

THE BULB ISSUE

GULF COAST *Gardening*

ISSUE 246 • NOVEMBER/DECEMBER 2024



TEXAS

MASTER GARDENER

TEXAS A&M AGRILIFE EXTENSION

Galveston County

WRITTEN BY GALVESTON COUNTY MASTER GARDENERS
IN COOPERATION WITH THE GALVESTON COUNTY OFFICE
OF TEXAS A&M AGRILIFE EXTENSION SERVICE

The Splendor of Bulbs



MG Kevin Lancon

This month's newsletter is about bulbs. I've always thought of bulbs as a spring surprise. They are generally planted in the fall or spring depending on the bulb and then forgotten about until these little surprises burst onto the landscape scene with a beautiful display of color, intrigue and eye-catching splendor.

Our Fall Festival in the Discovery Garden on October 12 featured bulbs in the plant sales. We have a wonderful group of knowledgeable master gardeners who have a passion for bulbs. They give tips on specific varieties and bulb maintenance. We have recently added a bulb bed in the Discovery Garden, so that we can showcase a diverse variety of bulbs that perform well in our area. We located this bed near the entrance of the Discovery Garden, because of its stunning display of beauty while in bloom. If you are considering adding bulbs to your landscape, visit the demonstration garden bulb bed inside of Carbide Park in La Marque and talk to bulb bed team members.

I hope you enjoy this issue of our newsletter, and invite you visit our web site at <https://txmg.org/galveston> and also our Facebook page at <https://www.facebook.com/galvcountrymg/> for more information of upcoming events and activities.

We also thank you for supporting the Galveston County Master Gardeners and hope to see you soon.

Kevin Lancon

GCMGA President



Surprise lily (*Lycoris*) Pixabay.com



The Cover Photo on the Sept/Oct issue was erroneously tagged with an incorrect photo byline. The wonderful cover photo is by MG Vicki Blythe (Not Sue Bain as printed).

Bulbs: A Lazy Gardener's Delight



MG Karolyn Gephart

To have a bulb garden one has to prepare the soil at the right location, to plant the bulbs following directions, and then to spend a lifetime (if it is one that naturalizes) enjoying the blooms. My own bulb garden used to be a raised bed vegetable garden where I fought weeds, pests, squirrels and my own forgetfulness when it came to watering. Now it is a seasonal show of beauty with no lines taken on my weekly To Do list. I love it.

This issue is filled with beauty and tips on successful bulb practices. You can even have bulb lasagna and not go near the kitchen to prepare it. Enjoy a daughter (Jamie Hart) of a National prize winning daylily gardener sharing what she has learned in her lifetime about daylilies. The Discovery Garden Bulb Team Leader Fran Brockington has two articles: crinum and rain lilies. Get informed from Hedy Wolpa on what pests can attack bulbs. And so much more!

Ever wonder what research is happening in the Discovery Garden? The first of many articles on research going on is in this issue with Norma Torok telling readers about growing three varieties of winter squash.



Daylily (*Hemerocallis*) Xing Ma

Enjoy the issue. It just might encourage you to put some bulbs into your landscaping this month. What a beautiful springtime you could have...and for those who cannot wait, forcing an amaryllis bulb or paperwhites can be festive holiday décor in November and December.

Happy Holidays!

Karolyn Gephart

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Amaryllis 'Aquaro' Kathy Bors-Koeford



MG Norma Torok at Fall Festival MG Karolyn Gephart



MG Sandra Gervais holding 'Black Pearl' Amaryllis MG Ira Gervais



ON COVER: Amaryllis 'Sunshine Nymph' by MG Ira Gervais



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Bulbs for Beauty to Come



Ralinda Fenton
GCMG 2023

Fall is a great time to plant bulbs for beauty to come. Planning allows the gardener to experience beautiful, effortless flowers in the spring and beyond. This issue's focus is bulbs and the other plants that are frequently called bulbs – corms and tubers.

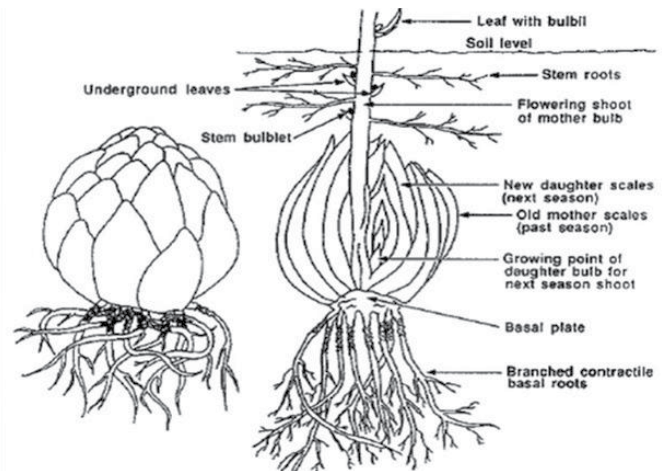
A bulb is a storage unit holding nutrients to keep the organ alive while it is dormant. They have both food and water in them. That is why most bulbs have a swollen base. This allows the plant to survive during periods of cold and drought. When conditions become conducive to growth, the organ will grow. Because of the storage organ, the plant can grow quickly and reproduce easily. People frequently get bulbs, corms, and tubers confused. So how do you know one from the other?

Bulbs are made up of a storage unit consisting of modified leaves (called scales) that surround the actual plant and have a flat bottom and round, pointed upper part. A bulb contains a small version of the plant. The scales are the actual storage unit which contains the nutrients needed. Some bulbs have a tunic that is dry, thin covering to protect the bulb. These bulbs are called tunicate bulbs. One bulb can grow year after year and gets larger and larger as it grows. They grow new bulbs called bulblets. They grow laterally on the basal plate. They can be divided to produce additional plants. Common examples of bulbs are amaryllis and allium (onions).

Corms are a solid living organ that contains the actual bud of the plant. It doesn't have scales. The stem of the corm contains the nutrients the plant needs to grow. The enlarged stem resembles a bulb but is much flatter, but it is always solid. The bud is usually in the center-top or off to the side where it sprouts from the base. The roots grow from the underside of the corm. Corms have a tunic similar to a true bulb. The corm does not grow larger over time. A new corm is formed each year; the old one shrivels as all the nutrients are used and absorbed in the new corm. Cormels, baby plants, will be produced around the top part of the corm. These can be separated from the corm and planted to produce new plants. Common examples of corms are crocus (*Crocus vernus*) and gladiolus (*Gladiolus palustris*).

Tubers are underground parts of the stem that store the nutrients for growth. They do not have dry leaves around it all and do not contain a basal plant like bulbs and corms. The tuber has little eyes or growth buds that will produce a plant. They are round, elongated organs with bumps where the growth will occur. They are usually much flatter than bulbs or corms.

Root vegetables are common tubers. A well-known root vegetable is sweet potato. The yam is the actual tuber. Tubers dry out much more easily than bulbs or corms. They can be stored in peat or vermiculite to slow down the drying. Tubers are best propagated by separating pieces of the tuber with at least one eye and some roots to give you a new plant. Common flowering examples of tubers are dahlia and begonia.



Bulb San Joaquin Master Gardeners

Two other organs that are frequently called bulbs are tuberous roots and rhizomes. Tuberous roots are actual roots and contain the nutrients for the plant. Examples of tuberous roots are beets and carrots. Rhizomes have thick stems that grow horizontally. They propagate by growing additional stems as they grow below or on the surface of the ground. Some examples of rhizomes are canna lilies, mint and ginger. There are many invasive species that are rhizomes. Rhizomes can easily get out of hand as they continue to spread horizontally. I recommend diligently containing them in a specific area or planting them in pots.

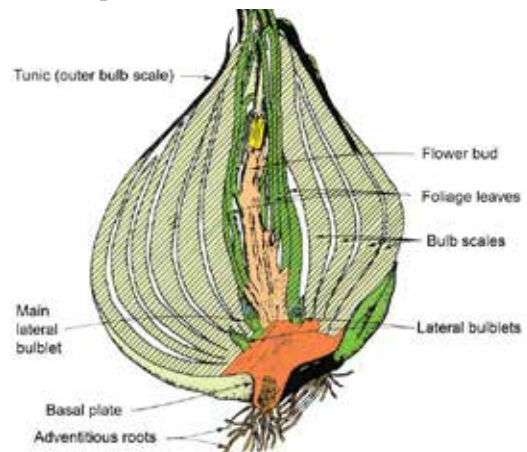


Diagram of a bulb Davies et al., 2018

“...purchase good, healthy, quality bulbs”

There are a few very important things to consider when choosing and planting bulbs. The first, purchase good, healthy, quality bulbs. The healthier they are, the better your flowers will be. Our Master Gardener in-person annual fall sale offers many bulbs from which a buyer can choose. Planning before a sale what would be best benefits the buyer. Local nurseries and gardening catalogs also offer bulbs. Secondly, be sure you have your bed already properly prepared before you get your bulbs so you can plant them promptly to prevent them getting too dry before planting. If you get them early and need to store them, keep them in a cool, dry, well-ventilated area. You will most likely lose plant production if improperly stored. The third consideration is to be sure you purchase bulbs that are suitable for your area. Here in Galveston County (Zone 9b), there are many bulbs we can grow. Be sure you plant your bulbs at a suitable depth which is usually two to three times the diameter, but always check with the directions to verify. It is best to avoid ones that require a winter chill period although it can be done with the appropriate cold treatment. A caution however, the cold season bulbs do not flourish or adapt here even with using cold treatment. Those bulbs will have to be replanted every year and usually have stunted growth in our area.

All types of “bulbs” can provide beauty for the gardener. Many bulbs grown in zone 9 are the kind of plants that we can enjoy year after year without having to repurchase plants. With a little care, we can all help beautify our area with bulbs, corms, and tubers.



Saffron crocus bulb MG Ralinda Fenton

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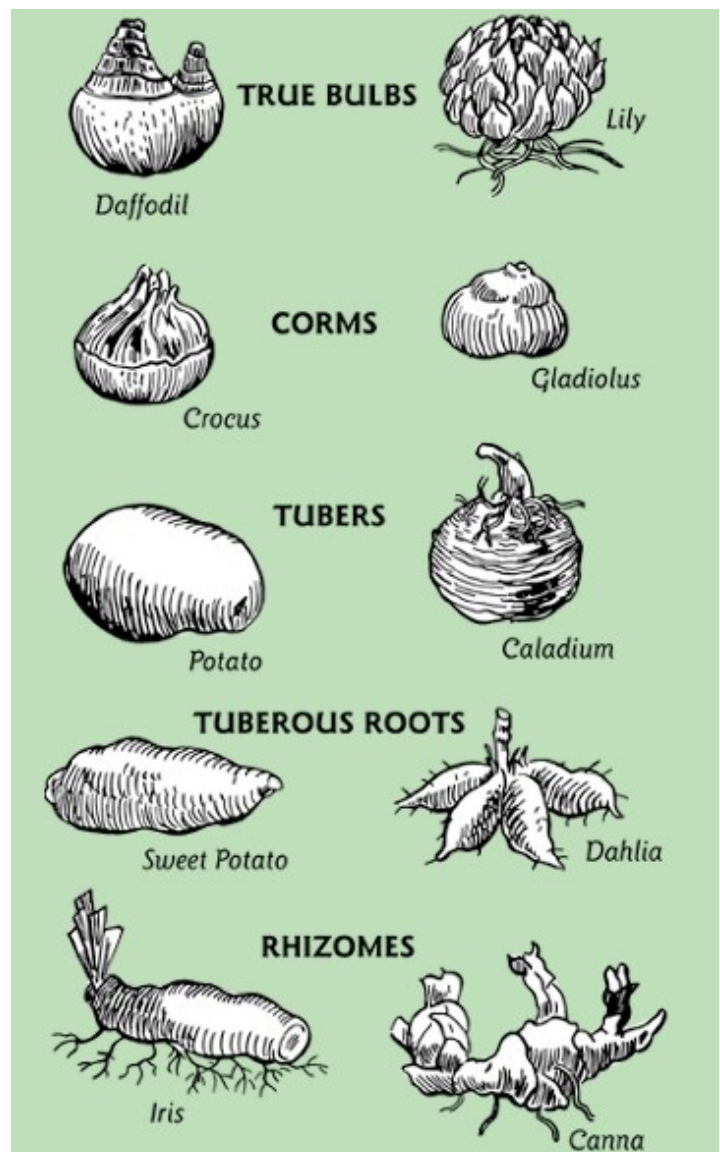
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University of Georgia Extension

Growing Daylilies in Southeast Texas' Heat and Humidity



By Jamie Hart
GCMG 2023

The forever forgiving daylily (*Hemerocallis* spp.) is a highly sought after perennial for its vibrant blooms, hardiness, and ability to adapt to a variety of climates and soil types. Daylilies are growing more popular every year and there are several approaches here that will ensure they flourish and enhance your garden with brightness and color.

