yellow-orange to dark red-orange in color, and vary in fruit size from ½ to 4 in. in diameter, and may be spherical, acorn, or pumpkin-shape. It is a true berry by definition. The Japanese varieties are favorites due to their eating qualities. We generally group into astringent or non-astringent. Persimmons need full sun, no standing water, and do not need a pollinator. Loses leaves in winter. Withstands freezes well. They have virtually no diseases and birds are the only pest, so they are easy to grow. Persimmon loose their leaves in winter.

**Fuyu-gaki**—When ripe the skin develops a deep orange color that shines brightly on a sunny day. Most popular persimmon trees in the United States. Is non-astringent which means that it an be eaten even in the unripe state with no bitterness and completely seedless. Tomato shaped. This deciduous tree is a very heavy and consistent bearer, reaching heights of 20 ft. tall and 15 ft. wide. Persimmon will live to temperatures falling below 5 degrees. There are 2-4 seeds per fruit and fruit size is 2 1/2 - 3 inches. Fruit ripens from September - October.
POMEGRANATES (*Punica granatum*)

Known for their knack to survive in many conditions in the southern sections of Texas (come varieties up north) and easy to grow. Most likely came via Spanish in 1500’s and Mexico then Texas. Nurseries were reported in 1860’s. They grow readily from seeds, and tolerate high pH soils and drought conditions. Grows as a shrub or tree with showy red-orange blossoms in the Spring/early Summer, Fruit should be picked before it gets to ripe as rain may cause the tight skin to break open. Pomegranates are a healthy source of antioxidants and vitamins B & C.

Ambrosia—Has the largest fruit of any pomegranate. The flavor of the tart and sweet juice and dark red seeds is as intense as other pom’s. Tree is long lived, tolerates many soils and self fertile maturing to 12-16 ft. Start harvesting in September or early October and enjoy a fruit with a good source of antioxidants. 150 Chill hours.

Texas Pink—Medium sized fruit, light pink with a tart and sweet flavor. Like Ambrosia, it tolerates many soils, is self fruitful, and matures to 12-15 ft. Sweet and tart flesh makes one want another then another. Low chill hours.

PLUMS (*Prunus*)

Mature plum fruit may have a dusty-white coating which is easily rubbed off, known as "wax bloom". Plum trees produce abundant crops with cold weather winters. The 2010 reports indicate a “best plum crop in 10 years”. 1989 was the nearest big producing year. 2011 certainly started as a cold year.

Santa Rosa—Produces an abundant harvest of sweetly flavored, dark purple fruit each year. Adaptable to most soil types and are self fertile. Cross pollination is not necessary, but will increase fruit production when a second plum tree is planted nearby. Santa Rosa tree takes up very little space, yet produces gobs of fruit. Fruit appear in mid-June and ripen in mid August. Delicious when eaten fresh and perfect for drying and baking.

Scarlet Beauty—A very low chill hour (150) plum with a deep purple skin, red flesh and excellent flavor. Self fruitful. Japanese dessert plum fruits are larger in size and much juicier and are most often eaten as fresh fruits because of their delicious blend of sweetness and acidity.

Weeping Santa Rosa—Feedback from the last 2012 sale seems to “demand” a weeping form of the Santa Rosa. This center piece in any landscape will leave your yard with bragging rights in the neighborhood. 500-600 chill hours.

TANGERINE

Sunburst Tangerine—A cross between the two citrus hybrids Robinson and Osceola in 1961. Medium size, about 2½ - 3 inches in diameter. Oblate and has a depressed navel. Rind is thin, smooth, and somewhat easily removed. Seed numbers will generally average between 10 to 20 seeds per fruit in most years. Reaches maturity by mid-November and will remain acceptable
WORKING DEFINITIONS

Sun—Continuous, direct exposure to 6 hrs./day

Full Sun—greater than 6 hrs./day

Chill Hours—Annual number of hours between 45 F & 33F.

