

SPRING 2018

# The Garden Beet

**University of California**

Agriculture and Natural Resources ■ Master Gardener Program

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

Trained Master Gardener volunteers, ready to answer gardening questions, extend research-based information to the public about home horticulture and pest management through classes, hotlines, community events and demonstration gardens.

Want to know:

- what to plant when?
- how to manage a pest?
- how to become a Master Gardener?

Visit our website at

<http://mgorange.ucanr.edu>

## SOIL: FOUNDATION OF THE GARDEN

Soil, the loose upper six to eight inches of earth, is teeming with microorganisms (animal), the residue of live and dead plants (vegetable) and the decomposed rock from which the soil originated (mineral). Soil supplies plant roots with a source of air, water and nutrients. Soil also insulates plants from extreme changes in temperature. Topsoil is the layer most influenced by climate and most enriched by the addition of organic matter. It is the foundation of a healthy garden.

Here are the key components of healthy soil and the steps to take to get there.

### **Soil texture and structure: working toward loam**

Soil texture is grouped into three categories: coarse (sandy soils), medium (loamy soils) and fine (clay soils).

- *Very coarse, sandy soil* dries out rapidly and is difficult to maintain at a high fertility level. It feels gritty, doesn't form clods, and can appear somewhat dusty when dry.
- *Clay soil*, which is common in Orange County, retains more water, has slower air and water movement and holds more mineral nutrients than sandy soils. Clay soil feels smooth between the fingers and is sticky when wet. Clay soils amended with organic matter are some of the most productive farmland soils on earth.
- *Loamy soil* has roughly equal proportions of sand, silt and clay. It allows roots to penetrate easily and it drains well. The majority of plants – and gardeners – enjoy the benefits of loamy soil.

Good-quality topsoil has a crumb-like structure. The tiny pores between soil particles allow water from the soil surface to infiltrate so water is retained but excess amounts drain down to allow space for air circulation.

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## Understanding soil nutrients and pH

Ideal soil contains sufficient quantities of approximately 20 essential plant nutrients. Carbon, hydrogen and oxygen are drawn from air and soil water; the other nutrients are dissolved in the soil water and absorbed by plant roots. Nitrogen (N), phosphorus (P) and potassium (K) are the elements plants need in the largest quantities.

Soil pH is a measure of the soil's acidity or alkalinity. Soil pH affects the solubility of soil minerals, the availability of nutrients to plants, and the activity of microorganisms. The midpoint of the (1 to 14 point) pH scale (7.0) is neutral. Numbers below 7 are increasingly acidic as the number decreases; numbers above 7, increasingly alkaline. Most plants prefer a pH ranging from 5.5 to 7.5 or slightly acidic to neutral, the range in which all plant nutrients are most readily available. Soil microbes are most active in this range also.



## Gardener's To Do List for Great Soil

Follow these recommendations and with time, the garden soil and the plants grown will be beautiful and bountiful.

- **TEST.** The most accurate way to determine the nutrient content, pH, structure and texture of soil is to send a sample of soil for analysis to a soil-testing laboratory. Do-it-yourself soil testing kits are also available at garden centers but do not produce as detailed information. (See more about this on page 3.)
- **TREAD LIGHTLY.** Many gardeners, anxious to get into their gardens in early spring, work their soil when it is still too wet. Soil should not be dug until it is sufficiently dry enough to crumble when worked and has reached a temperature of 50 degrees. Soils high in clay content are easily damaged if worked when wet. Foot traffic and heavy equipment crush the soil's pores, which limits plant's roots access to nutrients, air and water.
- **AMEND.** Amend soil with compost. A good rule of thumb when incorporating compost as a soil amendment is 25 percent of the planned depth, i.e., two inches of organic matter worked in to a depth of eight inches. Animal manure is another good soil amendment. Follow application instructions posted on the bag.
- **MULCH.** After amending with compost, add a layer of approximately three inches of mulch every year. Mulching reduces moisture evaporation, suppresses weeds, moderates soil temperature and helps prevent soil compaction. In addition, mulches decompose slowly thereby adding organic matter over a longer period. Use bark in perennial beds if possible, since it decomposes more slowly.

