

Master Gardener  
University of California



# The Curious Gardener

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## In This Issue

Low Tech Solution for Toxic Soils	3
The Vitamin B1 Myth	4
Hotline FAQs: Weed ID	5
Insect Trivia - Bug Math	5
Lady Beetle Baby Photos	6
Plant Growth Regulators	7
BotLat: Place Names	8
All-Star: Bladderpod	9
Spring Plant Sale	10
The Frugal Gardener	10
Events Calendar	11



## Buying Compost? Ask the ROTLINE!

*By Kevin Marini, UCCE Master Gardener/Compost Educator  
and ROTLINE Operator*

For over 20 years, UCCE Community Education Specialist Kevin Marini has been teaching about the art and science of composting. His phone line in the Placer County UC extension office is called the ROTLINE (530-889-7399) and he is available to call for free advice on home composting. Over the years the ROTLINE has received hundreds of calls asking all sorts of questions. Some of the most common questions are related to purchasing compost. Kevin Marini is providing answers below.

***Q. My favorite home store is now carrying compost. I appreciate the convenience but how do I know it isn't just dirt?***

In California bagged compost products must be registered with the state if 1) the compost is being marketed as an organic input material for certified organic production (CDFA Organic logo) or 2) if the compost label is making claims of nutrient value (N-P-K numbers—CDFA Fertilizer label). If there are no nutrient claims on the bag or if the compost is not being sold as an approved certified organic input material, there is no registration with the state required. Therefore, no one checks what's in that unregistered bag of compost. I am a firm believer in seeing and smelling compost before buying it, so it may be worthwhile to ask the store if it is OK to open a bag and see/smell the product before purchasing. It should be dark in color, crumbly in structure and smell of sweet earth.

***Q. I want to find a compost to purchase locally that is as good as the compost I "cook" myself in my backyard. I use kitchen scraps, fallen leaves, sawdust, grass cuttings, a little coffee grounds, and horse manure my cousin sometimes shares with me. My garden explodes with blooms, fruit, and veggies when I use my compost but I never make enough. The stuff I buy at big box stores lacks that growth magic.***

It is challenging to find commercially produced compost that can match the quality of a properly composted backyard pile of finished compost due to many reasons involving the production and storage of the compost. However, that doesn't mean that all commercially produced composts are bad or subpar. My suggestion

*Continued on next page*

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3rd Annual  
Placer County  
Master Gardener

# Garden Faire

Saturday, April 14,  
10:00 am - 3:00 pm

Rocklin Community Center  
5480 5th Street, Rocklin

We will have several interesting information tables, displays of master gardener activities and services, guest speakers, workshops, plant sales, and activities for children.

The event is free this year and it is not necessary to register.

Food trucks will be on site for those who wish to purchase lunch.

is to buy compost in bulk so you can visit the product and give it the look/touch/smell tests. Compost should not smell bad or have strong ammonia-like odors. It should not contain chunks of undecomposed materials or be made up of fine wood chips. As I said above, it should be dark in color, crumbly in structure and smell of sweet earth. The business selling the bulk compost should be able to tell you the inputs that went into the compost and have a lab analysis containing nutrient values, pH value, and heavy metal levels. There is great demand for high quality compost in California which can lead to a supply of low quality composts to meet the high demand. Another good suggestion is to ask your local organic farmer where they get their compost!

**Q. Why does the state of California have its own certification (CDFA) for organic compost? Why doesn't the state use OMRI?**

Good question! Let me first define the certifications. The Organic Materials Review Institute (OMRI) is a non-profit, independent organization that reviews submitted inputs (products) for their potential use in Certified Organic production and processing. If the product aligns with the National Organic Program (NOP) standards, then OMRI will approve it, place the product on their "OMRI list" of acceptable inputs and offer their logo for the label of the product. The State of California created a similar program through the California Department of Food and Agriculture (CDFA) and they also have a logo that can be placed on a label to show that the product meets CDFA standards. They review inputs for Certified Organic production and processing just like OMRI does. So, what's the difference? For California, getting CDFA approval is MANDATORY and required by law for organic inputs while OMRI is purely a voluntary certification of a given input. OMRI does not implement site inspections of the facilities where the inputs are being manufactured while CDFA does (in CA). OMRI has no power to prosecute producers who do not adhere to the standards outlined for their input approval while CDFA can hold these folks accountable with criminal prosecution or fines. Therefore, some products in CA will contain only the CDFA logo of approval while others will have both the CDFA logo and the OMRI logo.



