



University of California
Agriculture and Natural Resources

UCCE Master Gardener Program
Orange County

The Garden Beet

Spring 2019

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This newsletter is provided by the UCCE Master Gardener Program of Orange County.

UC Master Gardener Program Mission Statement: Extend research-based knowledge and information on home horticulture, pest management, and sustainable landscape practices to the residents of California.

Visit our website at <http://mgorange.ucanr.edu>

Contact the Garden Beet at gardenbeet@ucanr.edu

Spring Cleaning

"Where you tend a rose, my lad, a thistle cannot grow."

– Frances Hodgson Burnett, *The Secret Garden*

I tend thistles; specifically, artichokes. This interest in edible gardening started last year, after an inspirational trip to the OC Great Park Farm + Food Lab (page 11).

Direct sowing proved difficult. As a novice garden detective (page 2), I blamed the long germination time (page 9) and "the slugs return from Capistrano" (page 18) for my lack of seedlings, but I suspect my real problem was that I mistook fleshy smooth-edged artichoke cotyledons for pervasive purslane and weeded them out.

Life got busy and the majority of the overlooked "weeds" surpassed the harvest stage to bloom into ornamentals that gave roses a run for their money...

That is, until they inevitably browned into patches of stalky stubble, leaving me wondering if they were still candidates for the "yard waste" bin (page 8). I composted them, cellulose filled stalks, cottony spent flower heads and all.

After the winter storms passed, I realized the magnitude of the spring cleaning I had signed up for this year. Everywhere we spread compost is now teeming with clumps of pervasive "purslane."



Investigating Garden Problems

By Linda Genis, UCCE Master Gardener of Orange County

Crime Solving TV shows have been popular for many years and even armchair detectives are familiar with crime scene investigation. How about using these techniques to solve garden problems?

First the detectives secure the crime scene and identify the victim. Just as the identity of a victim helps narrow down the list of suspects, knowing the name of the plant with a problem helps us narrow down probable causes. Some pests have favorite plants, and some plants are more susceptible to certain diseases than others.

Look at the scene of the plant problem. We know that plants need sun and water. Has the plant been watered too much or not enough? Has a sprinkler head become clogged or is it leaking? A moisture meter can be a handy device to have in your garden tool bag. Is the plant getting the right amount of sunlight to meet its needs? Sometimes the plant's environment has changed when a nearby tree has been cut down, exposing it to more light, or over the years nearby trees could have grown, creating more shade.



Whiteflies on the underside of a broccoli leaf
Image: Linda Genis



Spider mite damage on a tomato leaf
Image: Linda Genis

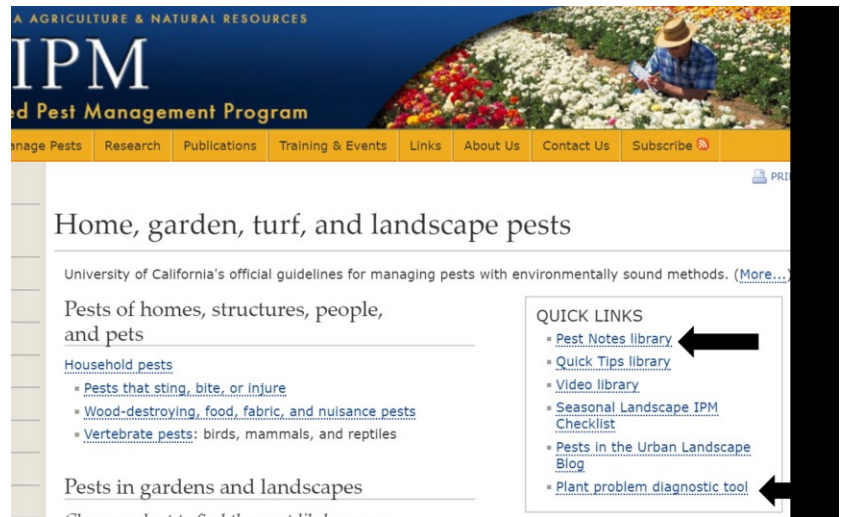
Did a pest leave clues behind? Slime trails indicate the presence of slugs or snails. Some caterpillars leave noticeable droppings. Check under the leaves where pests may be hiding. If there are holes in the leaves, they are clues as to who the suspect is. Leaf cutter bees leave round holes on the edges of plants. Slugs and snails eat irregular holes in the middle of the leaves. Sucking insects, such as aphids and mealybugs don't make holes at all. Spider mites, which are sucking insects, don't make holes, but create a stippling effect on the top of the leaf while they live on the underside. Spider mites also create a fine webbing. Discoloration or splotches on leaves may indicate a fungus rather than pest damage. Brown tips on leaves indicate a watering problem.

