#### In a Desert Garden

Sedum—Stonecrop

This month, I couldn't make up my mind what plant I wanted to feature in my article. As this series of articles is about my garden, a garden in the high desert, I like to write about plants native to the area or at least well adapted. This month I will write about a plant family that is at home all over the world and can take different soils and weather conditions as long as it doesn't get overwatered.

The Sedums are a family of plants I absolutely love. I used to grow them in my homes in Germany, in Alaska, I had these plants in my garden in West-Virginia, and of course I am growing them now. The climate here is by far the better for growing Stonecrops, as long as they have good drainage and a little afternoon shade they are happy. These plants are considered succulents and there is a great variety of them in all sizes and colors. Not all of them are hardy in our zones, but most of them make great container plants. The more tropical ones I take inside in winter but I

have many of the hardier ones growing all over my yard. Several of the Stonecrops are considered autumn flowers just like the Mums. My absolute favorite must be Sedum Autumn Joy or "Herbst Freude" which means the same thing in German. I think it is a German hybrid. I still can remember it growing in my mother's garden in Berlin. It is one of the taller Stonecrops, growing 2 to 3 feet tall and wide and its thick gray-green succulent leaves are very showy. In late summer, that is about now, it gets huge flower heads consisting of many small star-shaped blossoms that start out pink and as they age turn to copper and then to rust. The plant is hardy all the way down to zone 5, but freezes to the ground after the lightest frost. It needs good drainage and not too much water. It makes a good container plant. There also exists a variegated variety, but I have not been able to lay hands on it yet.

Many of the Stonecrops are considered rock garden plants because they are very small and many of them make great low water use ground covers. As their (Continued on page 2)

Inside this issue:

Cuttings 'N' Clippings	2
October Reminders	2
The Virtual Gardener	3
Mulberry Trees	4
Fall Plant Sales	4
Agent's Observations	5

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(Continued from page 1)

leaves are very fragile and usually break or fall off when touched they cannot be walked on. When they get smashed or broken off, like most succulents, they quickly make more plants from their leaflets.

This family of plants is huge and I will only &scribe a few. Every year I see more varieties available in the nurseries. A very popular little plant is *S. angelicum*. This one is from Western Europe. The dark green leaves are very tiny. White and sometimes pink flowers cover the plants in spring.

From the Mediterranean comes *S. brevifolium*, another tiny Sedum for rock gardens or containers. This plant has grayish-white, redflushed leaves that are very small, pink to white flowers appear in summer. It needs some afternoon shade.

An uncommon variety is *S. telephium* "Arthur Branch" with its bronzed leaves and burgundy-red stems that makes a nice contrast to gray-leafed plants.

- S. sieboldi, a Stonecrop grown for deep pink flowers in fall and its arching stems of succulent gray green leaves. It is native to Japan. There is also a variegated variety available; the leaves are pinkish and very attractive.
- S. confusum, a native to Mexico, has a spreading and branching habit. The leaves tend to cluster in rosettes towards branch ends. It has dusters of yellow flowers in spring.
- S. morganianum, Donkey's or Burro's tail is a beautiful plant, but not hardy in our winters and best



kept as a houseplant or in a very sheltered place It originated in Mexico and forms long trailing stems of light gray-green leaves that overlap each other. Pink to deep red flowers may appear from spring to summer but are rare. My plant had only flowered when I took it outside after the last frost. This year I was too lazy and left it in my sunroom and it did not flower. The leaves, as on most sedums, are very fragile and moving it usually takes off a lot of leaves.

*S, spurium* is another lovely groundcover, native to the Caucasus. The most popular variety is "Dragon Blood," with purplebronze leaves and blood red flowers.

As you might imagine, I keep quite a collection of these lovely drought tolerant plants. They make good potted plants as accents and nice ground covers under taller drought tolerant plants. Keep in mind most of the Stonecrops are very hardy but like a little shade from the hottest sun.

