

The Curious Gardener

Vol. 25, No. 3
Summer 2018

A Quarterly Newsletter Published by
the University of California Cooperative Extension
and the UC Master Gardeners of Placer and Nevada Counties

In This Issue

Hotline FAQs: Ants and Sunscald	2
Propagating Succulents from Stem and Leaf Cuttings	3
Black Walnut: Know Before You Grow	5
BotLat Corner: Mule Fat	6
The Phosphate Fertilizer Garden Myth	7
All-Star: Hybrid Catmint	8
Events Calendar	9

UC
CE

University of California
Agriculture and Natural Resources

An Odd Rose Question— The Answer Surprised Us Too!

by Trish Grenfell, Placer County Master Gardener

One of the benefits of being Master Gardeners is the opportunity for constant learning. Sometimes the questions we receive require research that leads to fascinating answers. Here's one such case from last summer.

Q: I planted a new rose this spring and it has produced many nice blooms since then. However, a bud opened recently revealing a flower that had a small branch growing out of the middle of the new bloom. I watched that little branch grow and develop leaves. This odd bloom did not drop all of its petals but it has no center, no flower "organs." Is my rose diseased? Should I destroy it or share it with a university for study?

A: From your description, it sounds like your plant has gifted you with phyllody, an odd flower formation in which flower parts are replaced by leaves and tiny branches. Phyllody can affect a flower's bracts, sepals, petals, pistils, and stamens, either with a partial or complete replacement of those rose parts. This condition occurs in many plants and for some reason is fairly common in roses. Although you may not have seen or heard of this abnormality before, it was recognized in roses more than 200 years ago.

Is your rose a floribunda? Those varieties are more likely to exhibit phyllody indications, possibly due to genetic predisposition. Three researchers at UC Davis, Dept. of Plant Pathology, describe the creation of green roses, "... one floribunda ancestor is *Rosa chinensis*, from which came the Green Rose, a curious variety that has a stable mutation causing phyllody in all its flowers."



Rose with phyllody abnormality.
Photo by Bev Ferguson

Continued on next page

Continued from previous page

Basically, the phyllody is the result of changes in the hormonal balance of plants. Yes, plants have hormones too. These phytohormones are chemicals that regulate plant growth. Since plants don't have glands, each cell is capable of producing hormones. They control everything that grows on the plant. Without them, plants would be masses of undifferentiated cells. Plant hormones affect the plant's shape, seed growth, flowering time, sex, aging of leaves, type of fruit, etc.

Hormone balance is impacted by environmental stress, insect damage, specific viruses and phytoplasmas. Heat and water stress are often the cause of phyllody in roses but according to the three researchers at UC Davis, "Phytoplasma infection of roses appears to be relatively rare...." A virus called rose rosette disease does reportedly cause phyllody in roses. And insects, most often leafhoppers, can not only induce phyllody itself, but also serve as disease vectors that can spread phyllody to other nearby plants.

In your case, it is likely that this summer's prolonged heat produced the environmental stress that changed the rose's growth pattern. If this is the cause, your rose may have normal and abnormal flowers simultaneously and otherwise look healthy. When the weather cools, the rose will resume producing only normal flowers. If not, bring photos of your plant to the Master Gardener office at 11477 E Ave in the DeWitt Center in Auburn or 255 So. Auburn Street in Grass Valley.

References

- *Rose phyllody*. UC IPM. UCANR. 2017. <http://ipm.ucanr.edu/PMG/GARDEN/PLANTS/DISEASES/rosephyllody.html>
- Sim, Sue and Adib Rowhani, Deborah Golino. *Phyllody In Roses*. Foundation Plant Services, UC Davis. n.d. <http://fps.ucdavis.edu/websitespdfs/articles/rosephyllodyarticle081904.pdf>

Hotline FAQs

Q: My Japanese maple trees are infested with ants. Please help!

by Pauline Kuklis, Placer County Master Gardener

A: Whenever I see large numbers of ants on a tree, the first things I suspect are sap sucking insects, such as aphids. Sap suckers excrete a sugary honeydew which ants find irresistible. Based on the photo at right, it appears that sun scald is the primary problem impacting your Japanese maple. The ants are likely due to an aphid infestation, which is secondary to the sun damage.