On TV shows we always see one investigator taking lots of photos. Sometimes a careful look at a photo will help you notice things you didn't notice outdoors.

Just as detectives bring their evidence to a lab, you can bring your evidence to your computer. One of the Master Gardeners' favorite websites is <http://ipm.ucanr.edu>. The box labeled Home, Garden, Turf and Landscape Pests is where we usually search. For more

information about pests of edibles, you can click on Agricultural Pests, but that sometimes includes management practices that are not practical or available for the home gardener.

When you are on the Home and Landscape Pest page, you will see a box in the corner labeled Quick Links. You can find the Pest Note library there and well as a Plant Problem Diagnostic Tool. The Plant Problem Diagnostic tool helps you narrow down problems by asking you to identify the type of plant (flower, vegetable, etc.), the name of the plant, what part of the plant is experiencing damage, and what the damage is. You will then see a short list of diagnoses which you can click on to see management recommendations.



Please continue to make use of our Hotline and visit our website for help with your questions. Think of us as part of your team as you strive to maintain a healthy garden.

ucceocmghotline@ucanr.edu
949-809-9760

Tomatoes on the Radio



KUCI 88.9 every Thursday at 8:30

Brian Hale will share his decades of experience growing tomatoes in Orange County. Why do vine-ripened store-bought tomatoes not taste as good as home-grown? What should gardeners do on Valentine's Day and Tax Day? What varieties are his favorites? Does it ever make sense to purchase a grafted tomato plant? What is the best way to store the fruit to maximize its shelf life?

To get the answers to these questions and more, tune into the KUCI 88.9FM on Thursdays from 8:30-9:30 AM or find previous talks that are archived in the vault at:

http://mgorange.ucanr.edu/Projects/Radio_Show/index.cfm .

You can also see Brian live for his talk at Reata Park on March 2nd (page 16).

Steven's Leafhopper: A Serious Threat to Plumeria

By Norma Yarbrough, UCCE Master Gardener of Orange County, Photos from Hodel, et al.

If you are like me, you may have a plumeria in your landscape or know that several of your neighbors are also growing this fragrant and showy specimen. *Plumeria rubra* has its origins in Mexico, Central America, Colombia and Venezuela. It has been widely cultivated in subtropical and tropical climates worldwide and is a popular garden and park plant, as well as being used in temples and cemeteries.



Over the last three years, collectors in Southern California are reporting and posting on social media about severe discoloration and deformity of the leaves on their plumeria, primarily *Plumeria rubra*. Initially it was thought that this problem was due to rain, wind, heat, mites, mineral deficiencies, improper pH, among other things. However, recent research has shown that the tentative source of the problem appears to be one of the “greatest calamities to befall plumerias in the history of these plants in California.”¹

In a document published in 2017 by Donald R. Hodel, Linda M. O’Hara and Gevork Arakelian titled “A New and Serious Leafhopper Pest of Plumeria in Southern California,” the history, symptoms, identification, biology and possible management strategies are laid out in a format that we can all understand.¹

History – collectors and growers in the San Diego area first noticed and reported on the leaf deformities in 2015. Over the next two years as the reports of this ‘disease’ escalated throughout Southern California, Gevork Arakelian (Entomologist with LA County Agriculture Commission) and Alessandra Rund (California Dept. of



¹ <https://ucanr.edu/sites/HodelPalmsTrees/files/268897.pdf>

Food and Agriculture) identified the suspect as *Empoasca stevens* (Steven's Leafhopper). This specimen was first collected on papaya in Orlando, Florida in 1940 by H.E. Stevens.

Symptoms - Leafhopper adults and nymphs “feed on the lower leaf blade surface, sucking plant juices mostly from the phloem. As they feed, they insert their needle-like stylet and inject substances in their saliva that aid in feeding and perhaps digestion but that are phytotoxic to the plant and cause a suite of symptoms called “hopperburn” and other leaf deformation symptoms.”¹ As the severity progresses, the leaves take on an orangish/pinkish hue and the leaves themselves begin to curl and shrivel. Symptoms vary by cultivar. And, so far, the damage has been limited to the leaves leaving the plant intact. The cumulative effect is unknown at this time.