Angel Rutherford, Master Gardener

Robert E. Call

Robert E. Call Extension Agent, Horticulture

> Carolyn Gruenhagen Editor

# Cuttings 'N' Clippings

- The next meeting of CCMGA is 5:00 p.m. October 7, 2004 at the University of Arizona South campus, Room 508 (formerly Room 100). The very special speaker is Colin Garland, founder of Global Classroom and the Aula Global Reserve in the cloud forests of Costa Rica. He is a professional wilderness guide, animal tracker, and naturalist who leads wilderness trips all over the globe. Our thanks to Valerie McCaffrey for bringing Colin to CCMGA.
- \* Saturday, October 2, 2004 from 9:00.—10:30 a.m. a free Water Wise workshop will be held at UAS. Dawn and Don Long, American Septic Service, will present Septic Care and Greywater Reuse.
- \*\* Angel Rutherford will be presenting two classes at Cochise College in October—
  October 9 Pond Building
  October 23 Pond Maintenance
  For information contact Cochise College at 515-5492



### October Reminders

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

#### The Virtual Gardener—Kick It Up a Notch With Home-Grown Garlic

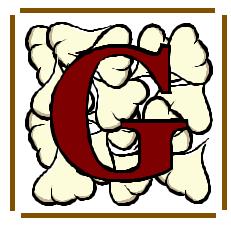
If you've ever watched Emeril Lagasse's cooking shows, you've likely heard him facetiously talk about kicking up a dish he's preparing by tossing in 20 or 30 cloves of garlic. This month I'm going to tell you how to grow your own garlic so you too can "kick it up a notch."

My interest in home-grown garlic began a several of months ago when a friend of mine gave me a sample of several varieties of garlic he had grown in his garden. It was wonderful. Before sampling his, I had never really given garlic a second thought and certainly never thought of planting any. Now I've decided to grow some myself.

Garlic is a plant with an interesting history. For example, we've all heard that garlic protects against vampires. (Just for the record a resident of Transylvania who believes in vampires said in a recent interview that garlic doesn't work for that purpose. Drat!) While we may dismiss stories of vampires, it is a fact that garlic is a powerful antiseptic and was used for that purpose by military doctors in World Wars I and II. Some current research supports the idea that garlic lowers "bad" cholesterol (LDL), raises "good" cholesterol (HDL), and reduces high blood pressure.

In a more botanical vein, garlic (Allium sativum) is a member of the lily family and is closely related to onions, shallots, and leeks. Because it does not produce true seeds, it is usually grown by planting the individual cloves that make up the bulb. Some types can also be propagated from bulbils, or

small aerial cloves, that grow on the stems. Although you can grow garlic by planting cloves from bulbs you buy at the supermarket, that is not the recommended way to do it. You can never be absolutely sure of the variety you'll get there, the genetic quality may not be the best, and they may be infected with viruses. The experts recommend you buy bulbs (sometimes referred to as "seeds") from nurseries that specialize in producing stock for propagation.



It is said there are more than 300 varieties of garlic grown worldwide and about 100 of those are commonly grown or available in the United States. Although most vendors offer California Early or California Late, the varieties you find in the supermarket, other varieties can be purchased from specialty suppliers (check the Internet for sources).

As with many plants, the names applied to garlic by the horticultural trade can be confusing. For example, a variety called Creole is also sometimes also called Purple-Skin, and another variety, Rocambole, may be called Spanish, Serpent, Bavarian, or Top Setting by different vendors. The Elephant garlic (Allium scorodoprasum) found in

the supermarket is not a true garlic but a close relative.

Unless you already have a favorite, Yavapai County Extension Agent, Jeff Schalau, recommends you try two or three varieties to find out which grow best for you and appeal to your taste. He suggests hardneck varieties Spanish Roja, Carpathian, or German Red or softneck varieties Inchelium Red, California Early, Chet's Italian, Mild French, or Silverskin.

Garlic needs four to six weeks of chilling at 32-50°F to induce bulb formation. For this reason it should be planted late in the fall (October-November) in Cochise County. Planting at this time gives the garlic a short period of growth before the chilling begins. The bulbs can be harvested in late June or early July.

Garlic grows best in loose loams that are high in organic matter. It is not a drought-tolerant plant and requires constant moisture during active growth. Also, since the roots lack a dense mass of root hairs that aid in the absorption of nutrients, the plants require fairly heavy feeding. Applying a balanced fertilizer (10-10-10) at the rate of 3-4 pounds per 100 square feet to the bed before planting will get them off to a good start. Reapply several light applications of fertilizer when leaves are growing but do not fertilize after bulbs begin to form. None of the Web sites I visited suggested using it, but I think a timed-release fertilizer would work well for garlic.

(Continued on back page)

#### My Experience With Mulberry Trees

Mulberry (*Morus spp.*) Fam. *Moraceae* 

Species: White Mulberry (*Morus alba L*), Black Mulberry (*M. nigra L.*), American Mulberry, Red Mulberry (*M. rubra L.*). Hybrid forms exist between *Morus alba* and *M. rubra*.

