

Harris County Master Gardeners Association Handbook for

2020 FRUIT TREE SALE

Saturday JANUARY 25TH, 2019

9:00 AM to 12:30 PM

19110 Longenbaugh Cypress, TX. 77433

*Please see map below as GPS may not recognize this address.
Located between Greenhouse Rd and Barker Cypress

9:00AM - 12:30PM
Free

Open to the
public

Easy parking

Free Shuttle
Service to
overflow parking

Special Feature:
Growing with
Plants & Nature
for the for kids
who garden

*Children under 7 need a
parent or responsible
adult within clear sight,
please.*



TEXAS A&M
AGRILIFE
EXTENSION

FREE
SHUTTLE
SERVICE
AVAILABLE
Between Weekley
Center & Park



TEXAS
MASTER GARDENER
TEXAS A&M AGRILIFE EXTENSION
Harris County

Reasons to Shop the Harris County Master Gardener Association

**2020 Fruit Tree, Avocado, Fig, Berry, Pecan, Coffee, Ginger.
Soil and More Sale**

**January 25, 2020 at the Richard & Meg Weekley Park
19110 Longenbaugh Rd. Cypress, Texas 77433**

1. A 14,000 sq. ft. fenced and partially covered sales area, with coordinated catalog, layout and plant list, ample adjacent parking, and convenient and assisted loading zone. Shuttle service provided for overflow parking at the Weekley Center. Public facilities available.
2. This year's sale will include 600+ citrus trees, 350+ non-citrus trees (including new varieties from the Texas A&M University Stone Fruit Breeding Program), 80 avocado trees, 120 fig trees, almost 200 berry plants, plus Arabica coffee and Zingiber ginger. Plus MicroLife 6-2-4 All Organic Biological Fertilizer and MicroLife Citrus & Fruit 6-2-4 All Organic Biological Fertilizer, and Super Rich Soils.
3. Children's activities with our Growing With Plants And Nature crew (formerly Open Garden Day). Fun filled gardening activities for the future gardeners.
4. Sales staff are all Harris County Master Gardener volunteers to assist customers in their selection of Trees, soils and more, as well as advise the proper planting, feeding and tending of all plants on sale.
5. Ask a Master Gardener Booth is available to discuss any questions gardeners may be experiencing in their yard, supported with published AgriLife Extension brochures and literature to guide them through fertilizing, planting, and garden and yard maintenance.

**Harris County Master Gardener Association
9449 Grant Road, Houston, Texas 77070**

<http://hcmga.tamu.edu>
www.facebook.com/HarrisCountyMasterGardeners

<http://AgriLife.org/HarrisHort>
www.facebook.com/HarrisCountyHorticulture

Harris County Master Gardener Association Fruit Tree Handbook

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Pricing

**Prices are SALES TAX free*

Trees		Price
Apple	3 gallon	\$35.00
Apricot	3 gallon	\$35.00
Avocado	3 gallon	\$45.00
Banana	3 gallon	\$25.00
Blackberry	3 gallon	\$22.00
Blueberry	3 gallon	\$22.00
Clementine	3 gallon	\$37.00
Coffee	3 gallon	\$25.00
Fig	3 gallon	\$25.00
Ginger	3 gallon	\$20.00
Goji Berry	3 gallon	\$22.00
Grapefruit	3 gallon	\$37.00
Kumquat	3 gallon	\$37.00
Lemon	3 gallon	\$37.00
Lime	3 gallon	\$37.00
Mandarin	3 gallon	\$40.00
Mulberry	3 gallon	\$22.00
Nectarplum	3 gallon	\$35.00
Nectarine	3 gallon	\$35.00
Nectarine LARGE	5 gallon	\$45.00
Olive	3 gallon	\$35.00
Orange	3 gallon	\$40.00
PawPaw	3 gallon	\$35.00
Peach	3 gallon	\$35.00
Peach LARGE	5 gallon	\$45.00
Pear	3 gallon	\$35.00
Pecan LARGE	5 gallon	\$45.00
Persimmon	3 gallon	\$35.00
Plum	3 gallon	\$35.00
Pomegranate	3 gallon	\$35.00
Satsuma	3 gallon	\$40.00
Tangelo	3 gallon	\$40.00
Tangerine	3 gallon	\$40.00
Microlife	3lbs container	\$20.00
Garden SOIL	per bag or 10 bag/\$50	\$6.00
COMPOST	per bag or 10 bag/\$85	\$10.00
Rain Barrels	as marked	
Donation		

2020 Fruit Tree Sale

Citrus:	Variety	Size	Lot	
			Qty	Location
Clementine	Algerian Tangerine	3 gal	20	A-1
Grapefruit	Bloomsweet Hybrid (Kinkoji)	3 gal	10	A-2
Grapefruit	Rio Red	3 gal	10	A-3
Grapefruit	Ruby Red	3 gal	10	A-4
Kumquat	Meiwa (Sweet) (New This Sale)	3 gal	10	A-5
Lemon	Eureka Frost	3 gal	20	A-6
Lemon	Improved Meyer	3 gal	60	A-7
Lemon	Lisbon Seedless	3 gal	25	A-8
Lemon	New Zealand Lemonade	3 gal	30	A-9
Lemon	Ponderosa	3 gal	10	A-10
Lemon	Ujukitsu Sweet	3 gal	25	A-11
Lemon	Variiegated Pink	3 gal	40	A-12
Lime	Kaffir	3 gal	15	A-13
Lime	Persian	3 gal	30	A-14
Mandarin	Encore	3 gal	15	A-15
Mandarin	Honey	3 gal	20	B- 1
Mandarin	Kishu Seedless	3 gal	15	B-2
Mandarin	Page	3 gal	20	B- 3
Mandarin	Pixie	3 gal	20	B- 4
Orange	Blood - Moro	3 gal	20	B- 5
Orange	Cara Cara	3 gal	20	B- 6
Orange	Hamlin (New Variety)	3 gal	10	B- 7
Orange	Maars (New This Sale)	3 gal	15	B- 8
Orange	Navel N-33	3 gal	20	B- 9
Orange	Pineapple	3 gal	10	B- 10
Orange	Republic of Texas	3 gal	30	B- 11
Orange	Washington Navel	3 gal	20	B- 12
Satsuma	Owari	3 gal	20	B- 13
Satsuma	Owari Frost	3 gal	20	B- 14
Tangelo	Orlando	3 gal	10	B- 15
Tangerine	Dancy (New This Sale)	3 gal	10	B- 16
Tangerine	Sunburst (New This Sale)	3 gal	10	B- 17

Texas A&M University Non-Citrus *

	Variety	Size	Qty	Location
Nectarine	Smooth Delight One (New)	5 gal	11	C - 1
Nectarine	Smooth Delight Two (New)	5 gal	11	C - 2
Peach	Flat Delight One (New)	5 gal	11	C - 3
Peach	Flat Delight Two (New)	5 gal	11	C - 4
Peach	Royal Zest Two (New)	5 gal	12	C - 5
Peach	Tropic Zest Three (New)	5 gal	12	C - 6

* Texas A&M University Non-Citrus: Texas A&M Stone Fruit Breeding Program recently released several series of lower chill-hour peach & nectarine cultivars. The work is done to evaluate stone fruit cultivars' performance and to produce superior early-ripening fruit and extend the harvest seasons in mild winter regions.

Non-Citrus:	Variety	Size	Lot	
			Qty	Location
Apple	Anna (New This Sale)	3 gal	10	C - 7
Apple	Ein Sheimer (New This Sale)	3 gal	10	C - 8
Apple	Fuji (New This Sale)	3 gal	10	C - 9
Apple	Golden Dorsett (New This Sale)	3 gal	10	C - 10
Apricot	Katy (New This Sale)	3 gal	10	C - 11
Banana	Dwarf Nam Wa (New Variety)	3 gal	10	C - 12
Banana	Ice Cream (New This Sale)	3 gal	20	C - 13
Nectarine	Spice Zee	3 gal	10	C - 14
Nectarine	Arctic Star (New This Sale)	3 gal	10	C - 15
Nectarine	Sun Red (New This Sale)	3 gal	10	C - 16
Olive	Arbequina (self-fruitful) (New This Sale)	3 gal	10	C - 17
Peach	August Pride (New This Sale)	3 gal	15	C - 18
Peach	Eva's Pride (New This Sale)	3 gal	10	C - 19
Peach	May Pride (New This Sale)	3 gal	10	C - 20
Peach	Mid Pride	3 gal	10	C - 21
Peach	Stark Donut	3 gal	10	C - 22
Peach	Tex-King	3 gal	10	C - 23
Peach	Tropic Snow (New This Sale)	3 gal	10	C - 24
Pear	Southern King	3 gal	10	C - 25
Persimmon	Fuyu	3 gal	10	D - 5
Persimmon	Giant Fuyu (New Variety)	3 gal	10	D - 6
Plum	Burgundy	3 gal	10	D - 7
Plum	Methley	3 gal	10	D - 8
Pomegranate	Garnet Sash	3 gal	15	D - 9
Pomegranate	Kandahar Early (New This Sale)	3 gal	15	D - 10
Pomegranate	Texas Pink (New This Sale)	3 gal	15	D - 11

Avocado:

	Variety	Size	Qty	Location
Avocado	Brazos Belle	3 gal	20	D - 1
Avocado	Don Juan	3 gal	20	D - 2
Avocado	Joey	3 gal	20	D - 3
Avocado	Mexicola Grande	3 gal	20	D - 4

Miscellaneous:

	Variety	Size	Qty	Location
Coffee	Arabica	3 gal	20	F - 2
Ginger	Zingiber "Baby Ginger"	3 gal	10	F - 3

Figs:	Variety	Size	Lot	
			Qty	Location
Fig	Celeste	3 gal	20	E - 1
Fig	Ischia	3 gal	15	E - 2
Fig	Italian Black	3 gal	15	E - 3
Fig	Italian Honey	3 gal	15	E - 4
Fig	Little Ruby	3 gal	15	E - 5
Fig	LSU Gold (New This Sale)	3 gal	15	E - 6
Fig	LSU Purple	3 gal	25	E - 7

Berries:

	Variety	Size	Qty	Location
Mulberry	Pakistan	3 gal	20	F - 4
Berry	Goji (New This Sale)	3 gal	10	F - 5
Blackberry	Natchez	3 gal	30	F - 6
Blackberry	Prime Ark Freedom	3 gal	25	F - 7
Blueberry	Emerald (Southern Highbush) (A)	3 gal	10	F - 8
Blueberry	Jewel (Southern Highbush) (A)	3 gal	10	F - 9
Blueberry	Rebel (Southern Highbush) (A)	3 gal	10	F - 10
Blueberry	Sunshine Blue Southern Highbush (A)	3 gal	10	F - 11
Blueberry	Climax (Rabbiteye) (B)	3 gal	10	E - 8
Blueberry	Pink Lemonade (Hybrid Rabbiteye) (B)	3 gal	40	E - 9
Blueberry	Premiere (Rabbiteye) (B)	3 gal	10	E - 10
Blueberry	Tifblue (Rabbiteye) (B)	3 gal	10	E - 11

Pecans:

	Variety	Size	Qty	Location
Pecan	Native (New This Sale)	5 gal	25	F - 1

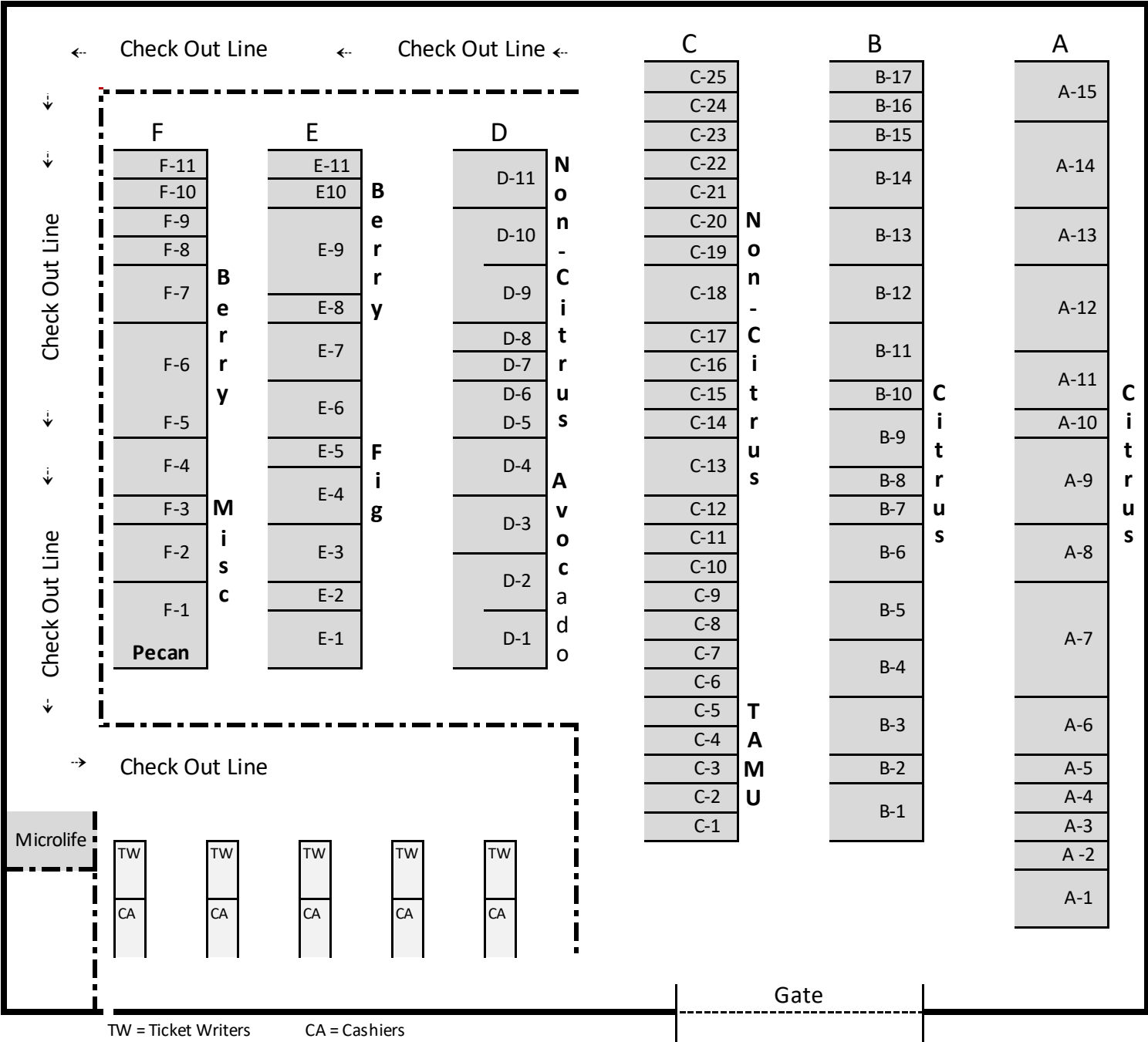
Visit hcmga.tamu.edu/plant-sales/

Please join us at our other sales:

- 2/22/20 GFG Fruit Tree & Tomato Sale
- 3/07/20 West Side Spring Plant & Vegetable Sale
- 3/21/20 GFG Pepper, Perennial, Spring Plant Sale
- 3/21/20 Cy-Fair Home & Garden Show

2020 Fruit Tree Sale Lot Layout

Richard & Meg Weekley Park January 25, 2020



Harris County Master Gardeners Association
Richard & Meg Weekley Park
19110 Longenbaugh, Cypress, TX 77433

Fruit Tree Sale
January 25, 2020

Citrus Fruit Trees -- Pages 1-3

TAMU Fruit Trees - Non-Citrus -- Page 4

Non-Citrus Fruit Trees -- Pages 4-6

Avocado -- Page 6

Miscellaneous -- Page 6

Fig Trees -- Page 7

Berries -- Page 7-9

Pecan -- Page 9

Chill Hours Average -- Page 10

*How to Plant and Care for your New
Fruit Tree -- Pages 11-15*

How to Test your Soil -- Last Page

Citrus Fruit Trees

Row	Fruit	Variety	Cold Hardy	Description
A-1	Clementine	Algerian Tangerine (Carrizo Rootstock)	to mid 20's	These are the crown jewel of the Mandarin citrus family. A hybrid between an orange and mandarin or tangerine, this variety is seedless, smaller in size, has thinner membranes, and more plentiful juice with a refreshingly sweet tang. The color is a bright red-orange with a pebbled, loose skin.
A-2	Grapefruit	Bloomsweet Hybrid (Carrizo Rootstock)	to mid 20's	Large-growing, vigorous tree. A cross between a pummelo and sweet orange. The fruit is very good and easy to peel and segment. Ripens Nov–Dec.
A-3	Grapefruit	Rio Red (Carrizo Rootstock)	to mid 20's	Large fruit with smooth, thin, yellow rind. Blushes red once mature. Deep red flesh and juicy with few seeds. Ripens mid to late November. Holds on tree until March.
A-4	Grapefruit	Ruby Red (Carrizo Rootstock)	to mid 20's	The fruit is of excellent quality and sweetness, and the skin is very thin and bright. The pulp is a distinctive red; but as the grapefruit tree ages, the color of the grapefruit interior will fade.
A-5 *	Kumquat	Meiwa (Sweet) (Trifoliolate Rootstock)	to mid 20's	Quarter-size, bright orange fruit covers a lush, dense, small (4'-6') tree. Ideal for container planting. No thorns. Can be eaten peel and all. Also good preserved, candied or made into marmalade. Highly fragrant blooms in summer, with fruit ripening in winter.
A-6	Lemon	Eureka Frost (Trifoliolate Rootstock)	to high 20's	This popular variety produces an abundance of fine, market-quality lemons year round. Large, juicy fruit with very few seeds. Attractive landscape or patio container specimen with bronze-purple new growth. Evergreen.
A-7	Lemon	Improved Meyer (Carrizo Rootstock)	to high 20's	A small tree with continuous crops of large, moderately seedy fruit from August–January. Thin skinned with smooth bright golden form. Tree is cold hardy in warmer parts of Houston, freezes to the ground in hard freeze (every 20 years) and produces again in 18 months. About 10' tall and 8'–10' diameter.
A-8	Lemon	Lisbon Seedless (Carrizo Rootstock)	to high 20's	Tolerates heat, cold and wind conditions. Blooms and fruits throughout the year, but main crop occurs in winter and early spring. Seedless. This lemon is what you want if you're looking for the type of lemon found in the grocery store. Popular as a flavoring in foods and drinks.
A-9	Lemon	New Zealand Lemonade (Carrizo Rootstock)	to high 20's	One of our new favorites, this sweet, juicy fruit actually tastes like lemonade! It is a sweet lemon hybrid of unknown parentage with distinctive black colored branches. Mature trees set several heavy crops each year with very pleasant, sweet, lemonade-like flavor.

