

# Landscaping with Succulents

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**A**gaves and cacti are among some of the most beautiful plants that can be grown in our desert environment.

These plants are part of a group called succulents and have developed adaptations to survive in the sometimes harsh desert environment.

Many of these species have a thick waxy coat called a cuticle that minimizes loss of water through their leaves and stems. The leaves of some cacti are modified to form spines, thereby conserving precious water and shading the stem. Some species have beautiful silvery colorations that reflect sunlight; others will literally close up their leaves when under drought or high temperature stress. Most have a vast network of fibrous surface roots that lie just under the soil and are capable of harvesting much of the rainwater that may come their way. For protection, agaves may be armed with spines. It is prudent to approach cacti and agaves carefully since the spines are coated with irritating substances such as steroids. Contact with skin can cause

swelling and numbness. To make matters worse, it's painful and the effect may last several days. It soon makes anyone who works with agaves take pause and be extremely careful. Luckily there are cacti and agaves that are without spines that do not pose a "gardening hazard."

Where do you begin to select from the hundreds of agaves and cacti in garden centers and specialty nurseries? A simple solution would be to choose plants that grow in your area. This simply means that plants that you've seen growing in Lake Havasu City or Yuma will not automatically do well in Tucson or Safford, or our northern towns and

cities. Conversely, species that do well in these northern locales, may struggle with the intense heat of the low deserts. In some locations, container growing of these plants is the most practical solution to avoid the danger of frost. Simply move the plants in containers into the garage or other room that does not freeze and then wait for milder weather to return the plants to your garden.

Driving or walking around your neighborhood will give you an opportunity to observe the 'tried and true' species. Take a visit to your local arboretum or local demonstration garden. Contact Cooperative Extension in your county for local information and informative bulletins on these plants and lastly, visit and talk to your local nurseries.

Now that you've narrowed your choice of species, locate the ideal location for that plant. Observe where that particular species does well. Is it against a west-facing wall? Is it in the dappled shade of a finely leaved tree such as Palo Verde or a Mimosa? Will it interfere with pedestrian access? Does it have spines that are dangerous to adults, children and pets and those who may come in contact with the plant? Will the plant soon out-grow its location? Choose the plant location carefully because once the plants are established, they are not easy to move.

After choosing the physical location, make sure the soil drains quickly and does not remain water-logged or drain poorly. Cactus and agaves will not tolerate such conditions which eventually may pre-dispose the plant to soil-borne pathogens. Heavy clay soil may limit the location of the planting. You may want to consider mounding a rapidly draining soil mix over clay soil to provide a satisfactory environment. Take the time to incorporate some of the soil into the clay soil so there will not be an abrupt change in soil texture which may result in poor drainage.

Planting is a simple operation. Place the plants no more than ¼ inch deeper than they were in their original container or nursery bed. If you plan on mulching the plants, allow for this additional depth. Since cacti, agaves and other succulents do not do well when organic material is placed on their stems, resist the temptation to use compost, ground bark or other organic materials. The best mulch is either crushed rock or decomposed granite. Using these materials will give a clean, neat appearance to your garden, help suppress weeds, decrease water evaporation and help moderate soil temperatures.

One of the toughest decisions for agave and cactus aficionados is "how much water do I give my plants?" Let's think of the plants and how they are irrigated in the wild. A rainstorm may come through and soon after the soil dries out. Then another rain may come along several days later and repeat the process. When watering we are attempting to have the plant dry out between waterings, but also to receive a thorough watering each time we irrigate. Since many of the water absorbing roots of cacti, agaves and other succulents are located just below the soil surface, deep watering is not necessary. As the daytime temperatures cool down and nighttime temperatures



Jack Kelly — Parry's agave (Agave parryi)

Jack Kelly — Golden barrel cactus (*Echinocactus grusonii*)



become chilly, watering may be reduced to once every two weeks and eventually once a month for most varieties of these wonderful plants. If we are fortunate enough to get winter rain, no supplemental irrigation is necessary during the winter months.

What are my favorite species of these plants? I'll share a few of my personal favorites. *Agave parryi huachuensis* (Huachuca agave) is a striking large blue-green plant with a beautifully formed rosette of leaves. *Agave parryi truncata* (Huntington's agave) with its perfectly formed rosette. *Agave Victoria reginae* and *Agave fernandi Regis* are small (up to 16 inches) plants that are strikingly marked and beautifully formed. Cactus that are 'hardy' include *Trichocereus terscheckii* (South American saguaro) which will thrive in cooler locations where our native Saguaro can't. It is a night-blooming cactus with fragrant large white flowers. *Trichocereus* hybrids are a group of plants that have been bred for their spectacular flowers and hardiness. Flowers can grow to 6-8 inches in diameter and come in stunning reds, white, yellow and pink.

*Echinocactus grusonii* (golden barrel cactus) is a beautiful cactus with pale yellow flowers. What makes the plant stand out are its golden spines. Their dramatic form and color can be the focal point of any garden. In the low desert, golden barrels may need some protection from the sun and a little more water than their neighbors to the north. Another group plants that should be included in your garden are our native agaves. *Agave parryi*, *A. murphyi*, *A. pariflora*, and *A. palmeri* all perform well in the low and mid desert areas.

If you really want something a little different in your garden, give these wonderful low-water desert plants a try. You'll not be disappointed.

Jack Kelly — *Trichocereus* hybrid 'First Light'