Daylilies are not true lilies. They belong to a different plant family called *Hemerocallis* which is a combination of two Greek words *hemera* (day) and *kallos* (beauty). They are appropriately named as their blooms last for one day. Daylilies are clump-forming, erect, herbaceous perennials. An older plant can produce many buds and, if tended to, will give you a good number of blooms throughout their growing season. Deadheading, although not necessary, will make way for new blooms and keep the plants looking tidy.

Choosing the Right Daylily Varieties

Selecting daylily varieties that are suited for Southeast Texas is important. Search for cultivars that are tolerant to our heat and humidity. Varieties like 'Stella de Ora,' 'Happy Returns,'



'Little Grapette'

'Mango Candy,' and 'Little Grapette' are four great choices. These varieties are evergreen and semi-evergreen and are well suited for our area as they will keep their foliage longer. They can also take our mild winters. 'Stella de Ora' is the most sought-after daylily with masses of golden yellow that will flower throughout the summer. When planting, vary the times when your varieties bloom. It's nice to have early, mid and later bloomers so there is a succession of flowers occurring in your garden.



One of my mother's designs using 'Stella de Ora'

There are diploid and tetraploid daylilies. Diploids have two identical sets of chromosomes in each cell

and tetraploid has four. Tetraploids have many advantages over diploids such as larger and more vibrant blooms and flower stalks are sturdier, and flowers and foliage are of heavier substance. Tetraploids grow fast and are very resilient as well as being resistant to diseases common in high humid climates. A few varieties would be 'All American Chief,' 'Red Volunteer,' 'Mary Todd,' 'Sacha,' and 'Diamonds in the Sky.'

The American Daylily Society database maintains 82,000-plus daylilies. You can search by daylily name, partial name, hybridizer, or run advanced searches such as flower forms. Search results will show details on registration year, parentage, and flower forms and color.

Garden Site and Soil Preparation

Daylilies do best in full sun with well-draining soil. Dig a hole that is twice as wide and deep as the root ball. Space them about 18 to 24 inches apart.

Plant in late winter or early spring with the crown level with soil surface. Tamp soil gently and water deeply to settle the soil around the roots. They need at least six hours of sun for the best blooming success. Because of the intense summer sun, it is best to have morning sun. Afternoon shade will keep plants from getting heat stress and scorched leaves. Good drainage is also important, especially in our area that is known for heavy rains. Our soil can range from sand to clay. Amend it to get a good middle ground by working in some good organic compost. A slightly acidic to neutral pH (6.0 to 7.0) is ideal for daylilies. Mulching is important here as the sun will dry the soil quickly. Use about 2 to 3 inches around the plant, but do not cover the plant crown as this could cause rot. Mulching also regulates temperature and suppresses weeds.

Watering and Feeding Effectively in Southeast Texas

Daylilies are relatively drought-tolerant once they are established. Soils here can become waterlogged with excessive rains or become really dry in the heat of summer. They will need good deep watering, making sure to bottom water to prevent fungal diseases. A good drip irrigation is ideal. Daylilies do well without any fertilizer but adding it can increase blooms and robustness. You can fertilize in early spring, in mid-summer before the daylilies bloom and in late summer with a slow-release fertilizer designed for flowering plants. LSU recommends 5-10-10 or 6-12-12 for ½ cup per square yard. If using a spray or granular, apply at the base avoiding the leaves as they can burn the foliage. It is always a good idea to get a soil test done at your local extension office before amending the soil.

“...highly sought after for vibrant blooms”

Daylilies will multiply on their own making them an ideal plant to share. For the best health, they should be divided every three to five years depending on the thickness of your growth. If you do not divide, they will start growing smaller and fewer flowers. There are newer varieties that grow slower so you can wait a bit longer on divisions. Propagation is done by root division so you will need to dig them up and divide them into sections, then replant at a proper distance. The root systems of daylilies consist of tuberous rhizomes that spread through the soil. The extra rhizomes that you do not put back in the ground may be stored by drying then putting them in vermiculite, sawdust, or peat moss in a cool dark place; You can wait to cut back the foliage on your daylilies until spring, as soon as you start to see new growth. Leaving the foliage through winter will help insulate and nourish your rhizomes. If you have them in pots, they must be protected from frost.

Growing daylilies requires some effort, but the reward is a garden blooming with color and character to be admired all summer long. By choosing the right varieties, preparing your soil, watering correctly, and applying fertilizer as needed, you will receive daily gifts of beauty. *All photos by MG Jamie Hart and her mother, Jean Brown*

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'All-American Chief' MG Jamie Hart



GCMG Serenity Garden

Editor's Note: *Jamie Hart grew up around daylilies. Her mother was in the Hemetocallis Society and won many prizes for her daylilies. She won Best in Show at the National Flower Show at Cheekwood in Nashville two consecutive years and was a National Flower Show Judge.*



GCMG Earth-Kind® Bed

The Indestructible Crinum



Fran Brockington
GCMG 2018

Crinums are hardy bulbs in the amaryllis family. Their petal shapes can be trumpet-like, funnel-shaped, narrow, spidery, or star-like. They handle heat and drought, humidity or excessive rainfall, floods, salty air, or cold freezes. Bulb author Scott Ogden said, “Crinums are indestructible.” They are often found where farmhouses once stood. Dr. Bill Welch is known for saying “No crinum has ever died.” Greg Grant tells us they remind him of his grandmother who “grew them along the front porch where the audacious flowers bathed us with their powerful fragrance during summer evenings.”

Planting and growing

Crinum leaves are basal, coming from the bulb. They are strap-like, often reaching three-foot long. They are clump-forming and do not like to be moved. Crinums can be planted any time of the year in our area. Allow plenty of room, at least a foot apart. Plant the bulb with good drainage three times its depth, keeping their neck above ground. They will often bloom their first year during the summer but can sometimes take a few years after disturbing roots. All summer you will be rewarded with three-foot tall scapes, with a cluster of two-inch buds. You may need to stake some of the taller varieties. The large buds will surprise you with how many flowers it holds. Each flower only lasts a day, but they open one right after the other. They like full sun with adequate soil moisture but don't mind a little afternoon shade. They love dappled sun. Bring stalks indoors to enjoy. Cut a scape with at least one opened bud. This will ensure they all will open and release their fragrance. Consider growing in containers. There are some smaller varieties and crinums love being pot bound.

Cleaning up

The flowers attract pollinators, such as bees and butterflies. Watch for pests which include slugs and snails. Usually, birds will keep pests under control. After all buds have bloomed, cut the stalk from the bulb. Sometimes your crinums may get “red blotch.” Though there is limited academic research to back this up, Jenks Farmer, a horticulturist from my home state, South Carolina, says that often red blotch, a fungal disease, can be controlled by removing diseased leaves and feeding with fish emulsion. Most will recover as they grow new foliage. If leaves are too long or look ragged, you can trim them. Unlike most bulbs, you can remove leaves anytime of the year. Remember, crinums are evergreen. Bulbs replenish themselves through photosynthesis, and as Greg Grant says,



'Ellen Bosanquet' MG Kevin Lancon

“the leaves are like solar panels,” leave them on as long as they are green.

During winter if we have a freeze, the foliage may die. Last year all of my crinum's foliage eventually turned to mush. I cut it all off. Because the bulb is underground in the warm earth, it will survive. Sunlight can then reach the bulb again. Once the weather warmed, the bulbs pushed out new bright, shiny green foliage. Mulch as extra protection during a freeze.

Dividing crinums is not an easy task; that is why you choose well when planting. Removing offsets is your best bet. Splitting a clump takes a strong sharpshooter and a strong back. When the clump is out of the ground, pull the roots apart gently. Do not tear the basal plate where the new roots will emerge. Our winters are the best time to remove offsets. My 30-year-old 'Ellen Bosanquet' mother bulb is over 12 inches in diameter. I have shared many of her “daughters and granddaughters.”



MG Fran Brockington

“...often found where farmhouses once stood”

Origins and Hybrids

Crinum is a large genus of probably 180 species. Thad M. Howard says the crinum name comes from the Greek translation of lily. Crinums, however, are found in tropical areas of the world whereas lilies like cooler climates. Crinums are often called lilies, i.e., crinum lilies, spider lilies, swamp lilies. They are actually in the amaryllis family rather than the lily family. *Hymenocallis liriosme*, called ‘Spider Lily’, is similar to the *C. americanum*, our native, white-flowered crinum, ‘Southern Swamp Lily,’ but ‘Spider Lily’ has a membranous cup from where the petals grow that ‘Southern Swamp Lily’ does not have. They both love ditches in Texas.

Crinums were among the earliest plants to be hybridized, starting in the 1700s. Hybridizers choose species for the traits they desire. For example, *C. bulbispermum*, produces cold hardy early bloomers, *C. asiaticum*, produces tall, spidery hybrids, *C. zeylanicum*, have red on the flowers or leaves, *C. moorei*, likes growing in the shade, and *C. x herbertii* produces more striped hybrids.



‘Southern Swamp Lily’ tam.u.edu

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www.pacificbulbsociety.org



Crinum amabile MG Kevin Lancon

‘Giant Spider Lily,’ *C. x amabile* is very scarce, very tall, six to eight feet, has green leaves, white spidery petals with red stripes and ‘Queen Emma’, *C. x augustum*, has purple tinted leaves, purple on the back of its petals, and purple stalks. They are both are from *C. asiaticum* x *C. zeylanicum*. ‘Milk and Wine,’ an early bloomer from *C.*

herbertii, and ‘Stars and Stripes’ from *C. x digweedii* are other striped hybrids.

Popular, pink-flowered hybrids are ‘J.C. Harvey’ from *C. zeylanicum* x *C. moorei*, ‘Cecil Houdyshel’ from *C. bulbispermum* and *C. moorei*, ‘Summer Nocturne’ (a compact variety) from *C. moorei*, the highly scented ‘Mrs. James Hendry’, and the deepest wine-red ‘Ellen Bosanquet’ from *C. moorei*.

Always try to confirm varieties of your crinums and keep them well-marked to preserve their history. Then your indestructible crinums will be part of your garden history and add beauty to your yard.



‘Stars and Stripes’ MG Fran Brockington

Bulb Lasagna: How to Plant a Pot of Layered Spring Bulbs



Michelle
Thompson
GCMG 2017

To add a pop of spring color to a garden, sunny porch entrance or patio, consider planting bulbs in containers lasagna style – yes, lasagna! Planting bulbs in containers doesn't require the labor intense digging of holes in our clay laden, slow draining soil that can often lead to rotting bulbs. I used to spend hours planting bulbs with a bulb digging tool when I lived in Michigan. Oh, how I loved the early

spring color after the long dreary winters up there. So I'm all in on the less labor intensive container version. Bulb lasagna is the outcome of layering spring flowering bulbs in one pot to create a long-lasting display of blooms. Select good quality, plump, firm, unblemished bulbs that grow and bloom at different times. The different textures of foliage also create interest.

Using the lasagna method, you will need a clean pot at least ten inches deep that has drainage holes, fresh potting soil and a variety of bulbs. Larger pots work best as soil temperature will be cooler; smaller pots can dry out quicker or retain too much water causing the bulbs to rot.



