You Had Me at Aloe
Susan Pelton, UConn Home & Garden Education Center

If you are one of the many home gardeners who may not always remember to water your houseplants or container plants or if you are looking for gardening ideas that consume less water, then succulents may be for you. Currently, succulents are everywhere you look; from the pages of bridal magazines where the soft pastel hues inspire many a bridal party’s bouquets to home décor where these plants can be grown in small apartments or spacious homes to outdoor gardens where succulents can survive on limited water.

Succulents are defined as drought-resistant plants due to the fact that they have leaves, roots, or stems that are capable of storing water. So even though these plants are capable of withstanding periods of drought they will have better growth and flower production with regular watering. Succulents have developed the ability to absorb even the smallest amounts of water available from rainfall, light showers, mist, or dew. The shallow roots of the succulent allow for the absorption of moisture that may not penetrate very far into the soil. In addition, succulents have a reduced number of stomata, the pores through which water exits the leaves during transpiration, which they may keep closed during the heat of the day to reduce the loss of moisture due to evaporation.

Succulents image by Luke Pelton

When thinking of succulents an image of fat, fleshy leaves may come to mind. Sedum, agave, and aloe all have these thick leaves, often in the form of rosettes. The interior of these fleshy leaves contains a thick, mucilaginous substance that aids in water retention and can be found in a wide variety of plants. To say that it is a gluey substance is an understatement as it has been used as the base for many adhesives including the gooey, amber-colored, craft glue that many Baby Boomers used for their school projects.
Mucilage is also edible. The first marshmallows were made from the boiled, sweetened pulp of the marshmallow (Althaea officinalis) plant although this is no longer the way that marshmallows are manufactured. Among the succulents, Aloe vera is still very much in use for the medicinal properties of its pulp. From the Middle Ages aloe was used as both a laxative and a purgative, a trait that can cause issues such as diarrhea and stomach cramps if it is consumed. More common today is the use of Aloe vera gel in cosmetics and medicines. It can be found as an ingredient in beverages, soap, ointments, and lotions, mostly as a topical treatment for skin ailments such as rashes and burns. An Aloe vera plant in the home may provide a fresh source of the gel by simply cutting off a portion of a leaf.

To grow an aloe plant or another succulent in your home first consider the origin of the plant. Aloe is native to the Arabian Peninsula, an area that is just northeast of Africa, where the climate is generally hot and arid except during the rainy season. Therefore, aloe plants should be placed in an area where they will receive several hours of bright light each day. Use a potting mix formulated for succulents or a well-draining soil and allow it to dry out between waterings. Outdoor plants should be brought into the home for the winter in USDA zones 7 and lower, such as in Connecticut. Aloe plants adapt their growth to the size of their container, a smaller container will keep the plant small, and an abundance of room in a pot may allow the plant to sit in soil that is too wet, promoting root rot.

Agave and its close relative Yucca are native to arid parts of the Americas, and stonecrops (Sedum sp.), which are native to the Northern hemisphere, will tolerate the cold of a Connecticut winter, even more so if they are planted in full sun and near a building. Most succulents will be happy with at least 6 hours of full sun to avoid becoming leggy, 8 hours of sun will promote better color and flowering. They will appreciate a bit of afternoon shade; like us, they may start to fade if they are subjected to repeated doses of temperatures above 90°F. Mixing container-grown succulents and cold-hardy varieties amid rocks in an outdoor garden can create a lovely, drought-tolerant landscape.

To see a large collection of succulent varieties plan a visit to the Torrey Life Sciences Greenhouses on the UConn campus in Storrs, CT. The greenhouses are open to the public from 8:00 a.m. to 4:00 p.m., Mondays through Fridays and Saturdays from 10:00 a.m. to 2:00 p.m. For questions on houseplants, succulents, or other horticultural topics, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, visit our website at www.ladybug.uconn.edu or contact your local Cooperative Extension center.