Japanese maples are very sensitive to direct sun and hot temperatures, both of which are plentiful in our counties. Sunburned bark can change in color and may ooze sap. Once the injured tissue dries, the bark can crack, making the tissue beneath susceptible to fungi or borers. In addition, the weakened state of the tree makes it more prone to pests such as aphids. As noted above, the sticky secretion from aphids attracts ants.

It is best to protect your Japanese maples by ensuring they are planted in a location that does not get afternoon sun—the more hours of shade, the better. It also helps to whitewash the trunks with white interior latex paint that has been diluted with an equal amount of water. Finally, proper watering is very important. Maintain even moisture in the soil; do not let the soil dry out completely or become too soggy. All of these steps will help keep your Japanese maple healthy and therefore better able to resist pest infestations.

Since you currently have an ant infestation, you can help control them by putting a sticky barrier around the trunk. Then you can scatter bait stations that contain a sugar-based bait around the base of the tree.

For more information, read:

UC IPM Sunburn at ipm.ucanr.edu/PMG/GARDEN/ENVIRON/sunburn.html
UC IPM Ants at <http://ipm.ucanr.edu/PMG/PESTNOTES/pn7411.html>

Do you have
gardening questions?
Call the Master Gardener
Hotline in your county
Nevada Co. 530-273-0919
Placer Co. 530-889-7388



Sunburn damage on Japanese maple trunk. Photo by Pauline Kuklis, Placer County Master Gardener

Propagating Succulents from Stem and Leaf Cuttings is Easy and Rewarding

Article and Photos by Elaine Applebaum, Placer County Master Gardener



This leaf had fallen to the ground and sprouted roots and a plantlet without any human assistance. That's how easy it is to propagate succulents from leaf cuttings!



Spreading species such as Sedum often produce adventitious roots on above ground stems as in the picture above. Simply cut segments of stem with roots attached and place them in potting medium after the cut has had a chance to dry.

Maybe because they are drought tolerant or maybe because they can be used in so many creative ways, succulents seem to be incredibly popular these days. Equally comfortable in containers or well-drained landscapes, they are easy to grow and the assortment of colors and forms available is staggering. Those of us with serious plant lust can always find new “must-have” varieties to add to our collections. And once we have a variety, it is easy to produce multiple offspring to share or trade with friends. New plants can be generated from individual leaves, sections of stem, or rosette clusters cut from the parent plant.

As with any propagation, it is important to use clean tools and pots, fresh potting media, and healthy plant parts. The biggest threat in propagating succulents is the possibility of the young propagule rotting. To increase your chance of success, always allow cut surfaces of stems and leaves to form a callus layer before placing them in the planting medium. To do this, spread the cuttings on a nursery tray and leave in a well ventilated, shaded spot for about a week until the cut ends are completely dry. Rooting hormone is generally not needed. For all of the methods described below, the best “soil” to use is a gritty quick-draining medium designed specifically for cacti and succulents. Keep in a bright location out of direct sunlight until plants are fully rooted. Avoid overwatering; succulents need very little moisture to develop new roots.

It is not only possible, but also very easy, to create a whole new plant from a single succulent leaf. Simply pull or cut plump, healthy leaves from species like *Crassula*, *Kalanchoe*, *Echeveria* and *Sedum*, allow them to dry and form a callus layer over the wound, then set the cut ends in contact with a cactus medium in pots and keep only slightly moist. Within a few weeks to a couple months—depending on the temperature—roots and a tiny plantlet, as seen in the photo above left, will form from each leaf. Nighttime temperatures above 60° are most conducive to succulent root growth; roots will form at lower temperatures, but take longer.



The top rosette and leaves plucked from the stem of an Echeveria that had gotten leggy provide material to make new plants.