* New to this Sale.

Citrus Fruit Trees (continued)

Row	Fruit	Variety	Cold Hardy	Description
A-10	Lemon	Ponderosa (Carrizo Rootstock)	to high 20's	Medium sized, vigorous, open-growing tree with large leaves and many thorns. New growth is bronzy purple with high fruit (sometimes more than two pounds) and thick yellow rind. Very acidic and seedy. Ripens early to mid October. Holds well on the tree.
A-11	Lemon	Ujukitsu Sweet (Carrizo Rootstock)	to high 20's	Called the 'lemonade fruit', this lemon-orange cross ripens to a bright yellow with a pear-shaped form that's quite large. The fruit is amazingly sweet and juicy with a thick rind that peels easily. Slower growing than most lemon trees, yet when it reaches two or more feet it will flower and fruit with great regularity. Springtime brings a flush of fragrant blooms.
A-12	Lemon	Variegated Pink (Carrizo Rootstock)	to high 20's	Vigorous, open-growing tree with green/yellow/white variegation. Very attractive landscape plant. Fruit often ribbed and slightly smaller than Eureka. Young fruit is variegated yellow and pink, gradually fading to yellow. Interior flesh is light pink.
A-13	Lime	Kaffir (Carrizo Rootstock)	to high 20's	Grown for its unique aromatic leaves used in Asian and Thai cooking. Tree is thorny with 'double' leaves. Very rough, small, bumpy green fruit. Aromatic and astringent leaves can be used fresh, dry or stored in the freezer.
A-14	Lime	Persian (Carrizo Rootstock)	to high 20's	Handsome, compact, medium-sized tree with dark green leaves that are larger than the leaves of the Mexican or Key Lime with very few small thorns. Small fruit, with thin dark green skin gradually turning light green, then yellow at full maturity. Fruit is somewhat larger than the Mexican or Key lime. Very aromatic, juicy and acidic with few or no seeds. Ripens mid-September to early October. Can be used while still green. Doesn't hold well on the tree after reaching full maturity.
A-15	Mandarin	Encore (Carrizo Rootstock)	to low 20's	Produces fragrant, medium-sized, round fruit strongly flattened at the ends with yellow-orange, thin skin and deep orange, juicy flesh with a rich, sweet flavor and many seeds. The fruit ripens very late in the season and keeps well on the tree. Medium-sized trees are productive, almost thornless and alternate bearing, which means they produce a heavy crop one year and a lighter crop the next.
B-1	Mandarin	Honey (Carrizo Rootstock)	to low 20's	Extremely sweet and juicy. Virtually seed free and thin skinned. Easy to peel. Flavor is reminiscent of honey with the warmth of cinnamon. Tree can be kept small to moderately sized. Produces fragrant, tiny white flower blossoms.
B-2	Mandarin	Kishu Seedless (Carrizo Rootstock)	to low 20's	Small to medium-sized tree with dwarfing characteristics. Fruit is small to medium size, with a thin, bright orange, easy-to-peel rind. Sweet, juicy, mild flavored and seedless. Ripens November through December and holds well on the tree into January.
B-3	Mandarin	Page (Carrizo Rootstock)	to low 20's	A cross between the Minneola tangelo and the Clementine mandarin. The round fruit is a deep orange, sweet and juicy, with numerous seeds. The rind is also deep reddish orange which is thin but easy to peel. The shiny, dark green leathery leaves compliment the abundance of early ripening small orange fruit. This is an excellent container plant because it is easily pruned to any size.
B-4	Mandarin	Pixie (Carrizo Rootstock)	to low 20's	The result of cross-pollination between King and Dancy. They have a mild, yet sugary-sweet flavor. They are seedless and exceptionally easy to peel. Your Pixies will bloom from March through June, maturing in late winter.
B-5	Orange	Blood - Moro (Carrizo Rootstock)	to mid 20's	Believed to have originated in Sicily. Vigorous growing, slightly spreading tree. Young trees may be slow to begin bearing fruit. Fruit is 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 almost purple later in the season. Ripens early to mid-January. Holds well on the tree until March.

* New to this Sale.

Citrus Fruit Trees (continued)

Row	Fruit	Variety	Cold Hardy	Description
B-6	Orange	Cara Cara (Carrizo Rootstock)	to mid 20's	Bright orange exterior similar to other navels, but its interior is a distinctive pinkish red with an exceptionally sweet flavor with a tangy cranberry-like zing, and they're seedless. It's a cross between the Washington navel and the Brazilian Bahia navel.
B-7 *	Orange	Hamlin (New Variety) (Carrizo Rootstock)	to low 20's	Sweet and juicy with few to no seeds. A medium to large, beautiful evergreen with lush, bright green foliage that looks fantastic in yards and attracts birds and butterflies. Heavily fragrant blooms are pleasing to the senses. Fruit ripens October to January.
B-8 *	Orange	Marrs (Carrizo Rootstock)	to mid 20's	Medium to large fruit, round to slightly oblate; moderately seedy. Rind is medium-thick. Surface is smooth and finely pitted. Flesh well-colored and juicy. Flavor sweet and lacking in acid. Holds well on tree. Ripens November to January.
B-9	Orange	Navel N-33 (Carrizo Rootstock)	to mid 20's	Medium to large, round-headed tree with deep green foliage. Fruit is large, with moderately thick rind. Rich flavor, with nicely balanced sugar and acid. Very juicy and seedless. Moderately easy to peel and separate into segments. Ripens early to mid November and holds well on the tree until end of January.
B-10	Orange	Pineapple (Carrizo Rootstock)	to low 30's	Produces an excellent quality juice. Richly flavored and moderately seedy. High sugar content. Peel turns deep reddish-orange at maturity. Known as an alternate bearer, meaning it produces a heavy crop one year and a lighter one the next. Ripens December to February.
B-11	Orange	Republic of Texas (Carrizo Rootstock)	to low 20's	Documented back to 1847 near Angleton, Texas. Medium to large round orange. Very flavorful. Very cold tolerant. A great, sweet orange that everyone should grow. Ripens November through December.
B-12	Orange	Washington Navel (Carrizo Rootstock)	to mid 20's	Easily peeled, seedless fruit is produced by this medium-sized tree. Fragrant flowers in spring and handsome foliage year-round. Famous for its winter fruits. Holds well on the tree.
B-13	Satsuma	Owari (Carrizo Rootstock)	to low 20's	The original satsuma. Very good flavor, great production. Has 0–6 seeds per fruit. As maturity passes, the neck increases in size. The rind roughens and loosens. Tree moderately vigorous but slow-growing; medium-small, spreading and drooping, very productive. Ripens late November.
B-14	Satsuma	Owari Frost (Carrizo Rootstock)	to low 20's	Most common of the many Satsumas. Very good flavor; great production. Virtually seedless. As maturity passes, the neck increases in size. The rind roughens and loosens. Tree moderately vigorous but slow growing. Medium-small, spreading and drooping. Very productive. Ripens late November.
B-15	Tangelo	Orlando (Carrizo Rootstock)	to mid 20's	One of the most cold tolerant of the tangelos. Tangelos are a cross between Oranges and Grapefruit. They have the same sugary sweetness as oranges, and when fully ripe, peel as easy as a tangerine. Fruit has a sprightly sweet flavor and is good fresh, as well as for juicing with other varieties of oranges. Fruit ripens November to January.
B-16 *	Tangerine	Dancy (Carrizo Rootstock)	to low 30's	First cultivated in Florida in 1867. Has sweet, red/orange flesh. Lower level of acidity than oranges. Thin rind is easy to peel and the slices are easy to pull apart without making a mess. Flourishes in the ground and in containers. Ripens in December, giving it the nickname of the "Christmas Tangerine."
B-17 *	Tangerine	Sunburst (Carrizo Rootstock)		A cross between a Robinson and an Osceola. The fruit is as pleasing to the eye as to the palate. They have a thin, smooth skin which make them easy to peel and enjoy. The flesh is a deep orange color and they contain some seeds. The trees have dark-green foliage, are moderately vigorous, thornless, up-right, with a spreading shape. Ripens November/December.

* New to this Sale.

Texas A&M University Fruit Trees - Non-Citrus

Texas A&M University Stone Fruit Breeding Program recently released several series of lower chill-hour peach & nectarine cultivars. The work is done to evaluate stone fruit cultivars' performance and to produce superior early-ripening fruit and extend the harvest seasons in mild winter regions.

