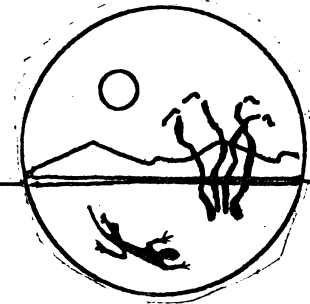


High on the Desert

Cochise County Master Gardener

Newsletter



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

Spring Planting

Have you ever competed in a foot race?

I have competed in several, trying hard to be the first one across the finish line. Many of us garden the same way, myself included. We try to be the first to put seeds in the ground and the first to produce vegetables and fruit. Who cares if what we produce isn't the best. It's the first out of the garden.

Perhaps we are in the wrong race.

Wiser people than I say it isn't the speed in which plants produce, but the quality of what they produce. If the fruits or the vegetables are not of the best quality we ran the race for naught. It took me a long time to come around to their thinking, but now I think they are right.

We work hard to prepare the ground for planting. We set out our method of watering. We make rows and furrows and carefully follow the suggested interval for planting. Then, with a big wide grin, we set out planting the seeds. We forget that Jack Frost might have one more freezing cold night in his mind. We also forget that the soil we are planting into has not reached the right temperature for

germination. If it has, then Jack's killing frost will soon take care of our lovely little sprouts.

Volumes have been written about this and that concerning the wonders of gardening, but all of them essentially say the same thing: Wait until after the last frost before planting and make sure the soil you are planting in is warm enough to sprout seeds. Now, if you followed directions and you have a greenhouse or a reasonable facsimile, you are straining to find a way to plant them. Did you take the time to take the plants out of doors during the day and return them inside in the evening? This is called hardening-off. The little plants are prepared for the rigors of outdoor life and can be planted if the aforementioned conditions have been met.

Going back to the race—there really isn't one, however the quality of the product determines whether you have a good crop or not. You don't have to be first, but you do want to be one of the best and you can be. Again, follow directions, read books, ask questions, and add your own special gardening expertise.

*Barry R. Bishop
Master Gardener/Staff Writer*

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Cuttings 'N' Clippings

➤ Nothing screams SPRING more to me than the sight of daffodils nodding their heads in the wind. But what do you do when the flower dies and the maturing foliage is left? According to Brent and Becky Heath, authors of *Daffodils for American Gardens*, planting companions that will emerge and hide the dying foliage is the best answer. Surprisingly, they suggest that you do not braid or bend them over and rubber band them. You see, most spring bulbs, including tulips, need oxygen and sunlight to store starches needed for next year's bloom. Therefore, bunching the foliage cuts off the maximum exposure to sunlight, suffocates the leaves, and can cause fungal problems. When the foliage starts to turn yellow and fall over, usually 8 to 10 weeks after bloom, it's safe to cut off the leaves. Companion plants for dafs include alliums, lilies, iris, coryopsis, penstemons, salvias, and my favorite, poppies. So get planting!

Cheri Melton
Master Gardener Staff Writer



➤ Did you know . . . a 1,700 square foot house is constructed of 13,450 board feet of lumber?
➤ The 1996 Southwestern Low Desert Gardening and Landscaping Conference will be held August 2-4 at the Wigwam Resort in Litchfield Park, Arizona (near Phoenix). The theme this year is "Joy of Desert Gardening." Master Gardeners and Master Gardener programs around the West are asked to submit their outstanding projects for consideration in the Search For Excellence Program. For further information, contact Lucy Bradley at (602) 470-8086, Ext. 323 or bradleyl@ag.arizona.edu.

April Reminders

Stake new trees
Plant cool season veggies
Fertilize
Prepare for pests

➤ According to the *Mountain View News*, March 13, 1996, the latest statistics show that Sierra Vista has the number one recycling program in Arizona. Pat Bell of the city's Department of Public Works says, "We are sure not the largest city in the state, but percentage wise, we recycled more waste than Phoenix, Tucson, or any other major city."

➤ If you received an Easter lily this year, enjoy it in your home and after it blooms remove the spent blossoms and plant it in a sunny location in

your garden. When the leaves turn brown, cut the plant back. Next spring you will once again be able to enjoy the beauty of the Easter lily in your garden.