'Lasagna' Cross Section Bing.com

Three or more different kinds of bulbs will provide a nice display in your container. Make your selection from early, mid, and late spring blooming bulbs. Gather your supplies and start your bulb lasagna by placing at least a two-inch clump-free layer of potting soil to the bottom of your container, allowing a planting depth of eight inches.



Bulbs Bing.com

In setting the first layer in your lasagna, plant the largest bulbs which are usually the ones that will emerge the latest in the season. These mid to late spring bloomers include daffodils (eighteen-inch-tall varieties), mid-spring tulips, late tulips, fritillaria species, freesia and allium bulbs. Press the flat or basal side (there may even be visible roots) down into the potting soil with the pointy side up. Alternately, you can use a dibber bulb planting tool, a sharp pointy spike, to make holes for all your bulbs. For maximum display, arrange bulbs close together in the pot about one and a half inches apart.

When planting your bulbs sprinkle some fertilizer into the soil. Use one that has a higher phosphorus number (the middle number of the N-P-K listed formula), like a specialized bulb fertilizer. Phosphorus helps to boost root development. I like to use organic bulb fertilizers; they don't burn and usually contain bonemeal, which is a good source of phosphorus. A slow release 5-10-10 formula would also work well.

Now you are ready to create the next layer using early spring bulbs. Sprinkle two inches of potting soil on top of the first layer of bulbs. On top of the soil arrange your second layer of bulbs. Leaving one and a half inches between bulbs will create a nice full display and leave enough room for the bottom layer of bulbs to emerge. This layer will include early spring bulbs like hyacinth, early tulips and the shorter twelve-inch and eight-inch dwarf daffodils. In general, bulbs should be planted to a depth of two to three times the diameter of the bulb.

For the third and final layer, add two inches of potting soil on top of the second layer of bulbs and nestle the smallest of your bulbs on top of the soil. The top most layer of bulbs can include snowdrops (*Galanthus nivalis*), spring snowflake (*Leucojum vernum*), winter aconite (*Eranthis hyemalis*), anemone (*Anemone blanda*), Dutch iris (*Iris reticulata*), Siberian squill (*Scilla sibirica*) and crocus species. Generally, you'll cover bulbs with three to five inches of soil, but recommended bulb planting depths vary so read package directions thoroughly prior to planting.

Plant cool season pansies or viola if you want to add quick color to the top of your container. They like full sun, the cooler Texas fall and winter temperatures, and well-draining moist soil, just as the bulbs do that are in your container. There are some bulbs that prefer only part sun, so you might consider a pot of those bulbs and top it with cyclamen, a cool season annual that also likes part sun.

Something to consider that will affect when you can plant is that tulips and hyacinth bulbs require a chilling period.

“Bulb lasagna...to satisfy your gardening appetite...”

The chilling process helps to initiate flowering and root growth. Cold temperatures stimulate a bio-chemical response that “turns on” flower formation and initiates root growth. “Without a chilling period, the bulbs will try to bloom, but the flowers will be small and malformed,” advises Longfield Gardens, an online bulb retailer. A refrigerator is a great place to chill bulbs as they need to be 35-45 degrees F. Chill your bulbs in paper or mesh ventilated bags away from fruit, especially apples, as they may release ethylene gas that can damage the developing flower bud in the bulb. Chill a minimum of eight weeks and up to 16 weeks before planting. Keep bulbs in the refrigerator until you plant them. If you start to chill your bulbs on November 1, you will be able to plant them in your container January 1.

Information on the bulb package should give an indication of when they will bloom. Whether you are a beginner or experienced gardener, bulb lasagna may be just the thing to satisfy your gardening appetite.

Resources:

For a list of daffodils and jonquil varieties that grow in the south go to <https://aggie-hort.tamu.edu/archives/parsons/flowers/BULBS2.html>

For a list of tulip and daffodil varieties for warmer climates go to: www.adrbulbs.com/page/Growing-spring-bulbs-in-warm-climates

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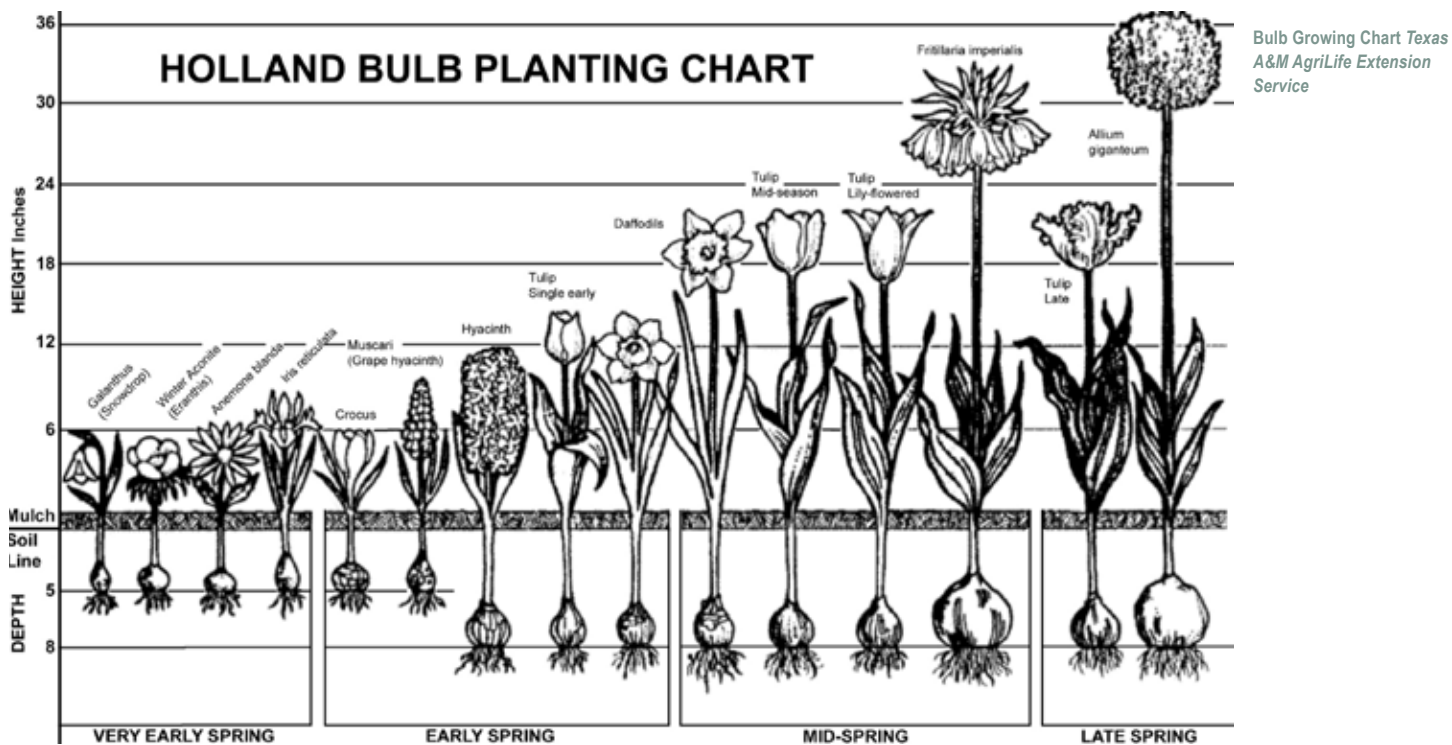
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Spring Containers of hyacinths, tulips and pansies Bing.com



Tulips and grape hyacinths Bing.com



The Joy of Rain Lilies



Fran Brockington
GCMG 2018

Introduction to Rain Lilies

When I moved to Texas, I volunteered at Armand Bayou Nature Center. While there, a friend gave me bulbs of which I was not familiar. “Rain lilies” she said. “You’ll love them.” When they bloomed, I learned they were called *Zephyranthes grandiflora*. Later, while visiting my mother-in-law, I saw small, white, star-shaped flowers popping up in her yard. When I asked what they were, she said, “Rain lilies. Those grew at my mom’s house in Lafayette.” I was puzzled. This started me on my quest to learn about rain lilies.

What I learned

An important thing about rain lilies is they come in a variety of colors and sizes. Many will naturalize on their own, spreading seeds each year. The perennial ones will form clumps, spreading by offsets, growing larger every year. Most rain lilies are from the Americas; some are native to Texas. All have grass-like foliage, some narrower than others, some darker, some lighter green. Finally, after hot, dry summer days, what brings them into bloom is the late summer and early fall rain. They are seldom fooled by sprinklers or hand-watering. They are RAIN lilies.



Rain lily MG Intern Beth Strobe

Caring for Rain Lilies

Although they are not true lilies, rain lilies are multiple species of true bulbs all within the amaryllis family. They appreciate well-drained soil with organic matter, but any soil will support rain lilies. They prefer 8-10 hours of sun daily. After-

noon shade helps blooms last longer. Plant two to three inches deep, six inches apart, add a one-to-two-inch layer of mulch, then water well. A light sprinkling of 5-10-10 fertilizer can help them get started. Rain lilies remain dormant in winter and early spring. The bulbs can be stored, if necessary, in a cool, dry area. A true bonus is rain lilies can be planted almost anytime of the year. Planting in the fall through spring is best, especially after dividing. However, rain lilies will adapt. They have very few diseases, insect, or pest problems. Like others in their amaryllis family, rain lilies are toxic if eaten. Normal rainfall should be enough, even through most hot summers. Author Greg Grant writes “Rain lilies need prolonged dry periods to set blooms. Irrigation in summer actually harms their flower production. The late summer’s deep soaking rains coax out their beautiful flowers.” Each flower lasts a day or two, and the group will continue blooming, off and on, all summer and into the fall. Author Chris Weisinger tells readers most varieties “have papery seeds, and as a flower fades, a seedpod forms in its place and eventually bursts open naturally allowing the seeds to spread by the wind.”

Genus, Species, Hybrids common in Texas

The late Dr. William M. Johnson, former agent for Texas A&M AgriLife Extension for Galveston County, wrote in one of his weekly newspaper columns, “Gardening with perennials is like painting with a full palette of colors, textures, forms, and fragrance.” This is true about rain lilies. Three common genera in Texas have been *Habranthus*, *Cooperia*, and *Zephyranthes*, though there is continued discussion regarding nomenclature. The following are rain lilies that are widespread in our area.

Habranthus genus identified in 1824 by William Herbert

Habranthus flowers are trumpet-shaped, tubular, or funnel-shaped, and point upward at an angle.

Petals are somewhat irregular. They often have unequal numbers of stamen. Leaves are narrow and strap-shaped.

Typically, larger than *Zephyranthes*, their blooms are one to three inches wide, large, and showy. Stems are 8 to 12 inches tall. Seeds are slightly winged and thicker.



Habranthes robustus Lisa Lawrence Nickelow

“...easy to grow, low maintenance plants”

H. robustus (syn. *Zephyranthes*) are pink with a white throat. Their foliage is narrow and dark green. They thrive in hot summer dormancy. Author Dr. Bill Welch reports, “You never need to buy them again.”

H. tubispathus, (syn. *H. texanus*), now (syn. *Z. tubispatha*) are bright yellow-orange with streaks of bronze. Seeds sprout quickly. Considered rare, they are called Texas Copper Lily. Grant describes them as “Field of Gold or Yellow Brick Road.”

Cooperia genus is now under Zephyranthes

C. drummondii (syn. *Z. chlorosolen*) have white, 2 inch flowers with protruding anthers. They are tall and will reseed well, naturalizing in fields or lawns. They are a fragrant native plant, often called evening lily. They were named for the botanist Thomas Drummond who arrived in Texas in 1833.

Zephyranthes genus now has 600 or more species.

The name comes from Zephyrus, the Greek god of the west wind, which brought the rain. Often called zephyr lily or fairy lily, they naturalize easily. Blossoms point straight up, and have six equal stamens, or three shorter and three longer. Two-inch wide flowers tend to be star-shaped and open flatter. Stems are 6-12 inches tall.