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
C-1 *	Nectarine	Smooth Delight One <i>(New Variety)</i>	400-450	<u>White</u> -fleshed fruit with tangy, sweet flavor. Self-fertile. Low acidity. Firm, very attractive, medium to large fruit. Clingstone. Showy, pink flowers with 5 petals. Semi-spread growth habit. Ripens early to mid May through early June.
C-2 *	Nectarine	Smooth Delight Two <i>(New Variety)</i>	400-450	<u>Yellow</u> -fleshed fruit with tangy, sweet flavor. Self-fertile. Low acidity. Firm, very attractive, medium to large fruit. Clingstone. Showy, pink flowers with 5 petals. Semi-spread growth habit. Ripens early to mid May through early June.
C-3*	Peach	Flat Delight One <i>(New Variety)</i>	450-550	This <u>white</u> -fleshed fruit is deliciously sweet. Self-fertile. Low acidity. Medium to large fruit. Semi-freestone. Characterized as a flat or donut peach. Ripens in late May to early June.
C-4*	Peach	Flat Delight Two <i>(New Variety)</i>	450-550	This <u>yellow</u> -fleshed fruit is deliciously sweet. Self-fertile. Low acidity. Medium to large fruit. Semi-freestone. Characterized as a flat or donut peach. Ripens in early May to late June.
C-5 *	Peach	Royal Zest Two <i>(New Variety)</i>	500-600	<u>Yellow</u> -fleshed fruit with traditional acidity. Self-fertile. Semi-freestone. Medium to large fruit. Ripens consecutively over 5 weeks from mid May until late July in the medium chill zone of Texas.
C-6 *	Peach	Tropic Zest Three <i>(New Variety)</i>	150	<u>Yellow</u> -fleshed fruit with traditional tart-sweet peach flavor. Self-fertile. Semi-freestone. <u>Very low chill hours</u> . Medium to large fruit. Ripens early May.

Non-Citrus Fruit Trees

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
C-7 *	Apple	Anna	200	Large crops. Sweet and crisp. Stores two months. Self-fruitful, but better production if pollinated by Golden Dorsett. Low-chilling, yellow apple with a slight red blush. Ripens late June, softens fast and should be handled carefully.
C-8 *	Apple	Ein Sheimer	100	Heavy-bearing, very low chilling requirement. Sweet, yellow apples in early summer. Excellent pollinizer for Anna. Self-fruitful.
C-9 *	Apple	Fuji	200-400	Flowers in mid to late spring and produces fruit that ripens in October. Perfect for the backyard garden as they are adaptable to a wide variety of soil conditions. Likes partial to full sun. Smaller than other apple varieties, growing to a mature height of 10-15 feet, and a width of up to 10 feet.
C-10 *	Apple	Golden Dorsett	100	Large, firm, golden delicious type. Very low chill requirement. Picked with a pink slight blush. Flavor is sweet. Fruit is firm and will store several weeks in the refrigerator. Bloom period overlaps with Anna and the two varieties planted together provide good cross-pollination. Ripens mid to late June.
C-11 *	Apricot	Katy	300-400	Large apricot with red-blushed skin and deep yellow flesh; freestone flesh is firm mild and sweet. Early harvest early to mid-May.
C-12*	Banana	Dwarf Nam Wa <i>(New Variety)</i>	n/a	Fast growing; heat and cold tolerant. Grows 8-10 feet. Boasts rosy red/pink trunk. Known by many names throughout the world, including Pisang awak and ladyfinger. Produces large sized bunches of

* New to this Sale.

Non-Citrus Fruit Trees (continued)

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
C-13 *	Banana	Ice Cream (Blue Java)	n/a	A fast growing, cold tolerant tree with delicious fruit that actually tastes like ice cream. Has awesome display of burgundy flowers and a tropical look with substantial leaves. Strong trunk and root system holds up well against the elements. Grows to a height of 18 feet.
C-14	Nectarplum	Spice Zee	200-300	A white-fleshed, nectarine-peach-plum hybrid. Skin is dark maroon at fruit set and turns pale pink when ripe. Both nectarine and plum traits are easily detectable. Tremendous purplish-pink blooms in the spring, followed by a flourish of red leaves which mature into lush green in late summer.
C-15 *	Nectarine	Arctic Star	300	Earliest to ripen of the white fleshed nectarines. Low in acid, super sweet with no tartness. Semi-freestone, snow white flesh with beautiful dark red skin. Rave reviews in trial tastings. Ripens mid to late June. Self-fruitful.
C-16 *	Nectarine	Sun Red	200-300	Sweet and flavorful, medium to large fruit is semi-freestone with bright red skin and firm yellow flesh. Self-fruitful. Ripens mid-May to early June.
C-17*	Olive	Arbequina (self-fruitful)	n/a	Recognized for its aromatic ripeness, low bitterness, pungency and stability. Self pollinating, low polyphenol content, small fruit and cold hardy.
C-18 *	Peach	August Pride	300 or less	A large, all purpose yellow freestone peach for milder climates. Sweet, aromatic, rich flavor. It is one of the very best! Ripens 3-4 weeks after the Mid Pride Peach. Self-fruitful.
C-19 *	Peach	Eva's Pride	100-200	Delicious, fine-flavored, large peach. The yellow-fleshed, freestone peach has a unique red mottle to its interior. Self-fruitful and a heavy producer, with harvest season beginning in late May through late June.
C-20 *	Peach	May Pride	175-200	Very early ripening peach for warmer climates. Delicious and sweet. Produces beautiful pink blossoms. Ripens in May. Self-fruitful.
C-21	Peach	Mid Pride	175-200	Very early-ripening, freestone peach for warm winter climates. Ripens in May. Sweet and tangy fruit. Very large for such an early peach. Large, showy pink blossoms. Self-fruitful.
C-22	Peach	Stark Donut	200-300	Unique white-fleshed fruit with a sunken center (shaped like a doughnut). Sweet, with a mild flavor described by some as almond-like. Self-fruitful. Blooms late midseason. Harvest late June to early July.
C-23	Peach	Tex-King	450	Attractively colored, yellow fleshed, clingstone peach that matures early to mid May. Bears large fruit with good productivity and excellent firmness. Introduced by Texas A&M. Self-fruitful.
C-24 *	Peach	Tropic Snow	225	White flesh, semi-freestone peach. Low acidity, extremely sweet flavor. Self-fruitful.
C-25	Pear	Southern King	300-350	A high quality traditional pear of unknown parentage. Shows resistance to fire blight. Good for fresh eating or canning. Self-fruitful.
D-5	Persimmon	Fuyu	100-200	The most widely grown persimmon tree. Bears young and yields large crops. Slightly drooping branches provide an elegant look in the landscape. Deep-orange fruit is medium-sized and oblate in shape, with a consistently sweet taste. Stays firm even when ripe. Keeps well for several weeks. Non-astringent. Seedless. Heat-tolerant. Ripens in September to October.
D-6 *	Persimmon	Giant Fuyu	200	Larger, not as flat as Fuyu. Crunchy when ripe like Fuyu. Sweet, flavorful, non astringent. Easy to grow, cool or hot climates. Self-fruitful. Harvest mid October to mid November.
D-7	Plum	Burgundy	250-350	Medium sized, reddish, purple-colored fruit has a deep red, mellow, sweet flesh. Self-fruitful. Fruit ripens in early July, but keeps well on the tree until mid August.

* New to this Sale.

Non-Citrus Fruit Trees (continued)

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
D-8	Plum	Methley	250	A deep red plum with red flesh. Medium sized. Mild flavor, excellent for fresh eating or jelly. Ripens early June. Self-fruitful. An excellent pollinator.
D-9	Pomegranate	Garnet Sash	100-200	Heavy producer. Slightly dwarf tree. Will set loads of small to medium sized fruit in the first year. Large seeds produce a sweet-tart juice. Self fruitful.
D-10 *	Pomegranate	Kandahar Early	100-200	This old world variety, from Afghanistan, has red skin and flesh. With a sweet flavor and just a touch of tartness, it can be eaten fresh or juiced. Self-fruitful. Ripens in September.
D-11 *	Pomegranate	Texas Pink	100-200	Large, pale pink, soft and sweet fruit with a great flavor. Self-fruitful. Very early ripening.

Avocados

Row	Fruit	Variety	Description
D-1	Avocado	Brazos Belle	This purple-black fruit is an elongated pear shape, has creamy flesh and high oil content. The skin is shiny and paper thin. A large, upright, somewhat spreading tree. Very cold hardy. Ripens from September to October.
D-2	Avocado	Don Juan	A nice sized fruit with speckled green-brown skin and exceptional quality flesh. Cold hardy to mid teens.
D-3	Avocado	Joey	Founded by Joey Rivers in Uvalde, Texas. Fruit is medium in size and egg shaped. Skin is purple-black in color. Heavy bearer. Ripens from August to October. Extremely cold hardy, to 15° F.
D-4	Avocado	Mexicola Grande	Tall, spreading tree similar to the Mexicola. The fruit is 15-25% larger and somewhat rounder shape with a better seed to flesh ratio. The skin is paper-thin and purple to black in color. High quality flesh with a high oil content. Hardy to the upper teens, ripens in September.

