

Cacti & Succulents for Desert Landscapes

What is a succulent?

A plant that has the ability to store moisture in its tissues, to utilize in surviving periods of drought

- leaf succulents
- stem succulents
- root succulents

What is a cactus?

A succulent that develops areoles, and can have spines borne in clusters

Why succulents and cacti?

- drought tolerant
- low maintenance
- specimen or accent plants - add interest and contrast to landscape

Needs of cacti & succulents

- soil - well-drained soil
- light exposure
 - winter sun is milder, and most plants enjoy it
 - summer is extreme, even for many succulents
 - full sun – direct sun most of the day
 - partial sun – morning sun, with afternoon shade
 - light shade/filtered sunlight – very bright light, or dappled shade
 - moderate shade – moderately bright light
- temperatures
 - cold hardy
 - summer nighttime temps
- water - all need some water during their growing season (for most, during the warm season), with very infrequent water needed during the cold months
 - roots are generally shallow, but wide spreading
- fertilizer - most don't need much, perhaps one application of a low-nitrogen fertilizer (organics are great) at the start of the growing season

Planting

- maintain orientation that plant had previously to prevent sunburn
- maintain original soil level
- bare-rooting cacti and succulents allows roots to develop in homogenous soil
- wait a few days to water in plants that have thick, fleshy roots

Caution!

Euphorbias produce a milky sap that can irritate/blister skin

Cacti

Smaller cacti

Echinocereus engelmannii – Hedgehog Cactus

1-1½' tall, 1-2' wide; full sun, filtered or partial sun

-*Echinocereus triglochidiatus* – Claret Cup

1' tall, 1-1½' wide; full sun, filtered or partial sun

Echinopsis candicans (*Trichocereus candicans*) – Argentine Giant

1 – 2' tall, 4 – 6' wide; full sun, filtered or partial sun

Echinopsis hybrids – Easter Cactus

6" – 2' tall and wide

-*Echinocereus pentalophus* – Ladyfinger Cactus

4-8" tall, spreading 2-3'; filtered or partial sun

-*Mammillaria grahamii* – Fishhook Pincushion

4-8" tall, clumping to 1' wide; filtered or partial sun

Tephrocactus articulatus – Pine Cone Cactus

1-2' tall, 1-1½' wide; full sun, filtered or partial sun

-*Astrophytum myriostigma* – Bishop's Cap

2 – 3' tall, 6 – 8" wide; filtered or partial sun

-*Astrophytum ornatum* – Monk's Hood

2 – 3' tall, 6 – 8" wide; filtered or partial sun

-*Peniocereus greggii* – Arizona Queen of the Night

2 – 5' tall; filtered or partial sun

Barrel cacti

Echinocactus grusonii – Golden Barrel

2' tall and wide; full sun, filtered or partial sun

Ferocactus cylindraceus – Compass Barrel

3-5' tall, 1' wide; full sun

Ferocactus pilosus (*F. stainesii*) – Fire Barrel

1' tall and wide; full sun, filtered or partial sun

Prickly-pears & Chollas

Opuntia basilaris – Beavertail Prickly-pear

1' x 2-3'; full sun, filtered or partial sun

Opuntia ficus-indica – Indian-fig Prickly-pear

8-12' tall, 6-10' wide; full sun, filtered or partial sun

Opuntia macrocentra – Black-spined Prickly-pear

2-3' tall, 3-5' wide; full sun, filtered or partial sun

-*Opuntia microdasys* – Bunny Ears Prickly-pear

1-2' x 2-3' spreading; full sun, filtered or partial sun

Opuntia santa-rita – Purple Prickly-pear

3-4' tall, 4-6' wide; full sun

Cylindropuntia bigelovii – Teddy Bear Cholla

3-5' tall, 2-4' wide; full sun

Columnar cacti

Carnegiea gigantea – Saguaro

20 – 30' tall; full sun

Cereus hildmannianus (*C. peruvianus*) – Peruvian Apple Cactus, Night-blooming Cereus

10 – 15' tall, 6-10' wide; full sun, filtered or partial sun

-*Myrtillocactus geometrizans* – Garambullo, Whortleberry

6 – 12' tall, 6 – 8' wide; full sun

Pachycereus marginatus (*Stenocereus marginatus*) – Mexican Fencepost

6-10' tall, 2-4' wide; full sun, filtered or partial sun

Pachycereus schottii forma *monstrosus* (*Lophocereus schottii* f. *monstrosus*) – Totem Pole