Chill Hours in Brazoria County—2009 = 424, 2010 = 703, 2012/13 = 390(incomplete)

B.t.—Bacillus thuringiensis

Seedless—0 to 6 seeds per fruit

A & M Seedless—0 – 9 seeds

Clingstone Peach—Does not separate easily, but contains more pectin; therefore is the better canning peach.

Freestone Peach—Flesh separates very easily from the stone with circular cut

Deciduous—“falling off at maturity”. Typically used to describe trees or shrubs that lose their leaves seasonally.

Macronutrients—Substances needed for growth and other functions. Major macros are carbohydrates, protein, and fats which then used to produce energy through metabolism.

Micronutrients—Commonly referred to as ‘vitamins & minerals’ required in small quantities throughout life. Iron, magnesium, iodine, chloride, etc.

Russet—Reddish brown color (or red/gray by some folks).

Strawberry—At the beginning of the 17th Century, William Butler Wrote, “Doubtless God could have made a better berry, but doubtless God never did.”

REFERENCE SECTION

FERTILIZER:

Plants only absorb nitrogen in two forms: nitrates and ammonium, (ammonium sulfate). Any organic or inorganic material of natural or synthetic origin (other than liming materials) that is supplemented to a soil to supply one or more nutrients essential for plant growth and essential for high-yield harvests. In the 1960’s the National Fertilizer Development Center began development of control-release or coated delivery. Commercial fertilizers typically provide six macronutrients and seven micronutrients necessary to plants. Apply at the drip line. Keep mulch away from tree trunk.

Macronutrients—(N) nitrogen, (P) phosphorus, (K) potassium, (Ca) calcium, (Mg) magnesium and (S) sulphur.

Micronutrients—(B) boron, (Cl) chlorine, (Cu) copper, (Fe) iron, (Mn) manganese, (Mo) molybdenum and (Zn) zinc.

NPK—in the USA these three numbers on the fertilizer label represent an analysis of the composition by weight. These three numbers correspond to nitrogen, phosphorus, and potassium (N-P-K) and always appear in that specific order. The second value P is not elemental phosphorus but P2O5. The third value is not elemental potassium but K2O. For example a 50 lb. bag of 10-10-10 will contain 10 lbs. nitrogen, 4.4 lbs. phosphorus and 8.3 lbs. of potassium.


NOTE: ammonium nitrate has stringent federal regulations against use or possession since it an ingredient for terrorist bombs.

Apples—Generally fertilized with nitrogen each year, preferably ammonium sulfate. One month after planting, apply 1 cup over a 2-foot circle. In May and June following planting, add 1 cup around the tree. Spring of second season: 1 cup in 3 foot circle repeated in April, May and June. Year three: 2 cups, 4 times per year in March, April, May and June. Four year or older trees are considered mature. Growth of 12 to 18 inches per year is ideal for bearing trees. Apply one lb./inch of tree trunk diameter. An 8” diameter would get 4 lbs. at budbreak and the other 4 lbs. in May. If crop is poor or nonexistent, delete May application.

Avocados—Essentially the same as for other fruit trees in South Texas: ammonium sulfate (21-0-0). One half cup per month in the first year, one cup per month in the second year and two cups per month in the third year monthly from February to September. Thereafter, apply two cups per year per inch of trunk diameter, split into equal applications in February, May and September.
REFERENCE SECTION

FERTILIZER Continued:

**Blackberry**—Require about 1.25 pounds of ammonium sulfate per year, per plant. Rule of thumb: 1 cup = 8 Oz, 2 cups = 16 oz. or one lb. Apply fertilizer 12 inches from the plant. Apply all the fertilizer in the winter (Jan./Feb.) or in smaller increments during the growing season: one application in March, June, September.