White Mulberry is native to eastern and central China. The tree was introduced into America for silkworm culture in early colonial times. They are quite tolerant of drought, pollution, and poor soil. Some are damaged at 25°F, while others are unfazed at -25°F. The white Mulberries can grow to 80 ft. and are the most variable in form. The name white comes from the color of its buds, not the fruit.

The White Mulberry is on my list of "trees to plant" if you have room and enjoy fruit and wildlife. Plenty of room is the real secret.

Do they cause allergies? If you plant the female Mulberry, you won't even have pollen—just fruit and birds that have never visited your garden before.

Are they messy? Yes and no. The fruit is messy, but if you can place your tree away from paths and patios, then I say, "No problem." I actually sweep my sidewalk clear of the fruit, sweep it back into the garden where it dries and feeds the birds into fall, and if it is a good year they scratch for fruit into winter. Once the birds learn to rely on them, they bring their babies every year. I also use my leaves

and my neighbor's leaves for mulch and compost.

Edible for humans? Most definitely. In many countries people depend on it to supplement their diet. Lay a clean cloth or sheet under the tree and give it a good shake and only the ripe fruit will fall. You can do this continually for several weeks. Jam or tarts are great. The fruit contains about 9 % sugar with malic and citric acid. It can be eaten right off the tree or added to other fruits, especially pears and apples.

Do they get worms (caterpillars)? Okay yes, once in a blue moon you may get them, but if they are planted at a distance there won't be any inconvenience. I have not had a problem since 1987.

My house had three fruitless mulberry trees when I moved in and it was a mess. They all were right up against the house and patio. This is not a good idea. They were so big and because I needed sunlight to plant my vegetable and herb garden we took them down. My neighbor had the *Morus alba*, (white fruiting) which I enjoyed and I had a seedling start at the side of my house. It grows several feet a year. It gives great shade, is low maintenance and uses low



water. They can take freezing temperatures.

I enjoy mine along with the Cedar Waxwings, Orioles, Quail with their fledglings, White Wing Doves, and Inca Doves to name just a few of the many birds that come. Mockingbirds are always welcome. They never eat from the bird feeder, but only bugs and of course I make sure they all have an abundance of fruit.

Emily Boyd, Master Gardener

#### Correction:

Due to a publishing error in last month's newsletter, the author of the Book Review, Allergy-Free Gardening: The Revolutionary Guide to Healthy Landscaping by Thomas Leo Ogren was omitted. The author was Emily Boyd, Master Gardener.

#### **Fall Plant Sales**

**Tohono Chul Park**, 7366 N. Paseo del Norte, Tucson, 520-742-6455, Saturday and Sunday, Oct. 2 & 3.

Tucson Botanical Gardens, 2150 N. Alvernon Way, Tucson, 520-326-9686, Ext. 22, Saturday and Sunday, Oct. 2 & 3.

**Boyce Thompson Arboretum**, 3 miles W of Superior off U.S. 60, 520-689-2811, October 16-31 with special events on the weekends.

**Desert Survivors Nursery,** 1020 W. Starr Pass Blvd., Tucson, 520-791-9309, Saturday and Sunday October 16 & 17.

**Pima County Master Gardeners**, 4210 N. Campbell Ave., Tucson, 520-626-5161, Saturday, October 30, 9:00 am—Noon.

#### The Agent's Observations

We have a hoard of khaki green beetles that have been attacking our fruit and landscape trees and shrubs.

They have defoliated several plants. They seem to appear when the rainy season begins. What are they and how can we control them?

After several samples were brought to the office it was determined to be scarab beetles. Specifically they are *Macrodac*tylus uniformis. These insects are associated with wild grapes but when "desert plants" are found in the desert they will consume them. This particular genus is in the subfamily Melolonthinae which includes the genera Diplotaxis and Phyllophaga among others. These are the rose chafers, dung, May and June beetles. These species normally have long clawed hind legs. Feeding, mating, and egg laying occur in June and July. Eggs are deposited a few inches below the soil. Hatching takes place in a couple of weeks. The grubs are root feeders and overwinter in the ground. They emerge in the early summer to repeat their life cycle. One generation occurs per year. Control: If they continue being a problem excluding the beetles with netting, cheese or shade cloth or window screen placed around the plants. Hand picking and throwing them in soapy water will decrease populations also. Use gloves because some species may cause blistering. Harvesting nearly ripe fruit before the beetles do should be done. If needed, general use insecticides like sevin, malathion, or a pyrethriod will protect foliage and fruit in the future.

