



High on the Desert Cochise County Master Gardener Newsletter

Vol. 18, No. 10 OCTOBER 2007

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

The Virtual Gardener—What Kinda Bug Izat?

The other day I was pulling weeds in my garden when I spotted a movement in the grasses under the garden fence. A closer look revealed a largish, rounded, dark gray something on the other side of the fence that was moving slowly in the direction of my hand. What was it? Was it dangerous? A snake?

I pulled my hand back and continued to watch. Slowly a large bug emerged that turned out to be a *Mastigoproctus giganteus* or vinegaroon. Although intimidating to look at with giant pincers and a long whip-like tail, vinegaroons are harmless, at least to humans. Vinegaroons (AKA whipscorpions) get their common name from an ability to squirt acetic acid (vinegar) from glands under their tails and their presence can often be detected from their scent even when they cannot be seen. Vinegaroons are not too common but may be seen during the summer and

early fall. I hadn't seen one for a couple of years. If you've never seen one and would like to see a picture check out the Web site at <http://insects.tamu.edu/fieldguide/cimg365.html>.

We've all seen bugs in the garden or around the house. Whether you are freaked out by them or fascinated, you have probably seen one you would like to know the name of. Since there are so many species, it is difficult for the average person to learn to specifically identify more than a handful of bugs on sight, but with the help of your Web browser, you may be able to learn the name of almost any one you find.

I've used the term "bug" deliberately. The term, as I "technically" define it here, includes all sorts of creepy-

(Continued on page 2)

Inside this issue:

Did You Know ?	2
Ruellia	3
Cuttings 'N' Clippings	3
Rats in Landscapes	4
October Reminders	4
Agent's Observations	5
High on the Desert	6

Cochise County Cooperative Extension

www.ag.arizona.edu/cochise/mg/

1140 N. Colombo, Sierra Vista, AZ 85635

(520) 458-8278, Ext. 2141

450 Haskell, Willcox, AZ 85643

(520) 384-3594

(Continued from page 1)

crawly things you find around the garden or house that may or may not freak you out. They mostly fall into a couple of large groups and the key to a successful hunt for their identities on the Web requires that you begin your search by looking in the right group. Insects comprise one of my two groups and arachnids (spiders) comprise the other.

Insects are the most diverse and widely distributed animals on the planet. Over 30 million species are estimated to have been described and new descriptions are added to the list daily. Insects are found in almost every land environment and a few species even make their homes in the ocean. Arachnids, on the other hand, are a much smaller group of animals, with only about 70,000 described species but, like insects, there are large numbers of them around. They too are mostly terrestrial and include spiders, scorpions, ticks, and others.

If you took a high school biology course, you may remember that the scientific naming scheme for animals has them divided into large groups which are in turn divided into smaller groups, which are divided into yet smaller groups, and so on. From largest to smallest, the groups include Phylum >>Class>>Order>>Family>>Genus>>Species. Insects and arachnids belong to the same phylum (Arthropoda) but fall into different classes (Insecta and Arachnida, respectively).

A number of Web sites help you to identify a bug at least to the level of Order and perhaps even lower. Some of these Web sites are organized around the concept of a key.

Keys work by asking you a series of questions about the appearance of the bug you are interested in identifying, similar to the parlor game of twenty questions. The answer to each question sends you down a different path to another question until you finally reach an identification.

Insects and arachnids can easily be distinguished by counting the number of their legs—insects have six and arachnids eight. Once you have found the correct key, you can begin answering the questions and moving down through the key. A good key for identifying insects can be found at <http://www.earthlife.net/insects/orders-key.html>. This Web site not only contains a key to the orders of insects but good instructions for using identification keys in general and even explains how to make your own key. If the use of a key is a little too left-brained for you, there are other options.

For the right-brained, there are Web sites that have extensive collections of pictures you can search through to find a match for

the bug that's bugging you and some even allow you to send pictures of your nemesis to an expert for identification. These include, <http://www.whatsthatbug.com/index.html> and <http://bugguide.net/node/view/15740> Check them out or just run a Google search on bug identification to find many more.

Until next time...Happy Surfing!

Gary A. Gruenhagen, Master Gardener
gruenha@theriver.com

Did you know?



- ◆ Butterflies and moths are insects belonging to the order Lepidoptera, which means “scaly winged.”
- ◆ Butterfly wings are covered with tiny scales, each a single color.
- ◆ Butterflies have lived on earth for millions of years.
- ◆ There are about 250 species of butterflies found in Southeastern Arizona.
- ◆ The state butterfly of Arizona is the Two-tailed Swallowtail.

See *Butterfly Magic at the Gardens* Arizona's only live tropical butterfly exhibit at the Tucson Botanical Gardens, 2150 N. Alvernon Way, Tucson, AZ from October 16, 2007—March 31, 2008. There is an admission fee. For information call (520) 326-9686 or go to www.tucsonbotanical.org

Robert E. Call
Extension Agent, Horticulture

Carolyn Gruenhagen
Editor

Ruellia: an amazing plant

The first time I saw Ruellia, I was hooked. This was at my very first time visiting Tohono Chul Park. The plant I am referring to grows outside the gift store and is absolutely gorgeous. Unfortunately after doing some research I found out that this plant would not be hardy in my little garden.