Z. atamasco has white flowers that are very large, up to five inches wide. They often turn pink with a dot on tip. An early bloomer, they have thick, glossy, wide foliage.

Z. candida is widely grown with star-shaped white cups and six deep golden stamens out of greenish throat. They tolerate moist soils better than others, even on pond edges and recover well from a freeze.



Zephyranthes candida MG Louis and Noreen Wilson

Z. citrina are small and deep yellow. They produce many seeds but do not offset much.

Z. drummondii (syn. *Cooperia pedunculata*) are white with wider petals than many. Often called giant prairie lily, their flowers open in late afternoon. Slightly fragrant, they have blue-green, wide leaves. Anthers do not protrude with a tight throat. They produce many seeds.

Z. grandiflora are very popular and are a deep pink,

larger bulb that blossoms more than most. They have six larger yellow stamens and stigma that protrude. They multiply by offsets and do not reliably reseed. Well known former Houstonian Ima Hogg planted them at her home at Bayou Bend.

Z. 'Labuffarosa' is a hybrid with wider, flatter pink to pale pink petals. Leaves are darker green. They were collected by John Fairey and Carl Schoenfeld in Mexico near La Bufa Mountain and introduced at the former Yucca Do Nursery in 1997.

I have learned much about rain lilies and find each one to be a joy and happy surprise when summer and fall rains bring out their blooms.

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Zephyranthes grandiflora Marcela Clark



Zephyranthes grandiflora MG Fran Brockington

A Fragrant Cultigen: The Tuberose



Karolyn Gephart
GCMG 2017

Scientific Name: *Polianthes tuberosa*

Type: Tuberous rooted rhizome

Family: *Asparagaceae*

Native Range: Mexico, Central and South America

Bloom Time: Late summer to mid fall



Courtesy of tntuberose.com,
Gallatin, Tenn

Flowers: White, showy, and fragrant

Zones: 8 to 10

Height: 3 to 4 feet

Spread: 2 to 3 feet

Sun: Full sun especially in winter

Soil: Needs good drainage

Propagation/Division: Lift and separate bulbs every few years

Pollinators: Attracts bees and butterflies

Tuberose are the most fragrant garden plants that grow in zones 8-10. They are cultivated for use in perfumes and for cut-flower production. The creamy white blooms are waxy and funnel-shaped, two inches in length and three-fourths inches wide, opening on long spikes. Single blooms have six petals. Their foliage is slender and long, described as grasslike. Their basal leaves are 18 inches long and as named, grow from the base of the stem. After flowering ends, the foliage gradually turns brown but until it does, it should not be removed as it continues to feed the bulb for the next year through photosynthesis. In zone 9, tuberose grows in the garden year-round. It multiplies quickly. Tubers can be planted mid-spring in a location with sun, in well-drained soil, and four to six inches apart, two inches deep.



Tuberose 'The Pearl'
GCMG Database

Single blooms have six petals. Their foliage is slender and long, described as grasslike. Their basal leaves are 18 inches long and as named, grow from the base of the stem. After flowering ends, the foliage gradually turns brown but until it does, it should not be removed as it continues to feed the

bulb for the next year through photosynthesis. In zone 9, tuberose grows in the garden year-round. It multiplies quickly. Tubers can be planted mid-spring in a location with sun, in well-drained soil, and four to six inches apart, two inches deep.

Polianthes tuberosa is Greek with *polios* meaning whitish and *Anthos* meaning flower. *Tuberosa* in Latin refers to being tuberous. Tuberose is not a "tube-rose" but instead a "tuber-ose." According to University of Arkansas Extension Horticulturist Gerald Klingaman (retired), "The "tuber-ose" name refers to

the technical description of the root system and was used by bulb growers to distinguish it from hyacinths that had similarly shaped and fragrant flowers but grew from a true bulb."

The history of the tuberose goes back to pre-Columbian Aztecs in Mexico who cultivated the plant. Tuberose is considered a cultigen which is a plant that does not occur naturally in the wild. The tuberose was carried to Europe by the Spanish conquistadors in the 16th century. From there it was passed on to warmer climate areas, i.e., Africa, India, and the Mediterranean, where, like the Spanish, gardeners loved having such a fragrant flower blooming in the hot summers.

Dr. William Welch, author, professor and Extension Horticulturist Emeritus, cites the inclusion of the tuberose in horticulture accounts in the Mississippi River area during 1777. Because of its early history, Welch refers to the tuberose as a "fragrant garden antique."

Tuberose were among those bulbs sold in our recent Galveston County Master Gardener Fall Festival at the Discovery Garden.

Galveston County gardeners can easily grow tuberose and might want to place the plants in living spaces such as patios, walkways, and flower beds near entrances so that when blooming, the fragrant flowers can be most enjoyed.



Fields of tuberose cultivated from plants passed down by a great-grandmother over 30 years ago. Courtesy of tntuberose.com, Gallatin, Tenn.

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Plant of the month: Gloriosa Lily



Claudia M.
Trujillo
GCMG 2023

Whenever my uncle listens to an old Colombian vallenato song called “Lirio Rojo” (my red lily), he jumps from his chair, clapping and looking for a female partner to dance:

“My red lily withered

And it was because of the summer

That’s why I’m heartbroken

And I am feeling so lonely”

I would also be very heartbroken if a plant like the gloriosa lily, botanically classified as *Gloriosa superba*, died in my garden. When I heard about this plant, I was very intrigued by the name “gloriosa” (glorious, gorgeous, magnificent). Such an appealing name motivated me to go to my favorite nursery and ask for more information.

A little shy at first, I asked where I could find all the lilies. A very kind lady guided me to where they were and I immediately started looking on each of the labels of these herbaceous perennial plants, eventually feeling a little sad because I couldn’t find one gloriosa. The lady noticed I was looking for something special and when I mentioned the plant’s name, she said “Ah! The gloriosa lily is not here. But please follow me.” She took me to an uncovered patio behind the cashier’s room in the heat of a summer afternoon. And there it was, planted in a 10-inch circular pot, with plenty of sun. The first feature that I noticed was that the gloriosa lily isn’t a typical bulb, nor a true lily, but a vine from the separate plant family *Colchicaceae*. That one, in particular, was graciously (or gloriously?) entangled in an obelisk trellis, showing the numerous lanceolate leaves with a vivid green color. It took me a couple of seconds to find the flowers. This particular plant had at that time, three blossoms in the back, two of them facing straight to the sun. How exotic they were! The most distinctive attribute of this plant are the tepals, which are not true petals, but the showy leaf-like outer covering of the flower, proudly arching upwards from the stalks.

A mature gloriosa lily can bloom robustly for several weeks from late spring to summer. The flowers have a yellowish color at the base that turn abruptly into red from the middle to the end. The tepal’s surface curves like the ruffs of a dress, a trait that made me think that they are really dressed up to dance. Because of the direction of the tepals, the stamens with the big anthers look rather unprotected, sprouting from the receptacle, the base of the flower.

Unfortunately, the plant was not for sale that day at the nursery and instead, they offered me tubers. I have my tubers in a bag in the refrigerator with a couple of silica gel desiccant packs, waiting to be planted after the last frost because the plant is sensitive to freezing temperatures. Gloriosa tubers can be grown in pots or in the ground in rich, well-drained soil. Between March and May plant them horizontally, 2 to 4 inches deep, put some compost on the top then water. Keep the soil slightly moist but while the tubers are still dormant, don’t overwater, and being that they are rather brittle, handle them carefully with the help of a trellis. Gloriosa lilies will look fantastic growing up a pergola.

I can’t wait to plant mine and enjoy the blossoms, to take some pictures and send them to my dear uncle. For sure he will again jump up from his chair and play his favorite song, “Lirio Rojo,” to dance again and again, celebrating the beauty of this exotic red “lily.”

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MG Karolyn Gephart

Great Bulbs to Plant Now



Beth Strobe
GCMG Intern 2024

I first fell in love with bulbs on a springtime visit to Amsterdam. In Holland, tulip fields in bright colors dot the landscape as far as the eye can see. During the 15th century, the Dutch became fascinated with tulips from the Ottoman Empire. The obsession culminated in the bulbs being sold for up to 10 times the annual income of a skilled craftsman at that time. Wealthy merchants participated in a tulip exchange that dealt in tulip futures, like our stock exchange today. The lucrative tulip market eventually collapsed but tulips remain as a bulb of choice there.

When I returned from my trip, I wondered how I could replicate the beauty of bulbs here. I wanted easy to grow, low maintenance plants. With our upper Texas Gulf Coast being a microclimate all its own, I realized that I couldn't replicate the colorful Dutch tulip fields without a tremendous amount of effort. But the good news was that I could easily grow other types of bulbs that are just as magnificent.

Bulbs are plants that store their entire life cycle in underground storage structures which contain their nutrients and energy. Many bulbs have adaptive characteristics and become naturalized, returning each year. These bulbs can be the gift that keeps on giving. Since naturalized bulbs replicate easily, they are shared from garden to garden. How special it is to see a bloom that reminds us of a dear friend or a cherished loved one.



Crinum MG Beth Strobe

Three different bulbs I particularly enjoy can be planted in the fall for spring blooms.

Rain Lily (*Zephyranthes*)

Pink rain lily bulbs (*Zephyranthes robusta*) were given to me by a dear friend who was moving away. She wanted to keep a piece of her memory alive in Texas. Rain lilies are actually part of the amaryllis (*Amaryllidaceae*) family. *Zephyranthes* translates as "flowers of the west wind," and the bulb is sometimes referred to as the "fairy lily." The flowers of varied shades of white, yellow, lavender, pink and red are produced on 8 to 10 inch stems. I initially planted my gifted bulbs during the fall in a semi-shaded place in my garden. By spring, I was delighted to see that they were flowering. From April to August, they produced dainty, pink blooms. Rain lilies naturalize by producing seeds which can be harvested or allowed to fall to the ground. I planted the seeds that I harvested in a patio planter. It wasn't long before those lilies were producing flowers. Rain lilies should be planted in fertile, loose soil in sun or part shade. Although they are best known for flowering after a rain, the plants are quite well adapted to hot and dry environments.

Crinum (*Crinum asiaticum*)

This bulb holds a special memory. It was gifted by one of the descendants of Mary Moody Hutchings of Galveston.



La iris Full Eclipse GCMG Intern Beth Strobe

“...can be a gift that keeps on giving”

How special it is to think that the crinum I planted is a little piece of Galveston’s amazing history. Often mistaken for being in the lily family, crinums are part of the amaryllis (*Amaryllidaceae*) family. Crinum is translated from the Greek word *crinon*, which means lily. As they are often found in historic cemeteries, crinums are often referred to as “cemetery lilies.” Also, since southern gardeners love to share this bulb with others, they are regarded as “passalong plants.” Most crinums do best with humidity and rainfall. I planted mine in an area that gets morning sun. They tolerate clay soil, but do appreciate rich compost. Crinums are truly the grand dame of the southern garden, blooming heavily from April to June and then intermittently throughout the summer. The majestic flowers bloom on stalks that range from two to four feet. My crinum blooming reminds me of Galveston’s rich history and past southern gardeners who set out to beautify and enrich their island homes.

Louisiana Iris (*Iris spp.*)

I acquired this rhizome from a beloved relative. Having been a transplant to Texas back in the late 1980’s, she learned about this bulb on a garden tour. Falling in love with the bulb, she decided to plan a garden around it, thus beginning her decades-long love affair with gardening. The “Louisianans” are not one species, but a collection of multiple species of iris native to Louisiana. Commonly known as the “Swamp Iris of Louisiana” these rhizomes adapt easily to our climate and produce spectacular blooms from April to May in a vast array of different colors. The word iris is derived from the Greek word for rainbow.

The variations in color, which range from pure white through dark purple and all the colors in between, hold a special place in my heart. These irises like to receive full sun and thrive where the soil holds moisture. They are a perfect choice where there is standing water.