**Source**: Carl Olson, Curator, Entomological Collection, University of

Arizona. & Insect Pests of Farm, Garden and Orchard, 8<sup>th</sup> Edition. 1987. Ralph H. Davidson and William F. Lyon. John Wiley & Sons. New York. pp.485-486.

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I have two large cannas, both red/orange in color. One gets sun most of the day. The other receives sixty percent sun and is in the shade by mid-afternoon.

Both plants have flowered twice with long colorful stalks. The last seven-weeks neither has grown new flower stocks. The first plant is very burnt around the leaf edges, while the second plant looks very healthy. They are both watered by a drip system. Both cannas were cut back to the ground last winter and started to grow last March. They have been adequately fertilized with Miracle-Grow. What seems to be the problem?

Lets cover a little bit of general canna lily (Cannaceae) care first. Cannas are tropical to subtropical plants originating in North America. Most in the nursery trade are hybrids. They perform best in full sunlight, provided they have adequate water. They can be grown as "bog" plants or surrounding pond areas. The biggest problems growing cannas in desert landscapes surrounded by rock mulch is not enough water. Other problems include too much shade, not dividing them every three to four years, not pruning out the old flowers regularly, not fertilizing them regularly, and not using organic soil amendments and organic mulch where they are planted. Plant cannas in locations away from hot walls or reflected light but in full or nearly full sun. In our climate they also do well under very light shade, but in

deep shade they suffer. Half a day of sunlight is not enough. Cannas enjoy organic soils. They may not perform well in alkaline desert soils. Desert landscapes may have a designated high water use area devoted to plants that require more water than true desert plants. These are the areas normally devoted to plants that will shade the walls of the house or provide shade to outside living areas. These are also the areas where tropical looking plants like cannas will perform best. Desert soils need to be modified with lots of organic matter. 3:1 ratio, in the planting hole and then surrounded with four inches of an organic mulch. Cannas are a clumping, herbaceous perennial that increases its size by growing short underground shoots called rhizomes. When planting a one gallon canna expect in three years the plant to be eighteen inches across and double its height, if properly maintained. Every three or four years, in late fall, clumps should be divided. If not divided in a timely manner the number and quality of the flowers will be reduced, regardless of how care they receive. The clumps can be divided with a sharp knife, allowing the wounds to callus over by placing them outside in the shade for a few days after cutting. The rhizomes are replanted about three to four inches deep and twelve to eighteen inches apart. Fertilize with your favorite phosphorus fertilizer when you replant. The remainder can be shared with friends. Following the above recommendations should revive your

**Source**: Robert Morris, Nevada Clark County Cooperative Extension

Robert E. Call Extension Agent, Horticulture

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(Continued from page 3)

Do not separate the cloves from the bulbs until you are ready to plant them. Place the cloves vertically in the ground with the pointy end up, space them no less than about 6 inches apart, and cover them with 23 inches of soil. During the fall and winter most of the action will take place underground. When the soil warms up in the spring leaves will begin to appear above ground. For hardneck varieties you should cut off the seed stock when bulbils begin to form. Cut back on water for about a week before you are ready to harvest the bulbs. The garlic is ready to harvest when the lower third of the leaves have turned brown and the bulbs have segmented into individual cloves that can easily be separated (dig up a couple of bulbs to check on this).

After harvesting allow the bulbs to cure for 24 weeks in a dry location out of direct sunlight. The leaves of softneck varieties can be braided after 2-3 days of curing, if desired. If you do not braid, trim the leaves to about ½ inch and the roots to ¼ inch after curing. Garlic will store for 3-5 months at 32°F but will sprout in the refrigerator.

Before I wind this up, I must warn you that infusing garlic in oil at home is extremely dangerous and can lead to your untimely demise. The oil provides an ideal environment for growing the botulism bacterium (Clostridium botulinum). Consuming oil contaminated with botulism toxin can KILL you.

If you would like to find out more about growing garlic, do a Google search on garlic or point your browser at the following sites:

http://ianrpubs.unl.edu/ horticulture/g 1425.htm

http://www.extension.umn. edu/distirbution/crop systems/DC7317.html

http://cals.arizona.edu/ yavapai/anr/hort/byg/ archive/growinggarlic.html

Until next time—Happy Surfing.

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

