



High on the Desert Cochise County Master Gardener Newsletter

Vol. 15, No. 11 NOVEMBER 2004

The University of Arizona and U.S. Department of Agriculture Cooperating

In a Desert Garden

Passion Vine – passiflora

I love climbing vines, especially in my small garden, where there is no room to spread out there is always room to climb up. The first passion vine I ever grew was a houseplant I had in my apartment in Berlin, Germany. I enjoyed its purple flowers for many years. Seven years ago when I came to Arizona I came across a similar plant at Wal-Mart and I just had to have it. The first year I had it outside all summer and when the weather got cooler I took it into our sunroom. During the winter I noticed a “growth” on it only to realize it was a cocoon, and one day a beautiful butterfly emerged. Reading up on it I found out that the Passion Vine is the only food plant for the larvae of the Gulf Fritillary, a pretty bright orange Butterfly. Now I had that beautiful creature in my sunroom and nothing was in bloom and I couldn’t let it out as the nights were freezing. I prepared some sugar water just as I would for the hummingbirds and I kept offering it to the butter-



fly. For 10 days the butterfly took sugar water from my finger. Then I found it dead on the carpet.

The next spring I planted the vine in a very sheltered spot next to our house. I took a chance—it will survive the winter or it will die. Well, the whole season the plant thrived, covered with beautiful purple flowers, butterflies and caterpillars, and it grew and grew.

My husband and I take care of a wash in our area and we find the most amazing things people discard. So one day we found a huge chain link gate in excellent condition. It was the perfect trellis for this rampant grower and in no time the vine had covered it. The first winter came and the leaves died and left me with a huge mess, but the next spring it was as beautiful as before. Unfortunately, I never found out its name.

Since then I am growing another one. This one I raised from seeds a friend gave me. I am not much of a seed grower. I just throw them in my gravel

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and when they come up—great. By the way, gravel is a great medium for seeds as the gravel keeps the moisture and the seeds can germinate. This vine is very nice. What I like about it is it stays evergreen. The flowers are light green with purple crowns. The species is *passiflora caerulea*. This also is a very vigorous vine and can be quite invasive if left unchecked. If growing on a chain link fence it is best to pull it up to the top and not to let it grow through the chain link. Once it is on top of the fence it can ramble. The reason why is the stem of this plant can get as thick as a man's arm and eventually the chain link will cut into the stem.

There is also a white variety that is very striking and also stays evergreen, *passiflora caerulea alba*. Both of these plants produce very pretty fruits that are egg-shaped and mature to bright orange. There are several other varieties of this plant and I have tried several but they are not suited for this climate. These plants can take full sun and some drought, but of course perform better with additional irrigation. The damage the caterpillars do is benign once the plant has taken off. When the plant is very young you want to watch for them.

Angel Rutherford, Master Gardener



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Improved Planting Standards

1. Planting hole should be three to five times the diameter of the root ball and no deeper. The sides of the hole should be rough or sloping. Trees develop a root system that extends one and a half to four times the canopy diameter and lies within two feet of the soil surface. This lateral root system supports the tree and absorbs water and nutrients. Transplanting practices should encourage root spread.
2. Set the top of the root ball at or slightly above the soil surface. Trees planted deeper than the root ball tend to subside as irrigation compacts the soil beneath the root ball.
3. Remove the tree from the container. Avoid lifting the tree by its trunk. Disentangle and spread any roots that had circled in the container. Score the sides of the root ball to encourage lateral root growth.
4. Place the tree in the hole and backfill. Do not add amendments to the soil. Do not tamp with your feet. Form irrigation borders (if used) just outside the root ball. Amended backfills tend to restrict root spread and reduce top growth. Amended backfills also tend to wick water away from the root ball.
5. Spread mulch on the soil surface to a depth of three to four inches. Keep mulch away from the tree trunk.
6. Do not prune unnecessarily. Root initiation and growth is stimulated by stem buds and leaves. Therefore shoot pruning reduces root growth and prolongs establishment.