Some succulents, like *Aeonium*, *Echeveria* and *Graptopetalum* eventually get leggy and develop bare stems. To tidy their appearance and create new plants at the same time, use a clean sharp knife or shears to lop off the rosette near the end of the stem. Remove lower leaves from the cutting to create a stem 1/2" to 1" long. These individual leaves, if mature and healthy, can be used to create new plants as described above. Allow the cut end of the rosette to dry out and then gently push its stem into the planting medium so that the lowest remaining leaves are just above the soil surface. Pieces of stem without leaves can be laid horizontally on top of the medium and may sprout roots and stems (see photo on next page). The cut stem left on the original plant will likely sprout multiple new rosettes as well. These can either be left in place or gently pried off and treated as cuttings themselves.

If you don't have the patience to wait for stem and leaf cuttings to grow to useable sizes, division is a fast, easy way to get multiple and relatively large new

Continued on next page

Continued from previous page

plants from clump-forming succulents. *Sempervivum* (hens and chicks), *Agave*, *Hawarthia* and *Aloe* develop offsets or “pups”—little plants that sprout around the base of the mother plant. Gently pry these babies off the parent or cut them off with a sharp, sterile knife. Most will have already formed new roots of their own, but if not, be sure to take a bit of the stem connecting the offset to its parent as this is where new roots will form. Remove any rotted or damaged roots and plant into clean media in new pots. Spring or early summer is the best time for dividing in this manner.

Now that you know how easy it is to propagate succulents, grow your own to use in all those clever projects you’ve seen in magazines and on the internet. And be sure to grow a few to give to friends. You never know when they might have that new must-have variety to share with you!



The most important step in propagating succulents is to allow the cut ends to callus or dry out before placing in the cactus mix.



A cut stem from *Crassula ovata*, (jade plant) laid horizontally on cactus mix has sprouted roots and shoots.



Succulent stem and leaf cuttings planted in clean cactus mix will soon sprout roots and form new plants to share with friends or use in creative arrangements.

References

- Kelly, Jack. *How to Propagate Agaves and Cactus from Cuttings and Seed*. University of Arizona Cooperative Extension Publication AZ1483. January 2009. <https://extension.arizona.edu/pubs/az1483.pdf>
- Toogood, Alan. *Plant Propagation*. DK Publishing Inc., American Horticultural Society. 2009.



Meet a California Native

Eriogonum umbellatum, Sulfur Buckwheat

I’m one of over 100 *Eriogonum* species native to California. I’m a semi-evergreen subshrub that grows only 12-18 inches high but spreads up to about three feet across. Though I am originally from the mountain areas of the state, I am highly adaptable to lower elevations and tolerate shade better than other buckweats.

Yes, I’m in the same botanical family as the buckwheat made into pancakes, kasha and soba noodles (*Fagopyrum esculentum*), but reserve me for decorative purposes only.

Black Walnut: Know Before You Grow

By Annette Wyrick, Placer County Master Gardener

Memories of abundant shade provided by a very large black walnut tree stirred in my friend's mind; she anticipated the landscaping of a newly purchased large property. The desire to grow edible plants and to care for horses is a high priority for her. Would a black walnut tree be a wise choice for this situation?

First, she needed to consider size. After 30 years most black walnut trees reach a mature size of 90 feet tall with a trunk diameter of 3 feet; however, they may grow to 150 feet tall with a trunk diameter of 7 feet. A very large space is needed to accommodate a tree of this stature. Each plant will have male and female flowers but the male flowers shed their pollen at a time when the female flowers are not receptive. Therefore, two different varieties with an overlapping bloom period are required for fruit production. Plant spacing should be 30-60 feet. The tree produces large green fruits which, if not harvested from the tree, will rot and stick to the shell or wherever they fall. Harvesting is accomplished by shaking or poling the tree. As with all fruit and nut trees, regular care is needed to provide optimal growing conditions. For more information on care, visit http://homeorchard.ucanr.edu/Fruits_&_Nuts/Walnut/.