*Buying in bulk allows you to see, touch and smell the quality of compost before you buy.*



# Low Tech Solution for Toxic Soils

By Joan Goff, Placer County Master Gardener

Thousands of sites throughout the world are polluted from mining, agricultural spraying, and manufacturing. Handling the polluted soil has traditionally been done by digging it up and putting it in containers, never to be used again. Is there a better way? Plants!

Plants reach into the soil to pull up nutrients and water. Scientists have discovered that some plants can also pull up toxic materials from the soil. Poplars, willows, mustard, sorghum grass, sunflowers and duckweed are a few that have this very special ability. These plants have been used to help clean up soil contaminated with atomic waste, lead, zinc, mercury and other chemicals in places like Chernobyl, Fukushima, and contaminated ground all over the world.

Phytoremediation is the term for this, phyto meaning plant and remediation meaning to fix or remedy. While not a recent finding, phytoremediation is becoming better known as we look for cost effective ways of handling toxic sites. Other ways used to clean up soils polluted with heavy metals can cost \$1 million per acre, but phytoremediation is estimated to cost in the tens of thousands of dollars. However, the slow process may take several years to complete and the area cleaned is restricted to the soil surface, root zone, and the area inhabited by the microbes which help the plants deal with the toxic soil. Offsetting that is the aesthetic value of pretty plants doing their work quietly.

Not all plants can be used this way; those that can tolerate high concentrations of heavy metals are called hyperaccumulators and there are over 500 flowering plants in this category. *Brassica juncea* (mustard) accumulates copper, selenium, and nickel, *Arabidopsis halleri* (rock cress) accumulates zinc and cadmium and *Lemna gibba* (duck weed) accumulates arsenic. Scientists are working to improve this capacity by breeding plants to be more effective at taking up toxic materials.

And what can be done with the plants after they have done their work? The plants cannot be plowed back into the soil, consumed by humans or animals, or put into a landfill—but they can be burned. Work is being done on the extraction of metals from these hyperaccumulator plants. This process is called phytomining and involves the smelting of metals from the plants. In other words, the metals found in the plant tissues may be harvested and used commercially by the mining industry. Research today is also working on genetically engineered super-hyperaccumulator plants to accomplish toxic “mining” with increased speed and volume. With proper guidelines and regulations from the EPA, phytoremediation may play a growing role in the push to a cleaner, greener world.



Plants in the mustard family (*Brassicaceae*) are used to reclaim polluted soils.

## References

- Griffith, Jeanne. *Plants, from pennycress to willow, have potential to clean up polluted soils, researchers are finding.* Cornell University Cornell Chronicle. 2007. <http://news.cornell.edu/stories/2007/10/researchers-explore-power-plants-clean-soils>
- Hammond, Corin & Wilkinson, Dr. Sarah. *Phytoremediation: using plants to treat environmental pollution.* University of Arizona. 2012. <https://superfund.arizona.edu/info-material/information-sheets/english/phytoremediation>
- Evan. *Phytoremediation: The Future of Environmental Remediation.* University of Massachusetts. 2013. <https://blogs.umass.edu/natsci397a-eross/phytoremediation-the-future-of-environmental-remediation/>

# The Vitamin B1 Myth

By Trish Grenfell, Placer County Master Gardener

Does vitamin B1 actually help plants become established when they are transplanted into your home garden soil? No. SIMPLY NO!

The archives of the UC Davis publication "California Agriculture" back in Sept 1984 told its readers that vitamin B1 (thiamine) did nothing to reduce transplant shock; it had no impact on root growth. We knew back then? Yes. An abundance of scientific horticultural evidence has accumulated during that period and through the years substantiating that fact. It is true that a plant does need thiamine but it manufactures its own source of this vitamin and therefore never needs more. Many fungi and bacteria which form symbiotic relationships with plant roots also produce thiamine, so it's likely that healthy soils will always have adequate levels of vitamin B1. However, gardeners have continued using vitamin B1 root stimulation products since 1984 and they have been flying off the shelves in the succeeding decades and still are, albeit diminished.

