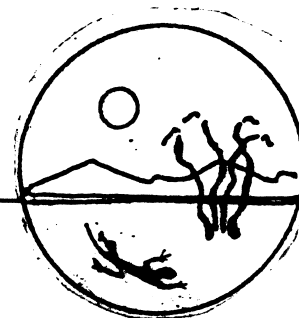


High on the Desert

Cochise County Master Gardener

Newsletter



University of Arizona and U.S. Department of Agriculture cooperating.

PLANT PROFILE— Bring on the Wildflowers

Botanical name: Penstemon (pen-stay-mon)

Family: Scrophulariaceae

Range: Native to the Western United States and Mexico

This huge genus of wildflowers is essential for any xeriscape garden and is one of the best flowers for attracting hummingbirds. There are more than 250 penstemon species. They can be found growing on sandy, arid hillsides; in forests; on the plains; and from the low deserts to the highest mountains, so choosing a species suited for your specific conditions no matter where you live is easy. They range from 1 to 6 feet in height and can spread from 1 to 3 feet across. Most are perennial, can be deciduous or evergreen, are drought-tolerant, come in a rainbow of colors, and like their relative, the snapdragon, produce flowers along a spike.

Penstemons feel at home in rock gardens, borders, courtyards, containers, wild gardens, meadows, and look wonderful with Southwest plants which share their water usage to include yuccas, cacti, and our native trees and shrubs. Plants improve with age and reach their glory in the second or third year.

After blooming, let the seed heads ripen on the stalk, collect, and scatter them where you want to start a new colony or leave seed heads on the plant and let them do the work for you. Depending on the

weather conditions in winter, you should see new volunteers next spring. Most require well draining, loose sandy or gravelly soil. Poorly drained soils encourages crown rot, as well as "wet mulches" (wood mulches), so use a "dry mulch" such as sand or rocks. During the bloom period, if the weather is hot and dry, a supplemental, deep irrigation every ten to fourteen days will keep the foliage and flowers looking their best.

If you are new to this wonderful group of plants, here are a few of the easier ones to try first. If you are a "Penstemaniac," go crazy! *P. eatonii* (Firecracker Penstemon) grows 2 feet high x 15 inches wide. Native to Utah. A prolific bloomer in late spring with numerous spikes of scarlet flowers and dark green foliage. A head turner. *P. palmeri* (Pink Wild Snapdragon) grows 4-5 feet high x 24 inches wide. Native to New Mexico and Arizona. Very hardy, heat-tolerant beardtongue with highly fragrant spikes of huge, light white blossoms that are tinged with lilac or pink. Flowers in early summer. Grey foliage. *P. pseudospectabilis* (Desert Beardtongue) 36 inches x 18 inches wide. Native to southern New Mexico. Loves hot weather! Long spikes of hot pink flowers with grey leaves. Deadheading faded flowers will keep the plant blooming for many months.

Penstemon - a wildflower you should get to know. Happy Spring everyone!

Cheri Melton
Master Gardener/Staff Writer

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Oops!

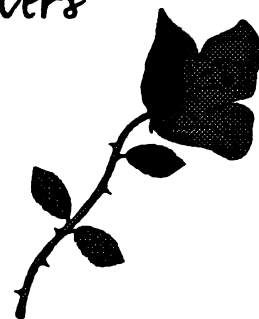
The first page article, second paragraph, (Acacia) of February's newsletter should have read:

A. stenophylla (shoestring acacia) is widely used in Sierra Vista and looks great planted with eucalyptus and palo verdes. Leaf threads are long and narrow which produces a beautiful weeping effect. Flowers are white puffballs and can appear during winter and spring. A fast growing evergreen tree to 30' tall with a 20' spread. *A. greggii* (catclaw acacia) is a long-lived (one hundred years or older) deciduous shrub. Plants found in Mexico can reach up to 15' but it usually grows to no more than 6'. It is also known as the "frito" plant because the flat, wide fruits are twisted like corn chips. The flowers are yellow, sweet-scented, and attract bees and butterflies. The seeds are relished by quails and desert animals seek refuge in its branches which contains sharp, cat-like claw thorns. *A. redolens* (prostrate acacia) is a spreading, evergreen groundcover that can spread up to 15' and often stays under 2' in height. Leaves are narrow, pointed ovals, grey-green, and leathery. In spring small, puffy yellow balls cover the plant. Noted as one of the best sprawling plants for arid climates and can die out if overwatered.

Sorry for any inconvenience!