The rain lily, crinum and Louisiana iris were directly planted in my garden mid-November, and they all bloomed the following spring. Other suggested bulbs to plant now for spring blooms are Dutch amaryllis (*Hippeastrum spp.*), canna, grape hyacinth (*Muscari spp.*) and allium.

On my journey discovering the beauty and majesty of bulbs in my own garden, I learned important life lessons along the way. Bulbs provide a lesson on growth, bloom and rest that each of us can easily adapt to our own seasons of life. I encourage you to embark on your own journey to discover how bulbs can bring enrichment and joy to you and your garden.

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Tulip beds in the Netherlands MG Intern Beth Strobe

MG Couple Enjoy Bulb Paradise



Ira and Sandra Gervais
GCMGs 2011

Tomatoes are not the only plant that captures the gardening hearts of master gardeners Ira and Sandra Gervais. Their home in Friendswood is surrounded by wonderful bulbs they enjoy outdoors and indoors in arrangements. Ira is considered the ‘tomato guru’ and many county residents have enjoyed his three-part presentations. He can talk ‘tomatoes’ but now all will know he also along with his wife, an outstanding cook who authors Seasonal Bites in this publication, can talk ‘bulbs.’ They are offering a visual tour on these two pages of a few of their favorites they have captured in photos. Enjoy!



Amaryllis ‘Gervase’



‘Sunshine Nymph’ Jumbo Double with Ira



Skadoxus



Amaryllis ‘Blossom Peacock’



Daylily double bloom



Amaryllis ‘Bouquet’

“...a visual tour of the Gervais’ favorites...”



Amaryllis 'Black Pearl'



Amaryllis 'Happy Nymph'



Crinum 'Burgundy'



Amaryllis 'Cherry Blossom'



Rain lilies



Amaryllis 'Luna'



La iris King Creole 2 bunch



La Iris 'Black Gamecock'

Bulb Insects: Recognizing a Few Destructive Pests



Hedy Wolpa
GCMG 2018

Are you a bulb enthusiast, or maybe a novice bulb gardener, or just thinking about trying bulbs in your garden this year? You'll be thrilled to know that bulbs and their stunning floral displays have few insect pests. You may have already learned that bulbs grow in many settings, varying climates, in sun or shade, moist or dry conditions. This is what makes them so delightful to gardeners looking for easy, hardy flowers that return year after year and often multiply with little help. Sometimes these characteristics make true bulbs, as well as corms and tubers, attractive to insects, too!

As with other flowering plants, good hygiene, as well as proper maintenance and cultural practices for bulbs, are all important. Weak, damaged, and stressed bulb plants are susceptible to pests and diseases. Examples of insect pests in bulbs include bulb flies, aphids, and thrips. Snails and slugs enjoy tender new leaf growth. Mites are also sometimes present, although they are arachnids (the same grouping as spiders) and not insects. Here are some common pests you may find when growing bulbs:

Narcissus Bulb Fly (*Merodon equestris*) This insect is a medium-sized hover fly, about 1/2 inch in length, resembling a bumble bee or honeybee. Typical of all hover flies, the bulb fly "hovers," moving erratically while foraging to evade predators. Larvae, or maggots, hatch from eggs laid near the neck of a bulb in spring, then move underground and burrow in narcissus (including paperwhite, tazetta, jonquil, and daffodil), amaryllis, hyacinth, and iris bulbs. There, they feed on the insides of the bulb, usually destroying it. The bulb rots away and rarely pushes new growth above ground. There's usually only one maggot found inside a bulb, rarely more. Larvae maggots overwinter inside the bulbs, emerging as adults in spring.



Narcissus bulb fly, (*Merodon equestris*) Dr. Whitney Cranshaw, Colorado State University

Interrupting the life cycle of bulb flies is accomplished by cutting back leafy foliage and flowers after blooming, ensuring that the bulb is covered with soil so the flies don't lay eggs in the top of the bulb, or removing bulbs from the ground and storing them. Check bulbs carefully when dividing them and throw away bulbs that appear soft or rotten. Also, bulbs may be soaked in hot water at about 110 degrees for three hours to kill any larvae.



Bulb damage Dr. Whitney Cranshaw,
Colorado State University

Aphid (*Aphidoidea*) This is a familiar insect to many gardeners, easily controlled with a forceful spray of water to foliage. Aphid infestation can bring viruses into the garden and can weaken the growth of leaves, resulting in yellow or brown foliage. Aphids also feed on bulbs when they're in storage or even when they're growing underground. Aphids, soft-bodied small insects with piercing and sucking mouth parts, cluster in great numbers on tender new leaves and stems. They excrete a sticky substance, called honeydew, which attracts ants. Insecticidal soap sprayed on the upper and underside surfaces of leaves is an effective control method. Aphids have many biological predator enemies in ladybugs, lacewings, syrphid flies, wasps, and dragonflies. Always inspect bulbs at point of purchase to insure you're not buying aphids, too!

Thrips (*Thripidae*) Small, slender, tan to brown in color, this insect is only about 1/16 of an inch in length and can be very difficult to see. Thrips feed using their rough mandibles to eat the surface areas of bulbous plants and suck plant sap. Thrip damage includes brown foliage, and the new growth and the flower buds are distorted. Infestations can get out of hand quickly, but control can be accomplished using insecticidal soap as soon as they are observed. If beneficial insects are nearby, such as lacewings and ladybugs, they'll do a great service cleaning up thrips. Sticky traps are also effective.

Bulb Mites (*Acaridae*) Mites attack a variety of bulbous plants and are often imported in bulbs when shipped to buyers. Bulbs with mite infestation become soft and fail to grow, so inspecting bulbs before planting is important. Mites are attracted to bulbs that may already have damage from improper handling or storage, or even other insects, and these bulbs should not be planted but destroyed.

“Bulbs have few insect pests...”

Some infested bulbs may produce foliage and even flower buds, but these will be deformed. Remember that mites are not insects; they resemble spiders in appearance, having four sets of legs, and are somewhat related to them. Their bodies are very small, yellowish white in color, with reddish-brown legs.



Aphid infestation on newly emerged iris Dr. Whitney Cranshaw, Colorado State University

Although slow moving, their damage to bulbs and plants is often extensive. One method of identifying mites is to hold a piece of white paper under a leaf, tap the leaf, and you will see small mobile spots on the paper. Spraying the plant with cold water will sometimes deter mites. If you suspect that your bulbs have mites, soak them for a few minutes in very hot water, at least 120 degrees, to kill any mites that might be present.

Insect damage to bulbs can be devastating. But good cultural practices will help give you the beautiful results you'd like in your garden. Inspecting bulbs before planting them, care when digging and dividing, good hygiene, along with proper light and moisture should help deter insect pests.

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Full grown larva in damaged narcissus bulb. Dr. Whitney Cranshaw, Colorado State University

Research and Discovery: Winter Squash Trial



Norma Torok
GCMG 2022

A winter squash trial is underway in the Discovery Garden to determine which winter squash variety might be the best yielding quantity and quality for our county. Master Gardeners Kevin Lancon, John Mitchiner, Michael Reed and Norma Torok are team members working on this trial. In support of this outcome, the following would be monitored: soil, evidence and maintenance of pests and diseases, water and other weather conditions that challenge healthy growth. The three varieties selected were ‘South Anna Butternut’ squash, ‘Delicata’ squash, and ‘Sweet Dumpling’ winter squash.



South Anna Butternut Squash

The winter squash varieties chosen are well suited for our local environment.

The ‘South Anna Butternut’ squash (*Cucurbita moschata*) is a cross between a ‘Waltham Butternut’ squash and a ‘Seminole’ pumpkin. Though crossed with a pumpkin, this vining squash has an elongated pear shape likeness to the original butternut squash variety. By cross breeding the ‘Waltham Butternut’ with the ‘Seminole’, the resulting ‘South Anna Butternut’ has a great resistance to downy mildew. This characteristic makes it a great choice for the hot and humid climate we have here in Galveston County. This variety of squash can grow from 9 to 18 inches long. The flesh is bright orange, and the mature ‘South Anna Butternut’ has a darker tan skin.

The ‘Delicata’ squash (*Cucurbita pepo*) is another variety that is resistant to powdery mildew. This squash is sometimes

called sweet potato squash because it has a “sweet as honey” taste. Like a sweet potato the flesh of the ‘Delicata’ is orange and dry. It is a bit smaller than ‘South Anna Butternut’ squash and grows to 8 inches long at maturity. The ‘Delicata’ name is derived from its very thin and delicate skin. The skin has a nutty flavor that compliments the sweetness of the flesh.

The ‘Sweet Dumpling’ winter squash is also a variety of *Cucurbita pepo*, an acorn squash. The vegetable is shaped like a sphere that grows to approximately 3x3 inches. Its spherical shape is ribbed and when matured yields an array of festive colors of green, orange, and yellow. The squash has a tough rind but the flesh is mild in flavor and also mildew resistant making it a good selection our humid area.

The culture for winter squash was created in Discovery Garden Research Bed-24. This bed is raised two feet and filled with garden soil that was enriched with mushroom compost and a multi-purpose 6-2-4 biological, wholly organic, granulated fertilizer. Three cattle panels were installed consecutively to form one arch allowing more space for the vines to grow and yield. All seeds were sown on March 19, 2024. To maintain watering needs, a drip system is utilized to provide the usual one inch per week. There have been some exceptional dry weeks with high temperatures when additional watering was provided. The squash plants were fertilized at first true leaf and subsequently, once every three weeks.



MG Michael Reed spraying the vines

Regarding pests, at a very early stage of growth this outcome was observed: the plantlets experienced vine borer damage. As soon as it was discovered, foil was wrapped around the

“...varieties chosen are well suited for our environment”



MGs Kevin Lancon and John Mitchner examining the vines.

stems at ground level to protect the vine from further damage. The vine borers weakened the organic system from efficiently providing nutrients at the onset. However, the vines survived and flourished on to blooming and providing yield. Mitchner commented that in the future, a better practice might be to sow the seed in pots, then transplant them into the beds, wrapping the stems in foil to mitigate vine borer damage.

At four months of growth, the vines experienced an infestation of sawfly. Quick action was taken to spray the vines with insecticide for managing the pests. Leaf footed bugs have continually been an issue. Spinosad, Permethrin, and Sevin are the products that have been utilized to help control pests. Diligent ongoing management of these pests has been necessary, but the vines have continued to bloom and yield fruit.

The good news is that while pests have been an issue, diseases have not. At this point of the trial, no diseases have infected the vines.

It bears mentioning that a unique weather event occurred during the trial; Hurricane Beryl came barreling through with water and high winds. Incredibly, no damage harmed the vines or the fruits that were growing on the vines. If anything, the extra rain gave the vines a healthy boost of color and growth.

As we all know, winter squash are called such because they will grow from spring to fall and have a tough flesh that allows us to store them well into the winter months. These winter squash plants experienced a very rich environment in spring to a very debilitating environment in summer. It is interesting to note that the vines began healthy and green in spring until early summer when many leaves on the vine began to burn off and left sparse-leafed vines for about a month.

After Hurricane Beryl, the vines seemed to flourish with increased lush foliage, more blooms, and yielding more fruit.

While the winter squash trial is not completed, we have some calculations of the yield thus far. The ‘Delicata’ squash produced 3.0 pounds fruit and ‘Sweet Dumpling’ produced 1.75 pounds. The quality of the ‘South Anna Butternut’ has been very good and most definitely the best yielding of all three varieties producing 64.75 pounds. To date, total yield of winter squash thus far is 69.5 pounds.

Still to be discovered is how tasty they are. A final report with updated numbers and data will be out at the completion of the trial.



MG Michael Reed under the winter squash arch

The Discovery Garden is a research garden maintained by the Galveston County Master Gardeners located at Carbide Park in La Marque. Findings from this research is used by Texas A&M AgriLife Extension staff to provide horticultural education to the residents of Galveston County. All Photos by MG Norma Torok.