➤ Earth Day is April 21, 1996. In conjunction, the City of Sierra Vista will be collecting leftover used paint from April 15-19 at their operations center on North Avenue. Also, a city-wide "Project Clean-Up" will be held with about 60 groups participating. Interested? Give Pat Bell at Public Works a call for information (458-3315.) Compost and mulch can be purchased from the city compost site, Tuesday-Saturday, 7:00 am - 3:00 pm. Call for availability (458-3315) as they are a "hot commodity" at this time of the year!

➤ The Sierra Vista Garden Club is responsible for the new plants at the Chamber of Commerce located in the old Bank One building on Carmichael St. More plants will be added in the near future. The next meeting of the garden club is April 18 at the Mona Bishop Room of the city library. Everyone is welcome.

➤ Jim Kowee of Diamond JK Nursery is having a spring plant (native) sale April 27 & 28. For information call 455-5387.

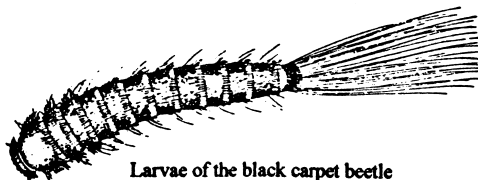
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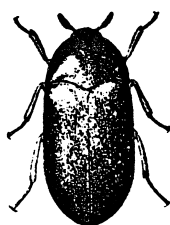
The Agent's Observations



Larvae of the black carpet beetle

QUESTION: My wife has several bites on her arms and legs. I have a sample of the insects that I think caused these irritations. Could you please tell me what they are and how to control them?

ANSWER: After examination under a dissecting microscope it was determined that they were insects from the Dermestidae Family. There are several species known as carpet beetles and furniture beetles. They can do great damage to home furnishings and clothes containing wool, hair, fur, feathers or other animal products. They can also survive on dead insects and food products such as cereals. The adult insects are rarely more than 6 millimeters long except the black carpet beetle which can be 12 millimeters long and are broad or an elongated oval in shape. When they are disturbed they play dead. The adult black carpet beetle is black with brown legs, but other species can be black to brown in color and may have a dull red band running down the center of the back. Others may be mottled with patches of white, yellow, and black and are light colored underneath. The

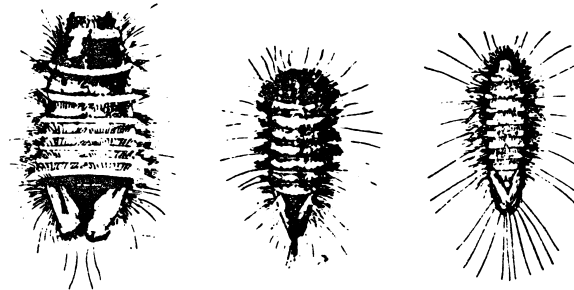


Black Carpet Beetle

larvae of all species are oval except the black carpet beetle, which is elongated with long tufts of golden to chocolate brown colored hairs at the end of the body. Other species are covered with black, brown, or tawny hairs and three tufts of bristles on each side of the posterior end. Adult beetles can fly and are attracted to light and are often found crawling on curtains and windows. On warm spring days they will feed on pollen of flowers and may fly from house to house. Females will lay up to 100 eggs which will hatch normally in 8 to 15 days. Larval growth depends on temperature and food supply and they will molt 6 to 10 times or more. The old exoskeleton are often seen on clothing and furniture and may cause itching in sensitive people. The pupal stage may last almost 2 weeks. The life span period from egg to adult depends on environmental conditions and species, but can be from 126 to 657 days. Usually there are only 1 to 2 generations per year.

Control: Remove or cover food sources like grain or animal food. In this case open dog food was the insects feeding source.

If infestations are severe then treatment with residual pesticides may be necessary, but carpet beetles may be difficult to kill. Treat only the edges or under carpets and around baseboards and floor moldings. Tank type vacuum cleaners may



Larvae of the varied carpet beetle (left), furniture carpet beetle (center), and carpet beetle (right)

be helpful in reaching cracks and crevices to eliminate sources of food and developing life stages.

Source: *Insect Pests of Farm, Garden, and Orchard*, 7th Ed. Ralph H. Davidson and William F. Lyon. 1979. pp.518-520.