March Reminders

- ✓ Winter prune trees
- ✓ Water periodically
- ✓ Cold-moist stratify seeds
- ✓ Order from seed catalogs
- ✓ Prune rose bushes
- ✓ Plant bare root trees
- ✓ Prepare spring planting beds
- ✓ Clean & repair drip irrigation system
- ✓ Plant seeds indoors for transplanting after last frost date



Cuttings

'N'

Clippings

- The Cochise County Master Gardeners Association meets monthly, the first Wednesday of the month, at 5:00 pm. Please call the Sierra Vista Cooperative Extension Office for the location. All certified Master Gardeners/Trainees are invited to attend.
- Tucson Botanical Garden, Tucson, AZ will be holding their Spring Plant sale on March 22 and 23.

Newsletter Staff:

Peggy Dierking
Carolyn Gruenhagen
Barbara Kishbaugh
Cheri Melton
Virginia Westphal

Robert E. Call
Robert E. Call,
Extension Agent, Horticulture

Useful Definitions

Annual: A plant that completes its life cycle in a year or less. Seed germinates, plant grows, blooms, sets seed, and dies all in one growing season.

Biennial: A plant that completes its life cycle in two years. Seeds are sowed in spring or plants are set out in summer/fall. Plant blooms the following spring, sets seed, and dies.

Deciduous: A plant that sheds its leaves, usually in the fall.

Herbaceous: A plant with soft tissues. Plants die down to the ground every year and regrow stems the following season.

Perennial: A nonwoody plant that lives for more than two years.

Semi-evergreen: In mild winters the plant will keep its leaves; in cold winters or severe drought will lose its leaves.

Source: *Sunset Western Garden Book*

The Virtual Gardener— Composting

How many of you know that Sierra Vista recycles a greater percentage of its waste stream than any other city in Arizona—15 percent to be exact? I didn't know that either until I heard Pat Bell of the Sierra Vista Department of Public Works speak at a recent Cochise County Master Gardeners Association meeting where I learned that this remarkable percentage is the result of the city's highly successful composting program. Later, at the High Desert Gardening & Landscaping Conference, I had the opportunity to visit the city's composting facility and see first-hand how it operated. I was especially impressed by the scientific rigor with which the composting process is regulated. Ed, the plant supervisor and our guide for the tour, was very knowledgeable about carbon-nitrogen ratios, optimum temperatures, moisture levels, and the like. My curiosity prompted me to see what information I could find about composting on the Web. A quick search using the Alta Vista search engine found 20,000 documents containing the word "compost."

A favorite site of mine that turned up in the search is hosted by Cornell University (<http://www.cals.cornell.edu/>

dept/compost/). Here is listed everything you ever wanted to know about composting. One section deals with the scientific and engineering principles involved in the composting process. Another section discusses composting projects that can be used by school teachers in the classroom. And a third section contains extensive lists

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of references. I found the scientific and engineering discussions to be the most interesting.

One of the biggest problems for composters in Sierra Vista at certain times of the year is finding enough green stuff (nitrogen-rich materials) for the pile. A page at the Cornell site discusses using nitrogen fertilizers for this purpose. It says that organic nitrogen sources (green stuff) decompose slowly, releasing nitrogen at rates comparable to the rate of growth of microorganisms in the compost. Synthetic fertilizers, on the other hand, release nitrogen at very fast rates that exceed the ability of the microorganisms to use it. This is especially true during the colder months when lower temperatures slow down the growth rate of the microorganisms. As

a result, more nitrogen is released than can be taken up and the excess is released as ammonia gas.

In order to preclude the formation of the ammonia gas (which can be detected with your nose) you should apply nitrogen fertilizers lightly in a series of applications over a period of time. Also, the total amount of fertilizer to be applied is much less than might be expected from its nitrogen content alone, although no research results are available to quantify the rates or amounts.

This site offers something for everyone interested in composting. If you are the engineering type who likes to quantify everything, there are tables of carbon, nitrogen, and moisture values for a wide variety of materials and formulas to determine the optimum mixes of everything going into your compost pile. If, on the other hand, you are a free spirit who uses the pds (pinch, dab, and smidgen) method of constructing your compost pile, you will also find plenty of practical, easy-to-understand instructions to make your composting experiences even better.

*Gary Gruenhagen, Master Gardener
(gruenha@c2i2.com)*

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*Gardeners know  
the best dirt!*

## The Agent's Observations

**Q** There are two weeds that grow on my property that produce burrs. One is clover-like and the other is a grass. They stick to clothing, blankets and animal flesh including my own! What are they? I spray them with herbicide but they reappear. How can I control them?

