



The Virtual Gardener— I Say Po-TAY-to—You say Po-TAH-to

Of all the things that frustrate many gardeners, the funny names that botanists give to plants has to be near the top of the list. We all grew up learning the names of many plants with easy to remember **American** names like “dandelion,” “snapdragon,” and “tomato,” not “*Taraxacum officinale*,” “*Antirrhinum majus*,” and “*Solanum lycopersicum*.” Not only are these funny-looking scientific names difficult to remember, they seem impossible to pronounce. For that reason many gardeners avoid using them altogether, and that’s a shame.

As I have written before (see [A Rose by Any Other Name](#), [What’s in a Name](#), and [Naming the Plant World](#)), the scientific names are important for many reasons but the most important of these for gardeners is that they are universal and unique. The common names are neither. For example, our “buttercup” (*Ranunculus sp.*) is a “bouton d’or” or “gold button” in French. Even worse, the genus *Ranunculus* includes about 600 species and many of those may be referred to as “buttercups,” even though they are completely different plants.

Most of the scientific names given to plants are derived from Latin or Greek roots. Even those containing words with non-Latin origins are usually “Latinized.” For example, an agave that commonly grows in our area is

named *Agave parryi*, after Dr. Charles C. Parry, a 19th century botanist. Note how the spelling of “Parry” is changed to “parryi” to Latinize it.

One of the reasons Latin and Greek were chosen as the basis for naming plants was because they were the common and universal languages understood by all educated people in polyglot Europe prior to the 20th century. Since no one speaks these ancient languages today, we really don’t know how they should be pronounced and there is much confusion on the subject. English-speaking botanists tend to pronounce botanical names in one way and Continental European botanists in another. And neither group is totally consistent. Most botanists pronounce the names in whatever way they were first taught. So what’s a gardener to do?

The first and most important rule is not to be intimidated. Do the best job you can in trying to come up with the pronunciation (see some helpful hints below) but don’t be chagrined if someone corrects you. Just go with the flow and understand that they don’t really know the authentic ancient Roman or Greek pronunciation either. The main thing is to communicate accurately. [In Australia I was once shopping for some o-REG-a-no and told the correct name of the spice was o-re-

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GAN-o. So I switched pronunciation and got what I was looking for. When in Rome . . .]

Probably the easiest and most convenient way to find a recognized pronunciation is to use a reference that gives a phonetic spelling along with the botanical term. There are many of these. Your first stop might even be a regular dictionary. Although standard dictionaries may not be very comprehensive when it comes to plant names, they do often include the botanical names of the more common plants along with their pronunciations. There are also a number of books with lists of botanical names and their pronunciations. One that I have in my personal library is *A Gardener's Handbook of Plant Names, Their Meanings and Origins* by A. W. Smith (Dover 1997, Mineola, NY). As the title suggests, this book not only provides phonetic spellings of the names but short explanations of what they mean or how they originated.

Of course in this age of the Internet, there is no need to buy a book. References with phonetic spellings of botanical names abound online. Some even come with spoken pronunciations. One of the most extensive lists is the "[Botanary](#)" or *Botanical Dictionary* on the Dave's Garden website that contains over 21,000 entries, including both plant names and other botanical terms. The [Plant Finder](#) on the Missouri Botanical Garden website provides spoken pronunciations of genus and species names but unfortunately many of our Southwestern desert plants are not listed. Another resource for spoken pronunciations is a website called [HowjSay](#). The voice speaks with a decidedly British accent, but both American and British pronuncia-

tions are given where they differ. For example the pronunciation of "oregano" mentioned above is given in both versions. Although HowjSay is a general purpose resource and not specialized for botanical terms, it is surprisingly comprehensive.

But what if you can't find a pronunciation for a plant name in one of these references? In that case there are some general guidelines you can use (or ignore, if you wish). Here are some tips for pronouncing vowels and consonants and determining which syllables to stress.

Pronouncing vowels

- As in English, vowels may be long or short. Although some people have attempted to establish complex rules for when to use each form, the best rule is to use the one that sounds right to you.
- With some exceptions, every vowel is generally pronounced, but names that contain the two letter combinations "ae" and "oe" are pronounced as a single vowel, either a long e (as in "bee") or a short e (as in "met"). When Latinized proper names end in "ii," it is not necessary to pronounce them both, thus "douglasii" becomes "douglas-ee" and not "douglas-ee-eye." The ending "oides" is another exception. Pronounce it "OY-deez," not "o-EYE-deez."