Cuttings 'N' Clippings

* The next meeting of CCMGA is 5:00 p.m. Thursday, November 4, 2004 at the University of Arizona South campus, Room 508 (formerly Room 100). Penny Artio will present *Specific Plant Habitats in the SW Mountains for Black Bears*.

* Saturday, November 6, 2004 from 9:00.—10:30 a.m. a free *Water Wise* workshop will be held in the Public Meeting Room at UAS. The topic is *Fix Drips, You CAN Do It!*

* Thanks to Agnes Gromek for an outstanding job of completing the inventory of the books in the Master Gardener Library!

* To keep your birds happy in the fall check out your local nurseries or garden centers for trees and shrubs to plant. They are staples in a bird-friendly yard. These are sometimes available at half price.

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 (The bulletin *Frost and Frost Protection* is available from the Cooperative Extension offices.)

The Virtual Gardener—Straw Bale Cold Frame

Several years ago I visited a permaculture garden in Patagonia. Of the many interesting things I saw there, one particularly struck my fancy—a straw bale cold frame for growing temperature sensitive plants when the weather is cool. This year I decided to see if I could extend the tomato growing season by constructing a straw bale cold frame of my own. My goal (possibly unrealistic) is to see if I can keep the tomato plants alive and productive through the winter. I'll let you know how it works out as the winter progresses.

The idea is simple. Construct a U-shaped enclosure of straw bales that opens to the south and cover the top and south sides with clear plastic. The straw bales with their thickness and poor heat conduction properties insulate the enclosure on the north, east, and west sides, and the plastic allows sunlight to heat up the enclosure from the top and south sides. I used six bales to construct my cold frame and 6 mil plastic for the covering. My cost for the bales and the plastic sheeting was less than \$40. In addition I bought ten 5 inch long spikes at five cents apiece and used some old two-by-fours I had on hand to fasten the plastic to the bales.

The bales measure approximately 45 inches long by 22 inches wide by 17 inches high. By stacking them on the short edge, I made an enclosure about 44 inches high by 28 inches deep by 45 inches wide. This is enough to accommodate six five-gallon nursery pots containing my six Roma tomato plants.

I cut the two-by-fours to span the width of the cold frame and drilled holes in them to slip the spikes through and pin them to the bales. The plastic is stapled to the board at the rear of the cold frame and draped across the top and down the front.

On warm days the plastic is rolled up across the rear bale. On cooler days I leave the plastic down. On cooler nights I roll the plastic down and cover it with an old quilt. This solution does not work so well when it rains at night, so I am going to have to find a waterproof insulation material to substitute for the quilt. So far the temperature has been about 10 degrees warmer in the morning than the outside temperature. Since I want to keep the interior temperature at 50°F or above, I will have to figure out some way of adding or conserving heat on the cooler nights to come. One way would be

to add some thermal mass to the enclosure. For example, I could place a container of water inside the enclosure that will heat up during the day and radiate heat during the night.

So far my tomatoes have been doing well. There are many blossoms on the plants, and several fruits are starting to develop. How they will fare in the cold days of December and January remains to be seen.

After some searching, I have been able to find only a few references to straw bale cold frames on the Web. Here are three URLs to check out:

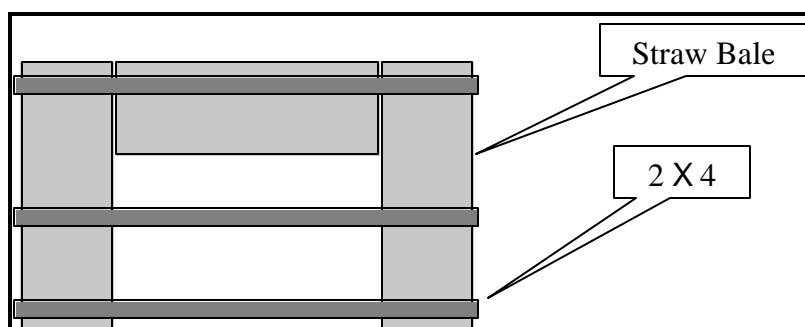
http://www.hgtv.com/hgtv/gl_seasonal_fall/article/0,1785,HGTV_3625_1372188,00.html

http://www.hgtv.com/hgtv/gl_seasonal_other/article/0,1785,HGTV_3626_1382840,00.html

<http://forums.gardenweb.com/forums/load/fourseason/msg0613085519712.html>

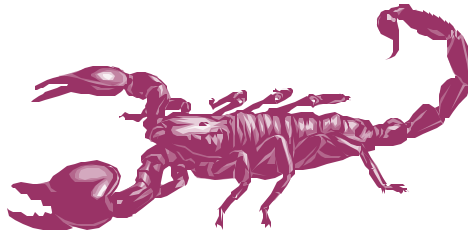
Until next time—Happy Surfing.