**A** The two plants that are producing burrs in your yard are bur clover, *Medicago hispida* Gaertn., and field sandbur, *Cenchrus pauciflorus* Benth., which is a grass. Both of these plants are annuals and sometimes short-lived perennials reproducing from seeds.

Bur clover is a low trailing plant found in lawns, gardens and along roadways and waste areas. Plants stem weakly, branching from the base and radiating out from a taproot one quarter to two feet long. Leaves are composed of three lobed clover-like leaflets with toothed edges and indented tips. Where the leaf joins the stem there is a pair of small leaf-like structures. Yellow flowers are produced during early spring and late fall. Seeds are found in spiny pods. The pods are straw colored or brown when mature and contain several kidney-shaped seeds which are yellowish or tan colored.

Bur clover should not be confused with another weed of the same genus called black medic, *Medicago lupulina* L., which is very similar but has hair, not spines on the seed pods. Both

are natives of eastern Europe and Asia and are cousins of alfalfa.

Field sandbur, not to be confused with southern sandbur, *Cenchrus echinatus* L., is a warm season grass found in dry, sandy, cultivated soils in lawns, roadsides, washes, and waste places. Plants are from eight inches to three feet tall with shallow roots which spread horizontally forming mats. Leaf blades are flat but can be twisted or folded and are two to five inches long. Reproduction is by seed or by prostrate stems that root. Burs grow in spikes one to three inches long and bear 10 to 30 burs each that are a shiny, straw yellow that contain two seeds. Each plant can produce up to 1,000 seed.

**Control:** These annual weeds arise primarily from seeds. Cultivation of young and/or mulching before seeds germinate can control these plants. On non-crop land, soil solarization, moist, tilled soil covered with black plastic, can kill weed seed. Control with herbicides like Roundup or 2,4-D is best accomplished on young plants. Herbicides or cultivation of mature plants will not control these weeds in the long run if seeds are allowed to mature. If seeds are allowed to develop then chemical controls must be applied before seeds germinate. Bur clover germinates during the cool weather of early spring or fall. Sand bur germinates during the warm weather of spring or summer. Herbicides that can be applied before seeds germinate are Gallery, which

controls broadleaf weeds like bur clover or Surflan would be a second but not as effective choice. Field sand bur growing among broadleaf plants can be controlled using Poast or Fusilade. On non-crop land several compounds can be used including Stomp, Bueno, or other soil sterilants. Some of these compounds are only available to licensed pesticide applicators. As with all pesticides read the label and understand their use.

**Source:** *An Illustrated Guide to Arizona Weeds*, 1980. Author: Kittie F. Parker.

**Q** I have apple, peach and plum trees that were planted in 1963. They are being attacked by a boring insect that makes trails under the bark. What can I do to get rid of these insects?

**A** There are several insects that will bore into and make galleries under the bark.

These insects however for the most part, attack only weak growing or old trees. The trees are nearly 34 years old and fall into the weak and old tree category. Generally fruit trees if cared for will live for 25 to 35 years. There are some exceptions like pear and apricot trees. I would not spend a lot of time on these trees that are naturally declining anyway, other than taking them out and replacing them. I would plant some new fruit trees if you want to harvest fruit over the next few years.

*Robert E. Call*  
Extension Agent, Horticulture

## Grow Your Own Decorations

Since many of us are busy going through the catalogs and planning our gardens for this year, it seems like a good time to think about growing some of your own decorations for next fall and the holidays. Looking around the house, I thought of all the decorations I have that were "home grown" in my garden.

There is a dried arrangement which contains okra pods, statice in shades of blue and pink and mauve, wild-collected thistle pods and some tops of corn stalks, all arranged in a basket. Many annual flowers are available especially for drying, and lots of perennials and herbs dry well, also. On a visit to the florist one day I noticed that they had hot peppers, still on the plant, picked and displayed in the case. Dried peppers are easy here, but I hadn't thought of drying them on the stem so they could be put into an arrangement! Ristras are easy, too, if you grow your own peppers. I especially like the little "firecracker" peppers to make into mini-wreaths and ristras.