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Discovery Garden Update



Tom Fountain
GCMG 2008

The Discovery Garden looks fresh and green despite Hurricane Beryl and all our hot weather this past summer. The truth is our average high temperature was only one to two degrees above normal for the season. Rainfall on the other hand averaged one to two inches below normal each month, but the rain was scattered out enough to keep most hardy native plants in good shape. The extended forecast from the National Weather Service indicates that temperatures will likely run a little above normal with rainfall slightly below normal throughout the winter. Don't forget, this hurricane season has been very active and it's not over until November 30, so be prepared.

Fall has been a busy season in the garden. Activities have involved the cleanup from the hurricane, the start of construction for the outdoor classroom, expansion of the pollinator garden and all our normal garden projects. This takes much effort from all master gardeners who come to the garden, not just the individuals that I capture in a picture.

Despite the roof damage to the greenhouse, team members were able to grow plants for fall. In photo 1, Pat Saenz, Tanya Padgett, Joseph Davis, and Kaye Corey are repotting plants.



Photo 1

With the expansion of the Pollinator Garden completed, Sue Bain and Vicki Blythe were out in the area doing a little maintenance in photo 2.



Photo 2

Herman Auer is normally out in the orchard area teaching others how and when to prune and graft all the different plants; however, in photo 3, I found him over in the garden harvesting okra.

Master gardeners had a highly successful fall plant sale this year. In the vegetable area photo 4, Alice Rogers was getting her order filled by Pat Saenz, Sven Bors-Koefoed, Briana Etie, and John Mitchiner.

The irreparably damaged greenhouse roof has been demolished and replaced by a more practical system.



Photo 3



Photo 4

Seen in photo 5, Jim Mitchner, Keven Lanyon (inside), and Phil Stark are on ladders detaching the roof panels.



Photo 5

The Kitchen Krew is a group who make coming to the garden on a Thursday workday special. In photo 6, Regan Mears, Linda Barnett, Linda Steber, and Ed Klein were starting to prepare another great lunch.



Photo 6

With the cooler weather I'm hoping to see you in the garden soon but continue to be safe and enjoy your day.

Seasonal Bites: It's Fall Y'all; Let's Eat



Sandra Gervais
GCMG 2011

FALL! Beautiful, cooler, invigorating! Once again, we can go outside and enjoy our gardens.

Here are a couple of recipes that may come in handy for get-togethers and holiday parties. Nothing too complicated — just tasty. The first is a simple shrimp recipe from Master Gardener Briana Etie. It was a hit when she served it in 2021, at the dedication renaming the A&M AgrLife Extension office, honoring Preston E. Poole and Dr. William McCray Johnson. The second is an easy

chocolate cake that dresses up nicely for various holidays or to simply please the chocoholics at home. Since Dr. Johnson really, really loved chocolate, this cake seemed to naturally go with his memory.

Chili Lime Shrimp Cups 350-degree oven

1) Wonton Cups:

15 wonton wrappers
1-1/2 tablespoons olive oil
Mini Muffin pan



Lightly brush wonton wrappers on both sides with olive oil. Sprinkle one side lightly with salt. Press the wrappers down into the bottom cups of a mini muffin pan. Fold the four corners flat and to the side to form a cup-like shape. Bake until lightly browned, about 8-10 minutes. Remove pan from oven and cool on a rack. Handle shells lightly; they are delicate.

2) Shrimp Filling:

12 large shrimp (31-40 or about 3" long including the head), peeled and deveined
2 teaspoons olive oil
1 lime
1 teaspoon chili powder, regular or ancho
1/4 teaspoon fine sea salt
1/4 teaspoon freshly ground black pepper
1 cup baby arugula leaves

Zest the lime. (Keep rest of lime for use later in recipe.) Mix together lime zest, olive oil, chili powder, salt and pepper. Toss shrimp in this mixture and coat well. Arrange on sprayed baking sheet in one layer. Bake at 350 degrees until shrimp are completely opaque, about 8-10 minutes. Cool.

3) Lime Cream Topping:

3 tablespoons sour cream.
1 teaspoon freshly squeezed lime juice. (from zested lime above)
Pinch of salt.

Stir the three ingredients together in a small bowl. Put in fridge to chill.

4) Assembly:

Fill wonton cups with a few leaves of arugula. Spoon on a small dollop of lime cream. Top with a cooled cooked shrimp.

Makes 15 shrimp cups. Recipe can easily be multiplied.

Notes:

Use milder or spicier chili powder or other baby greens for variety. The wonton cups will keep unfilled in an airtight container for up to a week. The shrimp may be prepared up to 2 days ahead and stored in airtight container in the refrigerator.

** Fill cups right before serving so they don't get soggy.

Moist Chocolate Cake 350-degree oven

Ingredients:

1 box of chocolate cake mix for 2-layer cake. (Don't use mix with pudding in it.)
1/2 cup unsweetened cocoa
1 cup Miracle Whip Dressing
3 eggs
1-1/3 cups of water



Cake:

Stir cake mix and cocoa in large bowl. Stir in Miracle Whip, eggs and water. Beat with hand mixer on low speed for thirty seconds, scraping bowl often. Increase mixer speed to medium and beat for 2 minutes. Grease and flour 12-cup fluted/Bundt pan or 10-inch tube pan. Pour in batter. Bake at 350 degrees for 45-50 minutes, until the toothpick inserted in center comes out clean. Cool 10 minutes. Remove from pan and let cool completely on rack.

Glaze:

2 cups sifted powdered sugar
2 tablespoons milk
1/4 teaspoons vanilla

Mix the powdered sugar, milk and vanilla with a whisk until well blended. Drizzle on cooled cake as in picture. Decorate with dried fruit, nuts, candy, or different colored glaze patterns to suit.

Houston Botanic Garden - A Nearby RAP admission



Barbara Lyons
GCMG 2014

Since beginning a travel feature in this publication, I have been writing about the Reciprocal Admissions Program (RAP) sponsored by the American Horticulture Society. My intent is to balance discussion of gardens within Texas with those in other states. Part of my goal is to feature each of the RAP gardens in Texas. This issue, I travelled a short ride up I-45, exiting Park Place, then on to Houston Botanic Garden (HBG) at 1 Botanic Lane, Houston, TX 77017. Free parking is available. Check them out at www.hbg.org or contact (713)-715-9675. I have visited this garden the past few years with my family, both to visit the garden and to view one of their special events, the 2023-24 edition of “Radiant Lights.”



MG Karolyn Gephart

Houston Botanic Garden is a relatively new venue, opening during the pandemic in September 2020, but the idea for its formation is not. In 2002, a group of visionaries formed a non-profit with the intent of bringing the botanic garden concept to life in Houston. In 2015, after years of planning and fundraising, the Houston City Council approved a long-term partnership to transform the under-utilized Glenbrook Golf Course into the Houston Botanic Garden. Today’s garden is only a fraction of the overall development plan which could take 20-30 years to complete. The 132-acre site is in southeast Houston along Sims Bayou. Besides sponsoring the garden, HBG’s mission includes hosting several events throughout the year which appeal to all age groups, genders, and ethnicities in the areas of the arts, horticulture, and health/wellness.

Eight current garden ecosystems at HBG range from wilderness to cultivated collections of non-native plants, wild nature to controlled structures, and native plants from places worldwide. The more natural areas include the Woodland Glade, an open event rental space surrounded by hedges and magnolia trees; Coastal Prairie, a display of prairie grasses and native plants; and Stormwater Wetlands, native plants which assist in water purification and erosion control. More structured areas include the Community Garden, providing rental spaces for the public to cultivate; Culinary Garden, featuring dietary and medicinal plants; Global Collection Garden, sectioned into various climactic areas, being arid, tropical and sub-tropical, with plantings appropriate for each; and, my favorite, the Pine Grove, exhibiting several species of evergreens. The Susan Garver Family Discovery Garden is a kid-favorite area with many hands-on water features, open spaces and a lagoon to interest children of all ages.



HBG entrance MG Judy Anderson

“Eight current garden ecosystems at HBG...”

In February 2024, we visited a special event at HBG, Radiant Lights. It began with ticket and parking procurement online. Parking was a bit confusing. On-site parking at HBG has limited parking spaces for such a well-attended event so they are mostly restricted to those with special needs, having just a few general admissions. Additional parking is available at Monroe Park and Ride with bus transportation to HBG for a small fee per car for event participants. Payment is made online, and a receipt is shown to the attendant while waiting in line for the bus. Admission to the event is time-stamped to keep the crowd from overwhelming the lighted trail, therefore visitors should arrive at the offsite parking about 30 minutes prior. During our visit the sun set after our arrival allowing the impressive lighted displays to shine. In 2024, the Radiant Nature included displays of plants and animals along with a heavy emphasis on the Asian winter holidays. The display is along a pathway that meanders through the garden property taking over one and a half hours to travel. There are spots for great photographs along the way as well as some activities and food/drink stations at various intervals throughout the trail. It was quite impressive! I felt it was at par with the Houston Zoo's event, Zoo Lights display and would gladly make it an annual family tradition.

This year's program will be Radiant Nature, and it will feature mostly all new lanterns which will “encompass both the traditional western winter holidays and the Chinese New Year and related festivities,” as reported to me in a recent email from Justin Lacey, HBG's Director of Communications and Community Engagement. He also mentioned that the new version is significantly different from last year's event so even previous attendees will enjoy the new experience. This year's event will be from Friday, November 8, 2024, through February 23, 2025, running for 65 nights total. Their website calendar has specific dates and pricing.

Since the AHS Reciprocal Admissions Program (RAP) is my focus, I want to make an example of this garden. While the program can be accessed by joining the American Horticulture Society, it can also be procured by joining a botanical garden which is a member of the program. With HBG being the closest botanical garden to our county, it would be advantageous to become a member. Benefits, of course, include the RAP but also various discounts at the garden shop and special events. Also, each level of membership includes a ticket (or two) for attendance at a members-only preview of Radiant Nature, so that for the usual cost of one weekend-daytime admission and one Radiant Nature ticket, membership just about covers the cost.

See the garden's website for details.

Houston Botanical Garden is in its infancy as a display garden venue and will take several years to be at a level with other grand botanical gardens in the state. Yet, it is well on its way to being a mainstay for garden programming in our area.

References:

www.hbg.org

Lacey, Justin. Email to Barbara Lyons. 27 August 2024.



MG Judy Anderson



Lantern Festival Courtesy of HBG

Book Review: *Bulbs for Warm Climates* by Thad M. Howard



Lisa Belcher
GCMG 2014

Soon winter will arrive, and many Texas gardeners will be receiving gardening magazines advertising the latest tools and the new seeds and bulbs on the market that can be grown in our region. We will peruse these for hours, dog-eared pages while making wish lists of bulbs that are promised to grow in our zone. Eagerly awaiting our bulbs, we prepare our beds, and for those of us who do a bit of journaling, draw what our soon-to-be new bulb bed might look like. Once our bulbs arrive, we plant them exactly per the instructions given and wait. Hopefully, that pesky foe, the squirrel, has not found it first and our humidity in Galveston County has not induced the bulb to rot, before our promised bulb of zone 9 emerges in all its glory. Sadly, this is often not the case. Although Galveston County Master Gardeners do thorough research prior to their bulb sales of those that will indeed grow and thrive in our area, not all bulb vendors' claims are accurate. So where is a good place to gather information on bulbs that can be grown not only in Galveston County, but all over Texas? Look no further than Dr. Thad M. Howard's *Bulbs for Warm Climates*.

Dr. Howard graduated from Texas A&M University with a Doctor of Veterinary Medicine degree. He served in the U.S. Army Veterinary Corps during the Korean conflict. He later opened the San Pedro Animal Hospital. Dr. Howard was also a botanist and published numerous articles on botany in Central and South America. During his travels he found 35 unnamed species of bulbs.

