

Succulents Add Beauty to Your Garden

By Carolyn R. Casey, Fairfax Master Gardener Intern

Succulents come in various shapes, sizes and textures making them beautiful and interesting additions to any garden. Some produce beautiful flowers while others contribute interesting shapes. Did you know that the word succulent means juicy? There are several succulents that like Northern Virginia's soil and climate in Zone 7. The plants mentioned in this article are perennial and annual succulents that have done very well in my garden and have been found to be low maintenance and easy care.



photo: University of California Agriculture and Natural Resources

Succulents are drought tolerant and found throughout the world. They evolved to survive long periods of drought by storing water in swollen leaves, stems or roots. They have shallow roots that allow them to absorb water from light rains or heavy dews. Their waxy, hairy and spiny surfaces create humid micro-habitats that reduce air movement and water loss. Succulents that store water in their leaves often have thick, fleshy leaves that have a tough skin and need more water than stem succulents. Succulents also have the ability to go dormant during drought conditions.

If succulents have leaves, they may be covered with a waxy covering or white pubescence that reflects sunlight this keeps the inside of the leaf cool and reduces the need for transpiration. Transpiration is the process of water movement through a plant and its evaporation from leaves, stems and flowers. Water is necessary for these plants but only a small amount of water taken up by the roots is used for growth and metabolism. The remaining 97 to 99.5 percent is lost by transpiration.

Succulents need six to eight hours of sunlight a day. The best time to fertilize them is in the spring and summer when they are actively growing. Their most common pests are scale, mealy bugs and root mealy bugs. Succulents need to be watered in the morning to keep them from developing root rot and sunburn. Mulch and other materials that hold water need to be kept away from the base of succulents to prevent root rot and snails.

Succulents can be propagated by tip and leaf cuttings. A cutting needs a few days to heal before putting it into a root medium. Perlite, sand or vermiculite are good rooting mediums. Some succulents like sedum will become plants from a single leaf.

Types of Succulents

Hens and Chicks (*Sempervivum tectorum*) are perennial succulents with beautiful rosette leaves that may be green, gray, silver-violet or have a rose hue. They reproduce from offsets, tiny plants that grow near the edge of the mother plant. They are native to the mountains of southern Europe. Did you know that Hens and Chicks are cultivated in Europe not only for their appearance but as part of a Roman tradition claiming that they protect buildings against lightning strikes? They are easily grown in average, well-drained soils in full

sun and tolerate some light shade. Hens and Chicks look great in rock gardens, as a border, in rock crevices, along stone walls and as a ground cover.

Cacti are succulents that are native to America. The word cactus comes from the Greek word *kaktos*. The terms cactus and succulent are often used interchangeably and can be confusing. Did you know that all cacti are succulents, but not all succulents are cacti? Stem succulents have spines instead of leaves. Cacti are differentiated from other succulents by their sharp spines. When you look closely at a cactus you can see spines growing from a point on its surface called an areole. Cacti developed spines as a way to protect themselves from animals trying to access the stored moisture inside them. Cacti and succulents are valued not only for their unique appearance, but also as sources for food, drink, cosmetics, medicines, implements and construction materials.



photo: Shelley McNeal, University of Maryland Extension

Prickly Pear Cactus

The Prickly Pear cactus (*Opuntia*) is a perennial that is native to Mexico and appears on the Mexican flag. It produces an abundance of beautiful yellow flowers that can be 3 to 4 inches wide and edible fruits called tunas that taste like watermelon. The Aztecs used the juice from the prickly pear to treat burns and drank it to treat hepatitis. Currently, prickly pear cacti are used to treat toothaches, kidney stones, burns and urinary tract inflammation. They can be eaten in salads or stews and are rich in vitamins and calcium. The juice from the fruit is used in jellies and candy. Prickly Pear cacti prefer full sunlight and well-drained soil. Plant them 6 feet apart, because they can grow 3 feet high and 6 feet wide. They should not be overwatered because that can promote root rot. Wear gloves when you handle them because the needles are sharp and difficult to remove from your hand. They do not need to be fertilized when planted outdoors, and they shrink during the winter months.



photo: Carl Lewis, Creative Commons

Yucca filamentosa

Yucca filamentosa is a large perennial succulent that stores water in its trunk and has tall stalks that are covered with beautiful white bell-shaped flowers. Other varieties have red, pink, yellow or coral tubular flowers on 4 to 6 foot stalks. Yuccas bloom from April to June. They have sword-shaped evergreen leaves that have thread-like filaments curling along the edges and sharp pointed tips. They are resistant to deer, rabbits, poor soil, drought and heat. Yuccas tolerate many different types of soil and prefer full sun but will tolerate partial shade. They need to be planted 3 to 6 feet apart. The Native Americans use them for a variety of purposes including food, medicine, cordage and soap. The edible flowers taste like bitter artichokes and can be used in salads, soups, stews, or roasted. Yuccas are pollinated by the small white Yucca moth and hummingbirds. They also serve as larval hosts for the Yucca Giant-Skipper (*Megathymus yuccae*) and the Cofaqui Giant-Skipper (*Megathymus cofaqui*) butterflies. Yucca plants have oblong green fruits that turn brown

when mature. The fruit are 2 inches by 3/4 inch with many black seeds. Yuccas can be propagated by division, root cutting and seed.

