

GGG

Granville Gardeners Gazette

Promoting Education and Recreation through Gardening Activities

www.thegranvillegardeners.org

Oxford, North Carolina

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Deep Yellow Euchiaena moth



Two Luna moths mating



Rosy Maple moth

THE NOCTURNAL GARDEN: MOTHS AND OTHER NIGHT VISITORS

By Mike Dunn, Naturalist/Educator

Monday, August 23 at 7 p.m., Granville County Expo Center 4185 U.S. Hwy 15S, Oxford, NC

About the Program

Many people are aware of the importance of butterflies and using native plants to attract them to your garden. But moths rule in terms of flying scaly-winged visitors to your landscape – they are considered better pollinators by some, come in an incredible variety of beautiful colors and strange shapes, and outnumber butterflies by at least 10 to 1! Learn about some of the fascinating moths (and other nocturnal creatures) that call our region home and how you can attract them to your yard.

About the Speaker

Mike is a lifelong naturalist-educator in Chatham County, NC. He retired after 36 years working with the North Carolina State Parks System, the N. C. Museum of Natural Sciences, and the N. C. Botanical Garden. During that time, he had the privilege of traveling to some incredible natural areas throughout North Carolina and beyond to observe and photograph wildlife and share his love of nature with thousands of people from kindergarteners to retirees.

By Marty Finkel and Mike Dunn Photos: Right and left: Mike Dunn Middle: Marty Finkel

President's Notes

As I write this, July has flown by, and August is almost here. The Granville Gardeners were busy in July.

On July 16th, over a dozen of us took a field trip to Triangle Urban Farm in Apex, NC. Dustin Loyd gave us a wonderful tour. I won't say much more since Marty is going to provide you with a great article and photos of our trip. If you want to see some other photos of their operation, head over to our website, www.thegranvillegardeners.org, and look under the Projects tab. You will find a great photo gallery of our visit.

On July 24th, The Granville Gardeners participated in the Granville County 275th Anniversary Celebration at the Granville Athletic Park in Oxford. We set up a booth with our new portable folding table, new easels for our photo display and new white board, along with our business cards, new brochures, and membership forms. All of this was protected by the GG 10X10 canopy. It was warm, but with the shade and a bit of a breeze, we were comfortable on a very hot day. A big thank you to Jim Nutt, Kay Nutt, Christy Henthorn, Dodie Veres, Pat Wilkerson, Gerry Alston, Heidi Mann, and Heidi's husband for helping. I couldn't have done it without them. We got more exposure throughout the community and several people took applications and brochures. We've continued to add new members throughout the past 18 months, and I am very happy about that.

Our Ice Cream Social was held on Monday, July 26th at Lynch Creek Farm. Granville Gardeners member, Kerry Carter and her husband own this beautiful venue. Despite some showers rolling through early in the evening, we had a pretty good turnout of about 25 members and guests. We enjoyed delicious ice cream and desserts while we socialized. If you have never been to this beautiful place, you need to visit sometime. It is special.

I have been very busy over the past few months getting things in order at home and for the garden club, because I knew that I was not going to be able to do some of those things in August. On August 12th I am having hip replacement surgery, and I am not going to be up and "running" for a while. I will do what I can from home, but I am not going to promise that I will be attending the August 23rd meeting as that will be less than 2 weeks since my surgery. I know you all will manage just fine without me. I will be asking for someone from leadership to run the August board and general meetings in my absence. My plan is to return in time for the Covered Dish Social at Carmen and David Quinn's home on September 27th. Until then, I wish you all a wonderful rest of your summer and I will definitely see you in September.

Brenda LaFayette

President – The Granville Gardeners

GG Tour of Triangle Urban Farm

Friday, July 16 was a hot day as a group of Granville Gardeners gathered for a tour of Triangle Urban Farm near Apex. GG member Dustin Lloyd is greenhouse manager, and he was an excellent guide as he showed us the raised bed vegetable garden to the right of the house. In the center photo, the greenhouse is behind the garden.

A few grow towers are used outside (photo on the right), but most are in the greenhouse.