Pronouncing consonants

- Most consonants are pronounced as in English.
- CH is almost always pronounced as "K," as for example, "Chrysanthemum."
- Some initial consonants are silent. When the combination seems impossible to pronounce, don't try to pronounce it. For example, an initial "p" is silent when followed by "t," "s," or "n." Other initial silent consonants include "c" followed by "t," "m" followed by "n," and "t" followed by an "m." When

you encounter one of these just ignore the initial consonant and start the word with the second consonant.

Stressing syllables

- Stress is usually determined by the number of syllables.
- In two-syllable names the stress is on the first syllable. For example *Quercus* is pronounced "QUER-cus" and not "quer-CUS."
- In three-syllable names, the stress is commonly on the next to the last syllable (as in Spanish). For example, *Hibiscus* is pronounced "hi-BIS-cus."
- In names with more than three syllables, the stress is typically on the second from the last syllable. For example, the genus name for snapdragon, *Antirrhinum*, which has four syllables is pronounced "an-TEE-ry-num." But some sources also include names with three syllables in this rule. The Botanary on the Dave's Garden website recommends pronouncing the genus name for mesquites, "*Prosopis*," as "PRO-so-pis," but I have always heard it pronounced as "pro-SO-pis."

So there you have it. I Say Po-TAY-to—you say Po-TAH-to. Please don't obsess over the pronunciation of botanical names. Use them and pronounce them in a way that sounds right to you and is understandable to the person you are talking to. The most important thing is communication.

For a comprehensive discussion of plant names check out [California Plant Names: Latin and Greek Meanings and Derivations](#) and especially the [article](#) on this website that describes in great detail the problems of pronunciation.

For a pragmatic and iconoclastic discussion on how to pronounce botanical names, check out the [Hudson Seeds website](#).

Until next time, happy surfing.

Gary Gruenhagen, Master Gardener
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This Month In the High Desert Garden— Get Out and Do Some Yard Work

(Editor's note: This article written by Bill Schulze was adapted from a November 2011 article published in the *Sierra Vista Herald*.)

The next few months will bring cool weather, just perfect for getting those labor intensive jobs you've been meaning to do started . . . and finished. It's a time for putting in a drip irrigation system (a real water saver), fixing or installing fences, or cleaning the yard in general. Don't go pruning your trees and shrubs, though. Wait until January or February when the plants are dormant. Instead of pruning, replace your old mulch with new. The old stuff can harbor pests and diseases, think insect eggs, insect larvae, and fungal spores. Rake the old mulch up and bag, burn, or compost it, then install a fresh new layer. There are many forms of mulch, including pine needles, compost, straw, and shredded leaves, even grass clippings. If you don't make your own compost, it can be purchased by the bag from local nurseries. Compost and mulch are also available in bulk from the City of Sierra Vista.

We're likely to get a freeze in November, so think about protecting frost sensitive plants. Look at the following web address for a Cooperative Extension bulletin on frost protection:

<http://ag.arizona.edu/pubs/garden/az1002.pdf>. Frost protection techniques can be remarkably effective, so read the bulletin and follow it!

Good choices for annual flowers are pansies and petunias. As a bonus, pansy flowers are edible. Add them to a salad



for a colorful splash. November is the time to plant daffodil and tulip bulbs so you can enjoy their beauty next spring. It's still a good time to plant cold hardy trees and perennials. The plants will be much less stressed than if you'd planted them in warmer weather when the need for moisture is greater. In the vegetable garden, continue to plant cool season crops like lettuce, carrots, beets, cabbage, kale, garlic, and onions. Herbs that will do well in cool weather include parsley, rosemary, thyme, and chives. A good book to help guide you through the various desert planting seasons is *Gardening in the Deserts of Arizona* by Mary Irish.

We've heard a lot of complaints about grasshoppers lately. Conventional wisdom says that a cold winter will significantly reduce the number of these pests the following summer. So much for conventional wisdom, eh? In any case, grasshoppers are a tough problem. They're voracious and they number in the bajillions. The best protection is to cover plants with floating row cover or an equivalent light cloth-like material. This works well for cool season veggies, but it's not so great for plants that need bees to pollinate them. It's not so good for ornamentals, either. Who wants to look at flowers covered in old sheets?