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Scorpions

There are 36 species of scorpions in Arizona. All species can sting, causing some immediate pain, with little or no local swelling or redness. *Normally*, only one species of scorpion cause further medical problems. This is the Bark Scorpion.



The Bark Scorpion is one of the smaller species of scorpion. The color may vary from light tan to a darker brown, depending upon the environment in which it lives. It is usually between one and one and one-half inch long.

Scorpions live both outside in wood piles, palm trees, decorative bark, and inside homes or places that are dark and cool. During the day, scorpions seek shelter under loose boards, wood piles, rocks, or the bark of trees. Scorpions also find daytime hiding places in crawl spaces, attics, and closets. They will enter occupied rooms; kitchens may draw them when they are in search of water. They also hide in man-made objects. The Bark Scorpion is a climber, and it is commonly found in trees and on walls and ceilings. It clings to the underside of pieces of bark or wood.

Do not leave shoes, boots, clothing items, and especially, wet towels, outdoors where scorpions can hide. Shake all clothing and shoes before putting them on. Wear gloves when working in the yard. Wear shoes outdoors, especially during the evening hours. Scorpions are night feeders, and they are attracted to water, swimming pools, and irrigation areas. Alter the habitat that invites scorpions.

Tighten and caulk points of entry, use weather stripping around doors and windows, seal or place fine screen where air conditioning, swamp coolers, or exhaust fans enter the house. Be certain to remove harborage, such as rock or woodpiles, near the home, and repair plumbing leaks and ventilate moist areas.

Scorpions stay where food sources exist. Eliminating other insects (e.g., crickets) will reduce the scorpion population. One of the best ways to immediately eliminate scorpions is to obtain a blacklight and search for scorpions at night when they are active. Scorpions glow when a blacklight shines on them from a few feet away. Once the scorpion has been found, it may be sprayed with a pesticide, removed, or destroyed. Pesticides used for scorpion control are available at home and garden supply stores. When facing severe infestations, a professional pest control applicator is the best tool. Crawl spaces and attics, areas under sinks and counters, and closets may need to be treated. **ALWAYS READ AND FOLLOW** the pesticide label and store pesticides out of the reach of children.

-University of Arizona Cooperative Extension

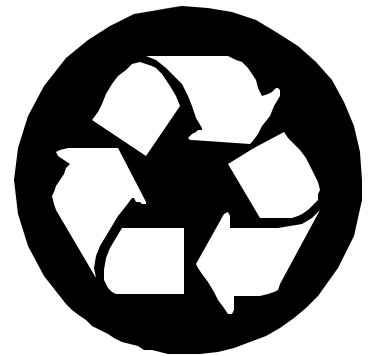
The best time to plant

a tree was

20 years ago—

The second best time is now!

-Anonymous



Recycling in Sierra Vista

Sierra Vista has a strong sense of environmental stewardship. Recycling is another avenue where citizens can demonstrate a commitment to the local environment.

Questions concerning the City's Recycling Program, or other environmental programs, should be directed to the City of Sierra Vista, Department of Public Works at 458-5775.

Mulch and compost are sold to the public at bargain prices. The compost site is located adjacent to the County Transfer Station on Highway 90 East (just past the entrance to the City Wastewater facility).

The Agent's Observations

Q I am a new resident in the area. I have four fruit trees; apples, pears, peaches, and figs. I can't tell the different seasons that you have here. When do I spray the dormant oil spray? When should I give them fertilizer? Can I use the tree spikes? Will the tree's leaves drop off?

