

THE FORT BEND GARDENER



HORTICULTURE IN FORT BEND COUNTY

SUMMER 2015

TEXAS A&M AGRI LIFE EXTENSION

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Contributions from:



FORT BEND COUNTY
Master Gardeners

Aggie Horticulture® 

**Fort Bend
Beekeepers
Assoc.** 

T E X A S
**Master
Naturalist** 

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Barbara Buckley
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I miss spring.... seriously

By Boone Holladay,
County Extension Agent-Horticulture

Somebody please help me out. Did anyone see spring? Officially, summer began on June 21st, but its glory has been with us for months already. Tropical storms and flooding quickly turned to brutal humidity, mosquitoes, and the early demise of vegetable gardens across the region. Somewhere in the hustle and bustle of it all, we neglected to get a spring edition of the Fort Bend Gardener sent out. We apologize for that. Our time was spent elsewhere on timely issues.

The infamous Walnut Caterpillar has returned with a vengeance and specialists have helped us respond to the needs of pecan owners. Our office, including the Fort Bend Master Gardener hotline has answered countless calls on diseased edible and ornamental plant and tree concerns and we have helped hundreds of people respond appropriately to those issues.

Within the terrible losses associated with the spring floods, we noticed the true nature of humans to step up and help their community. Everywhere you looked it seemed there was someone helping another in need. By offering much needed furniture, flood clean-up, and for some, just help with access to their homes, the light that shined above the tragedy was just plain old-fashion human kindness.

We hope you enjoy this read. Have a great day, Boone

“Half the interest of the garden is the constant exercise of the imagination.”

— [Mrs. C.W. Earle](#)

Obscure Scale Insect

By Boone Holladay,
County Extension Agent-Horticulture

You may have noticed this while driving around. As you look down a row of young oak trees, one of them at random looks light yellow, while the others are a nice dark green. Well, if you haven't, I have. Upon close inspection, these sickly trees are increasingly covered with Obscure Scale insect.

As the name implies infestations are obscure and difficult to spot. Infestations, especially heavy infestations will appear as if someone has sprinkled ash on the limbs. When checking for this type of infestation, it is best to check on 3 or 4 year old wood.

In the life cycle of this scale, females will excrete a waxy covering about 1/8 inch in diameter under which they feed and lay eggs. When immature emerge from eggs they are referred to as crawlers, which is the only mobile stage of this insect. Once a crawler has moved and settled in a new location it begins to feed, excretes the waxy covering and it will never move again. Fortunately, there is only one generation per year. Unfortunately, if not treated, they will exponentially multiply on the plant.

These insects feed by inserting their mouthparts or styles into the conductive tissue of the tree and feed on the plant sap. This shows up as yellowish or stunted new growth. Heavy infestations can cause limb dieback and will reduce overall tree vigor.

There are some beneficial lady beetles and mites that feed on scale and a few parasites which help, but if control is needed that control will have to come from the application of a dormant oil. Although we now have some highly refined light summer oils, they may burn foliage during high summer temperatures.

It is the general thought that these oils kill insects by suffocation where the oil covering prevents



respiration. Although the exact mode of action can be debated, the bottom line is that there has to be good coverage.

Scale control can be difficult and with heavy infestations it could take a couple seasons for management. Some of the difficulties for control include: the scale's waxy cover provides protection against pesticide exposure; some crawlers tend to settle under the protection of older scale covers, thus producing a layering effect; and crawler activity extends over a long period of time.

During the growing season, when dormant oil cannot be used, insecticide treatments can be used to control crawlers but these treatments must be correctly timed for crawler activity. Prior to purchasing any control products, read labels thoroughly.

For additional information on Obscure Scale, or any pest insect issues you may have, contact us at <http://fortbend.agrilife.org> for more information.

The Walnut Caterpillar, Round 3

By Boone Holladay, County Extension Agent-Horticulture
Bill Ree, Pecan IPM Specialist



Bill Ree and I have done much scouting and have collected some great data on the Walnut Caterpillars, which have been defoliating pecans in our area since early June. Here are some of our observations that will help you with an action plan.