Symptoms of the plumeria tree in Hawaii have been similar, but the leafhopper has also been found on papaya, avocado as well as plumeria.²

Management -

- Inspect new plants for pests and diseases
- Hose off plumeria in mornings rather than later in the day to dislodge nymphs and dust
- Clean up leaf litter; defoliate diseased leaves and bag them securely before disposing in trash
- Use yellow sticky cards to help monitor leafhopper populations



Leafhoppers are sensitive to pesticides, but unfortunately not to safer, less toxic materials. In severe cases, consider application of “systemic imidacloprid for long term control and foliar sprays of non-systemic bifenthrin for immediate knockdown.”¹ As always, be sure to read any pesticide label carefully before using it and be aware of the damage to the environment when using pesticides.

Resources, photos and more detailed information can be found at:

¹ <https://ucanr.edu/sites/HodelPalmsTrees/files/268897.pdf>

² http://www.extento.hawaii.edu/kbase/crop/type/e_steven.htm

Annual Plants; Perennial Pots

It is easy to end up with excess plastic pots. Recycling them is a step in the right direction. But reusing the pot in its current form can be an even more sustainable option.

Now is a great time of year to put these pots to work starting your own plants from seed. The calendar on page 16 lists several workshops to support you.

Larger empties may be candidates for repotting growing plants (see below).

When you reach the limit on the number of pots you can reuse, returning surplus pots to nurseries. A few local nurseries have committed resources to cleaning and sanitizing returned pots for a second life holding the next season's crop.



Image: Peganum (CC by-SA 2.0)

Check whether your favorite nursery has a reuse program or visit one of the nurseries on the following (incomplete) list:

Plant Depot: store credit for gallon size or larger containers.

Laguna Hills: donations of any size container.

Roger's Gardens: accepts donations of gallon size or larger. Ask about the "Plants-Not-Plastics" initiative in which they donate to Surfrider for each returned pot.

Potting and Repotting

Excerpt from California [Master Gardener Handbook](#) pages 265-266

It may be desirable to repot a plant to place it in a more decorative container, because it is nearly root-bound, or to change the medium it is growing in. Actively growing house plants normally require only occasional repotting. Slowly growing plants only rarely require repotting, while plants that grow more quickly require more frequent repotting. Foliage plants require repotting when their roots have filled the pot and are growing out of the bottom but before they start circling the inside of the pot. *(continued on next page)*

Repot a plant as soon as it becomes necessary. The pot selected for repotting should be the next-larger diameter available; for larger plants it should have a diameter no more than about 2 inches larger than the pot in which the plant is currently growing. It should also be clean and provide drainage. Wash soluble salts from clay pots with water and a scrub brush. Wash all pots in a solution of one-part liquid bleach to nine-parts water in order to reduce the incidence of soilborne disease. Allow containers to soak in the bleach solution for at least ten minutes.



*Repot as soon as necessary...
Image: Keith Williamson (CC by-SA 2.0)*

Before potting or repotting, the medium should be thoroughly moistened. Most plants can be removed easily from their pots if the lip of the container is knocked upside down against any solid object. Hold your hand over the soil, straddling the plant between the fore and middle fingers while knocking it out of its container. If the plant has become root-bound, cut any roots that encircle the plant so that the roots will develop properly. If the soil surface has accumulated salts, remove them. Set the root ball in the middle of the new container and fill soil under the root ball and around the sides between the root ball and pot. Do not add soil above the original level on the root ball unless the roots are exposed or some of the surface soil has been removed. Do not pack the soil. To firm or settle it, tap the pot on a tabletop or gently press the soil with your fingers.



*Fill soil under the root ball and around the sides.
Image: SB_Johnny (CC by-SA 3.0)*

*Placing gravel or other coarse-textured material in the bottom of the pot **does not** improve drainage...*

If drainage holes are too large and the potting soil comes out of the holes, place a few shards of discarded ceramic or clay pots over drainage holes to prevent soil loss. Do not place any material other than the potting mix in the container. Contrary to popular belief, placing gravel or other coarse-

textured material in the bottom of the pot does not improve drainage due to the fundamental physical properties of porous media. In fact, it will usually impede drainage and increase the saturated zone of soil in the container, which can result in root disease.

If improved drainage is desired for a potted plant, two things can be done. One is to increase the porosity of the soil media by incorporating additional perlite or similar bulking material. The second is to place the plant in a deeper container, which will increase the volume of soil media that remains well drained and unsaturated since it is the soil layer at the bottom of the container that remains saturated for a period after watering.