The plant, a big shrub, had pinkish purple flowers and the variety was *Ruellia californica*, a Sonoran Desert native. Then I came across *R. brittoniana*, a plant that I bought for my pond. It is a Mexican native and also called Mexican Petunia because the flowers resemble the bedding plant Petunia. This plant has narrow dark green leaves and lavender blue flowers. For about two years I enjoyed this plant in my pond. It dies down in winter but recovers quickly in spring. Then one day I saw it popping up in my desert garden, taking very little irrigation and of course really thriving in the monsoon. In the soil it grows into a nice sized shrub of 2 feet by 2 feet. Over the years my little garden is filled with this plant, taking all kinds of conditions; full sun, no sun, water, no water. I find it along the walks in the flower beds and it has naturalized all over the backyard. If it wasn't such a stunning plant, I would consider it invasive. In parts of the country, like California, it is considered an invasive plant. Here in the desert I welcome plants like that because I do not have to worry about them. In June when it was so hot



Ruellia brittoniana

and dry and my Salvias looked terrible, this plant still looked lush and trim. It wasn't blooming but it wasn't drooping.

I also have a pink variety called 'Chichi' that has started to make its mark. This one is not as vigorous and if you do not like plants that self-seed try 'Kathy,' a dwarf variety that is not invasive. I am looking for a white variety called 'Alba,' but have not come across it yet.

Ruellia is what I consider an intelligent plant. It has a really neat feature—the seeds only get dispersed when there is water available. If there is no water the plant hangs on to them. As soon as it rains or the plant gets irrigation you can hear the seed capsules pop and the seeds are thrown.

Angel Rutherford, Master Gardener

Cuttings 'N' Clippings

✧ The next CCMGA meeting is 5:00 p.m. Thursday, October 4, 2007 in the Public Meeting Room at the University of Arizona South campus.

✧ The October Water Wise Workshop is *Can I Be Water Wise if I am a Renter?* Renters and landlords alike will want to attend this talk. Simple fixes for plumbing repairs, techniques for water wise watering, and inexpensive ways to keep water use down will be taught from a renter's point of view. The lecture is free and presented at the U of A South Campus, 1140 N. Colombo in Sierra Vista on October 13 from 9:00 a.m. to 10:30 a.m.

✧ The Sierra Vista Farmers' Market continues Thursdays through the month of October. It is held from 2:00—6:00 p.m. on the NW corner of Wilcox and Carmichael. The winter schedule will run from November–April on the first Thursday of the month from Noon to 4:00 p.m.

✧ The Bisbee Farmers' Market will continue on Saturdays through October from 8:00 a.m.–Noon at Vista Park in Bisbee.

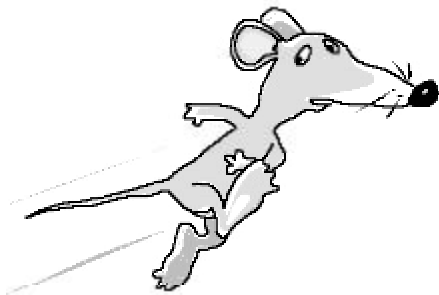
✧ A Farmers' Market is also held in Elfrida Fridays from 2:00–6:00 p.m. May through November at 10566 Hwy 191.

✧ A list of Farmers' Markets may be obtained from the Community Food Connections at www.foodconnect.org or telephone (602) 493-5231.

Rats In Urban Landscapes

There have recently been multiple sightings of rats in the development where my wife and I reside and in nearby neighborhoods as well. This motivated me to search the Internet for ways to best control these occurrences and to share this information with others who are experiencing the same problem. **My search was limited to rats in urban landscapes.**

Rats are mostly active at night and cannot survive when exposed to extreme direct sunlight. In our area they primarily feed on cactus, mesquite pods, pet food and bird seed left outdoors, garden vegetables, and fallen fruit from backyard trees. But, they will eat just about anything. Diminished predator populations in populated areas may also contribute to the increase in the rat population.



Like humans, **rats need food and shelter. If we deny them these necessities, they will not stay.** We can carefully destroy and remove any nests we find on our property; remove dead cactus and large fallen branches; trim overgrown desert spoons, agaves, cactus and other plants; trim lower branches of our shrubs; pick-up and remove trash and debris;

rearrange rocks and boulders to reduce harborage potential; create open spaces; keep groundcover low; not allow a skirt of dead branches to form on desert spoons or yuccas; collect and remove discarded vegetables in the garden and fallen fruit from backyard trees; close lids securely on trash cans and store them in the garage; properly care for compost piles; store firewood at least twelve inches off of the ground; and avoid placing storage boxes and other items that offer shelter along patios, walls, or buildings.