A Winter months in Southeastern Arizona are from December through February. Our spring can be long some years, from early February until May, and then very short to non-existent other years. During these years the winter months kind of melt directly into the summer heat! Fall is from the end of September until December. Use your trees to gauge the seasons. Fall is when the leaves are turning and beginning to fall. Winter is when the leaves are gone. Spring is when they are blooming and leaves are beginning to emerge and new growth starts. All of the leaves will fall when temperatures are near or below freezing. Usually this should be any time from October through November normally. All of the fruit trees you mentioned should receive dormant oil just as the leaves emerge. Spray the dormant oil when the leaves are less than a half and inch long. This is called delayed dormant spray and is the most effective against over wintering pests that are beginning to wake up. You should apply fertilizer and dormant oils about the same time. Fertilizer stakes can be

used. Granular or organic sources of nitrogen are all the trees really need at this time. Stakes are convenient if you have just a few trees but they have extra nutrients that are not really needed. They are expensive also. Make sure you use enough stakes and follow the label directions. The Cooperative Extension Publication, *Backyard Fruit Production*, give the formulas to determine how much fertilizer to apply. It is available at the Extension Office or on line at: <http://ag.arizona.edu/pubs/garden/az1162.pdf>

Q My ash, plum, and pomegranate leaf margins are turning brown and drying up. The leaves are yellowish in color with some green remaining between the veins. I have been watering the trees using a well. They are planted in my lawn. I used "Weed and Feed" on the lawn this spring and again during the summer. The trees are just looking sick and I am feeling like the trees!

A The trees are showing the signs of herbicide damage. "Weed and Feed" products contain fertilizer and 2,4-D herbicide. Inert particles like clay are coated with the herbicide which releases into the soil when watered. The herbicide 2,4-D will kill many broadleaf weeds in the lawn. However, the herbicide also can damage or kill other broadleaf plants. These trees are showing

symptoms but did not receive a large enough dose to kill them. The herbicide reached the shallow-rooted trees, was absorbed and you see the symptoms in the leaves.

Control: Do not apply 2,4-D type herbicides, (as a spray or in a "Weed and Feed" product), where desired broadleaf plants will absorb them through the roots or leaves. Many broadleaves like roses and grapes are very sensitive to 2,4-D type herbicides. The trees will most likely not show symptoms in the spring. For now the leaves will be dropping soon and the trees will not look sick.

Just a note on the herbicide 2,4-Dichlorophenoxyacetic acid, (the chemical name), or 2,4-D for short and related compounds. This herbicide comes in several different formulations. If it is to be used around plants that are susceptible, i.e. broadleaf plants, use an amine formulation. It is less volatile than an ester formulation. You must read the label and find the chemical name. If amine or ester appears in the chemical name you will know the type of formulation.

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Forcing Narcissus for Winter Bloom

Paper white narcissus are wonderful winter-flowering indoor plants, perfuming whole rooms, and they make great gifts. Sold at nurseries and garden centers, these daffodils flower in about two months if you plant them in containers.

Paper whites and other Tazetta narcissus, including golden yellow 'Grand Soleil d'Or,' are the most popular because they have multiple, fragrant flowers and don't have to be chilled before planting.

To plant the bulbs, fill a shallow pot with potting mix. Plant with the bulb tops just below the soil surface about an



inch apart. Place in a cool (below 50° F), frost-free, dark place and keep them there until shoots emerge.

Allow the plants to grow under bright, cool conditions to keep their stems strong and compact. You may need to put them outside on mild days and bring them in at night. Water whenever the soil dries out, and stake flower stems if they flop over.

When buds appear, bring the plants indoors for display. Most varieties bloom for about two weeks.

-Sunset Magazine

High on the Desert

The 12th annual High Desert Gardening & Landscaping Conference will be held at Buena High School in Sierra Vista March 4 and March 5, 2005. The conference will feature many expert speakers covering "everything you want to know and more" about High Desert gardening. Mark your calendar now and watch for more details in this newsletter in the coming months. The conference is sponsored by the Cochise County Master Gardeners Association in conjunction with the University of Arizona Cooperative Extension.