- **WEED.** Weeds crowd plants, compete for nutrients and moisture and often harbor pests. Eradicate as needed. The health of soil determines the health of plants. The mantra – "compost, compost, compost, mulch, mulch, mulch" – still rings true. The best way to amend soil structure and to provide oxygen, moisture and nutrients is to add moderate amounts of compost and top dress with mulch.



## How to test soil

A soil test will assist the homeowner in determining nutrient content, composition, and other characteristics such as the acidity or pH level. This information can be used to optimize plant growth or help solve soil-related problems. Three methods for testing soil are available in Orange County.

1. Purchase a soil test kit at a retail garden center and conduct the test.

Soil test kits range in cost from \$10 to \$50 for multiple tests. A Technology & Product Report from the American Society of Horticultural Science assessed the accuracy of commercially available soil test kits, as compared to test results from an analytical laboratory, with the following results:

- La Motte Soil Test Kit (La Motte Co., Chesterton, MD) 94%
- Rapidtest® (Luster Leaf Products, Woodstock, IL) 92%
- Quick Soiltest (Hanna, Woonsocket, RI) 64%

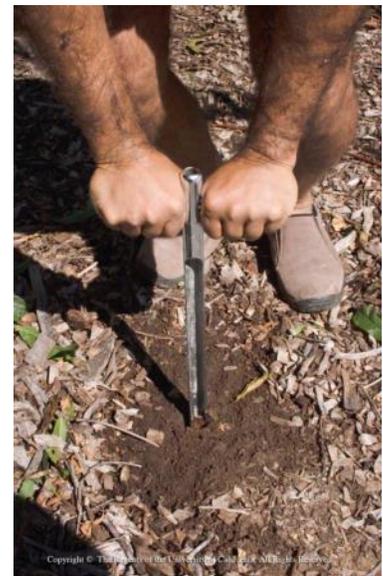
Additional information on soil test kits can be found at

<http://horttech.ashspublications.org/cgi/content/abstract/17/3/358>.

2. Send a soil sample to a testing laboratory.

Testing laboratories charge for soil analysis. We suggest that you call the selected laboratory prior to submitting samples. Quite often samples must be taken, packaged, and sent in a particular manner in order to obtain the best possible diagnosis. Soil testing laboratories in Southern California are:

- Associated Labs, Orange (714-771-6900, [www.associatedlabs.com](http://www.associatedlabs.com));
- Waypoint Analytical (formerly Soil and Plant Laboratory, Inc., Orange (714-282-8777, [www.waypointanalytical.com](http://www.waypointanalytical.com).)
- Wallace Laboratories, El Segundo (800-473-3699, [www.bettersoils.com](http://www.bettersoils.com)).
- The PACE Turfgrass Research facility in Oceanside (760-272-9897) maintains a list of soil analytical laboratories at [http://www.paceturf.org/index.php/public/free\\_stuff/](http://www.paceturf.org/index.php/public/free_stuff/),
- The University of Massachusetts has a mail-in program that features a basic soil test for \$15. The test includes measurements of pH, major nutrients, heavy metals, and amount of saturation. A brochure with directions on how to collect the soil and an application form is available at <http://soiltest.umass.edu/services>.



3. Drop off a soil sample at Orange County Farm Supply in Orange. Call first to find out how to take a sample. (714) 978-6500.