**Blueberry**—Switch your horses because there guys MUST have very acid soil medium such as sphagnum moss. Caution: Blueberries are very sensitive to over fertilization! Subsequent years, use 1 ounce of fertilizer for each year from planting, a total of 8 ounces per plant/year. Apply early spring and late spring for best results. Always water well after fertilizing. For organic fertilizers, blood meal and cottonseed meal work well. Avoid using fresh manure. Aluminum sulfate sold as Azalea fertilizer at plant stores may also be used.

**Strawberry**—Plants are shallow rooted and near the surface so plants tend to use nutrients very quickly. Compost is a natural fertilizer that strawberries love. About two weeks before planting, incorporate 2 lbs. of 5-10-10 (or equivalent) for each 100 square feet of planting bed. Six to eight weeks after the first fertilizer application, apply one pound of 5-10-10 (or equivalent) per 100 square feet; spread the fertilizer in a 6-inch band on each side of a row of strawberry plants. Repeat this rate again in late August. Brush or wash off any fertilizer granules that land on the foliage to avoid leaf injury.

Avoid the use of nitrogen fertilizer the Spring before harvest as it may result in large, soft berries; excessive vegetative growth; and increased susceptibility of plants and fruits to diseases. If plants are a light shade of green and are not growing well, an application of 1/2 lb. of 5-10-10 (or equivalent) per 100 square feet. Problem indicator: Pale or yellowish leaves—need fertilizer.

**Citrus**—“Look at the leaves, they tell you the story”… Herman Auer, Santa Fe Citrus guy for 30 + years. Yellowing leaves indicate lack of fertilizer or poor drainage. Dark green, lush leaves with burned tips indicate excessive fertilizing. Yellow veins, need iron (Ironite). Fertilizing too much when the tree has a healthy appearance may actually cause it to produce inferior fruit. Most citrus are nutrient hungry from the time they bloom until they have firmly set fruit—first application Balanced 8-8-8, year one, then move to 18-5-10 type combination thereafter. Use one cup/first year at bloom/fruit set; thereafter 2 cups (one lb.)/every inch of tree diameter. One very neat guideline as to when = Valentine/Mother’s/Father’s day.

**Figs**—Old timers would shrug at fertilizing figs. Usually necessary only for potted trees or when they are grown in sands. Excess nitrogen encourages rank growth at the expense of fruit production, often ripens improperly, if at all. In general, fertilize fig trees if the branches grew less than a foot the previous year. Apply a total of 1/2 - 1 pound of nitrogen sulfate, divided into three or four applications beginning in late winter or early spring and ending in June.

**Mulberry**—Fast growing, vigorous trees that require little fertilization. An Annual application of a fertilizer with balanced amounts of nitrogen, phosphate and potash, such as 10-10-10, will maintain satisfactory growth. Maximize growth and production with 10-10-10 fertilizers twice each year—late winter and again in June—one pound / inch of trunk diameter.

**Olive Trees**—Not big feeders. Respond amazingly well to watering by growth, fruit size and production and minimal fertilization. A sort of “Weed & Water but not feed” fruit. They cannot tell difference between organic (bone meal) or commercial ammonium sulfate. Do not fertilize trees planted between late October and early March. Apply mid-March June. Pine straw mulch preferred. One cup,16-16-16 when planting. One cup/1 inch of diameter thereafter.

**Pear**—First Year spread 1/2 cup of 10-10-10 fertilizer in a circle 12 inches from the trunk. Keep the fertilizer away from the trunk. Fertilize young trees monthly using only 1/4 cup of fertilizer through June. Feed mature trees each spring using 1/2 cup for every year of age until the pear tree is 4 years old then keep the fertilizer at the rate of 2 cups.
FERTILIZER Continued:

**Persimmon**—Trees do well with a minimum of fertilizing. Excess nitrogen can cause fruit drop. If mature leaves are not deep green and shoot growth is less than a foot per year, apply a balanced fertilizer such as a 10-10-10. One pound per inch of trunk diameter. Spread the fertilizer evenly under the canopy in late winter or early spring.