According to Jeff Schalau, an agent of the Arizona Cooperative Extension, Agriculture & Natural Resources division, this myth arose back in the 1930s and early 1940s from research being performed on plant growth regulators (plant hormones), called auxins which were mixed with vitamin B1. Further research throughout the last half of the 20th century on these auxins determined that they were stimulating root growth, not vitamin B1 on its own. Please be aware that some manufacturers have often relied on that early research to substantiate the continuing use of thiamine to lessen transplant shock.

So what does stimulate root growth and reduce transplant shock? Linda Chalker-Scott, Ph.D., Extension Horticulturist and Associate Professor, Puyallup Research and Extension Center, Washington State University tells us that plant growth regulator auxin IBA is inconsistent in growing root lengths and numbers and IBA, "...may help redirect resources to the roots by suppressing crown growth." No, most gardeners usually do not wish to restrain the size of the plant they just purchased from the nursery - although there are situations where redirecting the plant's energy to the roots is beneficial.

Auxin NAA is often the active ingredient in commercial root stimulator preparations. However, NAA tends to be toxic to seedling root development and should only be used for lateral root growth. This latter activity may account for NAA's success in regenerating roots of transplanted and root-pruned trees. But Dr. Chalker-Scott also advises, "Like IBA, NAA apparently suppresses crown growth." Another plant growth regulator PBZ also reduces crown growth.

So what should you add when transplanting your nursery finds? Dr. Chalker-Scott does suggest that if you want to add a fertilizer, "A nitrogen fertilizer is adequate for transplanting landscape plants". However, she assumes your soil test states your soil is low in nitrogen, the plant going into the soil requires nitrogen, and you are aware that transplanted plants are more vulnerable to fertilizer burn (less is more). She does strongly emphasize that unless your soil test says the phosphorus level is very low, "avoid the use of 'transplant fertilizers' that contain phosphate." Yes, she said no phosphorus! Don't miss the dismantling of that garden myth in the next *Curious Gardener*.



Research shows adding vitamin B1 does not reduce transplant shock.  
Photo by Pauline Sakai, Placer County Master Gardener.

## References

- Kontaxis, Demetrios G. and David Cox. *Effect of vitamin B, on vegetable transplants*. California Agriculture. September 1984. <http://calag.ucanr.edu/archive/?type=pdf&article=ca.v038n09p15>
- Schalau, Jeff. *Vitamin B-1 and Root Stimulators*. Arizona Cooperative Extension-Backyard Gardener. February 2010. <https://cals.arizona.edu/yavapai/anr/hort/byg/archive/vitamin-b1androotstimulators.html>
- Chalker-Scott, Linda. *The Myth of Vitamin Stimulants: "Vitamin B-1 reduces transplant shock by stimulating new root growth"*. Washington State University Extension - Horticultural Myths. n.d. <https://s3.wp.wsu.edu/uploads/sites/403/2015/03/vitamin-b1.pdf>



# Hotline FAQs

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

**My backyard is  
COVERED with a small  
weed (photo at right)  
that seems to be  
unbelievably prolific.**

## What is this plant?

by Pauline Kuklis, Placer County  
Master Gardener

You are one of many who are cursed with an abundance of little bittercress (*Cardamine oligosperma*). And yes, this native weed is very good at propagating quickly. In fact, once it flowers it forms narrow seed pods very quickly. When you touch them the plant will project seeds quite a distance.

Whenever you have a weed you would like to identify, I recommend using the Weed Photo Gallery on the UC Davis Integrated Pest Management website [http://ipm.ucanr.edu/PMG/weeds\\_intro.html](http://ipm.ucanr.edu/PMG/weeds_intro.html). Simply answer a few simple questions, and voila – you are presented with photos of all the possible weeds that meet the criteria you entered. So, for little bittercress:

1. It is a broadleaf weed, so click on “Identification” under the broadleaf category.
2. It grows in a rose-like shape, so click on “plants that form rosettes”.
3. Voila! You are presented with photos of 18 broadleaf, rosette weeds from which to choose. Simply click on the photo that matches your weed, then read all about it.

Give it a try, and read all about little bittercress!



Photo by Joseph M. DiTomaso  
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## Insect Trivia - How Good is Your Bug Math?