Miscellaneous

Row	Fruit	Variety	Description
F-2	Coffee	Arabica	Easily grow your own coffee, no matter where you live. Plant produces colorful beans against a background of glossy, dark green foliage. Harvest your beans when they ripen. They go from green to yellow, to orange, then finally to deep red. In addition to the coffee aroma, you will also love the spring flowers that smell like jasmine. Dry the beans in your oven or roaster. Once cooled, they are ready to grind and percolate into a delicious brew.
F-3	Ginger	Zingiber "Baby Ginger"	A great selection of edible, yellow ginger root that produces rhizomes quickly. Can be dug as soon 4-6 months in ground or from a container. Store-bought ginger root is mature, fibrous & extra spicy. "Baby Ginger", which is harvested juvenile, is becoming popular in the culinary arts. It is more mild, tender & does not need to be peeled. The shelf life is about 1-2 weeks at room temperature. Ideal plant to have in the home garden, where it can be harvested fresh as needed.

Fig Trees

Some fig varieties produce two crops a year. A *breba* is a fig that develops in the spring on the previous year's cane growth. In contrast, the main fig crop ripens in late summer or fall and develops on the current year's cane growth.

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
E-1	Figs	Celeste	100	Very productive, vigorously growing tree. Ripens early summer, before most other fig varieties. Fruits without pollination. The fruit is small and pear-shaped with ribbed sides. The color ranges from purple to brown, tinged with bronze. Pulp is white or amber colored. Very sweet with a rich, fresh flavor. Can reach 25 feet. Ripens in July.
E-2	Fig	Ischia	100	Well-loved as a container plant because they bear fruit at a young age. A productive yellow-skinned fig. The sweet, succulent fruit is large and can measure up to 2" in diameter with a reddish interior. They can be eaten fresh or dried to enjoy later. This fig variety can produce two crops a year, a breba and a main crop.
E-3	Fig	Italian Black	100	Jet black fruit with deep red pulp that is treasured for its flavor and reliability. Native to Italy. Great for preserves. Produces two crops per year, a breba and main crop. Ripens in July.
E-4 *	Fig	Italian Honey	100	Slow growing, heavy bearing, amber fleshed fruit. Use fresh or dried. Can be grown in a large container. Produces two crops per year, a breba and main crop.
E-5	Fig	Little Ruby	100	Such a slow growing, dwarf fig tree that is a favorite for bonsai. Small, bite size, sweet, ruby red figs are tasty and attractive on the tree. Great container fig and very unique. Produces a breba and a main crop. Plant height only 2'-3'. Ripens early August.
E-6 *	Fig	LSU Gold	100	Large golden fruit with a ruby blush. Fruit ripens from a light green to attractive yellow. Pulp is light red to pink. Ripe fruit has excellent, sweet fig flavor. Delectable when eaten fresh, but also dries well. Great for preserves! Louisiana State University introduction. Grows well in containers. Heat-tolerant. Ripens in July.
E-7	Fig	LSU Purple	100	Fruit is medium-sized with a mild flavor, high sugar content, and white flesh. The pulp is light amber to light red when ripe. It has a small eye making it resistant to spoilage. Enjoy fresh or dried. Tree is a vigorous, upright grower. Louisiana State University introduction. Grows well in containers. Heat-tolerant. Ripens from July through frost.

Berries

Blackberries :

Blackberries have roots and crowns that are perennial, meaning they will live many years. But the life cycle of the canes is just two years. A blackberry plant has two types of canes: Primocanes and Floricanes.

Primocane means a new cane, or a cane in its first year. Whereas, a Floricane is a cane in its second year. Floricane-fruiting blackberries produce a crop of summer fruit once per year on second-year floricanes (**Natchez**). Primocane-fruiting berries produce two crops a year, one in summer (on the pimocanes) and one in the fall (on the floricanes). (**Prime Ark Freedom**).

* New to this Sale.

Berries (continued)

Blueberries :

There are two classifications of blueberries that will perform well in the Houston area: Southern Highbush **(A)** and Rabbiteye **(B)**.

Southern Highbush varieties are generally self-fertile, but will be more productive if two or three varieties are planted in proximity.

(A: Emerald, Jewel, Rebel, Sunshine Blue)

Rabbiteye varieties generally require a pollinizer. Plant two or more varieties to insure a crop.

(B: Climax, Pink Lemonade, Premier, Tifblue)

Southern Highbush cannot be counted on to pollinize Rabbiteyes and vice versa.

Southern Highbush produce several weeks before Rabbiteyes. The longest harvest can be obtained by planting two or more of each classification.

Southern Highbush plant varieties are generally smaller than Rabbiteye plant varieties.

Blueberries prefer acidic soils (pH 4.5 - 5.0). A near fail-safe way to grow blueberries in almost any soil is to incorporate peat moss into the planting medium. For planting directly in the ground, work up a planting area approximately 2½ feet in diameter and 1 foot deep for each plant. Remove 1/3 to 1/2 of the soil. Add an equal amount of pre-moistened peat moss and mix well. (One 4 cubic foot compressed bale will usually be sufficient for 4-5 plants.) For raised beds, mix equal volumes peat moss with bark (not cedar or redwood), compost or planting mix.

Blueberries will generally begin to produce the second year after planting, but will take 4 – 5 years to reach full production. Depending on the variety of plant, you will probably get 1–2 pints of blueberries the second year. The third year you might expect 2–3 quarts, and the fourth year you should get at least 1 gallon, perhaps more. depending on the size of the fruiting canopy.

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
F-4	Mulberry	Pakistan	400	Easy to grow, this abundant producer of sweet medium-sized fruit performs exceptionally well in a container, yielding several crops per year even during the first season. Very tolerant of heat, humidity, drought and poor soil. Ripens April through mid summer.
F-5 *	Berry	Goji	600	Unique among fruits because they contain all essential amino acids. They also have the highest concentration of protein of any fruit. They are loaded with vitamin C, contain more carotenoids than any other food, have twenty-one trace minerals, and are high in fiber. Boasting 15 times the amount of iron found in spinach, as well as calcium, zinc, selenium and many other important trace minerals, there is no doubt that the humble goji berry is a nutritional powerhouse. This amazing little superfruit also contains natural anti-inflammatory, anti-bacterial and anti-fungal compounds. Their powerful antioxidant properties and polysaccharides help to boost the immune system.
F-6	Blackberry	Natchez	400 - 500	One of the first producers of the season. This semi-erect, thornless variety produces large, sweet berries each year. Fruit stores well for extended enjoyment. Summer-bearing florican. Ripens in early June. Trains well and grows freely along a fence or other supporting arbor.

* New to this Sale.

Berries (continued)

Row	Fruit	Variety	Chill-Hours (See Page 10)	Description
F-7	Blackberry	Prime Ark Freedom	150	New release from University of Arkansas, this is the world's first thornless primocane-fruiting blackberry. Fruits very early in the season, and where the climate is suitable, fruits again in the fall. Has exceptional fruit size and flavor. Excellent disease resistance, great heat and humidity tolerance.
F-8	Blueberry	(A) Emerald (Southern Highbush)	250	A mid season variety yielding abundant crops of the largest Southern Highbush berries with a mild, sweet flavor. Its rounded, spreading bush habit makes it a great landscape plant.
F-9	Blueberry	(A) Jewel (Southern Highbush)	200	This early to mid season producer is a leading variety due to its exceptional growth, high yields, and large tangy fruit. Makes an excellent landscape plant.
F-10	Blueberry	(A) Rebel (Southern Highbush)	400	An early, very productive variety with large, medium blue fruit and impressive yields. Introduced by the University of Georgia in 2005/2006. Semi-spreading and very vigorous.
F-11	Blueberry	(A) Sunshine Blue (Southern Highbush)	150	Mid to late season producer with medium sized, good quality, firm berries. Foliage is slender and is considered a good ornamental. It's upright, compact habit and blue-green foliage that turns burgundy in fall makes this plant especially decorative in pots.
E-8	Blueberry	(B) Climax (Rabbiteye)	450	An early ripening berry that produces medium fruit with a sweet flavor. Outstanding variety for harvesting a large quantity of berries. Growth is upright with intense green foliage.
E-9	Blueberry	(B) Pink Lemonade (Rabbiteye)	200	A pink blueberry! This early to mid season sweet treat is a delight to both the eye and the palate. The delicious berries add sweetness and delectable color to desserts. Bred by the U.S. Department of Agriculture, this beautiful fruiting shrub serves as an attractive ornamental with white-pink flowers in spring and crisp red-orange foliage in autumn.
E-10	Blueberry	(B) Premier (Rabbiteye)	550	An early to mid season producer with large fruit that possesses excellent flavor. Very highly productive. Plant grows upright with good foliage.
E-11	Blueberry	(B) Tifblue (Rabbiteye)	650	A mid season ripening plant with medium to large berries. An upright, vigorous grower. Leaves turn red in the fall making it a good ornamental plant.

Pecan

Row	Nut	Variety	Description
F-1 *	Pecan	Native	Pecan is the state tree of Texas. It is a large, deciduous shade free tolerant of conditions in all of the state. The fastest growing of the hickories. Blooms in the spring. Edible nut is enclosed in a thick, leathery four-valved husk. Very heat tolerant with medium-low water requirement. Prefers an acid neutral soil.

* New to this Sale.

Chill Hours Average

Everyone who is interested in growing their own fruit will eventually be faced with the issue of “chill hours”, or chill units (CU) – the terms are interchangeable.