**Pomegranate**—As seedlings, pomegranate may undergo severe fruit drop during its first couple of years but this will change as the plant matures. Fertilize first year with 6 oz. of 8-8-8 fertilizer in March and November. Followed by ½ lb./inch diameter of ammonium sulfate.

**Stone Fruit**—First year, one cup of 8-8-8 in April followed by one cup 21-0-0 in May & June. Second year 2 cups 8-8-8 March, then 2 cups 21-0-0 April, May, June. Mature trees take 2 cups/inch(8-8-8) diameter in February followed with 2-6 cups of 21-0-0 In May.

PRUNING:
Not generally done with apple, avocados, citrus, figs, mulberry, olives, pear, pecans, persimmon, pomegranates or plums. Occasional pruning for low branches where fruit lays on ground, to low to pick for older generations, storm damage, freeze die back or pops you upside the head while mowing. **Blackberries** may develop canes of 6-10 ft. each year. Prune back 40% of growth following harvest. Grapes need trellis and training for a couple years (vertical cow panels) in dormant months. **Peach and Nectarine** trees should be trained to an open center, thinking about an upside down umbrella as a final goal. Center scaffold is removed. Develop three to five scaffold branches arising near each other on the trunk. All scaffold branches are pruned to develop about equal in size, spaced as equally as possible around the trunk at a height 18 to 24 inches from the ground. Post harvest, prune 40% of all branches and any branches that grew toward the center. Many trees have been pre-prune depending on the licensed nursery. **Kiwi**, a vine plant, have an exceptional growth rate and require training and pruning similar to grape vines. Trellis is certainly a good option or a 5 ft. section of cow panel placed vertically.

ROOTSTOCK:
The importance of rootstock for long term productivity cannot be stressed enough. **Citrus, Poncirus trifoliata** commonly called TF has been grown for thousands of years **Trifoliata** is the best for this area as it is hardy for our cooler weather. CITRANGE: orange X sweet orange hybrid created by Dr. Swingle beginning in 1897. Carrizo citranges are hybrids of Washington navel orange and **Poncirus trifoliata**. The later crosses were made with the intention of producing cold tolerant scion varieties. **CAUTION to all of Texas. U.S.D.A. has issued a quarantine on all citrus in the lower Texas valley. A deadly disease called “Greening” was discovered in early 2012. Exercise good judgment and temptation in buying roadside citrus plants. Observe the old saying ‘If it seems to be a really good deal, it probably is not…’**

PESTS AND CONTROL:
The Scouts’ motto of “Be Prepared” had to be a gardener! Never a question of IF but WHEN.

**Avocados**—No real problems.

**Apples**—To control fruit tree pests, use one of the home orchard fruit spray mixes that are sold by several companies. Always follow all label instructions when applying these or any other pesticide.

**Berries**—When the berries get red in color, secret messages are sent to all birds in the neighborhood to join the berry fest. Use bird netting. Occasional stink bug invasion. Pesticides can’t control this armor plated beast. Wife came up with using a car vacuum ‘cause the bugs were too stinky to smash. Modified the intake to fit a ¾ inch clear plastic hose.
REFERENCE SECTION

PESTS AND CONTROL Continued:

Citrus—When you look at the new growth leaves and they look like they been attacked by a bunch of drunks on cheap gin, you’ll know this ‘ringworm’ pattern as the citrus leaf minor. CLM is by far the biggest problem for the home gardener. Best agent is Conserve SC (17% Spinosad) available at some local hardware stores or ‘farm & ranch’ stores. Ferilome (1% Spinosad) is available at most retailers and nurseries. Spinosad A & D are the active ingredients to look for. Spray your citrus in early spring to prevent damage. CLM will not kill mature trees but could really hurt a new plant as photosynthesis could be compromised.

Figs—Fig rust can be controlled with one or two applications of neutral copper spray in May to June. Figs are very hardy.