By Bonnie Bradt,  
Nevada County Master Gardener

Remember these answers and  
amaze your friends!

1. Houseflies find food sources like sugar, with their feet, which are \_\_\_\_\_ times more sensitive than our own tongues.
2. Approximately \_\_\_\_\_ silkworm cocoons are needed to produce one pound of silk.
3. Ants can lift and carry more than \_\_\_\_\_ times their own weight (remember that “rubber tree plant”).
4. It takes about \_\_\_\_\_ Monarch Butterflies to weigh an ounce.
5. Beetles account for \_\_\_\_\_ percent of all known species of plants and animals. There are more kinds of beetles than all kinds of plants that are known.
6. There are almost as many species of ants ( \_\_\_\_\_ ) as there are species of birds ( \_\_\_\_\_ ) in the world.
7. There are about \_\_\_\_\_ different kinds (species) of insects in the USA.

Answers below

1. 10 million
2. 2,000
3. 50 – a teeny tiny rubber tree plant
4. 100
5. 25%
6. 8,000 ants and 9,000 birds (known species)
7. 1,000



Once you've identified your weeds, learn how to manage them by reading these:

### Weed Management in Landscapes

<http://ipm.ucanr.edu/PMG/PESTNOTES/pn7441.html>

### Weed Management in Lawns

<http://ipm.ucanr.edu/PMG/PESTNOTES/pn74113.html>

# Lady Beetle Baby Photos

by Elaine Applebaum,  
Placer County Master Gardener

Most gardeners recognize adult lady beetles and know they are beneficial insects that keep aphids and other pests in check. But would you recognize the early life stages of this most loved insect? Lady beetles undergo complete metamorphosis, so the larval and pupal forms look very different than the adult. Last spring, I was fortunate to watch most of the lady beetle life cycle play out on the *Salvia* 'Bee's Bliss' in my backyard. I'm sharing this "baby album" so you will know what these garden allies look like in their youth and won't mistake them for pests.

To encourage lady beetles to take up residence in your yard, avoid pesticides and plant nectar- and pollen-rich plants. Take time to look closely in your garden this spring. You might be amazed at what you can find!



1. Lady beetle larvae have been described as looking like little alligators. They can be black or grey, and usually have some sort of yellow or orange-red markings that vary with species and growth stage. They are as small as a pinhead when they hatch from tiny yellow oval eggs (I didn't see this stage) and eventually grow up to 1/3" long, depending on the species.



2. They may not be as cute as human babies, but these youngsters work as hard as the adults, devouring aphids, scale, mites and other garden pests. During this feeding phase, a larva will outgrow and shed its skin (molt) three times.



3. After the feeding phase, the larva attaches itself to a stationary surface like this leaf and forms into a narrow pre-pupa, which will undergo one last molt.



4. After the final molt, it becomes a rounded pupa for the last stage of its metamorphosis. Though it may appear motionless and dead, do not disturb it or knock it off its support—important changes are taking place within.



5. The adult lady beetle has emerged, leaving the empty pupal case, or exuviae, behind.



## References

- Crenshaw, W. S. *Lady Beetles*. Colorado State University Extension Fact Sheet No. 5.594. July 2014. <http://extension.colostate.edu/docs/pubs/insect/05594.pdf>
- *Pests in Gardens and Landscapes: Quick Tips, Lady Beetles*. UC IPM Statewide Integrated Pest Management Program. October 2017. <http://ipm.ucanr.edu/QT/ladybeetlescard.html>

# Why Should I Know About Plant Growth Regulators?

By Jan Birdsall, Placer County Master Gardener

Many people today, especially gardeners, are becoming more aware and more selective about the food they eat; they consider its origins and what has impacted its growth and production. They may choose food grown with organic fertilizers and pesticides or with chemical fertilizers and pesticides, or some combination of the two. But they seldom consider the fairly common use of plant growth regulators in the commercial production of fruits and vegetables as well as nursery plants.

A Plant Growth Regulator (PGR) is a plant hormone, either naturally derived from organic material such as seaweed or liquid kelp - or the result of a combination of chemicals and/or other synthetics. It is applied by spray or other means to seeds or plants to modify their characteristics.