Thoroughly water the plant and container to wet and settle the new potting media. After watering and settling, the soil level should be sufficiently below the level of the pot to leave

headroom for watering. A guideline is to leave about one inch of headroom in a six-inch diameter pot and proportionately more or less for other pot size. A properly potted plant has enough headroom to allow water to drain through the soil and thoroughly moisten it.

Greening Your Yard Waste Bin

Adapted from Landscape to Reduce Waste lecture by Chuck Ingels, UCCE Sacramento County Horticulture and Farm Advisor.

In focusing on the four to six pounds of trash we generate daily indoors, it can be easy to forget that our outdoor landscapes also generate waste. Here is how to reduce your yard's impact.

Dispose of Materials in the Appropriate Bin: Did you know many waste collection companies will not accept material such as palm fronds, birds of paradise, or bamboo in the yard waste bin? Plastic bagged diseased plant material may need to go in the trash. "Each hauler has different programs and rules about their bins so I advise contacting your hauler for specifics and details about green waste collection," suggests Ruth Wardwell of the Prima Landfill. Make landscaping choices that are sensitive to your disposal options.

Reuse Materials: Many curbside waste collectors will not accept concrete. Repurpose construction debris into permeable pathways or retaining walls.

Grasscycling: Every thousand square feet of California lawn generates about a pound of grass clippings a day (300-400 pounds per year). If these clippings are left on the lawn, they break down quickly and reduce the need for additional fertilizers and the attendant risks of runoff, algal blooms, and deteriorating water quality while also saving you time and energy. To learn more, visit: www.calrecycle.ca.gov/Organics/Grasscycling/. If you find that you are mowing more frequently than weekly and clippings are still piling up, you may want to reduce the amount of nitrogen fertilizer that is applied to the lawn.

Rethink Hedges: Another way to look at a sculpted hedge is as a plant that is too large for its location. Keeping it trimmed into a smaller juvenile form requires a lot of time and energy. Incorporate plants in borders that will not overrun their space if you allow them to reach maturity.



Example of a low-waste landscaping. Reused concrete retaining wall serves as a planter for a "hedge" that does not require pruning. Beds and walkways that could have been turf are gravel and mulch.

Image: Chuck Ingels

Seed Germination

As seed catalogs arrive with intriguing new varieties, a seasoned gardener’s thoughts may turn to the seed packages of past years languishing partially used or unopened. We know seeds should be stored in low temperature and low humidity conditions. The California Master Gardener Handbook elaborates that a 1% decrease in moisture and a 10°F drop in temperature doubles seed storage life. Yet few of us have devoted air-tight containers in our fridge to protect our investment.



Image: USDA (public domain)

If we have stored our seeds under less than ideal conditions, it is still possible to test germination rates with a rolled-towel test. Place at least 20 of the suspect seeds on a moistened paper towel. Roll the paper towel up and place under optimal temperature and light conditions. Monitor the moisture level of the towel regularly. When sufficient time has passed for the seed type to germinate, unroll the paper towel and calculate the germination rate.

The Home Garden Seed Association advises to sow seed more densely to compensate if the germination rate falls between 50% and 70% and to start with fresh seed if the germination rate is lower. They also note that different types of seeds have different longevity horizons. Therefore, the busy gardener may choose to more generously share and refresh their supply of relatively perishable parsnips and parsley which can take several weeks to germinate.

Relative longevity data from: [Home Garden Seed Association](#)

Days to Germinate data from: <http://sacmg.ucanr.edu/files/164220.pdf>

Seed	Relative Longevity (years)	Days to Germinate at 59°	DTG at 68°
Lettuce	1	3.9	2.6
Onion	1	7.1	4.6
Parsley	1	17	14
Parsnip	1	19.3	13.6
Corn, sweet	2	12.4	6.9
Okra	2	27.2	17.4
Pepper	2	25	12.5
Beans	3	16.1	11.4
Carrot	3	10.1	6.9
Celery	3	12	7
Pea	3	9.4	7.5
Spinach	3	6.9	5.7
Beets	4	9.7	6.2
Cabbage	4	8.7	5.8
Cauliflower	4	9.9	6.2
Eggplant	4		13.1
Radish	4	6.3	4.2
Tomato	4	13.6	8.2
Turnip	4	3	1.9
Watermelon	4		11.8
Cucumber	5	13	6.2
Muskmelon	5		8.4

The average soil temperature at the [Irvine CIMIS weather station #75](#) last year ranged from 58.1 to 64.9 last year from March-May.