## Soil Resources

SoilWeb <http://ucanr.edu/sites/sacmg/files/163131.pdf>

Soil Quality and Fertility [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs144p2\\_068442.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_068442.pdf)

Managing Your Soil Health <http://ucanr.edu/sites/sacmg/files/117122.pdf>

What's In That Bag? – Soil Amendments [http://ucanr.edu/sites/sacmg/Soil\\_Amendments/](http://ucanr.edu/sites/sacmg/Soil_Amendments/)

An introduction to amending soils <http://www.ext.colostate.edu/Pubs/Garden/07235.html>

## SPRING: The best time for garden tours and shows!

**Saturday, March 17 and Sunday, March 18, 9am-4pm**

**Veggiepalooza Monster Tomato and Pepper Sale**

**Fullerton Arboretum, Yorba Linda and Associated Road, Fullerton, 657-278-3407**

[http://fullertonarboretum.org/ps\\_veggiePalooza.php](http://fullertonarboretum.org/ps_veggiePalooza.php)

This is a monster Vegetable Plant Sale offering a variety of seedlings from all over the world. More than 300 varieties of tomatoes, peppers and veggies – all grown at Fullerton Arboretum. Proceeds support plant conservation, environmental education programs. Veggie experts available for questions and answers. (*Stop by the Master Gardener booth!*)

**Thursday, April 12, 3pm-5pm or 6:30pm-8:30pm**

**Public Workshop: Fermentation**

**South Coast Research & Extension Center, 7601 Irvine Blvd, Irvine**

<http://ucanr.edu/sites/MFPOC/>

Two identical sessions of a class on fermentation – attend the session that best suits your schedule. Learn about the benefits of lacto-fermentation and other methods of fermentation. \$25 materials fee.

**Saturday, April 14**

**Annual 'Gardenfest' - San Clemente**

**San Clemente Community Center, Avenida Del Mar at Calle Seville**

<http://www.sanclementegardenclub.com>

Hosted by the San Clemente Garden Club. Admission is free. Families welcome.

Highlights include annual Plant Sale and Garden Flea Market, exhibits demonstrating sustainable gardening practices, garden related opportunities in the community.

**Saturday, April 14 (1pm-6pm) and Sunday, April 15 (10am-4pm)**

**Riverside Flower Show and Garden Tour**

**Elks Lodge, 6166 Brockton Drive, Riverside**

<http://riversideflowershow.info> 951 777-0746

Maps and tickets are available at the Elks Lodge. \$10 in advance; \$12 in person.

**Saturday, April 21, 11am-4pm**

**Sherman Library & Gardens 22nd Annual Private Garden Tour**

<http://www.slgardens.org/22nd-Annual-Private-Gardens-Tour>

Mingle with musicians and artists as you stroll through several amazing private gardens in the Newport Beach area. As always, the Tour includes a light lunch at Sherman Library & Gardens. Tickets will go on sale beginning March 1.

**Saturday, April 21 and Sunday, April 22, 10:00 am - 4:00pm**

**Green Scene Plant and Garden Expo**

**Fullerton Arboretum, 1900 Associated Road, Fullerton, 714 278-3407**

[http://fullertonarboretum.org/event\\_green.php](http://fullertonarboretum.org/event_green.php)

Specialty exhibitors offer an eclectic variety of beautiful and exotic plants, unique garden art, home goods and accessories. Growers offer varieties of native plants, tropicals, perennials, cactus and succulents, container displays and much more. Sunday will feature Plein Art with up to 30 artists painting garden scenes at the Arboretum. \$8 admission/ Arboretum members free. *(Stop by the Master Gardeners booth!)*

**Thursday, April 26 through Sunday, April 29**

**Southern California Spring Garden Show, South Coast Plaza, 3333 Bristol Street, Costa Mesa**

<http://www.southcoastplaza.com/gardenshow/>

Experience the best of Southern California living, decorating and entertaining with home furnishings and décor boutiques and visit a unique collection of gardening vendors. More than 60 vendors will be offering plants, flowers and gardening accessories. *(Check out Master Gardener presentations and booth!)*

**Saturday, April 28**

**Floral Park Home & Garden Tour - Santa Ana**

<http://www.floralpark.com>

Floral Park Neighborhood, recipient of Neighborhoods USA's "Neighborhood of the Year," hosts its annual Home and Garden Tour. Stroll through vintage homes and gardens, search for treasures at the Antique & Collectables Sale, view the Classic Automobile Display, or enjoy a snack at the food and drink concessions.