How to determine your Chill Hours Average

There is an ongoing debate about (CU) definitions and which model to use. We are going to leave that debate to others and use one of the oldest and most commonly accepted models to determine total average chill hours in our area:

A Chill Unit is an hour of air temperature between 32°F and 45°F, minus all hours above 60°F.

It is generally accepted that temperatures below 32°F do *not* contribute to CUs and that temperatures above 60°F *detract* from CUs. Therefore an hour is subtracted for every hour above 60° F and hours below 32° F are not counted.

The total number of CUs accumulated in an area during an average winter determines the *Chill Hours Average* for that area. Chill Hours do not have to be continuous. They are an accumulation of hours within these temperatures.

Some averages in our area:

Gulf & Bay Area	≤300
Hobby Area	≤300
Inner City	≤300
Pasadena-South Bay	350 – 450
Harris County (other than above)	400 – 600
Fort Bend County	400 – 600
Cypress-Bear Creek	≤600
Counties north of Harris	600 – 900

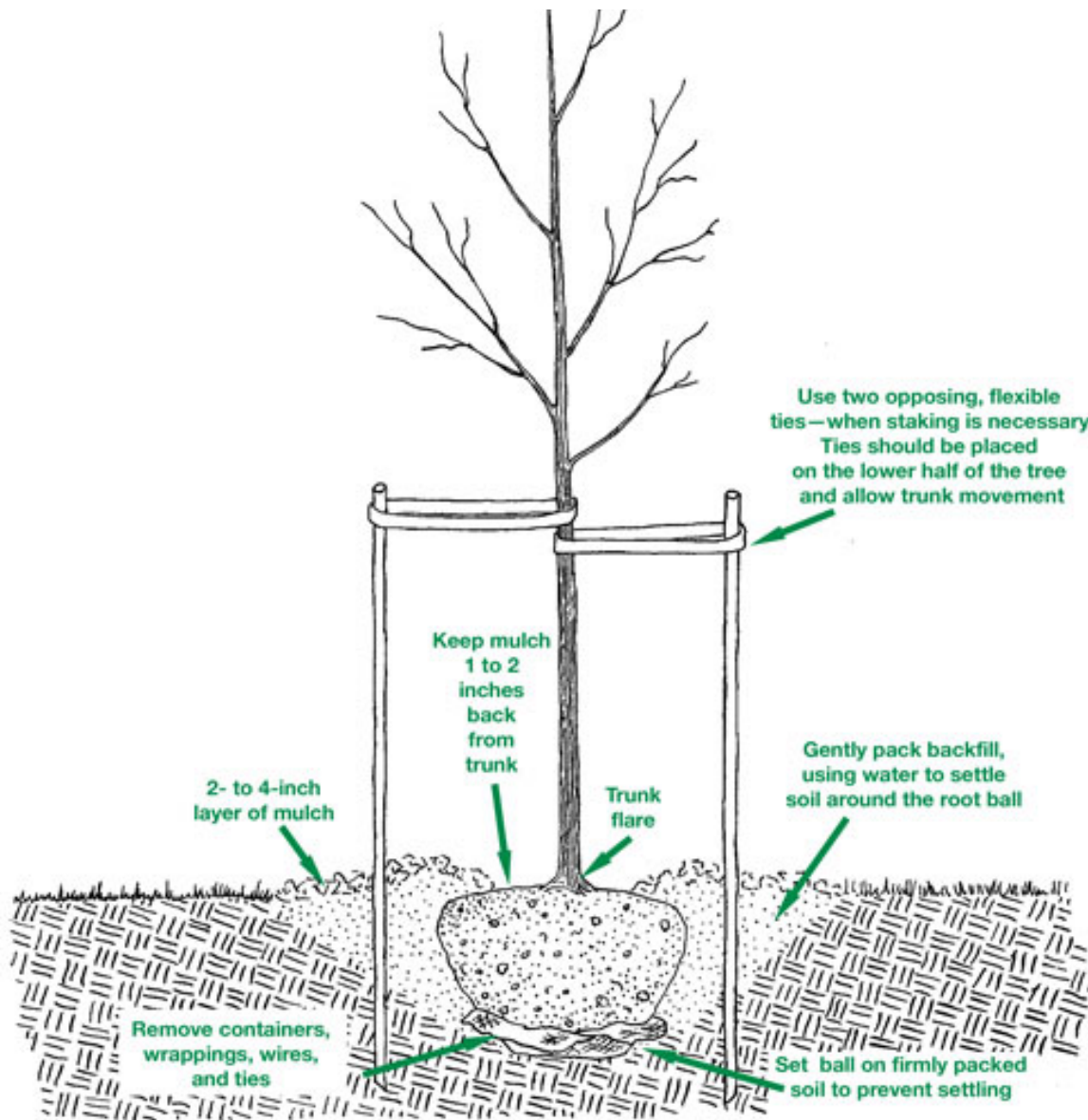
Finding out how many chill units you have accumulated

While the above chart gives you a guideline to averages, chill units can vary from year to year. Some local weather stations track and report chill. This website assists you getting a closer estimate of the chill hours you have actually accumulated in a given season: getchill.net.

There is a two step process. First, follow the getchill.net link to WunderMap and find a weather station closest to you. Click on that station, and find the station ID. Copy that ID number, go back to Get Chill, type or drop the station ID into the box, and click “calculate chill”. In a few seconds of searching, you will get the current number for that station. Not all stations record chill. You may have to repeat this for other stations in your area.

The above chill hour information is from The Garden Academy, complements of the owner, Angela Chandler. Among her long list of accomplishments, she is a Harris County Master Gardener, Precinct 2, Retired Status. For additional information regarding chill hours, and to read more about The Garden Academy and Angela Chandler, please go to TheGardenAcademy.com.

How to plant your new tree in the ground



Plant where your fruit trees will receive at least six hours of sun a day during the growing season.

Sun should not be blocked by buildings, fences or other obstacles.

Plant at least three feet from sidewalks and driveways and eight feet away from buildings, as roots will spread wider than the tree crown.

Allow ten to fifteen feet of space between fruit tree

Dig the hole a little deeper than the root is tall — and make it wide enough to accommodate the longest roots without bending.

Loosen the sides of the hole. Roots sometimes do not readily penetrate a slick interface.

Backfill with native or slightly amended soil until the bottom of the hole is at the right planting depth for the tree.

Prune off any broken, rotted or twisted roots, making a clean cut. Use a clean and sanitized pruning shear.

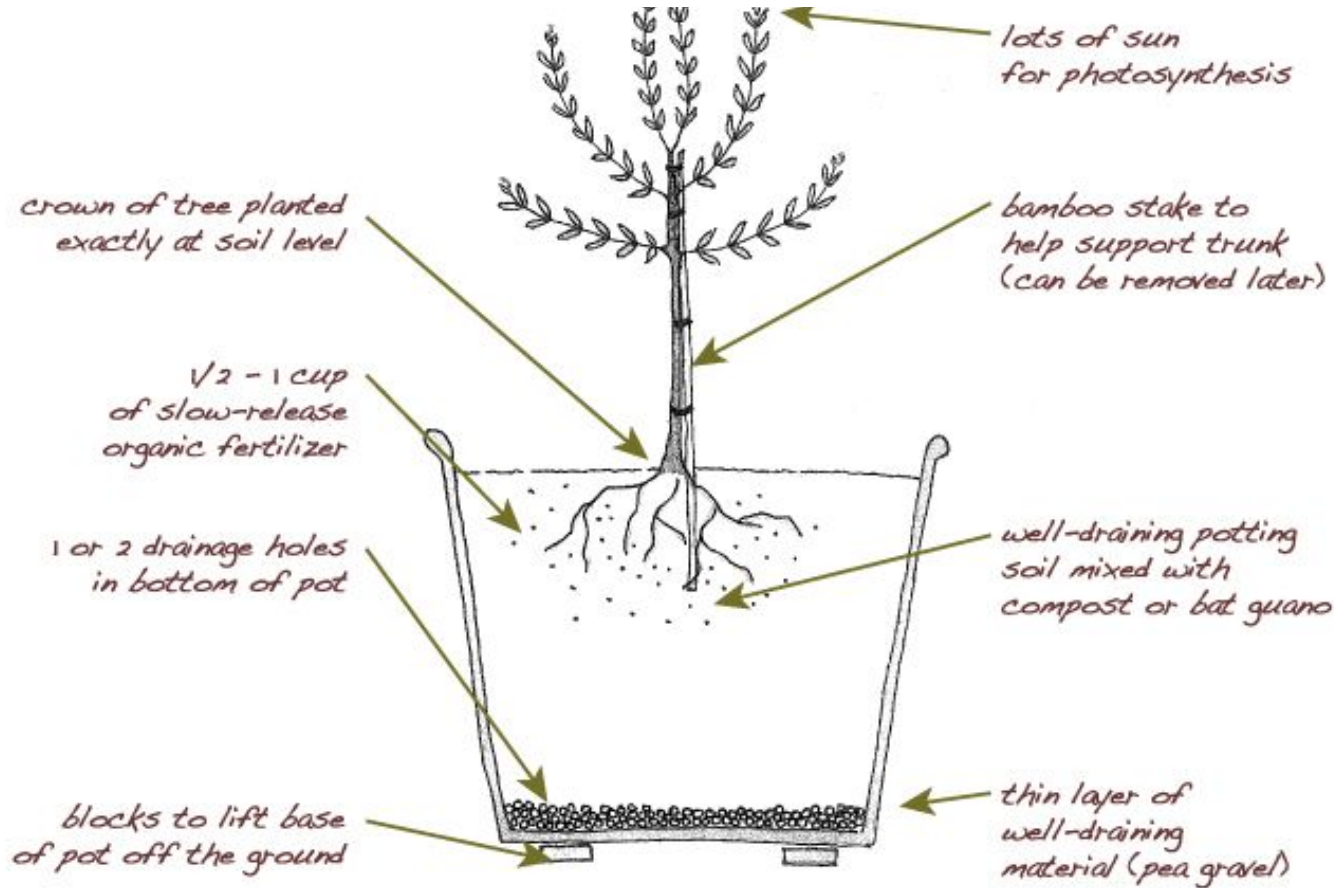
Position the tree, spread the roots and refill the hole, tamping the soil around the roots as you go.