With the large size of a walnut tree, it is notable to consider the site conditions that it will eventually establish. It will produce abundant shade with its large canopy and remember that it may drop messy fruits in this area. The walnut tree will have a substantial root zone which will outcompete other plants for water and nutrients. My friend would have to carefully think about the location of a walnut tree in proximity to a vegetable garden.

She learned that some plants may not grow well and may die when planted near a walnut tree. The earliest statement of walnut having a harmful effect on other plants occurred in 36 BC. In 1928 at the Virginia Agricultural Experiment Station, walnut isolated juglone was injected into stems of tomato and potato plants and caused severe effects. Report of juglone as the cause of walnut toxicity caused panic among farmers who hadn't seen any harmful effects. This began the walnut toxicity controversy.

There are many variables that make it difficult to determine if juglone is the cause of poor plant growth or death. There is varying susceptibility of plants to walnut. Some plants may tolerate being located beyond the canopy, but still within the root zone. Other plants may grow for many years and then die. Some plants are not affected at all. Sensitivity symptoms in affected plants are yellowing leaves, wilting, and death.

Edibles that show sensitivity to black walnut include tomatoes, peppers, apples, blueberries, pears, asparagus, cabbage, eggplant, potatoes, rhubarb, and blackberries. Sensitive ornamentals include azaleas, lilacs, Virginia creeper, clematis, hydrangeas, begonia, tulip, zinnia, mugo pines, and many more. An extensive list of sensitive and tolerant plants can be found at <https://ag.purdue.edu/hla/pubs/HO/HO-193.pdf>.

Horses will develop toxicity symptoms when exposed to black walnut. The chemical in black walnut that poisons horses is unknown. My friend decided not to add a black walnut tree to the property mainly for this reason.

What if you already have a black walnut tree? Increasing soil drainage by adding organic amendment will decrease sensitivity problems. Diligently removing tree debris under the canopy will be helpful too. A vegetable garden should be located far away from the roots of the black walnut tree. It certainly depends on your garden situation if a black walnut tree will be friend or foe.



English walnut trees, such as those in the California orchard pictured above, also produce juglone, but in smaller amounts than black walnut. For more information on walnut allelopathy and lists of sensitive and tolerant plants, click [here](#).

Photo: UC Agriculture and Natural Resources

References

- Dana, Michael N. and Rosie B. Lerner. *Black Walnut Toxicity*. Department of Horticulture, Purdue University Cooperative Extension Service. April 1, 2001. www.extension.purdue.edu/extmedia/ho/ho-193.pdf
- Willis, R. J. *Juglans spp., juglone and allelopathy*. School of Botany, University of Melbourne. *Allelopathy Journal* 7 (1) 1-55 (2000). [http://www.allelopathyjournal.org/Journal_Articles/AJ%207%20\(1\)%20January,%202000%20\(1-55\).pdf](http://www.allelopathyjournal.org/Journal_Articles/AJ%207%20(1)%20January,%202000%20(1-55).pdf)
- *Working with the Black Walnut*. PennState Extension. February 13, 2018. <https://extension.psu.edu/working-with-the-black-walnut>

agri-cola, ae *m* tiller of the field, farmer, husbandry
caulis, is *m* stalk, stem of a plant; cabbage
colo, colui, cultum 3 to care for; a) to till, cultivate
farm; b) to tend; *adj*: cultus 3 cultivated, tillage
(culta, orum *n/pl* tilled land, gardens, parks)
cresco, crevi, (cretum) 3 to grow
cultus *m* cultivation, labor, tilling; a) to till, cultivate
b) care, training, education; c) culture
florens, tis blooming, flowering
floreo, ui 2 to bloom, blossom
flos, oris *m* flower, blossom
fodio, fossom 3 to dig, dig up
folium, i *n* leaf; foliage
herba, ae *f* grass, herb
hortus, i *m* garden
radix *f* root; a) to dig, dig up
viridis, e *g* green
vita, ae *f* life
xylem
zephirus