**Sunday April 29, 11am-4pm**

**Fullerton Beautiful's Annual Garden Tour**

<http://www.fullertonbeautiful.org> 714-394-5805

Each spring up to ten selected private gardens in Fullerton are open to the public under Fullerton Beautiful's sponsorship. The goal is to showcase a diversity of landscape design, plant material, and use of hardscape features which may offer ideas as well as an opportunity to interact with local gardeners. \$15 per map.

**Friday, May 4, 11am-4pm**

**Gate and Garden Tour of South Laguna**

<https://www.lagunabeachgardenclub.org>

A mostly downhill walking tour of private gardens along the tree-lined streets of South Laguna. Major fundraiser for the Laguna Beach Garden Club for school gardens, scholarships and civic beautification. \$45

**Saturday, May 5 and Sunday, May 6, 10 am-5pm**

**Mary Lou Heard Memorial Garden Tour**

<http://www.heardsgardentour.com>

This tour highlights 40 residential gardens from Long Beach to San Clemente. Donations accepted for the Sheepfold, a shelter for women in crisis and their children.

**Saturday, May 12, 10am-4pm**

**Open Garden Day - Santa Ana**

**Neighborhoods of West Floral Park and Jack Fisher Park in North Santa Ana**

<http://www.opengardenday.com> 714-836-9777

Experience the inviting neighborhoods of West Floral Park and Jack Fisher Park in North Santa Ana including garden tours, guided sidewalk tour, garden expert talks and demonstrations, vintage cars, vendors selling unique garden treasures, and gourmet food trucks. \$15 presale tickets/ person online, \$20 day of the event.

## OUT & ABOUT with Master Gardeners: BOOTHS

Charles M. Schulz amused us when he drew cartoons of Charlie Brown visiting Lucy's booth for advice. There were some pretty quirky questions and answers in those cartoons!

When the Master Gardeners staff booths around Orange County, we come prepared for all the gardening questions. And the only advice we give pertains to the garden. Master Gardeners look forward to staffing booths because it helps to fulfill the mission of educating the public about sound gardening practices. At each booth, MGs prepare for the questions they may get in several ways:

- Master Gardeners go through a rigorous home horticultural course and are tested and certified at the end of the course.
- Master Gardeners attend an internal seminar to learn the dynamics of booths and garden shows.
- An experienced Master Gardener is teamed up with a rookie to staff the booth.
- We bring a small library of reference books so we can research questions.
- Appropriate literature including handouts, brochures, and pest notes are available.
- Business cards with hotline information are distributed.



Some booths are at major events and others at smaller venues. During an average year, Master Gardeners have had booths at two Orchid Shows, the South Coast Garden Show, Tanaka Farms (several times!), the VeggiePalooza and the Green Scene at the Fullerton Arboretum. In addition to booths at the above events, Day Booths have been made available for smaller one- or two-day events for health fairs, company events, city and community shows, and home garden tours. To inquire about getting a day booth for your event, email our hotline at [ucceocmghotline@ucanr.edu](mailto:ucceocmghotline@ucanr.edu).



Many times the booths are interactive. They have included tool sharpening, examining strawberries through microscopes, composting, teaching children with garden crafts, and several other activities.



Master Gardeners are interested in discussing gardening issues with visitors, providing advice, and information you can use. We will help you troubleshoot your garden issues and discuss trends and pests or diseases to watch for. We are interested in hearing your garden stories and helping to solve any issues you might have. Sometimes we might not know the answers right away, but we will find out for you, and tell you how to access our hotline so our team can research and answer your question.