QUESTION: Some shrub junipers at a rental property are dying. They are located under a window in a planter box and they are turning brown. Others on the property are doing very well. The sick plants are watered with a soaker hose which is turned on manually. What is the cause?

ANSWER: After examining some samples there was no evidence of insect or other pest damage. The dead or dying leaves were on side shoots or lower on the branch. The termi-

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nal growth looked fine. The most probable cause is improper watering. Turn on the soaker hoses and make sure they are working. Check the soil before irrigation with a soil probe to see if the ground is moist. If the probe goes in only an inch or two then water. If the probe goes in over a foot or two then do not water. With the dry winter we have had with little or no precipitation, watering of evergreen plants is necessary every month or so because they are still doing photosynthesis, although at a reduced rate and growing slowly with the proper environmental conditions.

Robert E. Call
Extension Agent, Horticulture

Bad Neighbors

Master Gardener Cheri Melton has been writing about companion planting—grouping plants that seem to be particularly content in each other's company—but what about the flip side? What about plants that don't get along together and shouldn't be planted near each other?

Plants that need lots of lebensraum and are antisocial to other plants, often even their own offspring, exhibit what botanists call allelopathy. They produce natural herbicides called phytotoxins and surround themselves with a chemical barrier that kills other plants by attacking their root systems or seedlings. Phytotoxins are most commonly produced in roots and leaves and usually reside in the soil as either water soluble solids or volatile gasses. Many

examples of allelopathy occur in arid climates such as our own where, because of the great competition for water and nutrients, plants find it advantageous to kill off their rivals.

Salvia leucophylla (a sage) is a classic example of an allelopathic plant growing in the wild. Where these salvias invade grasslands in California, there is a zone 1 to 2 meters in diameter around each clump that is devoid of herbaceous plants. Natural herbicides produced by these salvias are highly volatile chemicals that have been found to interfere with the germination of seeds of herbaceous plants and are found both in the air around and in the soil adjacent to the plants.

In addition to the general allelopathy described above, some plants exhibit a selective allelopathy that makes them bad neighbors for only certain other plants. These are the plants that shouldn't be grouped together in a garden. Many gardeners know, for example, that Black Walnut (*Juglans nigra*) is incompatible with a large variety of garden plants—including, pine, birch, azaleas, rhododendrons, domestic grapes, tomatoes, and potatoes—but is compatible with others such as, hickory, oak, poison ivy (of course!), salvia, and wild grapes. Radishes provide another example of allelopathy.

The subject of allelopathy is not without controversy, however. For example, in 1994 Marcus and Burz published an article in *The American Biology Teacher* (Vol. 56, No. 3, pp 180-81) titled, "A simple demonstration of allelopathy." In

that article they describe an experiment that showed that radishes are allelopathic to lettuce. In 1996 Santaniello and Koning, publishing in the same journal (Vol 58, No. 2, pp 102-03), describe an unsuccessful attempt to duplicate the results achieved by Marcus and Burtz. The lesson to be learned from these articles is to approach the subject with skepticism. Establishing that an allelopathic relationship exists between two plants can be tricky. Never-the-less, gardeners should be aware that such relationships do exist and be on the lookout for them. Jerry Baker, in his book, *Talk to Your Plants*, describes some of the common vegetables he believes are allelopathic to each other. Here is his list. You can be the judge as to whether he's right or wrong about them.

- **Asparagus**— onion, leeks, garlic, beans
- **Cabbages**— strawberries, tomatoes, pole beans
- **Carrots**— dill
- **Chives**— peas
- **Cucumbers**— herbs
- **Peas**— onion, garlic
- **Pole beans**— onions, bush beans, sunflowers, kohlrabi, beets
- **Potato**— pumpkin, sunflowers, tomatoes, cucumbers, tomatoes, raspberries

So next time your potatoes croak ask yourself, "Who did it? Was it the pumpkins? the sunflowers? cucumbers? the tomatoes? or the raspberries?" Of course there's always the possibility that it was the gardener!

Gary Gruenhagen
Master Gardener

A Transplanted Gardener . . .

I hope you were able to attend the High Desert Gardening and Landscaping Conference. Please don't forget to mark your calendars for next year's conference, slated for February 13-15. One of the best things about the conference is meeting friends, old and new, and trading tips. Here are some of my favorite tips, old and new.