Grape—The muscadine grape has been growing in Texas for centuries. Birds will be the major problem beating you to the feast. Bird netting is cheap and easy to install.

Kumquats—Refer to Citrus

Mulberry—Frequent inspection is a key for Scale and Mealy bugs. Early detection can be managed with water pressure from a garden hose and nozzle.

Olive Trees—Olive tree roots are vulnerable to root knot nematodes, citrus nematodes and root lesion nematodes. Purchase from reputable licensed nursery. Rabbits, sheep and cattle all like the taste of olive leaves and new twigs.

Stone Fruits—Fungicides for scab & scale include Distinguish, Abound, Gem and Sulfur applied post bloom, 3-6 weeks.

PLANTING TID BITS:

Bed Elevation—Importance second only to rootstock. Brazoria County is basically flat land endowed with gumbo soil which is great at holding water for rice crops. Edible fruit cannot stand wet feet for long. Elevation provides for long term productivity.

Elevation Materials:

Choice #1: Cinder bricks, holes pointed up and filled with dirt. Will last indefinitely, unless you run over with a tractor. Blocks are 16” long, so a 40” square is ideal. 2 length wise & third side way, repeated three times to form 40” square. A 2 X 16” inch flat cinder on top makes for nice sitting.

Choice #2: Railroad cross ties, grade 1 or 2. Last 20 – 30 years. For folks who live in country. City folks may have restrictions.

Choice #3: Commercial landscape timbers. Chemical treatment seems to lose its pizzazz after 5 + years and Texas termites are ready!

Bare Root Planting Tips:

Plant as soon as possible when you purchase the tree (mid February). If you are unable to do this, then heal them into the soil until you can plant and make sure the roots do not dry out. Healing involves burying the roots in the soil and moistening the soil in order to keep the roots alive. Dig a hole that is wide and deep enough to accommodate the root system, at least 4 “wider and deeper than the root ball when you remove it from the pot. Untangle and spread the roots out. Always make sure that the graft junction is above the ground when finished. Do not pile mulch up onto the trunk. Use existing soil, or mixture of 1/3 each sand, organic mulch and soil. Water in well, and water every day for a few days unless it rains.
REFERENCE SECTION

PLANTING TID BITS Continued:

CITRUS—additional
FREEZE Precaution—Keep mulch away from trunk EXCEPT when hard freeze is eminent. Pile mulch to cover the graft line. If the tree freezes down to the graft line, it will revert back to the rootstock – worthless as a fruiting plant.

Site Selection—A well drained soil, high in organic matter and slightly acid to neutral is desirable. Trees planted on heavy clay soils with poor internal drainage should be planted on a mound or row eight to 12 inches higher than ground level.

Time of Planting—The best time to plant citrus trees is in mid February after “Frost Season”.

Flowering—February-March. Strolling through a citrus garden during bloom season is a feast of captivating and encompassing aromas that everyone should experience.

Spacing—The site that will provide the most space should be selected. Navel oranges, grapefruit and other oranges are the most vigorous type citrus trees. Ideally, in an orchard, citrus should be spaced 30 feet apart. (Example: Allow at least 15 feet from any building or large tree on each side of the navel orange, grapefruit or other round oranges). Satsumas require a 20-foot circle in diameter, while kumquats lemons and dwarf varieties need only a 15 foot diameter circle. Homeowners need to plan!

Pollination—Citrus flowers have both male and female parts in the same flower so pollination is seldom a problem. Citrus trees produce an abundance of flowers and have a natural tendency to drop flowers. Blossom drop of 95% is normal. Some experts state that if 5% of all blossoms mature to full fruit, the tree could not sustain the weight.

Fertilizer—Valentine’s Day, Mother’s Day and Father’s Day (or day after!)
CAUTION: Under U.S.D.A. guidelines, it is unlawful to bring any citrus plants into Texas from any other state or country. Texas citrus valley region.