Last year I grew tiny pumpkins Tiny Tim (orange) and Baby Boo (white), both grow well here. They are very decorative, and can be expensive to buy at the store. I had enough to send a box full to my granddaughters for decorating at their

house from just a few vines. They loved painting funny faces for Halloween, especially on the white ones. Of course, you can grow large pumpkins, for Jack O' Lanterns, too. And, I haven't even mentioned gourds! Not only are there many different sizes, shapes, and colors of gourds but even more ways to decorate with them. Whole books have been written on decorative uses for gourds.

I have also grown ornamental popcorn in different colors, "Little Boy Blue," a pink and also a variegated variety that had lots of yellow and black kernels on the small 6 inch or so cobs. They are good decorations for a table or attaching to a wreath. The mauve-pink and dusty blue colors go especially well if you have "country" colors in your home. Strawberry popcorn is another great decoration.

Even the last of the season's veggies can be very decorative. At Thanksgiving, I fill a cornucopia-shaped basket with okra, eggplant, peppers, and corn and this year a few tomatoes picked green when frost was coming and ripening nicely to provide red color in the arrangement.

So - while browsing the catalogs, keep some decorations in mind, too.

*Maggi Crist  
Master Gardener*



## Castor bean *Euphorbiaceae*

The Castor bean is usually utilized in home landscaping projects for shade purposes (near windows) and for its ability to form fast-growing property borders. It is an attractive plant to display in one's yard during the hot Arizona summer months, plus it's also inexpensive to grow (neighbors readily give away its beans) and it's an easy keeper.

Reaching approximately six feet in height, the palm-like leaves are large and are supported on stout stems. The spiny clusters of fruits produce up to three seeds (beans) each; the beans have a mottled appearance but are smooth to the touch.

Originally, a cultivated oil crop, this plant may grow along roadsides, ditchbanks, in vacant lots, and in the unkempt yards of deserted houses and neglected property.

So, what's the problem with the Castor bean? All parts of this plant are extremely toxic to both humans and animals (even handling the beans may cause skin irritation).

*Peggy Dierking  
Master Gardener/Staff Writer*

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## **Conference Huge Success!**

The dedicated volunteers of the Conference Committee did it again! The Fourth Annual High Desert Gardening & Landscaping Conference drew 125 attendees and 21 presenters from Texas, New Mexico, California, and of course from all over Arizona. From the comments we got, it sounds like everyone had a great time! A special note of thanks to Cowboy Poet, Bud Strom who graciously recited several of his poems, including *Dry Lightning*.

I especially want to thank the **Committee Chairpersons** and members who gave so much of their time, energy, and talents to make the conference successful: **Rob Call**, Extension Agent, **Jena Barnett**, **Dutch Cauwels**, **Alice Christ**, **Frank Christ**, **Peggy Dierking**, **Elaine Gaar**, **Jan Groth**, **Gary Gruenhagen**, **Wilma Hinzman**, **Barbara Kishbaugh**, **Barbara Kuttner**, **De Lewis**, **Cheri Melton**, **Sheri Quinn**, **Jean Reese**, **Elizabeth Riordon**, and **Joyce Williams**, Cooperative Extension, Sierra Vista, Secretary!

Also, special thanks to our **Sponsor**, Bella Vista Water Company; **Exhibitors**, Diamond JK Nursery, Dorling Kindersley Family Library, Lawn & Garden Supply Co., Mountain States Nursery, Sears, Talking Drum Gourds, The University of Arizona Bookstore, and Tufflite; and **Door Prize Donors**, Ace Garden Place, Sierra Vista, Ace Hardware, Benson, Ajo Way Nursery, Arizona Pistachio Nursery, Bordiers Nursery, Chamber of Commerce and City of Sierra Vista, Color Spot Nursery, Cottage Gardens Nursery, Desert Trees Nursery, Greenwood Nursery, High Country Gardens, KanMar Gutters, Kazzam Nature Center, L & L Distributing, Monterey Plant Food, Paradise Distributing, Phoenix Botanical Garden, Pima Valley Greenhouses, Safeway, Shepherd's Seeds, Talking Drum Gourds, and Whetstone Pottery.

The Cochise County Master Gardeners Association was very proud to present to the Sierra Vista Public Library \$1,000 to be used for "high desert" gardening books. Also, \$500 was donated to the Cooperative Extension Library for use by the Master Gardeners.

Plans will be under way soon for next year's conference - February 12 - 14, 1998! Master Gardener volunteers will be needed once again. If you are interested, please contact Cochise County Master Gardeners Association President, Gary Gruenhagen, or the Sierra Vista Cooperative Extension office.

*Carolyn Gruenhagen, 1997 Conference Coordinator*