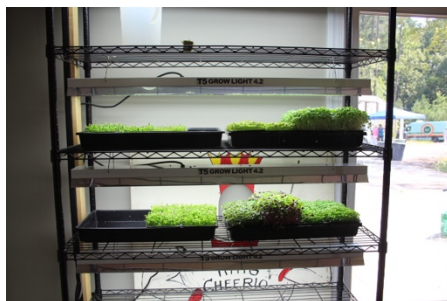


Dustin is ready to discuss the aeroponic system at the entrance to the greenhouse. Everyone was impressed with the cleanliness, health, and vigor of the plants growing in the towers. The photo on the right, below, shows a newly planted tower in the foreground. Since plants are started in rockwool plugs, they are easy to insert, and it's just as easy to remove a mature head of lettuce or other vegetable. The second row shows lettuces in different stages of growth and a head of red oak leaf lettuce close up.



These towers are 8' tall and the base is 30" in diameter. Below, stackable tower pieces are on the bench in front of Danny. The middle photo shows the Tower Garden Home system with a 24" base designed for home use. It has 32 planting ports, and the Tower Garden website has a list of over 150 fruits, vegetables, and herbs you can grow in it. The photo on the right is the room where boxes of produce for delivery are packed. The shelves hold for-sale food items, mixes, several kinds of flour, marinades, and more – all

grown or made in NC. The table to the right holds for-sale produce and microgreens that were left after the boxes were filled. The microgreens are grown under grow lights, second row.



The rest of the tour included seeing two of the three micro pigs and their pig houses, pullets, rooster and family, and GGs having a good time. Sebastian the cat didn't show up for a photo op.



Tower Garden by Juice Plus uses an aeroponic evolution of hydroponic systems that periodically showers roots from the top down with oxygenated water and nutrients precisely when plants need them. Visit the website for photos and an explanation of how the system works, provides up to 30% more yield, uses less water, and grows plants 3 times faster than conventional gardening.

This is part of the *Who We Are* statement on the TUF website: “We are a family. We are farmers. We are community builders. . . . We grew TUF guided by faith, supported by our family and by finding meaning and connection through our food.”



Dustin told us that TUF’s market is customers who order boxes which come in different sizes from an online listing of products that come from local farmers and businesses. Organic lettuces and greens come from TUF, while other vegetables, breads and pastries, pasture-raised meats and eggs, wildflower honey, nut butters, dairy products, goat milk body care products, mushrooms, fresh flowers, and more are brought onsite to be custom boxed. Carolina Mushroom Farm supplies several kinds of mushrooms, LaFarm and Ninth Street Bakeries deliver baked goods, and so on – the source is identified on each online selection. There is a walk-in freezer and cooler on the premises, and Dustin says that on the day before delivery, the assembling room is packed with delivered items and TUF produce which he and others have plucked fresh from the growing medium and washed, and filling orders is orderly chaos.

Dustin has to keep the greenhouse immaculate, which means getting rid of any pests organically (aphids and thrips were a problem in the beginning), and keeping the towers clean of calcium and other salts build-up. Taking all the tower sections apart and scrubbing was time-consuming and mind-numbing until he discovered citric acid. Now he fills a barrel with the solution and submerges tower components until the scale is dissolved and simply rinses well – all done! He has one part-time assistant.



By Marty Finkel

To-Do List

- Apply pre-emergence herbicide the **third week** in August to help control the weeds that always show up in late winter/early spring:

chickweed, mulberry weed, annual bluegrass (*Poa annua*), wild garlic and onions, several thistles, wild mustard, shepherd's purse, Carolina geranium, henbit, black medic, and many more.

Here's an excellent NCSU Extension article on this subject:

Fall Pre-Emergent Weed Control by Minda Daughtry and last updated by Rhonda Gaston

<https://lee.ces.ncsu.edu/2017/09/fall-pre-emergent-weed-control-2/>

Contact our horticulture extension agent, Johnny Coley for more information about using pre-emergence herbicides.