Lavender

What better plant to feature while “spring cleaning” than one whose name derives from the Latin word “to wash?” Commonly known as lavender, the *Lavandula* genus is host to 47 known species of flowering plants that are prized for their ornamental, medicinal, and culinary potential.

Here are some distinctions between English, French, and Spanish lavender:

English or Common lavender usually refers to varieties from the *L. angustifolia* species, connoting their “narrow leaves.” Their perfume is considered the sweetest smelling and favored for premium essential oil and culinary applications. However commercial growers often opt for the Lavandin hybrids in spite of their sharper overtones because they have larger, easier to harvest flower heads.

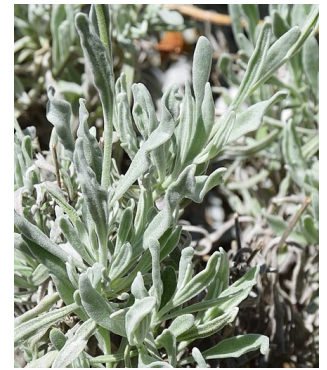


L. angustifolia by Captain Tucker
(CC by-SA 3.0)

Spanish and French lavender can refer to *L. stoechas* “in rows” with flowers comprised of corn cob-like bracts; *L. dentata* “teeth” of fringed leaves; or *L. lanata* “wooly” fuzzy leaves. These coastal species are favored by southern California landscapers because they thrive in hot, dry, sunny environs with more alkaline soils. They also offer convenience of being a “snail-proof” plant and a good alternative to invasive grasses like pampas and fountain grass. In fact, two hybrids from this family are listed in the UC Davis Arboretum All-Stars. Goodwin Creek Grey lavender (a *dentata* and *lanata* cross) is heralded for its long bloom season lasting from spring clear through fall while Otto Quest Spanish (a *stoechas* variety) boasts the showiest spring blooms.



L. stoechas by
liesvanrompaey (CC by-SA
2.0)



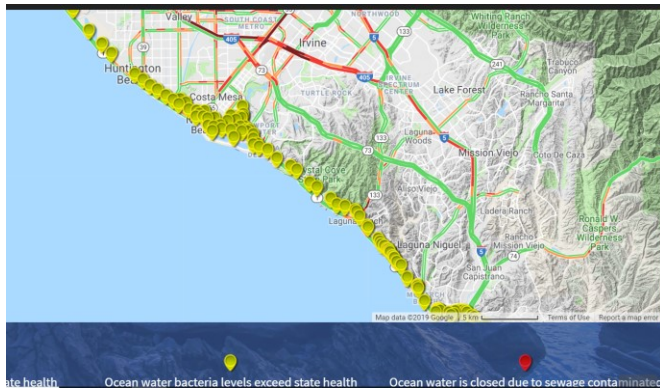
L. lanata by Krzysztof Golik
(CC by-SA 4.0)



L. dentata by Forest and Kim
Starr (CC by- SA 3.0)

Consider adding lavender to your plant palette to spice up salads or sachets. Keep in mind that it generally grows about two feet tall and should be spaced a foot and a half apart. Gardeners who already have their patch established will find spring an ideal time to divide it or take cuttings to share with both friends and foes because in Victorian floral symbolism, lavender is equated with both devotion and distrust.

Green Means Go with OC Beach Info



Advisory in effect 72 hours after rain

Considering a trip to the beach? Before getting into the water, check <https://ocbeachinfo.com/> to determine if bacteria level in the water exceed state health standards and may cause illness.

Every week (or more often), health care and sanitation agencies collect samples from 150 locations along the Orange County watershed. They measure these samples for indicator bacteria which may show the presence of harmful pathogens.

Warnings are issued for areas with elevated levels of bacteria. Advisories are issued in the 72 hours following a storm because the runoff can make water unsuitable for swimming. If sewage discharge is detected, the area will be red flagged and closed. Over time, bacteria levels drop due to die off from UV exposure, salt, or age; dilution; and predation by other organisms.