The first generation has done their damage and they are currently pupating in the soil. In a couple weeks, the adult moths will hatch out, mate, and start the whole cycle all over again. What this means for pecan owners is that new young caterpillars should begin feeding on trees again around mid-July and should be quite noticeable again by the last week of July. This would be the time to look out for clusters of the reddish ones on tree trunks, which are easy to treat.

Datana integerrima, is a foliage feeder of trees in the family *Juglandaceae*, which includes the pecans, hickories, and walnuts. Infestations start with female moths depositing egg masses of 300 to 900 eggs on the undersides of individual leaflets of mature foliage.



Egg masses are deposited in one layer and free of any covering, so that growers can spotlight into the trees at night and see the white dime-size clusters of eggs on the underside of leaves. They will resemble bicycle reflectors. Eggs will take approximately 10 to 12 days to mature and larval feeding will be approximately 23 days before larvae leave the tree to seek pupation sites. So, if you see the new egg masses on mature foliage, it should be about a week before the larvae hatch out.

The caterpillars grow in stages called 'Instars'. When they are young they stay up at the top of the canopy and feed. Then, after the 3rd instar (usually about 1 week



later), they begin to come down the trunk to molt in clusters. This is probably a protective habit, for as they grow larger, they are easier to be spotted by birds, etc. If you cannot reach the top of the tree where the caterpillars are feeding, you may be able to catch them when they move down the tree and cluster to molt. This is usually about 6 to 15 feet up the tree and easy to spot with a little inspection. If you can catch them then, you can spray the cluster with a range of soft products listed below.



The safest product for full canopy spray situations would be *Bt* (Dipel, Thuricide, Caterpillar Killer). *Bt*, or *Bacillus thuringiensis*, is a bacterium that if ingested by caterpillars will kill them, but is completely safe for all other insect and animal species. This has to be sprayed on the leaves where caterpillars are feeding to be effective.

For control of clusters on the tree trunks there are a range of options including: wettable Sevin (*Carbaryl*), oil sprays (citrus, dormant, or summer oils), or just a mixture of soapy water (10-15 drops of dishwashing soap to 24 oz. water). Spray directly on and completely saturate live clusters.

Be aware of the potential for acute poisoning to pets and wildlife if you use some chemical pesticide products on these insects. With the large populations of these, ingestion of treated insects by birds and other beneficial organisms may prove deadly.

We ask that if you scout any young populations of the Walnut Caterpillar in your area, that you contact our office at <http://fortbend.agrilife.org>. We will then visit the area to confirm the outbreak and if confirmed, will add it to our mapping. Thanks ahead for your help.

July Named Smart Irrigation Month

by the Texas Irrigation Association

Adopted from release by Tammy Swor, TXIA Media

July is traditionally the month of a peak demand for water for lawns, gardens and landscapes in North America. The Irrigation Association named July as Smart Irrigation Month to increase public awareness about simple practices and innovative technologies homeowners, businesses and property managers can use to:



Save money on utility bills.

- Minimize or defer investments in infrastructure to store and carry water, typically paid for by property taxes or municipal bonds.
- Protect their community's water supply for generations to come.

Homeowners typically overwater lawns and landscapes by up to 30 percent. By selecting and planting carefully, watering wisely, and maintaining and upgrading automated irrigation systems, consumers can save money, save water and see better results.

To find a licensed irrigation professional to design, install, maintain or audit your irrigation system, visit www.txia.org. For tips on efficient irrigation, go to www.smartirrigationmonth.org. Smart Irrigation Month is an initiative of the Irrigation Association, a

non-profit industry organization dedicated to promoting efficient irrigation. Visit www.irrigation.org to learn more.

As well, Texas A&M AgriLife has a wealth of information available online for anyone interested in learning about simple ways to help conserve water for our future generations. Go to <http://texaswater.tamu.edu/> to view these resources. As well, Texas A&M AgriLife Extension, the City of Sugar Land and several industry partners are putting on a symposium on November 13th for landscape industry professionals which will focus primarily on landscape water conservation. Mark your calendars now.