- Container plants are, by definition, under stress because the roots are confined. Keep them watered to reduce some of the stress.
- Plant seeds of cilantro, arugula, dill, beets, carrots, radish, lettuce, turnips, kale, spinach, mustard, and snap beans, plus transplants of cabbage, broccoli, and collards. For more to plant now, type NCSU planting guide
- Large trees require between 50 and 200 gallons of water/day in the summer, so most herbaceous plants under these trees will suffer if not watered (from Plants Delights Newsletter).
- Cut annuals back by half for bushier plants and more flowers.
- Strawberry and blueberry plants set buds in the fall, so fertilize now with a complete fertilizer. If you get any on the leaves, wash it off.
- Hot, dry weather favors spider mites – control with insecticidal soap. Or hit all surfaces of leaves with high volume water spray each time you water – this will control if done regularly.
- Keep an area of soil moist for butterflies, or set out watermelon rinds so they can drink the juice.
- Allow bell and jalapeno peppers to turn red for extra flavor & higher beta carotene content.
- Divide irises and daylilies this month.
- Check garden centers for fall-blooming bulbs to add to your garden.
- The week of September 1st is the recommended time to spray for peachtree borers. **Get prepared now:** Spray the trunk and major branches, paying particular attention to ground level. Follow label instructions. Note some products will recommend multiple applications. Peachtree borers may also attack apricot, cherry, nectarine, and plum trees. For more information on peachtree borers with a link to a list of “Homeowner Products Listed for Borers” see: ww.ces.ncsu.edu/depts/ent/notes/O&T/trees/note141/note141.html.
- Clean up spent crops in the garden, and if you are considering a fall garden, pick up a copy of HIL 8001, *Growing a Fall Vegetable Garden*, or on the net see: www.ces.ncsu.edu/depts/hort/hil/hil-8001.html. Also see: <http://pubs.ext.vt.edu/426/426-334/426-334.pdf>, and www.clemson.edu/extension/hgic/plants/pdf/hgic1256.pdf. Also some seed sources have growing guides and other information on their web sites.
- If you are interested in extending your vegetable gardening season past the first frost, see: www.pubs.ext.vt.edu/426/426-381/426-381.pdf or <http://urbanext.illinois.edu/hortihints/0402c.html> or Jabbour, Niki. *The Year-Round Vegetable Gardener*. North Adams, MA.: Storey Publishing, 2011. Also see: <http://wimastergardener.org/sites/wimastergardener.org/files/FloatingRowCover.pdf>. For a more comprehensive coverage of season extension with a resource list, see: <http://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-seasonextension/>.
- Note that NCOrganic (www.ncorganic.org) in the Organic Production section has individual sections on: Production Guides, General Organic Growing Resources, Pests & Disease Control, Season Extension and Greenhouse, Cover Crops, and Sources of Organic Seed and Organic Farming Supplies

By Marty Finkel

Oxford Yard of the Month



The winners of the July Yard of the Month are Bill & Gail Amerson of 512 Harris Street. A sign will be placed in their yard recognizing their achievement and the Granville Gardeners will give them a 12-month membership. They will also be eligible for the October grand prize drawings of \$75 in Oxford Downtown Dollars, a \$25 prize in Oxford Downtown Dollars, and two \$15 prizes in Oxford Downtown Dollars. The grand prizes will be drawn in October from all of the 2021 Yard of the Month winners.

Oxford Yard of the Month is awarded May through October. Nominations may be made by submitting the name and address of the property owner with (or without) a photo of the yard to socialmedia@oxfordnc.org. To be eligible for Oxford Yard of the Month, property must be within the City limits and cannot have been awarded Yard of the Month in the past two years. For more information, please visit our website at oxfordnc.org or contact Oxford City Hall at 919-603-1100.

Ice Cream Social, Lynch Creek Farm

We had a wonderful time on July 26, as you know if you read Brenda's President's Notes in this issue. I can't add any more to her description, and I wish everyone could have been there. It was a delight.

Arriving – front porch



Socializing inside the log cabin



In line for ICE CREAM!



Closer to target



Oh, the desserts! One of each, please



A good time was had by all



By Marty Finkel

Q&A

Q: Around the end of July, yellow and brown to black spots started appearing on the leaves of my tomato plants. Will this kill my plants? Also, I'm not getting as many tomatoes now.

A: There are probably at least a couple of things going on here. With temperatures of 90 and above, if the humidity is high, pollen clumps and the flowers don't get pollinated. This is more likely to happen with heirloom varieties with large fruit. Plants with fruit the size of golf balls likely won't have pollination failure, whereas those with tennis ball or larger size fruit will. Next spring, get tomatoes planted earlier so you will harvest more fruit before high heat sets in.

Tomatoes are both bee and wind pollinated, but it isn't honey bees that pollinate – it's carpenter and bumblebees. Because of the structure of the flowers, buzz pollination is required, and honey bees can't do that (see Did You Know, July 2019). To attract more bumblebees, plant Joe Pye weed and other pollinator plants in your garden. Gently thumping the flower cluster stalk, or knocking it with a pencil, can shake the pollen onto the pistil, which is what the wind does.