Peach—additional
Rootstock Selection—Rootstock influences the growth, productivity, and longevity of a peach tree. Nemagard rootstocks are recommended.

Tree Training—Before you start pruning visualize an umbrella turn upside down. This is the end result you want to achieve with peach pruning. After planting your new tree, prune to a single trunk of 24 – 36 inches, removing all branches. Within a few weeks after growth begins, select the strongest three to five shoots arising from the top 6 inches on the main stem. They should be evenly spaced along the trunk. Remove all other shoots along the trunks or limbs. These few branches will grow vigorously for about 4 weeks and then begin to harden and turn brown near the trunk.

First Year Care—One critical factor of first year peach tree care is weed control. Most grasses and weeds rob newly set peach trees by depleting water and nutrients from the soil and thus stunting growth.

Thinning—As a rule of thumb, fruit should be thinned within 2 weeks after bud set. Fruit should be thinned to six to eight inches apart along the fruiting branches. The gardener will grimace at the thought of throwing away hundreds of peaches but remember do you want hundreds of small peaches or dozens of plump, juicy ones.
PLANTING TID BITS Continued:

Peach—additional continued

Four Steps to Prune a Mature Peach Tree:
(1) Remove all hanger shoots, rootstock suckers, and water sprouts in the lower three feet of the tree.
(2) Remove all shoots above seven feet in height other than red 18 to 24 inch fruiting shoots. Cuts which leave limbs sideways at a 90-degree angle should be avoided.
(3) Remove the center scaffold and shoots which grow toward the inside of the tree.
(4) Remove old gray wood in the three to seven foot production zone. Post harvest is pruning time and removal of 40% of old growth is the target.

Planting—Remove from the container and snip any dead or damaged roots before planting. Make sure the root system is fully extended when planting. Do not coil or bunch up the roots. If you should purchase and cannot plant bare root trees immediately, heal them into the soil until you can plant or at least make sure the roots do not dry out. Healing involves burying the roots in the soil and moistening the soil in order to keep the roots alive.

Irrigation—We tend to remember watering new fruit trees/mature trees in the spring then getting them through a hot Texas summer. Don’t forget the fall, November/December. Fruit trees are loaded and need sustaining water.

BENEFITS OF COMPOSTING:
Most all trees listed in this publication benefit from the addition of compost whether at planting time or with regular amendments

Did You Know That Compost Can...
• Suppress plant diseases and pests.
• Reduce or eliminate the need for chemical fertilizers.
• Promote higher yields of agricultural crops.
• Facilitate habitat revitalization efforts by amending contaminated, compacted, and marginal soils.
• Cost-effectively remediate soils contaminated by hazardous waste.
• Remove solids, oil, grease, and heavy metals from stormwater runoff.
• Capture and destroy 99.6 percent of industrial air pollution in contaminated air.
• Provide cost savings of at least 50 percent over conventional soil remediation for the homeowner.
• Reduce Landfill load substantially

All composting requires three basic ingredients:
• Browns—Includes materials such as dead leaves, branches, twigs
• Greens—Includes materials such as grass clippings, vegetable waste, fruit scraps, and coffee grounds
• Water

Having the right amount of greens, browns, and water is important for compost development. Ideally, your compost pile should have an equal amount of browns to greens and alternate layers of organic materials of different-sized particles. The brown materials provide carbon for your compost and the green materials provide nitrogen, while the water provides moisture to help breakdown the organic matter.

What not to compost and why:
Meat or fish bones and scraps—Create odor problems and attract pests such as rodents and flies
Fats, grease, lard, or oils—Create odor problems and attract pests such as rodents and flies.
Diseased or insect-ridden plants—Can be transferred back to other plants.
Yard trimmings treated with chemical pesticides— Might kill beneficial composting organisms.
Coal or charcoal ash— Might contain substances harmful to plants.
Pet wastes— Might contain parasites, etc. possibly harmful to people.
Dairy products— Create odor problems and attract pests such as rodents and flies.