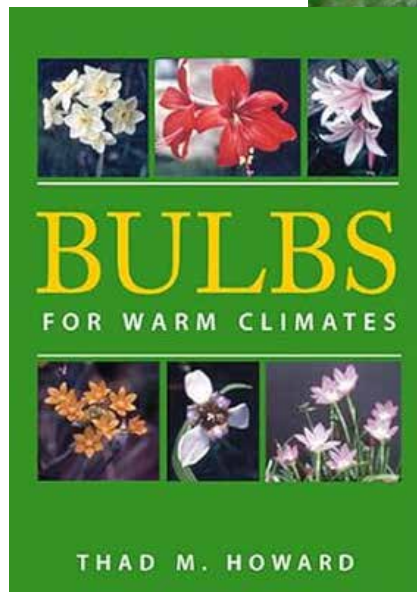
Southern gardeners know well how difficult it can be to try to grow those cooler climate bulbs. We long for these elusive beauties, try and try, but fail. In Dr. Howard's book, bulbs are divided into twenty-one different categories and then discussed in depth. Each chapter is filled with pages upon pages of beautiful colored photos. Along with bright photos comes a history of the first found and named variety of almost every bulb, whether it being in Mexico, Chile or here in Texas.

Earth-Kind® and Xeriscaping are becoming more and more popular ways of gardening and Dr. Howard goes into great

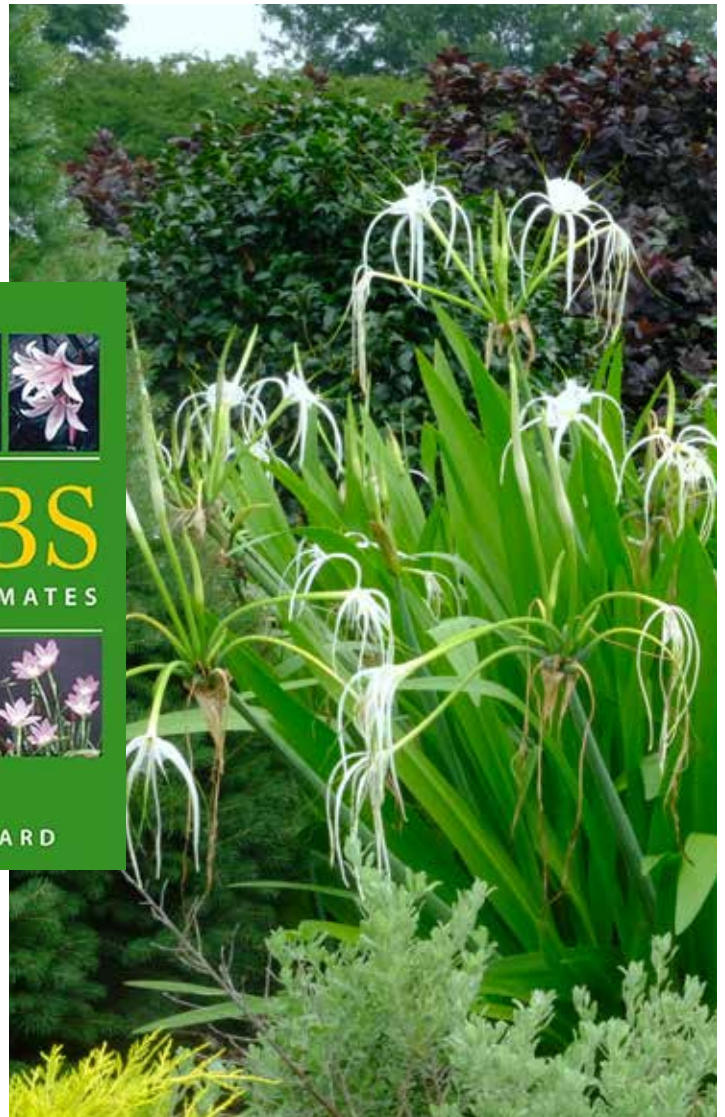
detail on rain lilies, as well as other smaller bulbs that can be used in this type of garden practice.

What I really found refreshing about this book, compared to others I've read, is that I could truly feel his love of bulbs and yet he minced no words when warning which zones in which they absolutely would not grow. That is something I really appreciate. This is a book for any Texas gardener, not just for those in Galveston County.

Dr. Howard passed away in 2009. In 1982, he had collected an undiscovered white spider lily in Mexico and in 2024, the 'Thad Howard' White Spider Lily (*Hymenocallis acutifolia*) is now registered and is being sold.



Bulbs for Warm Climates



'Thad Howard' White Spider Lily (*Hymenocallis acutifolia*)
Courtesy of Plant Delights Nursery www.plantdelights.com

Photo Gallery: Favorite Photos by Michelle Thompson



Michelle Thompson
GCMG 2017



Meet a Master Gardener: Charlotte Avant

Charlotte Avant is an active Master Gardener who can be found helping with plant sales, working in the gardens, attending gardening presentations and enjoying lifelong friends she met in the classes she took joining the Master Gardener program.

She was born in Aransas Pass and spent her childhood in the Galveston/LaMarque area. As an adult, she worked for an electrician in wiring houses and handling all the electrical issues for the City of Galveston. Being an electrician was her favorite job. A treasured memory of the time was putting up the Christmas lighting on the statue at the corner of 25th and Broadway, the Texas Heroes Monument, honoring those who fought during the Texas Revolution. Later, Charlotte became a housing inspector for the City of Galveston. When her husband at the time got a job in Saudi Arabia, Charlotte and her youngest child traveled with him to live there. Her daughter enrolled in school. "She got the best education she could have ever gotten. And we both made some lifelong friends. It was a great experience. We went to Egypt and Amsterdam while we were over there."

After moving back to the United States, living in Arkansas, she worked in the Safety Department at an explosive plant that made decoy flares. According to Charlotte, this type of flare resembles angel wings when it comes out of airplanes. It was there that Charlotte suffered a major stroke. It affected her memory. To help with her recovery, her daughter gave her a little dog Charlotte named Coco Chanel. The pet was just what Charlotte needed. "She gave me purpose. She saved me."

Charlotte met her current husband, Larry Braden, in Arkansas. He was a mechanical engineer at the explosive plant. Together they worked on her recovery and a year later they both retired and moved to San Leon, living by the water.

In 2017, Charlotte and her neighbor, Theresa Blackwell, joined the Master Gardener class. "She was great with plants and flowers and I had fruit trees. I wanted to become a master gardener to learn all I could about fruit trees and flowers. I'm still learning," Charlotte said with a smile.

Recently, she and Larry moved to Santa Fe to be closer to her three daughters, five grandchildren and six great grandchildren. Coco Chanel has been with her through all her journeys and helping her garden until last month. "I am still grieving," Charlotte shared.

Living closer to the Discovery Garden, Charlotte is able to get involved with other master gardeners weekly and enjoys working in the orchard among the citrus and fruit trees.

She works with Herman Auer (MG 1983) and her current learning curve is grafting fruit trees.

Larry continues to be supportive of her work. He keeps her focused on what she has to do on those days when she meets and works with the other MG volunteers.

Travel is also a favorite pastime. She recently returned from a cruise with her daughter and son-in-law to Greece, Italy, and France. Next year, more travel adventures are on the calendar. In the spring she and Larry will be celebrating their anniversary in St. John, Virgin Islands.

For now she is enjoying her new home and working on making her new yard a gardening haven.

Contributing Writers: Doreen Hughes, Alice Rodgers & Karolyn Gephart



Charlotte MG Doreen Hughes



Coco Chanel pup

GCMGs: Get Active!

This page enumerates opportunities for GCMGs to explore. Any Galveston County Master Gardener interested in volunteering is urged to contact the person listed immediately. **PLEASE READ AND CONSIDER.**

Continuing Education Opportunities:

- Saturday, November 2, 2024, ABC's Winter Vegetable Gardening with MG John Ely, 11 am, @ Jimbo's Nursery in Santa Fe.
- Saturday, November 9, 2024, Texas City Garden Club Holiday Market hosting three presentations @ Nessler Center — Container Gardening at 9:30 am, Citrus at 11 am, and Plumeria at 1 pm.
- Thursday, November 14, 2024, Greenhouses with MG Briana Etie, 10 am @ Weed & Wish Garden Club in Dickinson.

Organizational Needs:

- **Social Media....**We are looking for MGs to enhance our social media activities such as posting on Facebook, creating an Instagram presence and possibly initiating some short YouTube educational videos. Experience in any social media platform would be great. Social media is an ever-growing need for us and how we interact and engage with the public. It's also a role that can often be accomplished from home. *Contact Kevin Lancon.*
- **Discovery Garden Research Beds....**We need some additional volunteers who are interested being involved with vegetable research projects. Three beds are currently dedicated to these projects and assistance is needed with planting and maintenance, harvesting, collecting and documenting harvest data and other pertinent information, writing research summary reports, and creating short PowerPoint presentations. *Contact John Mitchiner or Michael Reed.*



NASA Ask an MG Table volunteers: Ralinda Fenton, Tanya Padgett, Cheryl Bruggeman, Jamie Hart and Stacey Phillips

- **Discovery Garden Administrator....**We have a need for a Discovery Garden Administrator, someone who could organize our files, organize and maintain our processes and procedures, safety information, plant bed assignments, and organize our plant bed logbook. This would be a great opportunity for someone who wants to get involved in the Discovery Garden but doesn't have a ton of time to devote to garden activities, or maybe can't do much physical work. If you're good with organizing and filing, and want to be active in the Discovery Garden, this might be a great role for you. *Contact Kevin Lancon.*
- **Program Coordinator Assistant....**We have need for a backup or assistant for Program Director Vickie Hall. In this role you would assist Vickie with her duties including scheduling and delivering educational seminars at the Extension office and at the Discovery Garden, typically on Saturdays. You also would substitute for Vickie if she had vacation or other personal priorities. This would be a great opportunity for someone to learn more about our education programs and be involved in one of the most critical components of the MG program. If you enjoy organizing and interacting with the public and want to be active in the educational sector of our organization, this would be a great role for you. *Contact Vickie Hall.*
- **Outreach Coordinator Assistant....**We need a backup or assistant for Outreach Coordinator Angela Farris. In this role you would assist with her duties, which includes organizing, scheduling and facilitating our outreach opportunities in the county. You would also substitute for Angela if she had vacation or other personal priorities. This assignment can be performed mostly at home. It would be a great opportunity for someone to learn more about our outreach programs and be involved in a critical component of the MG program. If you enjoy organizing, interacting with the public and MGs, using computer skills, and desire to be active in the outreach sector of our organization, this might be a great role for you. *Contact Angela Farris.*



Students in grades 3-5 in a Botany STEM afterschool class from Simms Elementary in Texas City ISD toured the Discovery Garden October 23. MG Debby Brady

2024 Fall Festival

The third annual Galveston County Master Gardener Fall Festival was held Saturday, October 12, 2024 in the Discovery Garden. The weather was perfect and MGs in red aprons and vests were in abundance to help shoppers. Five educational seminars were presented (Overview, Vegetables, Herbs, Harvest and Storage of Produce, and Plumeria). Tours, antique tractor show, great food, and a wide variety of booths were open from 9 am to 2 pm.