As for the leaf spots and yellowing, there are three main **fungus** diseases that can cause this: early blight and septoria leaf spot are two earlier season diseases, while late blight usually occurs in cooler weather. NCSU's Dr. Inga Meadows says there is no resistance to early blight, but some varieties are more tolerant. See <https://content.ces.ncsu.edu/early-blight-of-tomatoes>



Early blight on tomato leaves



Septoria leaf spot on tomato leaves

Fungal spores are wind borne and come from infected plant debris, near-by weed hosts, and can be present on cages and stakes. They can't survive in the ground over winter, but if infected plants are left on the ground and aren't completely decayed, spores will be there. They can be spread by insects and our hands and tools. Next season, disinfect your cages and stakes by spraying with 70% rubbing alcohol or dip them (or wipe) with 10% bleach solution – and rinse.

In the excellent 7-15-21 “Tomato Growing Advice for Challenging Weather and Every Day” conversation between Craig LeHoullier (the NC Tomato Man) and Joe Lamp'1, LeHoullier says that there are some things within a gardener's control that will help production. These are:

- Allow enough space between plants for good air circulation
- Keep plants mulched to avoid water splash from the ground
- Keep plants growing strongly by fertilizing and watering regularly
- Remove suckers on **indeterminate** plants: LeHoullier removes all but 3 suckers, resulting in a 4-stem plant.
- Topping: LeHoullier tops the plants at his stake height of 4'.

Your neighbor may not be aware of how disease spores spread, so to lessen the chances of soil borne disease, try planting in a straw bale or a grow bag – LeHoullier uses both. Straw bales need to be prepared about 2 weeks before planting if fertilizer is used to hasten the break-down of the straw, and a month or more if water alone is used. LeHoullier's book, *Growing Vegetables in Straw Bales: Easy Planting, Less Weeding, Early Harvests*, has step by step instructions, and his healthy, vigorous straw bale tomato plants are the proof that he knows what he's talking about.



Late blight



Late blight

If, despite all your good practices, one or more diseases kick in, there are fungicides to help control them. Clemson University has an excellent fact sheet that describes nearly all tomato diseases, disorders such as cracking, blossom end rot, etc. and has lists of resistant varieties and lists of fungicides, including copper. “When and How to Use Copper Fungicide in Your Garden” by Amy Vanorio on the *Morning Chores* blog is very informative and helpful. Bordeaux mix is a very old treatment – a mix of copper sulfate with calcium hydroxide (lime) that works on both fungal and bacterial issues. Vanorio strongly warns that plants can be damaged and soil altered by copper if directions for use are not followed. This and most of the fungicides Clemson lists can be used as a preventative before disease occurs and to help control disease once it starts.

Dr. Inga Meadows, NCSU Extension Associate, has several excellent articles on disease ID, management, prevention, and has lists of fungicides.

Photos: Inga Meadows, NCSU Extension Associate, Entomology & Plant Pathology

By Marty Finkel Sources: <https://joegardener.com/podcast/tomato-growing-advice-challenging-weather-craig-houllier/> <https://hgic.clemson.edu/factsheet/tomato-disease-disorders/> *The Gardener's Path* online 3-14-21 "How to Identify and Control Septoria Leaf Spot on Tomatoes" by Helga George, *Morning Chores* online "When and How to Use Copper Fungicide in Your Garden" by Amy Vanorio, "What's the Buzz? How Tomatoes are Pollinated" by Christine Casey 7-14-17 ucanr.edu

Q: What is the difference between pre-digested organic fertilizer and traditional fertilizer?

A: This answer is from a 7-27-21 article by Marko Macura in the online National Gardening Association newsletter. It takes 2 to 6 weeks to see results when traditional organic fertilizers are used, and it takes less than a week when a pre-digested fertilizer is used. Macura gives this analogy:

An estimated 30 to 50 million American adults are lactose intolerant, which means we lose the lactic enzymes necessary to break down whole milk and certain other dairy products. However, yogurt is **pre-digested**, which means it has bacteria that digest lactose and milk proteins -- thus relieving the digestive enzymes in our bodies of that job. We can then absorb the nutrients since we have skipped the enzymatic step that produces the discomfort. This is why some people who are lactose intolerant can eat yogurt without a problem.