There are insecticides that are approved for grasshopper control, but these typically kill beneficial ones like bees. And with the 'hoppers being so numerous, killing a few doesn't really help when those in your neighbors' yards are unaffected and ready to invade. A "natural" pesticide for controlling them is *Nosema locustae* (one brand name is NoLo Bait). *Nosema* is a microorganism that kills grasshoppers and crickets and has no effect on other creatures.

As a bonus, grasshoppers, being cannibalistic, will eat their dead brethren and will also be killed. Unfortunately (there's always an "unfortunately" isn't there?), the product must be applied early in the year as it doesn't have much effect on adults. It must also be applied over several acres, so if your neighbors (and your neighbors' neighbors, etc.) don't use the product or if you live next to the desert, killing them in your yard only will be of limited effectiveness. It is of help to keep your yard well mowed to cut down on food and cover for the grasshoppers. Encourage your neighbors to mow as well. Like I said, grasshoppers are a tough problem. Maybe you could send your young'uns out with a tennis racket!

If you have hummingbird feeders, don't take them down for winter. Many hummers stay here year around. We took our feeders down during the nights of the "Big Freeze" so the sugar water wouldn't freeze solid. When rehangng them early on those chilly mornings, the hummers were on them before we could even get back in the house.

Happy gardening!

Bill Schulze, Master Gardener

November Reminders

- ◆ This is a good time to install a drip system
- ◆ Replace summer mulch with fresh mulch
- ◆ Start a winter herb garden
- ◆ Protect plants from frost

Cuttings 'N' Clippings

☼ CCMGA will not be meeting in November.

☼ The next Water Wise lecture will be **Saturday, November 1, Septic Care, 9—11:30 AM**. Proper care for a septic system will help prolong the life of the system—and protect well water quality.

Presenter: Dr. Kitt Farrell-Poe, UA Water Quality Specialist

Location: UA Sierra Vista, 1140 N. Colombo Ave, Sierra Vista, AZ, Groth Hall, Public Meeting Room—Free.

INFORMATION: Look under Septic care in [Links](#)

For more information: (520) 458-8278, Ext 2141, or contact Valerie at:

valeriedavidson@email.arizona.edu

You can visit Water Wise at:

waterwise.arizona.edu

☼ **Water Wise Help For Cochise County Residents:** Need help with your landscape? Don't know how to water or what that plant is in your yard? No fear, Water Wise is here! Water Wise specialists are available to visit your home or business and help you do what you want, but more water efficiently. A qualified water conservation educator will visit your home or business and give tips specific to you! Contact us! (Phone numbers listed below).

- **Free Irrigation Inspection:** Do you know how your irrigation system works? Do you know if it leaks? Do you know how to set the timer? We can help!

- **Free Landscape Design Consultation:** Need ideas on how to have a lovely, low-water landscape? Want to have a landscape that relies on rainwater harvesting? We can help!

- **Free Rainwater Harvesting Consultation:** Want to collect rainwater but don't know where to start? Have a system you would like to expand? We can help!

- **Free Home Inspection:** Wonder why your water bill is so high? We can help! Water Wise specialists will visit your home and help you troubleshoot leaks.

University of Arizona Cooperative Extension Water Wise Office County Locations:

University of Arizona Sierra Vista, 1140 N. Colombo, Sierra Vista, AZ, 520-458-8278 x 2141 Cado Daily

66 Brewery Gulch, Bisbee, AZ 520-366-8148

Cochise County Building, 450 S. Haskell, Willcox, AZ 520-384-3594

Ask a



Cochise County Master Gardeners are available to answer your gardening questions either by telephone call to the Cooperative Extension Office or on-line on our web site at:

<http://ag.arizona.edu/cochise/mg/question.htm>

The following comes from our web site's Frequently Asked Questions:

Question: Should I fertilize and water my outdoor plants during the winter?

Answer: Fertilizing of trees and shrubs during the winter in the high desert should not be done. Fertilizer could stimulate plants to come out of dormancy, start new growth, and winter damage could occur. These plants are "resting" above the ground but do have activity in the roots if soil temperatures are warm. Normally trees and shrubs that go into winter with adequate soil moisture do not need watering during the winter. Usually winter rains or snow provide enough water. Deciduous plants do not need much water because the leaves, where transpiration

occurs, are gone and nutrients needed for growth are not required because there is no shoot growth. The same holds true for most evergreen plants. When the air temperatures are cold and sunlight is reduced, why grow? However, if winter moisture is not sufficient to keep the roots moist they will die. If no winter moisture occurs for four to six weeks then water.