If planting in fast-draining soil, water thoroughly in order to finish settling the soil around the roots. In slower-draining soils, water a little at a time - over several days if necessary.

Mulch a Volcano

Build a watering ring (Volcano) atop the ground around the tree, about 2 to 4 inches high and 6 to 8 inches thick. The ring should be slightly wider than the planting hole. If adequate soil isn't left over from planting, borrow some from the garden. Fill the water basin with water. When the water soaks in, it may be necessary to add a little soil to the holes made as the soil settled around the root system.

How to plant your new tree in a container



How to care for your tree the first couple years

1. Once your trees are planted, there will be some maintenance required. The amount will depend on what kind of trees you have planted. Watering, of course, will be the most important task. Mulching will help to retain soil moisture and reduce water needs. Fertilizing with a good organic fruit tree food is also recommended. Follow the directions on the package for application amount and frequency. Most fruit trees will require some pruning, if only to remove any dead or damaged wood. Since pruning differs with each type of fruit tree, we strongly recommend researching the type of pruning to assist you in making the most out of each tree.

Water young fruit tree once every other week. Most fruit trees require that you apply enough water to moisten the soil to a depth of 3 to 4 feet. This is the depth at which most fruit trees extend their roots.

2. Do not apply fertilizer until the tree begins new growth after planting. Fertilize monthly through October. Scatter fertilizer on the ground at least a foot from the tree trunk and promptly water it in thoroughly. Nitrogen is usually the only fertilizer element required in most Texas soils, but additional elements should not do any harm. Consult your local county Extension agent. Available fertilizers may vary in terms of the percentage of nitrogen, but the following is a general rule regarding the quantity to apply:

Amount of fertilizer per tree, applied monthly, February-October.

Nitrogen Content: 8-13% First year 1 cup Second year 2 cups Third year 4 cups

Nitrogen Content: 17-21% First year ½ cup Second year 1 cup Third year 2 cups

3. Keep your young fruit tree pest- and disease-free using preventive orchard care. Weed regularly, because weeds often harbor pests and disease while stealing soil nutrients and water. Additionally, always pick up and discard any fallen fruit, rake and remove fallen weeds often, and trim off any dead branches as those often attract rot-related diseases.

4. Treat the fruit tree if pests or disease occur. There are dozens of such potential problems, depending on your region and the type of fruit you have. In most cases, a standard 50 percent concentration copper spray, available in most garden stores and nurseries, resolves most common fruit tree diseases. Meanwhile, insecticidal soap treats most common pests like aphids and mites. Apply such products according to their manufacturer-specific guidelines, as toxicity varies widely by product.

How to protect young fruit trees from frost and cold spells

There are two types of protection for your young fruit trees Passive and Active.

Passive protection

Passive frost protection can minimize risk, decrease the probability or severity of frosts and freezes, or cause the plant to be less susceptible to cold injury. These practices include site selection, variety selection and multiple cultural practices.

The best time to guard your fruit tree from frost is before it is planted, and proper site selection is the best and most effective passive risk-avoidance strategy, use wind breaks, planting on south & east sides of a building, avoid hill tops or deep valleys. Avoid planting at the bottom of a slope — where frost accumulates — or on cold hilltops. Good site selection for frost protection includes good air movement.

Active protection

Active frost protection is getting more attention now with greater numbers of people planting and enjoying growing fruit trees. Active frost protection comes in three basics; the addition of heat, the mixing of warmer air from the inversion layer under radiation frost conditions, or the conservation of heat from the plant.

You can take several simple steps to reduce the risk of frost damage to buds, blossoms and fruit without using heaters, commercial wind machines or overhead sprinklers. If possible, choose fruit varieties less susceptible to frost damage in order to find varieties that bud and bloom later, when frost is less likely to occur. When this is not an acceptable factor like with certain citrus trees other remedies may be necessary.

For existing fruit trees, put off pruning until winter but before approximately February 15th around Harris County. If frost is in the forecast when trees are in bloom and the soil has been dry, water the soil a day or two beforehand to a depth of 1 foot (wet soils radiate more heat than dry soils do). To trap extra warmth, cover the wet soil around the bases of the trees with clear plastic until the danger of frost has passed. Bare soil — or soil covered with clear plastic — stores and radiates more warmth. Be certain to also wrap the base of the trunk up to and slightly above the root graft.

Frost blankets can provide frost protection for fruit trees and small fruits. When you place frost blankets around tree trunks, be sure to anchor them on the ground to trap the soil's radiant heat.

The biggest danger comes in the late winter/ early spring when the tree starts to break dormancy. The young leaf buds and shoot growth can be damaged by extreme cold, a late frost can mean a harvest-less year for a tree in bloom. Unfortunately, there is no cure for frost damage; a tree affected during its spring growth and bloom will have to wait until the next year to fruit. Prevention is key to protecting your tree from frost damage.

Know what your fruit tree cold hardiness is before planting and choosing. The first step to preventing frost damage is to select a variety of tree that is cold hardy and has the correct chill hours for your climate. This will reduce or, if you're lucky, eliminate the need to take further steps to protect your tree in the spring.

If your fruit trees are damaged by a late frost, you won't necessarily lose your harvest for the year. Apples, pears and peaches can lose up to 90% of their flower buds without a decrease in harvest.

If temperatures are expected to drop too low once your tree begins budding or blooming, or if sleet or snow is predicted, it's time to take action. If your tree is small enough, you can wrap it in frost blanket bags for the duration of the cold snap. Decorating with mini Christmas lights or C-9 or C-7 Christmas lights will add significant warmth around the tree. On especially colder nights and longer periods of deep chill light and cover with a canvas or large tarp. Uncover when temperatures reach near freezing or slightly above.

Using a large garbage can and putting can over your young and smaller citrus tree the first year and putting three 5-gallon buckets next to the trunk the second year to support the same garbage can because the tree was taller than the garbage can. After that, the tree was on its own.

Heavy frosts during or just after blooming can kill young fruits. In winter, or at any other time of year, if you expect severe frost for the night, cover the fruit trees to prevent damage. Trees that are only one to two years old are especially vulnerable to frost damage and benefit the most from covering

If you expect a long, cold spell, covering fruit trees every night can become tedious. An alternative to covering is to build a wooden framework covered in shade cloth, which protects trees against winter wind and helps keep the heat from the earth in place. Surrounding fruit trees with 5-gallon plastic pails of water also helps harness the heat to protect fruit trees from frost damage. These methods mimic the conditions that protect fruit trees when they are beneath building overhangs or near swimming pools or other bodies of water.

Why compost and rose soil mix

Composting is nature's way of recycling. It is a natural process of breaking down organic matter and turning it back into a rich nourishing substance. With this comes a lot of nutrition and benefits for your landscape and garden. Microorganisms produce a rich earthy substance called humus that is the key component in producing fine compost. Though most people think that compost is a fertilizer, it is a soil amendment. Fertilizers add nutrients to soil; while amendments improve the soil so that plants can make use of those nutrients. A simple way to distinguish the two is to remember that compost feeds the soil and fertilizer feeds the plant.

Why DS (Double Screened)?

DS is made from leaf mold, wood, vegetative debris. The raw materials are ground up and piles made by folding fruits and veggies into the piles. The juices from the fruits and veggie keep the compost with an optimum moisture content during the composting process. In addition, we also populate the piles with a microbe pack that allows for better composting. The piles then are turned and once the pile is mature and ready for processing, we screen a 1st batch with a 3/8" screen. How can you use our Compost DS?

Our compost DS is probably one of the finest fungal compost products you will see anywhere in the US. It's perfect for top dressing, amending, tilling, mulching, spot treating and as a general use compost.

Compost Tip:

Spread about a half-inch to an inch of compost around your trees, shrubs, and/or your lawn, and in your annuals and vegetable gardens. In established gardens, spread the compost on top of the soil, where it will eventually seep into the ground below; or you can lightly fork it over. This can help improve the first 6–10 inches.