Plants, too, need their food to be broken down before they can use the nutrients from it.

Since plants don't have a digestive system to do this, they ". . . rely on microbes in the soil to break down their food to a simple structure that the roots can easily absorb."

Organic fertilizer is a blend of organic materials and can be compared to whole milk in our analogy.

"When these blends go into the soil, your plants rely on microbes in the soil to break these materials down to a simple form that plants can absorb and grow. This is a very slow process, which is why it takes an average of 2-6 weeks to see results from most organic fertilizers.

AgroThrive is like yogurt.

AgroThrive organic fertilizers are the only fertilizers that have already gone through much of this digestion, which allows the plants to absorb readily available, organic nutrients as it is applied, while also providing beneficial microbes to help digest other locked up nutrients in soil. This allows users to see results in less than a week! To learn more visit www.agrothrive.com"

By Marty Finkel from cited source

Did You Know

Did you know that the dreaded box tree moth has been found in the US? It will destroy most boxwoods in the country if it becomes established.

On May 28, 2021 the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) announced that it had confirmed the presence of box tree moth (*Cydalima perspectalis*) in the continental U.S. and is working to contain and eradicate the invasive pest.

It's native to Asia and was introduced to Europe in 2007, where it spread quickly across the continent. It was introduced to Ontario, Canada in 2018, and that was the first time it appeared in North America. Last May, an infested nursery in Ontario shipped plants to Connecticut, Massachusetts, Michigan, New York, Ohio, Tennessee, and South Carolina. Nurseries or retail outlets that received boxwoods (*Buxus* spp.), *Euonymus*, or hollies (*Illex*) from Canada were notified that they should scout for eggs, larvae, pupae, and adults.

An alert sent two months ago by Dr. Steve Franks, NCSU Entomology stated: "Importation of boxwood, holly, euonymus, and other hosts from Canada have been [halted by federal order](#)."



Mostly dead boxwood hedge, the Netherlands



Mature boxwood tree caterpillar and web

Box tree moth caterpillars feed and reproduce only on boxwoods. If you notice your boxwood leaves being eaten, look for caterpillars (1/4" long when just hatched to 1 1/2" long when mature). They will continue to eat leaves and bark until only the midribs of leaves are left. With extensive damage, you will see webs and eventual death. If you find these caterpillars or see moths, contact Johnny Coley at 919-603-1350. So far, they have not been seen in NC.

Photos courtesy of Bennett Saunders, [NewGen™ Boxwood](#)

Did you know that hostas prefer cold winters and warm summers? You may have noticed on trips to northern states and Canada that many garden hostas resemble shrubs in size – when I first saw them, I was astonished to learn that some of them are the familiar varieties we use.

Most hostas require a winter dormancy temperature below 43 degrees F for 30 days. This requirement is genetic and is based on where the hosta originated – in a warm climate or a cold one. Luckily, here in NC our winter temperatures meet the chill requirement.

While our hosta clumps may not reach the size of the ones in New Hampshire and other northern states, here are some tips from Tony Avent on how to keep them growing well and looking good.

Top tips on how grow Hosta by Tony Avent, Plant Delights Nursery www.plantdelights.com

- **Sun** - Hostas prefer woodland garden conditions...**light shade** or a couple of hours of morning sun. Those who live in the north can get away with growing hostas more sun than us here in the south. Hosta leaf colors are preserved longer into the season with shade...so if you want to **preserve that nice blue leaf** or yellow leaf for as long as possible, choose more shade, preferably afternoon shade. The best sun hostas are the green cultivars.
- **Soil** - Well amended soil is best...rich in **organic matter** and tilled to improve drainage and prevent winter crown rot. **Slightly acidic** pH.
- **Water** - Hostas are drought tolerant but **1 inch per week** will keep them looking tip-top.
- **Fertilizer** - A fresh layer of **compost once per year** is plenty to keep a hosta supplied with all the nutrients it needs to look great.
- **Maintenance** - **Very low**...If you want to ignore your hosta, it will not mind at all. But you can keep your garden looking tidy by removing the spent flower stalks in late summer and by cleaning up the dead foliage after a few hard freezes at the beginning of winter.
- **Pests** - Deer love hostas and so do slugs, especially the newly emerging tender leaves. There are a variety of **deer controls** out there (fencing, predator urine, rotten eggs and hot peppers) but you can also control deer by interplanting hostas with plants that they do not like (e.g., Helleborus, Taxus, Vinca - Check out all our [deer resistant plants](#)). **Slugs** can be controlled with a variety of treatments but some non-toxic organic methods include collars, diatomaceous earth and sand around the plants.
- **Propagation** - Hostas can be divided every 3-4 years by digging them up and carefully separating the slips. Make sure each slip has some roots. **When is the best time to divide hosta?** Fall is the best time, but hostas are such tough plants that I have had success dividing them (in Raleigh) in any month.
- **Design Tips** - **Inter-plant** with evergreen or wintergreen plants to fill in when your hostas are dormant. Flowering in summer, the purple or white hosta flowers can be **combined with** other summer flowering plants with white or purple flowers. White, cream, and yellow variegated hostas stand out best when **surrounded by** solid green plants. Blue hostas stand out best when **set off with complementary colors** like pink and white flowers. **Fine textured plants** like carex and ferns play well with the bold texture of hostas leaves.