There are five types of hormones found naturally in plants at low levels:

- **Auxins** Promote adventitious roots, flower formation, and growth. Encourage central stem growth more strongly than side branches. Thin tree fruit.
- **Gibberellins** Stimulate cell division, elongation, and flowering. They break seed dormancy and can be used to influence timing of flowering, flower gender and flower size.
- **Cytokinins** Used to stimulate or retard plant growth, delay aging and death of plant. Useful for development of short bushy plants. Prolong storage life of flowers and vegetables.
- **Ethylene** Induces uniform ripening in fruits and vegetables. Helps in root development and shoot growth.
- **Abscisic Acid** Encourages germination and water stress management. During times of drought, it causes the plant to close off stomata to conserve water which causes death to leaves, flowers and fruit.

According to the University of Florida, PGRs have been in existence since the 1930s when acetylene and ethylene were first discovered and used on pineapple to enhance flower production. Synthetic auxins are well known as the active ingredient in most rooting mixtures. Organic and chemical/synthetic Plant Growth Regulators are regulated as a pesticide by both the U. S. Environmental Protection Agency (EPA) and the California Department of Pesticide Regulations. Commercial growers must adhere to specific instructions for use and application to their particular crop.

In California, according to the Department of Pesticide Regulations, PGR and pesticide use is strictly controlled. Growers apply low level PGRs to achieve a sought after purpose, such as increasing insect and disease resistance, preventing premature fruit drop in oranges or increasing root or stem strength. In addition, PGRs are applied to slow growth or keep young plants compact for easier transplantation from plant nurseries to the home grower. The shorter plants are not easily tangled, bent or damaged in transportation.



*In winters of inadequate chilling, a PGR is used to break dormancy of grape buds. Photo by Peter Christensen, used with permission of UC Regents.*

PGRs are commonly used with many kinds of crops including citrus, apples, grapevines and cotton to name only a few. When used according to approved label instructions and agricultural practices, these hormones are allowed to be utilized by licensed personnel. When overused outside of these requirements, they can cause problems with excessively fast growth, including external fruit ripening while interior fruit has not developed, or even death of the crop. In fact, in a more concentrated form, some PGRs are used as herbicides. These are regulated as a pesticide by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and must register as a pesticide with the EPA. Some PGRs are banned by the EPA for use on plants grown and intended for human consumption. A few of these PGRs (active ingredient named on packaging) are flurprimidol, ethephon, paclobutrazol, daminozide, chlormequat chloride, and hydrogen cyanamide. These are toxic to humans.

## References:

- *Plant Growth Regulators*. Plant Growth Regulators-Arkansas State University. 2006. [www.clt.astate.edu/mhuss/PLANT%20GROWTH%20REGULATORS\\_files/frame.htm](http://www.clt.astate.edu/mhuss/PLANT%20GROWTH%20REGULATORS_files/frame.htm)
- Fishel, Frederick M. *Plant Growth Regulators*. Plant Growth Regulators-University of Florida. 2015. <https://edis.ifas.ufl.edu/pdf/PI/PI13900.pdf>
- *Expectations for Pest Control Advisers: Plant Growth Regulators*. California Department of Pesticide Regulation. n.d. <http://www.cdpr.ca.gov/docs/license/grthreg.pdf>

agri-cola, ae *m* tiller of the field, farmer, husbandman  
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, tilled  
ta, orum *n/pl* tilled land, gardens, plantations  
cresco, crevi, (cretum) 3 to grow  
cultus *m* cultivation, labor, tilling; a) to till, cultivate  
b) care, training, education; c) to grow  
florens, tis blooming, flowering  
floreo, ui 2 to bloom, blossom  
flos, oris *m* flower, blossom  
fodio, fossom 3 to dig, dig  
folium, i *n* leaf; foliage  
herba, ae *f* grass, herb  
hortus, i *m* garden  
radix *f* root  
viridis, e *adj.* green  
vita, ae *f* life  
xylen *m* wood  
zen *m* wood

Corner

BotLat

Find Out What Those  
Weird Plant Names Mean

by Peggy Beltramo, Placer County  
Master Gardener

This column examines plant species' names that indicate their places of origin. It can be helpful to know where a plant came from, originally. That can help us understand what its cultural requirements are (sun/shade, heat/cold, swampy/dry). A plant's 'second name' after its genus often defines its origin. Look for these clues in a species name:

**Specific Geographical Regions**

- *californica*—from California
- *canadensis*—from Canada
- *canariensis*—from the Canary Islands
- *capensis*—from the Cape of South Africa

- *chinensis*—from China
- *japonica*—from Japan
- *magellanica*—from the south of South America! (Remember the explorer Magellan?)