Tips I learned at the conference: Garlic powder sprinkled on top of seedling beds/flats works as an antifungal property and will reduce the risk of damping off. Oak leaves also have an antifungal property.

Boulders are great for landscaping not only because they look so wonderful but also because they collect dew and the moisture drips off the boulders and basically acts as a slow drip irrigator for plants at the base of them.

When building pathways in your landscape, keep them at least 4 feet wide. This allows two people to walk the paths comfortably side by side.

White vinegar is an effective weed killer. (Interestingly, so is Terry Mikel's coffee, but that's another story!).

You can grow many desert plants from seed!!! Those which require no special treatment, just plant and grow, are desert willow, yuccas, agaves, pineapple, milkweed, creosote, and ocotillo.

Tips I learned from my grandmother: Reuse your greeting cards. She tears them in half and uses the front half (with the picture on it) as a postcard.

Take some of your veggie scraps (that you would be composting) and throw them into a freezer zip-lock baggie, freeze, and when you get a couple full make vegetable stock with it.

Recycle the lint from the dryer by lining the bottom of your seed starter trays. It will act as a water wicking system.

Got ants—explode them! She sprinkles grits around ant hills. The ants carry the grits back to the nest and eat. When they drink water the grits expand and—poweee—no more ants!



Grandma would take matches, tear off the cover and plant them 2-4 inches under her peppers. This gave the peppers the added sulfur they liked.

Tip I learned from friends: This is a great tip passed along to me from Bob and Mary Jo Cox. They purchased an item that looks like a photo album but is a diskette holder. They slip their seed packets into the slots and at a glance can see what they have. What a great way to organize your seed packets, unlike mine which are thrown into a box.

Tips from me: I love 35 mm film canisters. I store seeds in them and never leave my house without a couple in my backpack. Put a piece of masking tape on the side of it to label the seeds. The canisters can be reused again and again.

Toilet/paper towel rolls make great seed starters. I cut them into 2-3 inch lengths, write the seed name on the side of it with a waterproof marker, fill it with soil, plant a seed in it, and set them in trays. When it's time to set them out in the garden I push the soil and plant down about 1/2 inch and plant it so the collar of the tube sticks out and works as a cutworm collar. The open bottom allows the roots to spread quickly and establish itself.

When planting native seeds I fill a 1 gallon pot with my soil from the garden, about 3/4 full, and then use sterile potting soil for the next 2-4 inches (this is so the plants don't damp off but the roots can grow in native soil) and then sink the pots outside in my "nursery bed." I find that sinking the pots in the ground reduces watering needed and keeps them from being knocked over in the winds.

I had the composting blues. Getting it hot wasn't the problem but keeping it moist was. So I bought a plastic garbage can, the round kind with handles that snap over the lid works best, and drilled holes all over it (don't forget the bottom). Then I threw all my composting materials into it. Once a week I tip it over on its side and roll it

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around using my feet. (Only fill it three quarters full so it has room to mix and using a bungee cord helps keep the handles over the lid.) It mixes quite nicely and the enclosed can "sweats" and keeps the pile nice and moist. I can get compost ready in about 4-8 weeks.

I have a garden diary that I cannot live without. Now I don't write in it everyday, just stuff I want to keep track of like this year my mesquites started budding on 26 March, first hummingbird sighting was 31 March near the *Salvia greggii*, various newspaper clippings, and garden plans/drawings. Why I prize it so much is that I

tape the plant labels/tags that come with plant purchases in it. I also write down interesting plants that I find in magazines, books, and gardens that I want to purchase later. This makes an excellent reference list when I go shopping and avoids the "do I already have that plant?" syndrome.

When putting air in your vehicle's tires, be sure to check the spare. I also just learned that it's a good idea to always carry jumper cables. I recently went to the Desert Survivor's plant sale and in my haste and excitement I tore into the parking lot, shut off the engine, threw on the emergency brake, grabbed my

backpack and ran to the entrance. When I came back the car wouldn't turn over because I forget to turn off my lights. I did get some nice plants though!

May spring fever light your fire and inspire you to get out in your garden and grow native.

Happy Spring!

*Cheri Melton
Master Gardener/Staff Writer*

Bluebonnet