Next time you are at an event, stop by and say hello, let us know you read about us in the Garden Beet, pick up some information and one of our business cards so you can connect with us whenever you have a gardening question. *We want to hear from you!*

## Garden Tips

### MARCH

- Plant shrubs and perennials – except for tropicals that will do better in warmer months.
- Start fertilizing those plants that are at the beginning of their bloom or growth cycles, as well as established plants that only get fed once a year. Be sure to know the basic requirements of the plants because not all have the same needs as far as nutrients and pH balance are concerned.
- Prune winter blooming shrubs and fertilize them. Use acidic fertilizers for camellias and azaleas to increase blooms next year.
- Get a head start on controlling insects with easy organic methods such as a shot of water or releasing beneficial insects. Keep an eye out for snails and slugs.
- Weed early; add mulch to keep weeds under control in the warmer months and to cut down on watering requirements.
- Propagate perennials that have been successful.



### APRIL

- Prune shrubs and hedges that start to shoot up branches this month. Pittosporum, photinia, eugenia, and myoporums can all be pruned.
- There's still time to plant shrubs and perennials, including winter blooming shrubs like azaleas and camellias . . . and natives.
- Continue weeding and keeping plants healthy to discourage attacks by insects. If you applied mulch last month, weeding will be easy or not needed this month. If you didn't, mulch now.
- Plant achillea, asters, daisies, daylilies, honeysuckle, lantana, lavender, nepeta, scented geraniums and silver sage this month to encourage predatory insects.
- Wait for it . . . don't plant warm-season veggies – those that prefer very warm weather to mature – until the end of the month. They need consistently warm soil and air temperatures.



### MAY

- Plant those heat-loving vegetables and flowers! Keep them well watered and mulched and they will produce abundantly.
- Plant seeds – sow seeds of lima and snap beans, beets, carrots, celery, chard, chicory, chives, corn, cucumbers, eggplants, leeks, warm-season lettuces, melons, okras, green onions, peanuts, peppers, pumpkins, soybeans, warm-season spinaches, squashes, sweet potatoes, and tomatoes.
- Plant citrus and other tender trees – avocado, kiwis, kumquats, and pomegranates. Try cherimoya, guava, mango, and passion fruit in frost-free areas. Keep the soil well mulched to hold in moisture with less watering.
- Prune, deadhead, pinch back. Prune azaleas that have finished blooming with hedge shears to encourage blooms next year. Prune camellias if needed. Plants such as osteospermum (African daisy), chamelaucium (waxflower), jasminum polyanthum (pink jasmine), leptospemum (New Zealand tea tree) and wisteria should all be pruned back now to encourage a second wave of blooms.

*P.S. Did we mention mulching?*



## A Few Words about Water

Let's face it. We live in a tropical, Mediterranean climate – mild winters, dry summers. We will always have to contend with the issue of water – too little, too much, too soon, not soon enough. We need to educate ourselves and learn sound practices to help us use our water wisely. This is not a matter of conserving one year and being lavish with water the

next. It's a lifestyle to which we need to adapt. There are many ways, large and small, that we can accomplish that. We hope to share those tips in this and future issues of this newsletter so that you can use the ones that most work in your life. We'd like to hear back from you about what you do to conserve water at [ucceocmghotline@ucanr.edu](mailto:ucceocmghotline@ucanr.edu). In the meantime, here are two practices you might consider:

- Train plants to grow deeply for water. To test how deeply your irrigation water is going, water for the usual length of time and then push a trowel into the soil its full length. Push the soil clump to one side or lift it out completely, and look at both the depth of the roots and the water line in the soil – it'll be dark toward the surface and lighter down where it's dry. If the water line is not past the longest plant roots, not this far down, water again and then test another spot. Repeat until the water line falls below the root zone. Add all the test irrigation times together to get the total time needed at each watering. Don't water again until two-thirds of the root zone is again dry.
- Change watering patterns. Watering patterns begun now will help or hinder the plants' abilities to thrive – not just survive – during the extended heat of summer. Change to a less-frequent but deep watering pattern to encourage roots to grow deeply into the soil for moisture rather than spread just below the soil surface. During hot, dry spells, these deeper roots will have access to moisture for continued strong growth, but the shallow roots won't. Build soil basins around large plants and trees to prevent runoff until it's absorbed. Avoid overhead irrigation so late in the day that foliage cannot dry completely before sunset. Fungal and bacterial diseases thrive in warm, moist conditions and can develop overnight. Water in the morning.