To keep beachside water quality high, there are numerous things you can do:

- Sweep rather than hose driveways and walkways clean
- Properly dispose of household chemicals, rather than pouring anything down the storm drain
- Don't litter and clean up pet waste
- Avoid landscaping runoff by checking irrigation system and settings regularly



Mini-farming

By Linda Genis, UCCE Master Gardener of Orange County

Days are getting longer, soil temperatures are rising, and we've just had a good rainy season. You look longingly at rows of tomato plants when you drop by the big box store to pick up a can of paint or a box of nails. Wouldn't it be great to make a Caprese salad with tomatoes fresh from the garden? Or maybe salsa or a smooth marinara? But alas, space is limited and you don't own a plow. *(continued on next page)*

See Linda's Small Space Gardening presentation in Costa Mesa on April 2nd (page 17)

Don't give up your dream. You can grow a tomato plant in a five-gallon bucket. All you need is a location with at least six to eight hours of sunlight and a source of water. For a small container, choose a patio tomato, one with small fruit. Drill some holes in the bottom of the bucket, or spend a few more dollars for a real planter, and you're in business. (Don't skip the holes and put gravel in the bottom of the pot. That causes a perched water table, soggy soil and unhappy roots.) While you're at it, pick up a bag of potting mix. Shoveling plain ol' dirt into a container can cause drainage problems as well. Add time-released fertilizer to your container or fertilizer with liquid plant food once a month or according to package directions.

If you don't like tomatoes, there are other vegetables you can plant in the spring. Maybe you really like peppers. You can grow a couple in a half oak barrel. Follow these [guidelines](#) for how much can fit in various size containers.

This [planting chart](#) tells you what month to plant various vegetables. It was created by Master Gardeners especially for Orange County.



Lettuce Bowl



Small raised bed

If you have a little more room, you can build a Square Foot Garden, which is a raised bed that can be from 8 inches to several feet deep. Four feet by four feet is the standard size, but you can still get several plants in a three by three garden. Why four by four? The first rule of square foot gardening is "don't step on the soil." If your garden is wider than four feet, you won't be able to reach the middle. Square foot gardening is based on a specific planting mix of 1/3 peat (or coir), 1/3 vermiculite or perlite, and 1/3 compost made from various sources. Add fertilizer about once a month. You can use granular (dry) fertilizer in a garden in or on the ground. Once the garden is established, you only need to add more compost each year. [Square Foot Gardening](#) is a simple technique for both beginning gardeners and more advanced edible enthusiasts.

You can also tuck edibles among your landscape plants, but be aware of their water needs. Thyme is a low-water-use herb that makes a nice groundcover, and rosemary is a drought-tolerant shrub that will give you bee-friendly blue

flowers along with seasoning your food. In the spring, lettuce can be tucked under plants that will give it shade.

If you've never grown vegetables before, make this the year you give it a try. You can start with just one plant. Before you know it, you'll be hooked. You're not in this alone. The [UCCE Master Gardener Hotline](#) is only an e-mail away.

ucceocmg hotline@ucanr.edu

949-809-9760

GREAT NEWS FOR THE FARM + FOOD LAB!



Solutions for Urban Agriculture (SFUA) will operate the Farm + Food Lab. Solutions for Urban Agriculture is a non-profit founded by A.G. Kawamura (former Secretary of Agriculture of California and CEO of Orange County Produce, four generations of farmers) which is dedicated to demonstrating that 21st Century urban agriculture can be a dynamic partner in the building of healthy communities.

The garden will now be managed by a group that is exceptionally knowledgeable about agriculture and is dedicated to providing educational programs for the community.

UCCE Master Gardeners will continue to provide Garden Workshops at the Farm + Food Lab including the five this season listed in the calendar.

In addition, the Farm + Food Lab has been approved as an All American Selection (AAS) Display Garden. Come see the edible selections from AAS which were planted in January.

To learn more about SFUA's plans for the space, visit their website:

<https://www.solutionsforurbanag.org/>

Monthly Garden Tips

By Teena Spindler, UCCE Master Gardener of Orange County

March

- ☑ **It's spring planting season!** – This is one of the busiest months in the garden. It's time to plant warm season veggies and flowers. Veggies to plant in March include tomatoes, green beans, any of the squash family plants, corn and artichokes. Cool season veggies such as lettuce, broccoli and cabbage can still be planted this month if you have room. Warm season flowers to plant include ageratum, cosmos, marigolds, petunias, and salvias.
- ☑ **Feed, feed, feed!** – With spring arriving this month, EVERYTHING will be growing! Help your plants reach their full potential by providing food. All fertilizers are labeled with three numbers in the form: 3-5-2. The numbers represent the percentage of nitrogen, phosphate, and potash in the fertilizer. For lawns choose a fertilizer with higher nitrogen content which stimulates green growth. For fruiting and flowering plants choose a fertilizer with a higher percentage of phosphate. Follow directions on package carefully, too much fertilizer can burn your plants.
- ☑ **Pest Control** – As the weather warms and tender new plant growth appears, garden pests proliferate. Practice Integrated Pest Management which uses a broad based approach to controlling pests, with pesticides used only as a last resort. Start by planting plants in the right spot for their sun needs, spacing them as recommended, and watering appropriately. Walk through the garden frequently to spot infestations early. Trap, use barriers, and squirt pests off plants. If a pesticide is necessary, identify the pest and use a product specific to control that pest. Avoid broad spectrum pesticides which may kill beneficial insects and bees. Visit the [University of California IPM website](#) for more information.

April

- ☑ Continue planting warm season veggies and flowers – If you didn't get your warm season veggies and flowers planted last month, put them in now. The soil is warmer so seeds of green beans, beets, carrots, corn, and squash planted directly in the ground will sprout quickly. Peppers can be planted this month or in May. They like warmer weather.
- ☑ **Tomatoes** – Be sure to implement a training method for your tomatoes. Staking, trellising, or growing in a tomato cage are all good choices. Staking and trellising require pruning the plant to one or two main vines. Pinch off the suckers above the leaf junction. Tie the main vines to the stake or trellis. Using cages requires no pruning of the plants, but be sure to get LARGE cages. Small cages are soon overwhelmed by the plant. Concrete reinforcing wire in a 6' x 6' piece shaped into a cylinder makes a great cage.
- ☑ **Plant flowering perennials** – Choose and plant flowering perennials while they are blooming this month. Suggestions are alstromeria, penstemon, geraniums, coreopsis, guara, rudbeckias, and strawflower.

May

- ☑ **Roses**– After the first bloom (often in April), keep your roses blooming by deadheading and fertilizing after each bloom cycle. Also keep an eye out for aphids and other pests and control them early before they become more established.
- ☑ **Vegetables** – Continue to plant warm season veggies if you have room.
- ☑ **Plant Tropicals** – With the soil warming up, May is a good month to plant citrus, tropical fruit trees, and bougainvillea. Be sure to feed and water them all summer, as they are not drought tolerant.

For more garden tips, listen to our radio show 'In the Garden with UC Master Gardeners' the first Thursday of each month at 8:30am at KUCI FM 88.9 on your radio or online anytime at: <https://ucanr.edu/blogs/blogcore/archive.cfm>.

CALENDAR: UCCE Master Gardener Events

MARCH

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

3/2 9-10AM: Terrific Tomato Tips
 Reata Park and Events Center
 28632 Ortega Hwy, San Juan Capistrano

3/2 9-10AM: Site Selection and Soil Preparation
 Edible Garden Workshop Series
 Farm + Food Lab at OC Great Park
 14280 Cadence, Irvine

Thursdays 8:30-9:30 88.9FM KUCI
“In the Garden” radio show

3/12 1-2PM: Growing Tomatoes in Small Spaces
 San Juan Capistrano Community Center
 25925 Camino Del Avion, San Juan Capistrano

National Flower Month
 National Nutrition Month

3/16-3/17 9AM-4PM: Veggiepalooza
 Fullerton Arboretum
 1900 Associated Rd, Fullerton

3/10-16 Agriculture Week
 3/12-16 Wildlife Week

3/19 9:30-10:30AM: Growing Tomatoes
 Fullerton Senior Programs at Fullerton Community Center
 340 W Commonwealth Ave, Fullerton

3/22 World Water Day
 3/26 Spinach Day

3/23 9-10AM: Garden Plan, Plant Selection and Planting
 Edible Garden Workshop Series
 Farm + Food Lab at OC Great Park
 14280 Cadence, Irvine

3/23 9-10AM: Tomatoes
 OC Public Library - Katie Wheeler Branch
 13109 Old Myford Rd, Irvine

3/26 1-2PM: Herb Container Workshop
 San Juan Capistrano Community Center
 25925 Camino Del Avion, San Juan Capistrano

3/28 6-7PM: Grow It Now- Warm Season Veggies
 Anaheim Central Public Library
 500 W Broadway, Anaheim

3/30 11AM-Noon: Drought Tolerant Gardening
 OC Public Library – Tibor Ruben Branch
 11962 Bailey Street, Garden Grove