Corner

BotLat

Find Out What Those
Weird Plant Names Mean

References

- Byrne, Mary K. *Plant of the Week*. USDA Forest Service. January 4, 2018 www.fs.fed.us/wildflowers/plant-of-the-week/Baccharis-salicifolia.shtml
- *Baccharis pilularis* 'Pigeon Point'- Dwarf Coyote Brush. San Marcos Growers. 2001. www.smgrowers.com/products/plants/plantdisplay.asp?plant_id=4109
- Charters, Michael L. *California Plant Names: Latin and Greek Meanings and Derivations*. Calflora. 2017. www.calflora.net/botanicalnames/pageBA-BI.html#Baccharis



Baccharis salicifolia: Mule Fat

by Peggy Beltramo, Placer County Master Gardener

I bought a new plant. Okay, I admit; it was more than one. Do you know how a plant at the nursery just whispers, “Pick me!”? Well, maybe it’s sometimes a chorus.

This particular plant has the common name of “mule fat” and this is the beginning of its story. Since I am fascinated by plant names, I brought this plant home. I already knew about its relative *Baccharis pilularis*, a great pollinator plant. So here is another plant for my pollinator garden.

The USDA Forest Service advises, “The common name, mule fat, comes from the gold mining days when prospectors and cowboys would tie their mules to the shrub to browse.” Aha, this plant grows 6-8 feet tall. That is a lot of plant to make your mule fat!

Do you remember that the first word in a plant’s Latin binomial name is the genus of the plant—its “last name” in common language? *Baccharis* is the genus for both of these two plants. According to Calflora.net, the origin of this genus name is obscure. It may relate to Bacchus, the Roman god of wine (*bacca* in Latin means berry), but Linnaeus, the father of binomial nomenclature, did not explain his reason for this choice.

In the case of mule fat, its specific epithet—the second word in the Latin name—is *salicifolia*. This word is a combination of *salici*, referring to a willow (*Salix*), and *folia*, meaning leaves. Mule fat does indeed have willow-like leaves.

As for its cousin *Baccharis pilularis*, a spokesperson at San Marco Growers explains, “The specific epithet comes from the Latin word *pilula* which means “a little ball” in reference to the flower buds.” The common name of this plant is coyote brush (or bush). The reason for this is open to interpretation. Originally, it was my understanding that because the blossoms are dirty white, they looked like coyote fur stuck to the branches. Then I heard another origin story that contends the plant smells like coyote urine. At any rate, it blooms throughout the year, including fall and winter, providing nectar and pollen for our native pollinators at a time when food resources are sparse. That is a good thing, regardless of its name, color, or smell.

So the next time a plant whispers, “Pick me!”, check its BotLat name and see what you can learn about it. Then bring it home.



Baccharis salicifolia, Mule fat.
Photo by Elaine Applebaum,
Placer County Master Gardener

Left: *Baccharis pilularis*, coyote brush.
Photo from http://sonomamg.ucanr.edu/Plant_of_the_Month/Baccharis_pilularis/

The Phosphate Fertilizer Garden Myth

by Trish Grenfell, Placer County Master Gardener

Phosphorus is a macro-nutrient necessary for normal plant growth. It is denoted by the letter P and is listed on all fertilizer products in this order: N-P-K. Phosphorus plays a role in photosynthesis, respiration, energy storage and transfer, cell division, and cell enlargement. But some of the “facts” we knew about this nutrient’s use have come under scientific review and it’s a new ball game. We believed high phosphorus fertilizers encouraged more blooms, better root growth, and winter hardiness. Since young transplants needed a boost in root growth, we were told by the fertilizer manufacturers to add bone meal at planting time due to its high phosphorus and calcium.

As Dr. Linda Chalker-Scott, associate professor at Washington State University, reports, “There is little evidence for these claims. Phosphorus doesn’t stimulate flower production or root growth and has no apparent relationship to winter hardiness. It is true that cold soil can cause plants to show phosphorus deficiency such as red or purplish discoloration. But this isn’t because phosphorus isn’t present; the roots simply can’t absorb it when the soil is cold.”