BEST BUDS BY SWISS



Mark Your Calendar and Save These Dates

The Texas A&M AgriLife Extension Service in Fort Bend County, along with the Fort Bend County Master Gardeners, are offering opportunities for the people of our region to learn more about getting back to homegrown and homemade basics through various Backyard Basics programs and workshops.

The programs are offered at a nominal cost and their development came from a growing statewide and national interest from consumers to learn more about where their food comes from and how it is prepared and preserved.

Backyard Basics:

Getting the Most from Your Garden

- ◇ July 18— Earth-Kind Landscapes
- ◇ August 15—The Fall Food Garden
- ◇ September 12—Composting Made Easy
- ◇ October 23—Jams & Jellies
- ◇ November 14—Grilling
- ◇ December 5—Fruits & Nuts

For more information and to download registration forms visit :

<http://fortbend.agrilife.org/backyard-basics/>

Seasonal Garden Checklist:

July-August

By Dr. William Welch,

Professor & Texas A&M AgriLife Extension Service
Landscape Horticulturist

- Evaluate the volume of water delivered from lawn sprinklers to ensure healthy, stress-free grass during the heat of the summer. One thorough watering which will deliver one inch of water at a time is better than several more shallow sessions. The amount of water available through flower bed sprinklers may be checked by placing several shallow pans among shrubs or flowers.
- Caladiums require plenty of water at this time of year if they are to remain lush and active until fall. Fertilize with 21-0-0 at the rate of one-third to one-half pound per 100 square feet of bed area, and water thoroughly.
- Prune out dead or diseased wood from trees and shrubs. Hold off on major pruning from now until mid-winter. Severe pruning at this time will only stimulate tender new growth prior to frost.
- Sow seeds of snapdragons, dianthus, pansies, calendulas, and other cool-season flowers in flats, or in well-prepared areas of the garden, for planting outside during mid-to-late fall.
- Plant bluebonnet and other spring wildflowers. They must germinate in late summer or early fall, develop good root systems, and be ready to grow in spring when the weather warms. Plant seed in well-prepared soil, one-half inch deep, and water thoroughly. Picking flowers frequently encourages most annuals and perennials to flower even more abundantly.
- It is time to divide spring-flowering perennials, such as iris, Shasta daisy, oxeye, gaillardia, cannas, day lilies, violets, lirioppe, and ajuga.
- Select and place orders for spring-flowering bulbs now so that they will arrive in time for fall planting.
- Don't allow plants with green fruit or berries to suffer from lack of moisture.
- A late-summer pruning of rosebushes can be beneficial. Prune out dead canes and any weak, brushy growth. Cut back tall, vigorous bushes to about 30 inches. After pruning, apply fertilizer, and water thoroughly.

Visit <http://aggie-horticulture.tamu.edu/> for more in-depth seasonal updates from Dr. Welch and other Texas A&M Horticulture Department staff.

Master Gardener Classes to Begin October 8, 2015!

The Fort Bend County Master Gardener Training class, a program offered by the Texas A&M AgriLife Extension Service, begins Thursday, October 8, 2015. Classes are Tuesdays and Thursdays from 9am – 3:30 p.m. during the month of October through November 10, 2015. The cost of the class is \$200 (\$353 for couples). The fall class is limited in size.

Everyone who has a desire to increase their knowledge of gardening, then sharing their knowledge with others through community service in support of Texas A&M AgriLife Extension Service, and becoming a Certified Texas Master Gardener is invited. Applications will be accepted on a first-come, first-served basis so get your application in now! The deadline is September 28, 2015. If you wait any longer, your spot could be filled with someone else!

For information on the Fort Bend County Master Gardener Class and to obtain an application for the fall class, visit

<http://fortbend.agrilife.org/horticulture/master-gardeners/> or you can call 281-633-7033 or 281-342-3034.

Earth-Kind® Kids Kamp Registrations!