Ice plant (*Delosperma cooperi*) is a perennial succulent that likes dry, well-drained soil in full sun. This plant will grow poorly or die in soil that is not well-drained. Do not plant it in unamended clay soil. It is originally from South Africa. North of Zone 7, it is a semi-evergreen and is not winter hardy. It blooms from June to September with beautiful red-purple flowers that are about 2 inches in diameter. Ice plant likes full sun and tolerates drought and dry soil. This mat-forming plant typically grows to 3 inches tall and spreads quickly to 24 inches wide, which makes it ideal as a ground cover.



photo: Missouri Botanical Garden

Delosperma cooperi

Portulaca grandiflora is an annual succulent that is also known as Moss Rose. Portulaca is low-growing and native to South America and has succulent leaves that are fleshy and narrow. It can grow 8 inches tall and 1 foot wide. The beautiful flowers are red, orange, yellow, white and other pastel colors that come in single, semi-double and double forms. The flowers do not open on cloudy or rainy days and close up from sundown to sunup. After flowering, each flower is replaced by a seed capsule. The capsules will split open, releasing dark brown to black seeds. Portulaca reseeds itself, but propagation can also be accomplished by placing broken stems into the soil. These stems will produce roots. Portulaca has a taproot and fibrous secondary roots that are able to tolerate poor, compacted soils and drought conditions. It is a food source for birds that enjoy eating the seeds. Insect problems include aphids, gnats, snails and slugs. In wet areas, it may be affected by stem or root rot. This plant has a high drought and heat tolerance and needs to be planted in well-drained soil and in full sun. You can use Portulaca in a rock or crevice garden, as a border, in pots and hanging planters or allow it to cascade down a wall. Deadheading will deter self-seeding. They don't like being transplanted, and care should be given when handling seedlings.



photo: Daryl Mitchell, Creative Commons

Portulaca grandiflora

Sedums

One of my favorite perennial succulents is Sedum. *Sedum ternatum*, also known as three-leaved snow crop, produces showy white blooms from April to May. It likes full sun to part shade and is low maintenance. It can be used as a ground cover and grows 3 to 6 inches high, spreading by creeping stems that root at the nodes. These stems break away and die in winter, leaving newly rooted plants separated from the mother plant. It also tolerates rabbits and drought.



Sedum 'Autumn Joy'

Another one of my favorites is Sedum 'Autumn Joy,' a hybrid from *Sedum spectabile* and *Sedum telephium*. The succulent leaves emerge early as rosettes. In summer, pink puffs of flower clusters adorn the tops of the stems. These are especially attractive to bees and butterflies, but an occasional hummingbird may be attracted to them. It can also grow from fleshy stems harvested in fall and placed horizontally in a soilless medium in a sunny location of your home. In just a month or so, each leaf node will develop tiny roots. Each of these may be removed and planted as individual new plants. It has few pest or disease issues but may be eaten

by deer. It blooms for up to eight weeks with rusty pink blooms. Sedum 'Autumn Joy' provides food for pollinators in the late summer. Also, during the dry summer months, the birds enjoy pecking on this sedum to extract moisture. The young, tender stems and leaves can be eaten raw, but the older material should be avoided as moderate stomach upset can occur unless cooked. These hardy plants are members of the Stonecrop family. The sap in the thick leaves can be used to alleviate inflammation or as a cooling salve on burns and rashes. With its medicinal attributes, long flower life and ease of care, Sedum 'Autumn Joy' is a plant that you should add to your perennial flower garden because it is pleasing to the eye.

I hope that you enjoy these beautiful succulents in your garden as much as I do in mine! Happy Gardening!

Resources

- [Plant of the Week: Succulents](#), Gerald Klingaman, University of Arkansas Division of Agriculture, Research and Extension
- [Sedum ternatum](#), Missouri Botanical Garden
- [Prickly Pear Cactus](#), Shelley McNeal, University of Maryland Extension
- [Hens and Chicks](#), Sempervivum tectorum, North Carolina State University, Extension Gardener Plant Toolbox
- [Prickly Pear Cactus](#), UIC Heritage Garden
- [Yucca filamentosa](#), North Carolina State University, Extension Gardener Plant Toolbox
- [Transpiration](#), Wikipedia
- [Portulaca grandiflora](#), North Carolina State University, Extension Gardener Plant Toolbox
- [Hesperaloe parviflora](#), North Carolina State University, Extension Gardener Plant Toolbox