A soil tube, as shown above, can be used to collect soil for testing.

Most home gardens will not require applications of phosphorus. In fact, adding it when it is not needed can actually cause harm.

Photo by Jack Kelly Clark

from the soil since the time plants first occupied land on Earth. These fungi form mutually beneficial relationships with the roots of more than 90% of all vascular land plant species, thereby acting as their root extensions. They also protect the plants from many pathogens and are probably beneficial in ways not yet discovered by scientists. In return for these favors, the plants feed carbon to the soil microbes—as in the carbon dioxide excesses which cause global warming. This mycorrhizae-plant relationship has evolved through 400 million years and

Continued on next page



UC Davis professor, Kate Scow, center, works with UC Davis soil science students, collecting soils for analysis.

Photo credit: Gregory Urquiaga

We now know that **phosphorus is rarely in short supply in non-agricultural gardens or landscape areas**, largely because it seldom leaches. So you should never apply it without a lab soil test stating the soil is deficient in phosphorus. Our residential garden soils normally have the phosphorus they need. But **the important truth I want the reader to remember here: excess phosphorus may cause harm.**

T. L. Provin and J. L. Pitt, associate professors at Texas A&M University, state, “Excessive soil phosphorus reduces the plant’s ability to take up required micronutrients, particularly iron and zinc, even when soil tests show there are adequate amounts of those nutrients in the soil. High soil phosphorus levels also can threaten streams, rivers, lakes and oceans. Phosphorus can become water-soluble and mobile, entering surface waters and causing algae and other undesirable plants to grow. This reduces water quality and desirable fish and aquatic plants.”

If you add bone meal to your plantings, it may attract animals that may dig up the area. And your dog may be poisoned if it breaks into your bone meal bag.

Many scientists today believe that the most serious impact of excessive phosphorus in the soil is the harm it does to soil mycorrhizae, which are a very important part of the soil ecosystem.

These beneficial fungi have helped plant roots extract nutrients and water

Recommended Further Reading:

Hidden Partners: Mycorrhizal Fungi and Plants

<http://sciweb.nybg.org/Science2/hcol/mycorrhizae.asp>

Soil Biology Chapter 4, Soil Fungi

<https://extension.illinois.edu/soil/Soil-Biology/fungi.htm>

Soil Test for Phosphate

<http://calag.ucanr.edu/archive/?type=pdf&article=ca.v003n08p11>

Continued from previous page

scientific research is still on-going. Note: if the plant has enough phosphorus already, it closes the door to the mycorrhizae, thereby taking away the fungi food source. It will die off. The phosphorus itself does not kill the fungi. But without that open door, the plant will not have access to the other fungi benefits and the future stores of phosphorus the plant roots cannot reach. It is important to know also that the phosphorus presented by the fungi to the plant is in the form most easily accessible to the plant. That may not be the case for phosphorus found elsewhere in the soil or in fertilizers gardeners use. If the mycorrhizae are reduced, plant health will diminish.

Do not use phosphorus fertilizers unless you know your soil is deficient. Phosphorus fertilizers may be seldom, if ever, used if the future allows home gardeners to add the appropriate microbe miracle workers (fungi, bacteria, protozoas, etc.) to our soils. I see a huge opportunity in stock trading if that happens.

References

- Chalker-Scott, Linda. *The Myth of Phosphate Fertilizer: "Phosphate fertilizers will stimulate root growth of transplanted trees and shrubs"*. Puyallup Research and Extension Center, Washington State University. n.d. <https://s3.wp.wsu.edu/uploads/sites/403/2015/03/phosphate.pdf>
- Provin, T.L. and J. L. Pitt. *Phosphorus—Too Much and Plants May Suffer*. Texas A&M AgriLife Extension. n.d. <http://soiltesting.tamu.edu/publications/E-465.pdf>
- Smith, Tina and Doug Cox. *Fertilizing Flower Gardens and Avoid Too Much Phosphorus*. UMassAmherst Center for Agriculture, Food and the Environment. June 25, 2015. <https://ag.umass.edu/cafe/fact-sheets/fertilizing-flower-gardens-avoid-too-much-phosphorus>