## It's Not Over: Citrus Disease Update

The Asian citrus psyllid is present throughout Orange County. Since our last report, HLB disease, an incurable citrus bacteria spread by this insect, has been found in trees in Anaheim and Santa Ana. The website below has links to maps of infected trees and outlines of quarantine zones as well as recommendations about treatments to manage the psyllids.



When a plant disease jumps from one location to another farther than the vector can fly, we can assume it is being spread unwittingly by people. The most important steps we can take to protect our trees is to not move citrus trees, branches, or leaves and to treat our trees if we see evidence of citrus psyllids, the insects that spread the disease. [http://ucanr.edu/sites/ACP/Homeowner\\_Options/](http://ucanr.edu/sites/ACP/Homeowner_Options/)

## CALENDAR: UCCE Presentations, Workshops, and Talks

### **What's Bugging Your Plants?**

**Foothill Ranch Library, 27002 Cabriole, Foothill Ranch**

**March 10, 2pm-3pm**

Face it. You can't get rid of all the insects in the world, let alone in your yard...but you can learn to manage them so that your plants will thrive. The University of California Cooperative Extension (UCCE) Master Gardeners will teach you how to 'outsmart' the bad insects and attract the beneficial ones. They will give you tips on prevention, avoidance, suppression, and responsible pest control.

### **Successful Raised Beds, Part 2**

**Farm + Food Lab at the Great Park, Irvine**

**Link to directions: <http://www.cityofirvine.org/orange-county-great-park/hours-directions>**

**March 17, 10am**

It's Tomato Time! Attendees will transplant a tomato seedling into a pot to take home as well as get tips for planting all those veggies that love warm weather. Tomatoes, zucchini, beans, peppers and more thrive and produce abundantly when grown in the easy to care for environment of raised beds. Master Gardeners will share tips for plant selection, layout, starting from seed or using transplants, feeding, watering and keeping those veggies free of pests and disease. This is part 2 of the 'Successful Raised Bed Gardens' workshop on 2/17, handouts from the first workshop will be available for those who could not attend Part 1.

### **From Garbage to Gardening: Practical Composting in Small Spaces**

**South Coast REC, 7601 Irvine Blvd., Irvine**

**March 17, 9am-12noon**

Learn compost and vermiculture basics to fit local landscapes. Participate in hands-on activities demonstrating practical applications in a working environment. Create your own worm bin to take home – supplies included. \$50: pay on line at <http://ucanr.edu/survey/survey.cfm?surveynumber=22759>

### **Food Safety and Preservation**

**Wednesday, March 28, 5:30pm-7pm**

**Garden Grove Main Library, 11200 Stanford Ave., Garden Grove**

**<http://www.ocpl.org/libloc/ggr>**

UCCE Master Food Preservers will give an introduction to food safety and the basics of food preservation. Lecture will include demonstrations. Free to public.

### **Make It- Take It- Food Preservation: Morning Cheer Marmalade**

**Saturday, April 7, 10am-12 pm**

**Centennial Farms, OC Fairgrounds, 88 Fair Dr., Costa Mesa**

**<https://ocfair.com/centennial-farm/garden-classes/>**

This workshop is a hands-on lesson in steam canning Morning Cheer Marmalade. Each participant will take home the three half-pint jars of marmalade they make in class to enjoy at home, give as a gift or enter in the 2018 OC Fair. Youth ages 9-17 are welcome in this class, but must be accompanied by a registered adult. Class limited to 25. RSVP online by April 5.