**General Geographical Names**

- *australis*—southern areas of Earth
- *borealis*—northern areas of Earth
- *occidentalis*—from the west; i.e. not Asia
- *orientalis*—from Asia

**Habitat Locations**

- *campestris*—of the field
- *maritima*—near the sea
- *montana*—from the mountains
- *palustris*—from marshes
- *rupestris*—of hills
- *saxatilis*—of rocks
- *sylvestris*—of woods

Those are some of the passports our garden plants carry with them. Celebrate their origins and make them feel welcome in your yard.

**Resource**

- Mahr, Susan. *What's In A Name? Understanding Botanical or Latin Names.* Master Gardener Program University of Wisconsin Extension. November 2007. <http://wimastergardener.org/article/whats-in-a-name-understanding-botanical-or-latin-names/>

UCCE Master Gardeners  
of Placer County

33rd Annual  
Mother's Day  
Garden Tour

Sunday, May 13, 2018

10:00 am to 4:00 pm

RAIN or SHINE

Tickets \$20.00 each  
Children under 12 free

**6 unique gardens in  
Newcastle and Auburn**

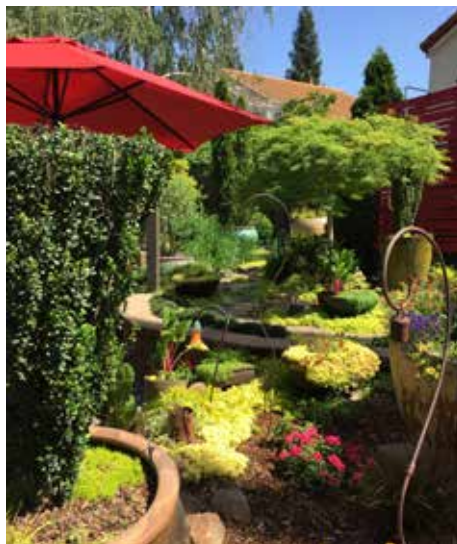
Tickets with maps  
will be available starting  
**Saturday, April 28** through  
the day of the tour at:

Eisleys Nursery  
380 Nevada St., Auburn  
(530) 885-5163

Green Acres Nursery & Supply  
5436 Crossings Dr., Rocklin  
(916) 824-1310

Green Acres Nursery & Supply  
901 Galleria Blvd., Roseville  
(916) 782-2273

This year discover formal and informal ways to incorporate edibles into the landscape for any size garden. See everything from small suburban spaces to a six acre farm. Grow what you enjoy!







## *Isomeris arborea*, Bladderpod

by Lynora Sisk,  
Placer County Master Gardener

This California native, *Isomeris arborea*, really shines as an UC Davis Arboretum All-Star. Bladderpod is one of the few native shrubs that bloom most of the year. The yellow flowers attract beneficial insects and hummingbirds. The shrub spreads out to make great cover and forage for songbirds and quail. With so many favorable attributes you can easily see why it's an All-Star.

Bladderpod is a medium sized bush that can grow 2 to 7 feet tall. The native is very appropriately named as the yellow flowers develop into bladder shaped seed pods containing 5 to 25 seeds. Bladderpod is a desert type plant and requires very low water. It is native to southern California, Baja California and Arizona, ranging in elevation from 200 to 4,000 feet. However it can tolerate a wide range of temperatures and has been grown as far north as Butte County.

You can start your own bladderpod from collected seeds that easily germinate. Plants can be propagated through direct seeding into flats or containers. Seedlings develop quickly so you'll need to move them to larger containers as they grow. Once established in gallon pots, you can transplant your bladderpod in the fall or spring to your chosen spot.

If you'd rather purchase a plant, you may be able to obtain one at the **UC Davis Arboretum Plant sale that takes place at the Arboretum Teaching Nursery. The sale dates are April 7, 29 and May 12.** You can also view bladderpod in the Arboretum's Desert Collection.