APRIL

S	M	T	W	T	F	S
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7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Thursdays 8:30-9:30 88.9FM KUCI
“In the Garden” radio show

National Garden Month
 National Landscape Architect Month

4/29-5/3 Air Quality Awareness
 Week

- 4/5 Dandelion Day
- 4/6 California Poppy Day
- 4/13 International Plant
 Appreciation Day
- 4/19 Garlic Day
- 4/22 Earth Day**
- 4/25 Zucchini Bread Day
- 4/26 Arbor Day**
- 4/29 Peace Rose Day

4/25-4/28: **Southern California
 Spring Garden Show**
 South Coast Plaza
 3333 Bear Street, Costa Mesa

Master Gardener and Food
 Preserver booths and 8 Master
 Gardener Presentations

4/2 1-2PM: **Small Space Gardening**
 City of Costa Mesa Community Garden
 170 Del Mar Ave, Costa Mesa

4/6-4/7: **Green Scene and Plant and Garden Expo**
 Fullerton Arboretum
 1900 Associated Rd, Fullerton

4/9 3-5PM or 6:30-8:30PM: **Preserving the Season: Pickling**
 South Coast Research and Extension Center
 7601 Irvine Blvd, Irvine
 Register at: <https://ucanr.edu/sites/MFPOC/> (\$25)

4/9-10 10AM-3PM: **Tanaka Farms Spring Festival**
 Tanaka Farms
 5380 3/4 University Drive, Irvine

4/12-14: **Imaginology**
 88 Fair Dr, Costa Mesa
<https://ocfair.com/imaginology/>

4/13 9-10AM: **Raised Bed Veggie Garden**
 Reata Park and Events Center
 28632 Ortega Hwy, San Juan Capistrano

4/13 9-10AM: **Irrigation, Mulching, Weed Control, and Fertilizing**
 Edible Garden Workshop Series
 Farm + Food Lab at OC Great Park
 14280 Cadence, Irvine

4/13 10:30-11:30AM: **Succulents/Plant Workshop**
 Aliso Viejo Library
 1 Journey, Aliso Viejo

4/17 6-7PM: **Creating an Edible Garden**
 Irvine Water District Community Room
 15600 Sand Canyon Ave, Irvine

4/20 1-2PM: **California Native Plants**
 El Modena High School
 3920 E Spring St, Orange

4/22 3:30-4:30PM: **Composting**
 Garden Grove Public Library – Chapman Branch
 9182 Chapman Ave, Garden Grove

4/23 9:30-10:30AM: **Butterflies in the Garden**
 Fullerton Senior Programs at Fullerton Community Center
 340 W Commonwealth Ave, Fullerton

4/27 9-10AM: **Veggie Container Gardens**
 Farm + Food Lab at OC Great Park
 14280 Cadence, Irvine

MAY

S	M	T	W	T	F	S
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19	20	21	22	23	24	25
26	27	28	29	30	31	

5/2 6-7PM: Succulent Gardening
 City of Costa Mesa Community Garden
 170 Del Mar Ave, Costa Mesa

5/4 9-10AM: Pest and Disease Control and Harvesting
 Edible Garden Workshop Series
 Farm + Food Lab at OC Great Park
 14280 Cadence, Irvine

Thursdays 8:30-9:30 88.9FM KUCI
“In the Garden” radio show

5/9 9AM-Noon: Exploring Beekeeping
 South Coast Research and Extension Center
 7601 Irvine Blvd, Irvine
 Register at <http://ucanr.edu/survey/survey.cfm?surveynumber=26715> (\$25)

Gifts from the Garden Month
 Salad Month

5/5-5/11 Wildflower Week
 5/13-5/19 Vegetarian Week

5/11 10AM-4PM: Open Garden Day
 West Floral & Fisher Park neighborhoods, Santa Ana
<http://www.opengardenday.com/>

- 5/1 International Sunflower Guerilla Gardening and May Day
- 5/3 Garden Meditation Day
- 5/5 International Respect for Chickens Day
- 5/4 Herb Day
- 5/8 Iris Day
- 5/16 Love a Tree Day
- 5/20 Pick Strawberries Day
- 5/28 Slugs Return from Capistrano Day
- 5/29 Composting Day
- 5/30 Water a Flower Day

5/18 9-10AM and 11AM-Noon: Building a Better Butterfly Garden
 Los Rios Park
 31747 Los Rios St, San Juan Capistrano

Edited by Christine Kenney

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