Marty's note: While following Tony's tips won't produce the size the hostas get in the North, it will optimize the health and appearance of ours.

Photos: Bennett Saunders

*By Marty Finkel: Boxwood tree moth article: Dr. Steve Franks, NCSU Entomology, Michigan State University Extension Landscaping article 7-19-21, The American HortFoundation "Box Tree Moth Coming Soon to a Box Wood near You?" 4-3-2020 article by Dr. Jill Calabro for photos
Hosta article: Perennial Plants Articles on Plant Delights Nursery website "Top Tips on How to Grow Hostas" by Tony Avent, "Hostas for Warm Climates," by Dennis Carey and Tony Avent*

Plant of the Month



Texas Firewheel (*Gaillardia aestivalis* var. *winkleri*, 'Grape Sensation')

The 2"-3" purple blooms distinguish this uncommon perennial from the typical blanket flower. It blooms midsummer through fall without deadheading. The spent flower heads retain their dark purple color, so plants remain attractive all season. Plants gradually spread to form a clump 18 inches wide and 24 inches tall. It prefers full sun to bright shade and well-drained, average to poor soil. Avoid irrigation, and it dislikes winter wet. It is drought and heat tolerant and attractive to pollinators.

Rare Roots <https://www.rareroots.com/products/gaillardia-grape-sensation>

Photo: Raulston Arboretum

Also in Bloom This Month

Note that bloom times vary, depending on climatic and meteorological conditions, and many plants bloom several months in a row (and sometimes rebloom). These are in bloom at the Raulston Arboretum.

Abelia
Allium
Amaryllis
Buddleia
Crepe myrtle
Canna Lily
Clematis
Crinum
Dahlia
Echinacea
Formosan Beautyberry
Ginger lily

Hibiscus
Hydrangea
Lantana
Mexican shellflower
Passion flower
Phlox
Rain lily
Rose
Rudbeckia
Surprise lily
Salvia
Verbena



Formosan beautyberry



Mexican shellflower



Chinese abelia



Crepe myrtle super-dwarf



Lantana 'Citrus Salad'



Crinum 'Bradley'



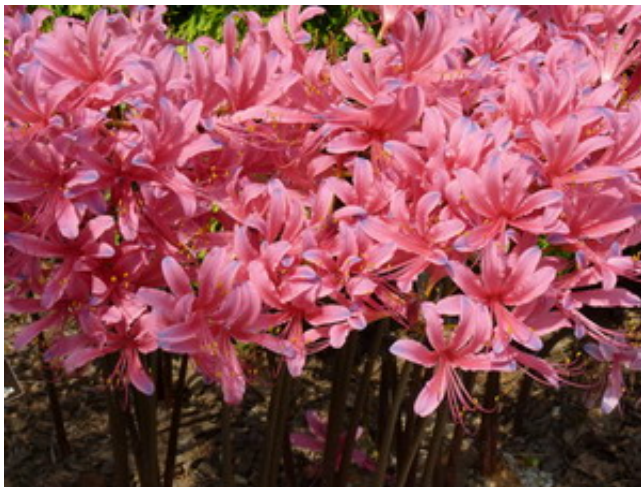
Rain lily 'Bankok Yellow'



Hibiscus 'Fireball'



Passion flower 'Pura Vida'



Surprise lily



Hydrangea 'Limelight'