Booths MG Karolyn Gephart



MG Grown Plants booth MG Michelle Thompson



Crew MG Karolyn Gephart



MG Michelle Thompson



Wagonettes MG Karolyn Gephart

A perfect day, a perfect place....and so many plants



Cashiers MG Karolyn Gephart



Plumeria Booth MG Michelle Thompson



Craft tables MG Michelle Thompson



Presentation registration MG Karolyn Gephart



Trio MG Sandy Klaud



Lynne Slaton and figs MG Karolyn Gephart

MGs at Work



MG Christie McGrath at her inaugural Compost Presentation for MGs *MG Herman Auer*



Filling wagons for delivery *MG Herman Auer*



October meeting hosts Trish and Mike McDaniel *MG Carol Jean Mulrain*



Fran Brockington talks bulbs at Friendswood's Heritage Gardener meeting *MG Karolyn Gephart*



How many men does it take to move some compost bags? *MG Herman Auer*



Plumeria presentation crowd with MG Loretta Osteen MG Herman Auer



MG Robert Rodriguez working the online sale pick up in September MG Jim Bridgett



We see you in the band MG Debbie Valdez MG Vicki Blythe



Plant sale workers taking a break MG Herman Auer

2024 Master Gardener Recertification Hours

Browse online to the members only webpage to review all hours: <https://txmg.org/galveston/membersonly/>

Date	Name of Program	Speaker	MG CEUs
1/6/2024	Wedge Grafting	Hazel Lampton, Debbie Espinosa	2.00
1/6/2024	Growing Peaches in Galveston County	Herman Auer	2.00
1/9/2024	January Mtg. - The Year Ahead 2024	Kevin Lancon, Frank Resch, Stephen B.	1.00
1/11/2024	L&L - Pesticides	CEA Phoenix Rogers	1.00
1/20/2024	Planting Fruit Trees	Herman Auer	3.00
1/20/2024	Growing Great Tomatoes, Pt. 2	Ira Gervais	2.00
2/1/2024	L&L - Ken Clark Foundation update	Samuel Clark	0.25
2/10/2024	Tree Selection for the Home	Briana Etie & CEA Stephen Brueggerhoff	2.00
2/10/2024	Spring Vegetables	Kevin Lancon	2.00
2/13/2024	February Mtg - Plants in Space & Space Crop Production	Dr. Gioia D. Massa	1.00
2/17/2024	Fig Tree Pruning & Propagation	Barbara Canetti	2.00
2/17/2024	Irish Potatoes	Kevin Lancon & CEA Ginger Benson	2.00
3/9/2024	Peppers	Gene Speller	2.00
3/12/2024	March Mtg. - Impacts of Severe Weather	Dr. Mike Arnold	1.00
3/14/2024	Lunch & Learn - Sweet Potato Trial Overview	Michael Reed	0.50
3/16/2024	Growing Avocados	Hazel Lampton	1.00
3/16/2024	Fairy Garden Workshop	Pat Saenz, Briana Etie	2.00
3/23/2024	Tomato Stress Mgmt., Pt 3	Ira Gervais	2.50
3/23/2024	Cucumbers, Squash & Melons	Kevin Lancon	2.00
4/9/2024	April Mtg. -Mars Desert Research Station	Dr. Kay Sandor	1.00
4/13/2024	Louisiana Irises	Monica Martens	2.00
4/16/2024	"Pilot Seminar" - MGs Only - Texas Superstars®	Sue Bain, Karen Nelson	2.00
4/20/2024	Beneficial Insects	Hedy Wolpa	2.00
4/20/2024	Texas Superstars®	Sue Bain, Karen Nelson	2.00
5/4/2024	Patio Citrus	CEA Stephen Brueggerhoff, TDA Janis Teas	2.00
5/4/2024	Plumeria	Loretta Osteen	2.00
5/29/2024	"Pilot Seminar" - MGs Only - Blackberries & Blueberries	Monica Martens	1.00
5/30/2024	Tomato Tasting in the Gardens	2024 GCMG Intern Class	1.00
6/8/2024	Blackberries & Blueberries for Small Yards	Monica Martens	2.00
6/13/2024	Lunch & Learn - Cucumbers	Kevin Lancon, Bobbie Ivey	0.50
6/27/2024	Lunch & Learn - Tomato Trial Recap	Jim Bridgett	0.25
7/13/2024	Succulents	Patricia Martin	1.50
7/18/2024	Lunch & Learn - Squash	John Mitchiner & Michael Reed	0.50
7/25/2024	Lunch & Learn - Pesticides	Brock Sanford	0.75
8/1/2024	Lunch & Learn - Seed Propagation	Briana Etie	1.00
8/8/2024	Lunch & Learn - Strawberry Trials	Michael Reed	0.50
8/13/2024	August Mtg. - Hibiscus presentation	Greg & Marti Graves	1.50
8/15/2024	Lunch & Learn - Blueberries	Monica Martens	0.50
8/22/2024	Lunch & Learn - Blackberries	Monica Martens	0.50
8/24/2024	Onions & Garlic	Kevin Lancon	2.00
9/12/2024	Lunch & Learn - Cabbage Trial	John Mitchiner & Michael Reed	0.50
9/14/2024	T-Bud Grafting	Hazel Lampton	2.00
9/25/2024	"Pilot Seminar" MGs Only - Backyard Composting	Christie McGrath	1.00
9/26/2024	Lunch & Learn - Sept. Plant Sale Recap	Kevin Lancon & Sue Bain	0.50
10/3/2024	Lunch & Learn - Herbs	Donna Merritt	0.50
10/5/2024	Plumeria Care in Winter	Loretta Osteen	2.00

2024 Recertification Hours for MGs

Total CEUs (Hours)

64.25

Last Updated: October 10, 2024

Reminder: In order to maintain your status as a certified Texas Master Gardener, each year you must complete a minimum of 6 hours continuing education, as well as 12 service hours. Additionally, those hours must be reported through the online Volunteer Management System or other means.



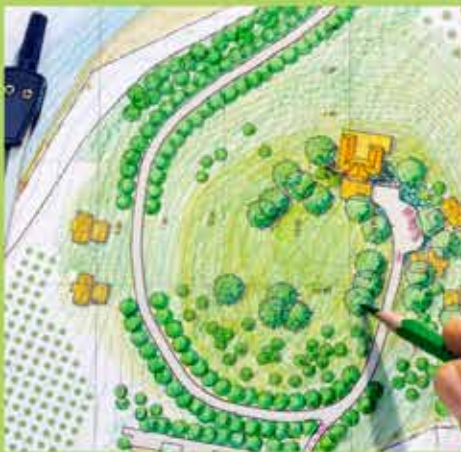
Horticulture November Events

Greenhouse Hobbyist
11/02/24 9:00am - 11:00am

Gulf Coast Gardening Seminar

Explore how a greenhouse can extend your growing season. Including the necessities for a healthy greenhouse such as location, flooring, heating/cooling, and ventilation.

To register, visit: <https://galveston.agrilife.org/events/>



Landscape Design Principles for the Home Gardener
11/02/24 1:00pm - 3:00pm

Gulf Coast Gardening Seminar

2-part seminar: 1st a discussion of site planning, plant selection, and conservation. 2nd a garden tour demonstrating how color, texture, etc. relates to plants and hardscapes.

To register, visit: <https://galveston.agrilife.org/events/>

Arranging Fresh & Artificial Flowers

11/16/24 9:00am - 11:00am

Gulf Coast Gardening Seminar

Hands-on workshop demonstrating and explaining the basic techniques of fresh and artificial flower arranging.

For details, visit: <https://galveston.agrilife.org/events/>





Horticulture

December Events

Growing Tomatoes from Seed, Pt. 1

12/07/24 9:00am - 11:00am

Gulf Coast Gardening Seminar

The 1st part in a series of 3 for growing tomatoes in Galveston County. Part 1 will cover starting from seed, choosing the best seed variety, where to obtain supplies, along with methods and techniques for starter plants to plant in your spring garden.

To register, visit: <https://galveston.agrilife.org/events/>



Open Public Garden Days

Every Thursday, 9:00am - 11:00am

Gardening with Master Gardeners

The Discovery Garden will be open to the public for visitors and gardening questions.

Location: in Carbide Park, 4102 Main St, La Marque, TX 77568

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EXTENSION

Galveston County Texas A&M AgriLife Extension
4102-B Main Street (FM 519) La Marque, TX 77568
<https://galveston.agrilife.org/horticulture/> 281-309-5065



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Last Word: Goals Underway at AgriLife Extension Office



Boone Holladay
County
Extension Agent
III - Horticulture
Texas A&M
AgriLife
Extension -
Galveston

Well, Howdy folks!

It's been three months now that I have been the Extension Horticulturist with Texas A&M AgriLife Extension in Galveston County. Prior to working here, I was in a similar position in Fort Bend County for the last 12 years.

In these past 3 months here in La Marque, I've been working towards a couple of goals. One of my first has been to get a pulse on our program and to get out and meet people and partners across the county. So far, I've met some great people and I'm looking forward to starting up great partnerships. If you own or operate a horticulture business in the county and we haven't met, I'd love to come visit. Just give me a call. Extension works best while partnering with others. In the green industry, we share many of the same missions and goals, and doing it together is easier, more productive, and more fun. In getting out to local landscape businesses, I've realized we need to put together training for nursery staff on areas of OSHA safety standards, pesticide applicators safety, knowledge on plant materials, and much more. I look forward to helping to build and deliver such programs.

Another area we are working on is our gardening call response, making it much timelier. Extension is known for taking calls from residents who need help with issues they hope to resolve. In September, we launched an expanded effort in this service. Previously known as Master Gardener Hotline, we have rebranded this service as Gardening Help Desk and have added a new volunteer role to coordinate our expanded team of volunteers. Aiming to expedite our response time, we now have volunteers in the office every day of the work week, Monday through Friday from 9 am to noon.



In Jimbo's Nursery bromeliad greenhouse are General Manager Claire Woolsey, Paul Winski - Extension Specialist, Brandi Keller, Galveston CMR Agent, and Horticulture Agent Boone Holladay. Photo courtesy of Jimbo's Nursery

Our goal is to have your questions answered and advice provided by next day at the latest. We know that when people reach out to us, typically it is something that is urgent and they need help quickly. With this new team in place, we can do that. For those that have not used this service in the past, we typically focus on horticulture, or gardening topics, but we can handle any question that you may have. If it's something that is outside of our wheelhouse, we'd be glad to get you to the right person or place that can help you.

The last thing that we'll be focusing on is getting the word out about Texas A&M AgriLife Extension and the community resources that we have to offer, most of which are free services provided to the people of Galveston County. We'll be identifying ways to expand our visibility across the county through print marketing, content in local media, representatives out and about at local events, and the expansion of social media platforms. Look for us, like, follow, share, help us spread the word however you can. We are too commonly referred to as a "best kept secret." Together we can change that.

Beyond these goals listed above, our office is thriving. With a couple recent transfers and a few top-notch new hires, we are fully staffed and ready to roll out some great activities over the winter and into the new year. Stay tuned.

Well, that's all for now. Until next edition, y'all take care out there.



Gardening Help Desk Coordinator Christina Reynolds (Class of 2022) trains new team member Norma Torok (2022).



Extension Agent Boone Holladay leads interpretative lab training for Help Desk team members Norma Torok (2022) and Tanya Padgett (intern 2024).

Judy's Corner: Galveston County Monthly Meetings



Judy Anderson
GCMG 2012

November GCMG Annual Meeting

It is time for the Annual Meeting of the Galveston County Master Gardener Association as required by the bylaws. The meeting will be held on Tuesday November 12, 2024. This is an important meeting for all master gardeners to attend. The current state of the association will be presented, including results of the plant sales, on-going projects, proposed bylaws' changes and plans for future projects. Elections will also be held for open positions in the association.

The meeting will begin early to accommodate the extensive business meeting. It will begin with a pot-luck dinner. Please bring a dish to share, but serving spoons are not necessary. The social time will begin at 5 pm and dinner will follow at 5:30 pm. The meeting will begin at 6 pm.



Board of Directors: Ed Klein, Judy Anderson, and Linda Steber



Board of Directors: Frank Resch, and Ira Gervais

December Holiday Meeting

When December arrives, the master gardeners will be gathering for their holiday party at the home of Mikey and Allen Isbell in Galveston. Bring a pot-luck dish to contribute to the traditional feast inside the Isbell's beautifully decorated home. If the weather permits, we will have social time on the front porch where Briana Etie and Hedy Wolpa will be holding registration.

At the event guests are encouraged to donate an unwrapped gift for the Galveston Children's Center.

Everyone is encouraged to participate in the Holiday Jingle Bells Gift Exchange. Bring a gardening gift valued under \$10 for a man or woman. Master Gardener (2020) Debbie Valdez will provide the music for the gift exchange.

The Social will begin at 6 pm with dinner at 6:45 pm.



Holiday Party 2023

Happy Holidays To All!