Hear ye! Hear ye! All youth entering 3rd thru 5th grade are invited to attend our Earth-Kind Kid's Kamp on August 3 – 7th, 2015 at the Fort Bend County Fairgrounds, 4310 TX-36, Rosenberg, TX 77471. Kamp will be held from 9 a.m. until 3 p.m. each day. Educational activities/topics include wild birds, insects, butterflies, bats and much more! Space is limited to the first 25 paid participants. The registration fee is \$75 which includes all materials, snacks, and T-shirt. For information, contact Margo "Mac" McDowell, 281-633-7033. Download & print registration form at <http://fortbend.agrilife.org/youthcamps/>.

Arctic Frost Satsuma Mandarin Hybrid Named New Texas Superstar

by Robert Burns, Extension Communication Specialist

Adapted by Barbara Buckley, Fort Bend County Master Gardener

Satsuma Arctic Frost has been named a Texas Superstar plant by Texas A&M AgriLife Research and Texas A&M AgriLife Extension Service horticulturists.

Arctic Frost is the most cold-hardy satsuma hybrid tested so far, having survived temperatures as low as 9 degrees at the Texas A&M Research and Extension Center test site near Overton, said Dr. Brent Pemberton, AgriLife Research horticulturist and chair of the Texas Superstar executive board, Overton. The board has named other cold-hardy satsuma mandarins as Superstars: Satsuma Miho and Seto in 2010, and Orange Frost in 2014.



Most citrus are easily damaged by the cold, and can only be grown in tropical and subtropical areas, said David Rodriguez, Texas A&M AgriLife Extension Service agent for horticulture in Bexar County and member of the Texas Superstar selection board. Because many satsuma mandarin varieties do well under Texas conditions, they were promoted as a group in 1993, but Miho was the first individual plant selected, Rodriguez said.

"All the satsuma crosses are the work of Dr. Ying Doon Moy, who was born in a small village in south China but immigrated to the U.S. in 1978, said Rodriguez. Moy found a position as a plant breeder with the San Antonio Botanical Garden in 1980, where until he retired in 1999, and developed more than 150 new varieties of papaya, ginger, esperanza, rose, hibiscus and citrus, Rodriguez said.

In 1997, Moy and Dr. Jerry Parsons, a now-retired AgriLife Extension horticulture specialist, began collaborating to hybridize various satsuma mandarins with winter hardy Changsha tangerines, a citrus variety long cultivated in China. Changsha is one of the most cold-hardy citrus grown there. It produces edible but extremely seedy fruit. Their intention was to produce an enhanced cold hardy variety with low seed count. The hybridizing was a success.

According to Rodriguez viable seedlings were planted in containers and over 5 to 7 years these grew and matured. Both Orange Frost and Arctic Frost were selected as the most successful cold-hardy crosses for propagation.

In 2005, Parsons and Dr. Larry Stein, AgriLife Extension horticulturist at Uvalde, asexually propagated all of the crosses by rooting cuttings from the original seedlings, Rodriguez said. By 2007, they had plants growing in 10-gallon containers, and proceeded to make trial plantings at Uvalde and Overton to test for cold hardiness in unprotected field settings. Both varieties were made available to commercial growers about two years ago.

"Arctic Frost grows to become a relatively tall tree with white flowers that give off a heady orange fragrance," Rodriguez said. Come late fall or early winter, Arctic frost produces fruit that is juicy, nearly seedless and easy to peel. It will grow 8 to 12 feet tall in the ground or 6 feet tall as a patio container plant in about five to six years.

"When planting in the ground, protection from cold by wrapping with frost cloth for the first year or two is recommended," Pemberton said. "A site protected from the north wind will also help with winter survival."

"The fruit peel and flesh is brightly orange colored, retaining that characteristic from its Changsha tangerine parentage," Stein said. "The taste is sweet and tart, presenting a true citrus flavor that is missing in varieties that are sweet but bland."

Rodriguez noted that as opposed to other satsumas, which are grafted to another variety rootstock, Arctic Frost is grown from its own rootstock. "So if they get nipped back from a hard winter, they do not produce shoots from below the graft," Rodriguez said. "Folks that have concerns about the cold might do well to size up the tree with a well-defined root system and strong top canopy for three years as a patio plant before transplanting to the ground."