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**Exploring Beekeeping**

**South Coast REC, 7601 Irvine Blvd., Irvine**

**April 11, 9am-noon**

This three-hour course is an introduction and brief overview of beekeeping. If you are interested in beekeeping, but not sure how to start, this class is for you. After taking this course, you will be able to make a well-informed decision about keeping bees in your back yard. \$40

**Butterflies in the Garden**

**Fountain Valley Library, 17635 Los Alamos St, Fountain Valley**

**April 14, 2:30pm-3:30pm**

Learn how to attract and keep butterflies in your garden, their life cycle, host and nectar plants and how to create a welcoming butterfly environment.

**Butterfly Garden in a Pot**

**Farm + Food Lab at the Great Park**

**April 21, 10am**

Celebrate Earth Day by creating a butterfly garden in a pot. Attendees will plant a take home pot that includes both nectar plants that provide adult butterflies with energy and caterpillar food plants that feed caterpillars. University of California Master Gardeners will share tips for plant selection to create a butterfly garden that will provide for the entire life cycle of butterflies as well as a place where humans can enjoy their beauty.

**Landscape Design Basics Workshop Series**

**South Coast REC, 7601 Irvine Blvd., Irvine**

**May 5, 12 and 19, 9am-12noon**

Learn landscape and irrigation design basics during this three-part workshop series presented by Kay Havens, UC Orange County Master Gardener, and Juan Garcia, Irvine Ranch Water District. Participate in hands-on activities creating your own landscape design plans. Supplies included \$30. Pay online by May 1 at <http://ucanr.edu/survey/survey.cfm?surveynumber=22602>

**Make It- Take It- Food Preservation: 'Blue Ribbon' Dill Pickle Spears**

**Centennial Farms, OC Fairgrounds, 88 Fair Dr., Costa Mesa, CA**

**Saturday, May 12, 2018, 10am-12noon**

<https://ocfair.com/centennial-farm/garden-classes/>

This workshop is an introductory hands-on class in steam canning methods and safety standards for preserving high acid foods. Participants will can dill pickles the old-fashioned way, with all natural ingredients and will take home three pints of pickles they make in class. Youth ages 9-17 are welcome, but must be accompanied by a registered adult. Class limited to 25. RSVP online by May 10.

**Food Safety & Preservation: Fermentation**

**May 17, 4:30pm-6:30pm**

**Cypress Public Library, 5331 Orange Ave., Cypress, CA 90630**

<http://www.ocpl.org/libloc/cyp>

How do they make that sauerkraut? What is kimchee? Is my yogurt fermented? Learn the principles of food safety and preservation with this evening's demonstration: fermentation. Handicap accessible.

## Sassy Succulents

### Farm + Food Lab at the Great Park

May 19, 10am

Heat proof your garden for the upcoming hot summer months by planting succulents of all shapes, sizes and colors. University of California Master Gardeners will have examples of various types of succulents, discuss soil and watering needs, demonstrate propagation, and give tips for creating your own 'sassy' succulent containers. The workshop will conclude with a brief tour of the succulent plantings in the Farm + Food Lab.

## From Garbage to Gardening: Practical Composting in Small Spaces

South Coast REC, 7601 Irvine Blvd., Irvine

May 19, 9am-12noon

Learn compost and vermiculture basics to fit local landscapes. Participate in hands-on activities demonstrating practical applications in a working environment. Create your own worm bin to take home – supplies included. \$50: pay on line at <http://ucanr.edu/survey/survey.cfm?surveynumber=22763>