Remember that there are very strict City of Sierra Vista ordinances that control the trapping of animals and birds. Do not open yourself up to a fine or jail sentence due to ignorance of the law. If you decide that poisoning and baiting is the way to go, then contact a professional. Poison is also a health threat to other animals, pets, and children, and is not recommended for rat control by homeowners. When poisoned rats die, natural predators may eat them and these beneficial predators can also die. Also, rats may die in hard to reach places, causing a bad smell. Ultrasound devices are not effective because rats quickly become accustomed to repeated sounds. Repellents have been found to be effective only for short periods of time. Snap traps can be effective, but should primarily be used indoors, in garages, or on screened patios. Glue boards are most effective in catching mice and probably should only be used indoors. Whichever plan of attack you

choose, **never handle a dead rat with your bare hands.**

With so many pros and cons for poisoning and trapping rats, it is clear that denying food and shelter to rats is the safest and most permanent method of rat control. Other methods are only effective short-term if the food and shelter issues are not addressed.

It's up to each of us to take responsibility to reduce this health hazard. If we all do our part, we can control the rat population and safely enjoy the outdoors in our yards and neighborhoods.

References:

http://metrokc.gov/health/env_hlth/rats.htm

<http://www.ipmucdavis.edu/PMG/PESTNOTES/pn7416html>

University of Nevada Cooperative Extension, SP-02-10; William Kerns, M. L. Robinson, Marie Ryan. Winterhaven News Bulletin– August 27, 2007

Deke Descoteaux, Master Gardener

October Reminders

- ◆ Be ready for the first frost
- ◆ Thin the seedlings
- ◆ Overseed lawns
- ◆ Plant spring bulbs
- ◆ Divide perennials
- ◆ Don't let weeds go to seed

The Agent's Observations

Q Is there a safe and effective systemic insecticide that works well for aphids and other piercing/sucking insects that infest trees and shrubs? What is it called and how does it work?

A An effective systemic insecticide for trees and shrubs has a common active ingredient name of "imidacloprid." It has several trade names. For the ornamental sector of the market it is called 'Merit.' In agricultural use it is called 'Provado' for use in fruit and nut trees, and 'Admire' for use in vegetables and row crops like cotton. As a seed treatment it is called "Gaucho." This compound is in the same chemical family as nicotine, but is chlorinated. Look on the ingredient label for the name imidacloprid. This product works well for insects like aphids, leafhoppers, mealybugs, planthoppers, psyllids, scale, thrips, treehoppers, true bugs like stink bugs and leaf-footed bugs, and whiteflies among others. This insecticide's mode of action is as a nerve receptor toxin. It has a moderate toxicity rating for humans and other mammals. It can be sprayed on the foliage or applied as a drench to the ground and then watered in and taken up systemically. It can provide season-long control. **Read and follow all label directions when using this or any other pesticide.** For further

information refer to the URL:
<http://en.wikipedia.org/wiki/Imidacloprid>

Q When are bell peppers and chiles ready to harvest?

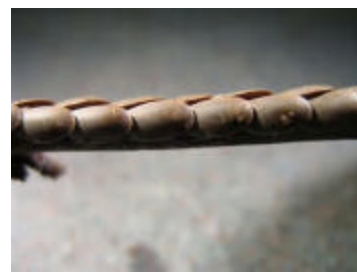
A Peppers and chilies are ripe when they pass the "squeeze test." They should be firm, not soft, when they are squeezed.

Nearly all peppers are a color other than green when they are ripe. Colored peppers will contain more vitamins and minerals than immature green peppers. Green, immature hot pepper fruit are usually more pungent (hotter) to the tongue and mouth than mature colored peppers. That is because mature peppers usually have more sugars in them that mask some of the heat, even though they have just as much or more capsaicin as immature peppers. The following URL contains more information on chile peppers and capsaicin:
<http://en.wikipedia.org/wiki/Capsaicin>.

Q I have some pecan trees that have a scale like insect on the leaf petioles. How can I control them?

A A sample was examined and found to have katydid eggs on it, not scale insects. The eggs of the katydid are about the size of cantaloupe seeds. They are laid end to end in a single row, with one end placed slightly on top of the next egg. These insects are harmless and do not damage plants. Scale insects on the other hand will clamp down on plants and suck juices from them cause damage. This is an example of where identification is the first step in controlling pest problems. In this case there was not a problem.

*Robert E. Call
Extension Agent, Horticulture*



Katydid eggs

The University of Arizona
Cooperative Extension
Cochise County
450 S. Haskell Avenue
Willcox, AZ 85643-2790

NONPROFIT ORG
US POSTAGE
PAID
PERMIT NO.
70

15th Annual Conference

High on the Desert

The 15th Annual
High Desert
Gardening & Landscaping Conference
will be held February 15 & 16, 2008
at the Windemere Hotel & Conference Center
in Sierra Vista, AZ.

Watch for details and plan now to attend!