References

- *All-Stars Plant Details*. UC Davis Arboretum All-Stars. n.d. http://arboretum.ucdavis.edu/allstars_detail_28.aspx
- *Plant Finder*. Missouri Botanical Garden. n.d. www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?taxonid=250745

Nepeta x faassenii Hybrid Catmint

by Elaine Applebaum,
Placer County Master Gardener

To be a UC Davis Arboretum All-Star, a plant must be attractive for most of the year, thrive in California's Mediterranean climate and have been tested in the UC Davis Arboretum. Many of the All-Stars also have one or more of the following features: low maintenance, drought tolerance, and/or being attractive to beneficial wildlife, including pollinators. *Nepeta x faassenii*, hybrid catmint, is all of the above and more. If there were an award for best all-around plant, this would certainly be a contender.

This catmint is easy-to-grow and equally at home in cottage, herb, container, or rock gardens. Blooming from May through September, it provides food for bees, butterflies, hummingbirds and beneficial insects. Use this perennial in mixed borders, as an edging, or even as a small-scale groundcover. Like other catmints, the grey-green leaves and lavender-blue flowers are highly fragrant. Deer and rabbits usually leave it alone.

Nepeta x faassenii will reach 18-24 inches tall and spread to almost 3 feet wide. It is one tough plant, handling almost any condition you might put it in. While it prefers full sun and well-drained soil, it can tolerate partial shade and almost any soil type. It thrives in drought and heat, and rarely, if ever, has problems with pests or disease. The only required maintenance is to cut the plant to the ground in winter, although shearing the plant after its first spring bloom will encourage more flowers throughout the summer.

Nepeta x faassenii is a hybrid of *N. racemosa* and *N. nepetella* developed in the nursery of Dutchman Johannes Hubertus Faassen.



Events Calendar

Nevada County Demo Garden

1036 W. Main St., Grass Valley (on NID Grounds)

Placer County Demo Garden

11477 E. Ave., Auburn (Senior Garden, DeWitt Center)

Nevada County events in **green**; Placer County events in **yellow**

All events are free unless noted otherwise

June

June 2

10:00 am - noon

Transform Lawn into Landscape

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

June 9

10:00 am - noon

Using Native Plants to Attract Birds to Our Gardens

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

June 16

10:00 am - noon

Succulents Add Charm to Your Garden

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

August

August 4

10:00 am - noon

Monarch Butterflies and Milkweed in Your Garden

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

August 8 to 12

10:00 am - 7:00 pm each day

Visit our booth and attend daily workshops and composting demos at the Nevada County Fair

Ag-Sperience area, Nevada Co. Fairgrounds,

August 18

10:00 am - noon

Compost is the Gardener's Best Friend

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

August 25

10:00 am - noon

Eat Your Greens: How to Grow Delicious Vegetables All Winter

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

September

September 8

9:30 am - 1:00 pm

"Bite Me" Tomato Tasting and Open House

10:30 - 11:30 am

Amazing Mason Bees workshop

11:30 - 12:30 pm

Salvias workshop

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

September 15

10:00 am - noon

A Home Gardener's Guide to Seed Saving

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

September 22

9:00 am - noon

Master Gardeners Fall Plant Sale

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

September 28, 29, 30

Fri. 11:00 am - 6:00 pm, Sat. 10:00 am - 6:00 pm, Sun. 10:00 am - 5:00 pm

Visit Placer Co. Master Gardeners at the Auburn Home Show

Gold Country Fairgrounds, Auburn

September 29

10:00 am - noon

Build Living Soil for Healthy Plants

Demo Garden, NID Grounds
1036 W. Main St., Grass Valley

Visit Master Gardeners at Local Farmers' Markets

8:30 am to 1:00 pm

Every Tuesday, May–Oct.