Texas Superstar is a registered trademark owned by AgriLife Research, a state agency that is part of the Texas A&M University System. More information about the Texas Superstar program, including retail outlets where Superstar varieties may be purchased, can be found at <http://texassuperstar.com/>.

Fulshear Farmers Market

by Ramona Ridge,
Coastal Prairie Master Naturalist

The Fulshear Farmers' Market was a vision of Forever Fulshear, a local non-profit, who made it a reality on Aug. 2nd, 2014. Fulshear is a small city with long-time acreage owners, many who have large gardens and newly minted master planned subdivisions without much green space so arrangements were made to introduce them to each other.



Wow, did that ever expand! Eight months later, the Fulshear Farmers' Market has between 15-30 vendors each Saturday with a huge variety of locally produced food and food products, plants, food trucks and more. Locally grown produce can be bought from Ole Boy Brazos Bottom Farm of Rosenberg, Shilling Farms from Colorado County, Backyard Bounty from Conroe, Three Sisters Farm from Needville, Moss Family Farms of Hempstead, Lucinda's Farm of Brookshire, and J&S Farms of Richmond. Everything sold at the FFM is required to be grown or produced within a 200 mile radius of Fulshear, thus ensuring the freshest fruits and vegetables and lowering the carbon footprint of long transportation.



Other vendors at the Market can be; Pecos Jack, with Ft. Bend County honey or Rosie McCusker, a beekeeper whose property is less than a mile from the market site; Natasha's Naturals, with handmade soaps, sugar scrubs, laundry detergent, dog shampoo and lip balms; Kookie's Cakes and Pies, who makes everything a sweet tooth could desire and amazing breads; Dennis Harlan, who drives up from Palacios each Friday night with huge, fresh-off-the boat shrimp; Rawr Cleansing Juices, who spend all Friday nights cold pressing the most delicious cleansing juices ever; Czech It Out, amazing Czech strudels and nut breads; Fort Bend Coffee Roasters, the dynamic couple of Abby and Bryan Hibbard never fail to impress with their delightful blends; Texas T Kobe Beef from Wallis with melt-in-your-mouth Wagyu cuts of beef; Katterra Exotics with the locally raised bison meat; Salsa Works who bring Houston Chili Pepper Festival award winning salsas; Sunshine Acres, Lane's Eggs, and Shilling Farms with farm-fresh eggs; Wicked Rosie with a huge array of homemade jams and jellies that will not be found in any grocery

store; Della Casa Pasta, who make natural pastas and ready to eat lasagnas and ravioli; Morning Star Prairie Plants with very difficult to find native plants; Reyes Nursery brings vegetable and flowering plants and trees; Naturalia makes a unique fruit snack with just two or three ingredients that is a huge hit with parents; Bayou Bread Company with a vast array of nut breads, and Dennis Dietrich who makes one of a kind bird feeders and bird houses (okay, so they stretched the food & food product idea to help the birds!). Other occasional booths are our own Texas Master Naturalists Coastal Prairie Chapter, dog and cat rescue groups with sweet animals to adopt, Fulshear Massage, chair massages (the vendors' favorite!); and Knife Sharpening Pro to get those knives, shears and garden tools really sharp and a different, delicious food truck is onsite each week. The Fulshear Farmers' Market is growing each week, so expect lots more to come! For information, please contact Ramona Ridge; 713.703.4129 or foreverfulshear@gmail.com.

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Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status. Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services are required to contact Texas AgriLife Extension Service at 281.342.3034 five working days prior to the meeting so appropriate arrangements can be made. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas cooperating.

DATES TO REMEMBER

Saturdays in the Gardens
with the Fort Bend Master Gardeners
First Saturday of the month 9:00-11:00 a.m.

Fort Bend Beekeepers Meeting
Second Tuesday of each month, 7:00 p.m.

Backyard Basics Education Series
March– November 2015

Coastal Prairie Master Naturalist
Programs, First Thursday of the month

For full information on events call (281) 342-3034 or visit

<http://fortbend.agrilife.org>

<http://fbmg.com>

<http://txmn.org/coastal/>

<http://fortbendbeekeepers.org/>