8-12' tall, 4-6' wide; full sun, filtered or partial sun

Stenocereus thurberi – Organ Pipe Cactus

8 – 12' tall, 6 – 8' wide; full sun

-*Harrisia* spp. – Snake Cactus

6-15' long; filtered or partial sun

Succulents

Agaves

Agave bracteosa – Squid Agave, Green Spider Agave

1-2' tall, 1-1½' wide; filtered or partial sun

Agave desmettiana – Smooth Agave

2-3' tall and wide; filtered or partial sun, to full sun

Agave geminiflora – Twin-flowered Agave

2' tall, 2-3' wide; full sun, filtered or partial sun

Agave macroacantha – Black-spined Agave

1' tall, 1-1½' wide, clumping; full sun, filtered or partial sun

Agave ocahui – Ocahui

1-1½' tall and wide; full sun, filtered or partial sun

Agave parryi var. *truncata* – Artichoke Agave

1.5' tall, 2' wide; filtered or partial sun, to full sun

-*Agave schidigera*

1-1½' tall, 1½ - 2' wide; full sun, filtered or partial sun

-*Agave schottii* – Schott's Agave

8-12" tall, 1' wide, clumping; filtered or partial sun to full sun

Agave victoriae-reginae – Queen Victoria Agave

1-1½' tall, 1½ - 2' wide; full sun, filtered or partial sun

Agave vilmoriniana – Octopus Agave

3' tall, 3-4' wide; full sun, filtered or partial sun

Agave x'Blue Glow' – Blue Glow Agave

1½' tall, 1½ - 2' wide; full sun, filtered or partial sun

Aloes

-*Aloe ciliaris*

3-6' long; filtered or partial sun

Aloe dawei – Dawe's Aloe

1-1½' tall, 1½ - 2' wide; filtered or partial sun, to full sun

Aloe dichotoma – Quiver Tree

6-10' tall, 3-4' wide; full sun, filtered or partial sun

Aloe dorotheaea

6-10" tall, 1' wide, clumping; filtered or partial sun

Aloe ferox – Cape Aloe

6-10' tall, 3' wide; full sun, filtered or partial sun

-*Aloe sinkatana* –

1' tall, 1-1½' wide; filtered or partial sun

-*Aloe striata* – Coral Aloe

1-1½' tall, ½ - 2' wide; filtered or partial sun

Aloe vera (*Aloe barbadensis*) – Aloe Vera, Medicinal Aloe

1½-2' tall and wide, clumping; filtered or partial sun, to full sun

Aloe x'Blue Elf' – Blue Elf Aloe

1' tall and wide, clumping; full sun, filtered or partial sun

Aloe x'Hercules' – Hercules Aloe

8-12' tall, 4-6' wide; full sun, filtered or partial sun

Ice Plants

-*Cephalophyllum* 'Red Spike' – Red Spike Ice Plant

4-6" tall, 6-8" wide; filtered or partial sun, to full sun

Drosanthemum floribundum 'Rosea' – Ice Plant

4-12' tall, 3-5' wide; filtered or partial sun

Malephora crocea – Red Ice Plant

6-10" tall, 2-3' wide; filtered or partial sun, to full sun

Malephora luteola (*M. lutea*) – Yellow Ice Plant, Rocky Point Ice Plant

8-12" tall, 3-4' wide; full sun, filtered or partial sun

Assorted succulents

-*Beaucarnea recurvifolia* – Ponytail-palm

12-15' tall, 4-6' wide; filtered or partial sun, to full sun

Bulbine frutescens – Yellow Bulbine

1-1.5' tall, clumping 2-3' wide; filtered or partial sun

Bulbine frutescens 'Tiny Tangerine' – Orange Bulbine, Tiny Tangerine

1-1.5' tall, clumping 2' wide; filtered or partial sun

Euphorbia antisyphilitica – Candelilla

1-2' tall, 2' wide; full sun

Euphorbia bracteata (*Pedilanthus bracteatus*) – Tall Slipper Plant

3-6' tall, spreading 3-4' wide; full sun, filtered or partial sun

Euphorbia lomelii (*Pedilanthus macrocarpus*) – Slipper Plant

3-4' tall, spreading 3-4' wide; full sun, filtered or partial sun

Euphorbia resinifera – Moroccan Mound

1-1½' tall, 1½-2' wide; full sun

Euphorbia tirucalli – Pencil Plant

6-10' tall, 4-8' wide; filtered or partial sun, to full sun

Euphorbia tirucalli 'Firensis' – Sticks on Fire

4-6' tall, 3-5' wide; filtered or partial sun, to full sun

-*Hechtia montana* – False-agave

1' tall, 1-2' wide, clumping; filtered or partial sun, to full sun
-*Manfreda maculosa* – Texas-tuberose, Spice-lily
6 – 12" tall, 1 - 1½ ' wide, clumping; filtered or partial sun
-*Manfreda* x'Macho Mocha' – Macho Mocha Manfreda
1-1½' tall, 1½-2' wide, clumping; filtered or partial sun
Manfreda virginica – False Aloe
1' tall, 1 - 2' wide, clumping; filtered or partial sun
Portulacaria afra – Elephant Food
2-4' tall, 3-8' wide; full sun, filtered or partial sun
-*Portulacaria afra variegata* – Variegated Elephant Food
1-2' tall, 2-3' wide; filtered or partial sun
Sansevieria spp. – Snake Plant, Mother-in-Law's Tongue
6" – 4' tall, clump-forming; filtered or partial sun to shade
-*Stapelia gettleffii* – Starfish Flower, Carrion Flower
4-8" tall, 1-2' wide; filtered or partial sun

Yuccas

Yucca baccata – Banana Yucca
4 - 6' tall, 5 – 10' wide; full sun
Yucca elata – Soaptree Yucca
6 – 15' tall, 5 – 10' wide; full sun
Yucca pallida – Pale-leaf Yucca
3 – 4' tall, 3 – 5' wide; full sun, filtered or partial sun
Yucca rostrata –Beaked Yucca
10 –12' tall, 6 – 8' wide; full sun