Near Whole Foods at the

Fountains, **Roseville**

8:00 am to noon

1st & 3rd Saturdays, May–Oct.

Old Town Courthouse parking

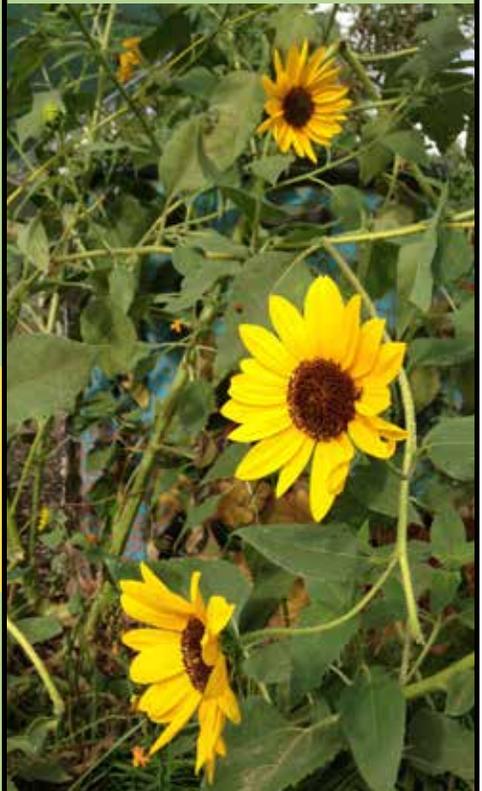
lot in **Auburn**

8:00 am to noon

Saturdays, Mid May–Mid Sept.

Growers Market, North Star

House, **Grass Valley**



About Master Gardeners

Our mission as University of California Master Gardener volunteers is to extend research-based gardening and composting information to the public through various educational outreach methods. We strive to present accurate, impartial information to local gardeners so they have the knowledge to make informed gardening decisions in regard to plant choices, soil fertility, pest management, irrigation practices, and more.

The Master Gardener volunteer program was started in the early 1970s at the Washington State University. Farm Advisors became overwhelmed by all the incoming calls from home gardeners and homesteaders so they trained volunteers to answer these questions and the "Master Gardener Program" was born. The first University of California Master Gardener programs began in 1980 in Sacramento and Riverside counties. The Nevada County and Placer County Master Gardener Associations began soon thereafter in 1983.

35 Years of Serving Placer and Nevada Counties

Production Information

The Curious Gardener is published quarterly by the University of California Cooperative Extension Master Gardeners of Placer and Nevada Counties.

Kevin Marini, Editor

Community Education Specialist: Home Horticulture and Composting Education, Master Gardener Coordinator

Trish Grenfell, Coordinator

Placer County Master Gardener

Elaine Applebaum, Production

Placer County Master Gardener

Have a Gardening
Question?

Call our Hotline

Placer County Residents

530.889.7388

Nevada County Residents

530.273.0919

Master Composter Hotline

530.889.7399

UC Cooperative Extension Placer County

11477 E Avenue
Auburn, CA 95603
530.889.7385 office
530.889.7397 fax
email: ceplacer@ucdavis.edu

UC Cooperative Extension Nevada County

255 So. Auburn Street
Grass Valley, CA 95945
530.273.4563 office
530.273.4769 fax
email: cenevada@ucdavis.edu

How to Subscribe

Online subscriptions are free to residents of Placer and Nevada Counties.

Log on to http://pcmg.ucanr.org/Curious_Gardener_Newsletter/ to sign up for your electronic delivery.

The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (as defined by the Uniformed Services Employment and Reemployment Rights Act of 1994: service in the uniformed services includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services) in any of its programs or activities.

University policy also prohibits reprisal or retaliation against any person in any of its programs or activities for making a complaint of discrimination or sexual harassment or for using or participating in the investigation or resolution process of any such complaint.

University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Equal Opportunity Director, University of California, Agriculture and Natural Resources, 1111 Franklin Street, 6th Floor, Oakland, CA 94607, (510) 987-0096.