In a nutshell all composting is, is just nature's way of recycling. It is a natural process of breaking down organic matter and turning it back into a rich nourishing substance. With this comes a lot of nutrition and benefits for your landscaping and gardening. Microorganisms produce a rich earthy substance called humus that is the key

component in producing fine compost. Though most people think that compost is a fertilizer, it is actually a soil amendment. Fertilizers add nutrients to soil; while amendments improve the soil so that plants can make use of those nutrients. A simple way to distinguish the two is to remember that compost feeds the soil and fertilizer feeds the plant.

Rose Soil Mix, it's not just for roses

Comprised of Composted Fines, Large Grain Angular Sand, Composted Pine Bark, traces of green sand and sulfur soil. This blend is made in Texas and is widely used for color, roses, azaleas, acid loving plants, fruit and veggies.

1. Why choose Rose Mix: loosens soil with organic materials, adds air, and allows water to easily reach roots. Rose mix is one of the best choices of soil for as this soil includes all these main elements and 50 percent of air, it is a perfect soil addition to raised beds, containers and when amending existing clay heavy soils. Rose Mix contains inorganic material such as sand, clay, and silt and organic materials this porous soil absorbs water adequately and quickly.
2. Maintaining the pH: Maintaining the pH of soil is equally important. The optimum pH to grow many vegetables and fruit trees is 6.5. If the soil pH is too alkaline or acidic, it can affect the growth. If you notice any foliage coloration or change in the plant growth, it could be because of the soil pH level.
3. Enriching the soil: Use peat moss to enrich the loamy soil if it contains more clay. Mix in organic compost, peat moss, dried leaf mold, and manure to amend the soil. If you are using a pot, then add the organic matter to the bottom before planting.
4. Keeping the soil healthy: The role of micro-organisms in the soil is very important. They keep the soil condition healthy by breaking down the organic materials and releasing nitrogen. You can help keep the soil microbes happy, by adding in alfalfa meal, decomposed organic matter, compost, kelp meal or fish emulsion.. These ingredients will provide nitrogen, phosphorus, amino acids, potassium, and necessary vitamins to the micro-organism population in the soil.

Top 10 Compost Reasons

- Supply nutrients for plants by providing surfaces where nutrients can be held in reserve in the soil
- Reduces the need for chemical fertilizers.
- Facilitate better drainage by loosening soil structure
- Use less water; Store water in the soil
- Help increase air drainage
- Increase the activity and numbers of soil microorganisms
- Encourage earthworms
- Enhances the ability of vegetables to stand up to common diseases and may improve their flavor and nutrition
- Compost can benefit year-round
- Helps balance the pH of your soil

Top 10 Soil Mix reasons

- Improved plant establishment and growth.
- Dramatically expand access to moisture and nutrients from the soil.
- Increased nutrient and water uptake.
- Increases efficiency of water use.
- Drought tolerance.
- Improved disease resistance.
- Assists in weed suppression.
- Improves soil structure and stability.
- Improves root growth.
- More blossoms and enhances nutritional value

Urban and Homeowner Soil Sample Information Form

Please submit this completed form and payment with samples. Mark each sample bag with your sample identification and ensure that it corresponds with the sample identification written on this form. *See sampling and mailing instructions on the back of this form.
(PLEASE DO NOT SEND CASH)

SUBMITTAL AND INVOICE INFORMATION: This information will be used for all official invoicing and communication.

Sheet ___ of ___

Name _____ County where sampled _____

Mailing Address _____ Phone _____

City _____ State _____ Zip _____ Email* _____

CLIENT NAME: Client name will only be included with information above on result reports.

Name _____

Lab Use only

Payment Required (DO NOT SEND CASH)

Check/ Money Order (keep your M.O. receipt)

Extension of Credit-Bill, AG-257 submitted (page 3)

Send Invoice/payment - Aggie Marketplace email address required.

Amount Paid \$ _____

Make Checks Payable to: Soil Testing Laboratory

This change in payment policy was required to meet State of Texas requirements for extension of credit. If enclosed payment is insufficient, by submission of this form, I agree to make payment for the testing services selected herein and provided upon receipt of invoice from AgriLife Extension.

SAMPLE INFORMATION (Required) (see options listed below)

Laboratory # For Lab Use)	My Sample ID	Square feet of sampled area	Last Time Fertilized	I previously used fertilizers/organics	I am growing (see below*)	Requested Analyses
Example	Front Yard	2000	5/30/14	5 lbs 21-0-5 per 1000 sqft	F	Select only one box
						<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12
						<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12

*A \$2.00 mail fee will be charged for all invoice and sample results mailed via USPS. Results and invoice can be emailed in PDF form for free. email results Charge \$2 for mailing

We strongly suggest emailing the laboratory at soiltesting@tamu.edu prior to shipping your samples. This will provide the laboratory a valid email address for returning your results and invoice. Bounced emails will be billed \$2 and a hardcopy will be mailed to the address listed above.

- | | | |
|--|---|---|
| Annual, Flowers and Gardens
A. Azaleas and Camelias
B. Roses
C. Annuals
D. Vegetable Garden
E. Other | Turfgrass
F. Common Bermudagrass
G. Hybrid Bermudagrass
H. St. Augustinegrass
I. Centipedegrass
J. Buffalograss | Trees and Woody Ornamentals
M. Pecan trees
N. Fruit trees
O. Shrubs and Ornamentals
P. Shade trees
Q. Other trees |
| K. Tall Fescue
L. Kentucky Bluegrass | | |

1. Routine Analysis (R) (1) (pH, NO ₃ -N, P, K, Ca, Mg, Na, S and Conductivity) (This test is a base test for basic fertilizer recommendations.)	\$12 per sample	8. R + Micro + B + Organic Matter (13) (Includes Test 3 plus organic matter analysis)	\$46 per sample
2. R + Micronutrients (Micro) (2) (Adds Zn, Fe, Cu, and Mn to test 1.)	\$19 per sample	9. R + Texture (determines % sand, silt, and clay) (7) (Includes Test 1 plus textural analysis)	\$32 per sample
3. R + Micro + Boron (B) (3) (Includes Test 2 plus boron) (Recommended for individuals applying compost and manures.)	\$26 per sample	10. R + Micro + Texture (11) (Includes Test 2 plus textural analysis)	\$39 per sample
4. R + Detailed Salinity (4) (Includes Test 1 plus detailed salinity analysis) (Recommended for individuals using lower quality irrigation water.)	\$34 per sample	11. R + Micro + B + Organic Matter + Detailed Salinity (14) (Includes Test 8 plus detailed salinity)	\$68 per sample
5. R + Micro + Detailed Salinity (5) (Includes Test 2 plus detailed salinity analysis)	\$41 per sample	12. R + Micro + B + Org. Matter + Detailed Sal. + Texture (15) (Includes Test 8 plus textural analysis and detailed salinity and provides the most comprehensive data needed for troubleshooting most plant/soil growing issues (does not address pathogen, pesticide or hydrocarbon issues)).	\$88 per sample
6. Routine Analysis + Organic Matter (8) (Includes Test 1 plus organic matter analysis)	\$32 per sample	Hardcopy mailed to address listed above	\$2 per invoice
7. R + Micro + Organic Matter (10) (Includes Test 2 plus organic matter analysis)	\$39 per sample	Pricing valid until 12-31-2019. The latest form can be downloaded at the laboratory's website: soiltesting.tamu.edu	

TAKING A SOIL SAMPLE FOR FERTILIZER RECOMMENDATIONS

Where to sample

- A soil sample should represent a given area of your lawn or garden that is treated or used similarly (for example, front yard, back yard, planting bed, garden and etc.).
- Sample areas separately if you observe distinct differences in slope, soil texture (for example sandy areas verses clayey) or water drainage.
- The laboratory does not provide analyses for heavy metals, microbial communities, pesticides or other non-traditional plant-nutrient management uses.

Collecting a soil sample

- Using a trowel or similar tool, scrape away any non-decomposed plant tissue and materials.
- Next, cut a core or divot 6 inches deep into the soil and place soil in a clean plastic container. Repeat this step 8 to 10 times in the lawn or garden which is being considered for testing.
- Mix all collected soil thoroughly, removing any roots or other visible plant materials and place 2-3 cups of soil in a quart-sized re-sealable heavy gauge plastic bag. Air-dry soil if sample feels wet to the touch.
- Label the bag with a permanent marker, clearly identifying each bag with a simple sample ID matching those used on the front side of this.

Mailing your soil sample

- Complete the information form on the front page (this information is required for you to receive fertilizer recommendations that are based on your soil test results). Incomplete information (e.g., lack of name, address, crop information and etc.) may result in delay of testing or receipt of results.
- Please include payment with the sample. Please note that the price is per sample. Send check or money order made out to Soil Testing Laboratory. DO NOT SEND CASH.
- Credit card payment information through Aggie Marketplace can be viewed at the laboratory's website. <http://soiltesting.tamu.edu>
- Place the plastic sample bag, completed submittal form, and your check or money order for the appropriate fees in a box or padded envelope and send to: United States Postal Service Other Couriers (FedEx, UPS and etc.)

United States Postal Service

**Soil, Water and Forage Testing Laboratory
2478 TAMU
College Station, TX 77843-2478**

Website: soiltesting.tamu.edu

Other Couriers (FedEx, UPS and etc.)

**Soil, Water and Forage Testing Laboratory
2610 F&B Road
College Station, TX 77845
Phone: (979) 845-4816**

Email: soiltesting@tamu.edu