## **Last Minute Notice:** Visit the Master Gardener Booth at Imaginology 2018

April 13-15, Orange County Fairgrounds, 88 Fair Drive, Costa Mesa

This three day, free, family-friendly event put features “makeshops,” demonstrations, competitions, and hands-on activities for the whole family with a focus on Science, Technology, Engineering, Arts and Math (S.T.E.A.M.) with more than 100 S.T.E.A.M. based exhibitors as well as visual arts, robotics and livestock competitions. More info: <https://ocfair.com/events/imaginology/information/>

## Planning your next field trip? *Experience the Youth Gardens at UC ANR South Coast Research & Extension Center*

The University of California ANR South Coast Research and Extension Center and Cooperative Extension, Orange County invite you to have your next excursion at the Youth Garden and Compost Training Center located at 7601 Irvine Blvd. in Irvine.

A fun setting for field trips or workshops, the Center’s demonstration gardens showcase best gardening practices employed by UCCE Master Gardeners and display various ways to develop a garden for young people. Raised beds are made from wood, stones and concrete blocks and creative planted containers include a wheelbarrow, washtub and a pair of jeans. Whether it is youth or adult groups, the Master Gardeners provide a professional and enjoyable experience conducting science-based learning. Open to the public by appointment only, reservations are required a minimum of one month prior to the selected date. For more information please contact: South Coast REC Tours and General Information – Tammy Majcherek, Center Outreach Coordinator [tjmajcherek@ucanr.edu](mailto:tjmajcherek@ucanr.edu) or Randy Musser, Orange County UCCE Master Gardener Program Coordinator [remusser@ucanr.edu](mailto:remusser@ucanr.edu) Normal business hours are 7am–4pm, Monday through Friday.

*In the Garden*

KUCI  
88.9 FM

**Tune in at 88.9 FM** Every Thursday at 8:30am. The first broadcast of every month provides the listener with a To Do list, addressing “What to do in the garden this month” with tips on keeping the garden productive and beautiful year round.

**Listen via computer** Tune in at <http://www.kuci.org/> (click the tab LISTEN/LIVE) to listen to the on-air broadcast. Expert guests tackle tough gardening issues and provide ideas and solutions.

**Download podcasts** For the convenience of listening at a more opportune time or re-listening to a favorite broadcast, download a podcast. It is quick and easy! Discover the abundance of broadcasts and topics at [http://uccemg.com/Projects/Radio\\_Show/](http://uccemg.com/Projects/Radio_Show/)

## Meet the University of California

### COOPERATIVE EXTENSION Family

The University of California Cooperative Extension is a national, publicly funded, non-formal educational system that links educational and research activities and resources of the U.S. Department of Agriculture, land grant universities and county administrative units. Following is a brief description of each of the programs that reside at the South Coast Research and Extension Center.



The 4-H Youth Development Program has the mission and goals of helping youth develop to their full potential. Youth participate in clubs, after school programs, day camps, or in other program settings.



The Expanded Food and Nutrition Education Program (EFNEP) assists low-income families and youth improve their health through proper diet and sound health practices. Bilingual field staff provides group teaching with Head Start and Healthy Start programs, ESL classes, pregnant/ parenting teens, substance abuse clients, schools, churches, parks and recreation departments, and community centers. Teachers and other volunteers are trained as extenders to reach low-income youth.



The Master Food Preserver (MFP) program is a public service community outreach providing up-to-date information on food safety and preservation. Master Food Preservers are volunteers who are formally educated in food preservation/food safety and certified by a university cooperative extension. Volunteers are qualified to teach food preservation/food safety in addition to disseminating that information via lectures, talks and other county events.



The Master Gardener (OCMG) program is a public service community outreach wherein volunteers are trained to provide UC research-based information to the residents and home gardeners of Orange County. Using a variety of activities such as workshops, lectures, and a garden hotline, volunteers answer questions about home horticulture, sustainable landscaping, and integrated pest management.

We still have answers to your gardening questions . . . but

**WE'VE CHANGED OUR *HOTLINE* EMAIL!**

**ucceocmghotline@ucanr.edu**

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