Cochise County Master
Gardener Newsletter Editor
Carolyn Gruenhagen

At a Glance Box

It's a Bloomin' Cochise County Native Plant of the Month

Plant: Wild Buckwheats: Sorrel, Abert's and Wright's

Description: Flowering herbaceous and sub-shrub plants

Blooms: Tiny (1/8" – 1/4") white or pink flowers, spring, fall

Water Need: No supplemental

Use: Excellent RainScape (landscapes supported by rainwater alone) plants

Culture: Well-draining soil, full sun, part shade. Common on rocky slopes, canyon sides, valley floors 2,500-5,000' elevation.

Learn more: Cochise County Herbarium,

www.cochisecountyherbarium.org

For an in-depth article, see below.

Cado Daily

Water Resources Coordinator, Water Wise Program

University of Arizona Cochise County Cooperative Extension

Wild Buckwheats

This month, I am thrilled to co-author this article with Mimi Kamp. Mimi is a published plant illustrator, is incredibly knowledgeable about native plants, and is one of the key volunteers at the Cochise County Herbarium. Together, we thought to share our wonder of three buckwheat species with you.

When we think of buckwheat, images of a bitter pancake grain may first come to mind. But in the landscape/native plant world, buckwheat can describe a wonderful, delicate yet tough, plant with tiny white or pink flowers or small clusters of yellow flowers.

Here in Cochise County, there are at least ten species of the buckwheat genus *Eriogonum* (air-ee-OG-onum), and several of them can be lovely additions to a cultivated or natural landscape.

At this time of year, the more striking buckwheat plants are the *E.*

polycladon or “Sorrel buckwheat”, the *E. abertianum* or “Abert’s buckwheat” and or “Wright’s buckwheat.” Other Cochise County buckwheats include wirestem (*E. pharnaceoides*), roundleaf (*E. rotundifolium*), skeletonweed (*E. deflexum*), Thurber’s (*E. thurberi*), winged (*E. alatum*), antelope sage (*E. jamesii*) and little desert trumpet (*E. trichopes*). Fun common names and easier to pronounce than the botanical names!

Two of the three highlighted buckwheat species—Sorrel and Abert’s—are herbaceous annuals or biennials (meaning they die in a year or two). Don’t expect to find them in nurseries because they are short-lived, unlike the Wright’s buckwheat. If you are lucky enough to have Sorrel or Abert’s buckwheat plants on your property, encourage them to ma-

ture so they can drop seeds and grow for the next year’s annual flower show.

The Sorrel buckwheat, blooming June to November, has very small pink flowers distributed along wand-like stems and is striking in



Eriogonum polycladon
Photographs by Mimi Kamp



groups where they create an area of soft pinkness in the landscape. It is found in well-draining soils of alluvial fans, in canyons and on

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the banks of arroyos as described in *Flowering Plants of New Mexico* by Robert DeWitt Ivey (great plant ID book with line drawings). Abert's buckwheat can be seen growing on mountain slopes and in valleys with its broad (1/2-1") gray/green basal leaves. Along the stem, flowers are arranged in spherical clusters that dot the landscape with small white balls March through September.

The Wright's buckwheat subshrub, a bright and happy bloomer, has a presence in the landscape even when not in bloom because of its woody form and evergreen leaves. When blooming June through October, the plant resembles a cloud of tiny white flowers like the baby's breath used in flower arrangements. Not only is the plant lovely, but a Mrs. Collom quoted in Kearney and Pebble's *Arizona Flora, 1951* ("K&P" for short) remarked, 'The flowers yield a fine, almost colorless honey' and buckwheat honey is still a favorite. Wright's buckwheat is also an important browse plant for deer.

Like many other flowering plants, these buckwheats are a two-for-one. As the flowers fade, they turn a dark rust color that is striking en masse.

If you are lucky enough to have native plants on your property, perhaps you will find these beauties pop up without any care or attention. If you do not have a natural plant area in your yard (or even if you do!), take walks in the mountains and grasslands to discover these hidden treasures

Cado Daily, M.A.
Water Resources Coordinator

Mimi Kamp
Botanist, illustrator, herbalist



E. wrightii