This All-Star is a true delight with its beautiful yellow flowers and attraction for beneficials and birds. If you collect the seed, be sure to leave some for the quail. Enjoy!

### References:

- *All-Stars Plant Details*. UC Davis Arboretum All Stars. n.d. [http://arboretum.ucdavis.edu/allstars\\_detail\\_63.aspx](http://arboretum.ucdavis.edu/allstars_detail_63.aspx)
- Smither-Kopperl, Margaret. *Bladderpod Peritoma arborea*. USDA NRCS Plant Guide. April 2012 [https://www.nrcs.usda.gov/Internet/FSE\\_PLANT-MATERIALS/publications/capmcp11060.pdf](https://www.nrcs.usda.gov/Internet/FSE_PLANT-MATERIALS/publications/capmcp11060.pdf)
- Dyer, Dave. *Bladderpod Cleome isomeris Greene*. USDA NRCS Plant Guide. March 28 2005. [https://plants.usda.gov/plantguide/pdf/pg\\_clis.pdf](https://plants.usda.gov/plantguide/pdf/pg_clis.pdf)

## 2018 Calendar and Gardening Guide!

2018 Calendar and Gardening Guide



Unlocking the Secrets to Successful Gardening  
Presented by the UC Master Gardeners of Placer County

Unlock the secrets to successful gardening with this 13-month calendar and gardening guide. The calendar is filled with beautiful photos and informative articles to empower gardeners to be successful. Monthly topics include pruning, importance of soil, winter and summer vegetable gardening, irrigation, home orchards, spring bulbs, home vineyards and more.

Features of the 2018 Calendar and Gardening Guide include:

- Monthly "what to plant" and "in season at the market" lists.
- Daily research-based gardening tips to remind gardeners of what to do and when to do it.
- References and resources for more gardening information. QR codes are included for quick access to online resources.

A limited number of calendars are still available at nurseries and businesses in Placer, Nevada, and El Dorado counties, at the Placer County Master Gardener office, and on our website. A list of vendors and how-to-order details are listed online at [pcmg.ucanr.org/2018\\_calendar/](http://pcmg.ucanr.org/2018_calendar/)

## Nevada County Master Gardeners Spring Plant Sale - May 12, 2018

By Ann Wright, Nevada County Master Gardener

As spring is drawing near, the Nevada County Master Gardeners are busy propagating, transplanting and caring for a multitude of young plants for the upcoming annual spring plant sale. This year's sale is scheduled for Saturday, May 12th from 9:00 am to noon at the Demonstration Garden at 1036 West Main Street in Grass Valley. Just in time for Mother's Day, the Nevada County Master Gardeners will be offering a huge variety of vegetable starts, flowers and some perennials as well as garden-related crafts.

In addition to standard hybrid and heirloom tomatoes, some newer varieties such as Red Racer and Sunchocola will be offered. Many of the tomato varieties were presented at the tomato tasting event last fall, and include cherry, paste and slicing types. Flowers will be in the spot light this year as several varieties will be offered including zinnia ('Zinderella Purple', 'Giant Cactus Lilac Empress', 'Raspberry Limeade', 'Queen Red Lime' and 'Dancing Girls'); marigolds ('Strawberry Blonde', 'Lemon Drop', 'Moonstruck Yellow', and Inca II Gold') and cosmos ('Cupcake', 'Cranberries', 'Lemonade', and 'Double Click'). Milkweed will also be sold as well as ambrosia melons, a variety of peppers and a host of other beautiful master gardener-grown plants!

For the list of plants available for sale, check the Nevada County Master Gardener website at [ncmg.ucanr.org](http://ncmg.ucanr.org) or contact us at our Hotline, (530) 273-0919.



## From May to October Visit Placer County Master Gardeners at:

### Auburn Foothill Farmers' Market

1st and 3rd Saturdays, starting May 5  
from 8:00 am to 12:00 pm  
105 Auburn Folsom Road  
Old Town Courthouse Parking Lot

### The Fountains Farmers' Market in Roseville

Every Tuesday, starting May 1  
from 8:30 am to 1:00 pm  
1013 Galleria Blvd, Roseville  
Whole Foods Parking Lot

UCCE Master Gardeners of Placer County will be available to answer your garden questions. Our booths will offer information, handouts, and advice related to vegetable gardens, composting, home landscapes, houseplants, pollinators, pest issues and much more. We love to chat and hope to see you there! Please stop by and say hello!

## Tips from the Frugal Gardener: Seed Starting & Scaring Birds

by Barbara Kermeen, Nevada County Master Gardener

For newbie gardeners who would like to try starting some seeds inside without investing in commercial pots, clean yogurt cups make great starter pots. Drill a drainage hole or two in the bottom of each, fill with potting soil, and plant. If you don't have a drill, you can punch holes in a stack of yogurt cups with a 10-penny nail and a hammer. In fact, you can use just about any kind of container as long as it's clean and has drainage holes in its bottom. Once the containers are planted, put them on a tray, like a cafeteria tray, or an aluminum or plastic tray that previously contained ready-made food.

Great bird deterrent: Don't throw away all those CD's of unwanted music and out-of-date computer programs. String twine between tomato cages, then tie a string through the CD, and suspend it from the twine tied between the tomato and pepper cages. The disc will twist in the breeze casting random glints of light all over the nearby plants.



# Events Calendar

## Nevada County Demo Garden

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

## Placer County Test Garden

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

### March

#### March 3

10:00 am - noon

#### **Water Wise Gardening**

Grass Valley Elk's Lodge

109 S. School St.

#### March 10

10:00 am - noon

#### **Edibles and Herbs**

Roseville Utility Exploration Center

1501 Pleasant Grove Blvd., Roseville

Small fee; register at 916-746-1550

#### March 10

10:00 am - noon

#### **The Amazing Mason Bees**

Grass Valley Elk's Lodge

109 S. School St.

#### March 17

10:00 am - noon

#### **Totally Tomatoes**

Grass Valley Elk's Lodge

109 S. School St.

#### March 24

10:00 am - noon

#### **Gardening Smart Not Hard**

Grass Valley Elk's Lodge

109 S. School St.

#### March 31

10:00 am - noon

#### **Practical Irrigation in Nevada County**

Demo Garden, NID Grounds

1036 W. Main St., Grass Valley



Nevada County events  
in green boxes



Placer County events  
in yellow boxes

### April

#### April 7

10:00 am - noon

#### **Introduction to**

#### **Vegetable Gardening**

Grass Valley Elk's Lodge

109 S. School St.

#### April 14

10:00 am - noon

#### **Firewise Landscaping**

Grass Valley Elk's Lodge

109 S. School St.

#### April 14

10:00 am - 3:00 pm

#### **3rd Annual Garden Faire**

Rocklin Community Center

5480 5th St., Rocklin

#### April 14

10:00 am - noon

#### **Composting and Mulching Basics**

Roseville Utility Exploration Center

1501 Pleasant Grove Blvd., Roseville

Small fee; register at 916-746-1550

#### April 19

9:30 am - 3:00 pm

#### **Placer Co. Master Gardeners at**

#### **Sierra College Earth Day**

Sierra College Rocklin Campus

#### April 21

10:00 am - 4:00 pm

#### **Home & Garden Show Booth**

Nevada County Fairgrounds

#### April 28

10:00 am - noon

#### **Container Gardening**

#### **Solves Many Problems**

Grass Valley Elk's Lodge

109 S. School St.

### May

#### May 12

9:00 am - noon

#### **Spring Plant Sale**

Demo Garden, NID Grounds

1036 W. Main St., Grass Valley.

See page 10 for more information

#### May 13

10:00 am - 4:00 pm

#### **Mother's Day Garden Tour**

Placer County Gardens.

See page 8 for more information

#### May 18, 19, 20

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

#### May 19

10:00 am - noon

#### **Soroptimists Garden Tour**

TBA - Nevada County

#### May 26

10:00 am - noon

#### **How to Build Raised Beds**

Demo Garden, NID Grounds

1036 W. Main St., Grass Valley

### June

#### June 2

10:00 am - noon

#### **Transform Yard into Landscape**

Demo Garden, NID Grounds

1036 W. Main St., Grass Valley

#### June 9

10:00 am - noon

#### **Using Native Plants to Attract Birds**

Demo Garden, NID Grounds

1036 W. Main St., 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 70's 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.

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Placer County Master Gardener

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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

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Please note all gardening advice and information is geared to the climate and conditions of Placer and Nevada Counties, CA.

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