

## SOME MAJOR FAMILIES AND GENERA OF SUCCULENT PLANTS

Including Natural Distribution, Growth Form, and Popularity as Container Plants

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There are 50-60 plant families that contain at least one species of succulent plant. By far the largest families are the Cactaceae (cactus family) and Aizoaceae (also known as the Mesembryanthemaceae, the ice plant family), each of which contains about 2000 species; together they total about 40% of all succulent plants. In addition to these two families there are 6-8 more that are commonly grown by home gardeners and succulent plant enthusiasts. The following list is in alphabetic order.

The most popular genera for container culture are indicated by **bold** type.

Taxonomic groupings are changed occasionally as new research information becomes available. But old names that have been in common usage are not easily cast aside. Significant name changes noted in parentheses ( ) are listed at the end of the table.

Family	Major Genera	Natural Distribution	Growth Form
Agavaceae (1) Century plant and Spanish dagger family	<b>Agave</b> , Yucca	New World; mostly U.S., Mexico, and Caribbean.	Stemmed and stemless rosette-forming leaf succulents. Some yuccas to tree size. Many are too big for container culture, but there are some nice small and miniature agaves.
Aizoaceae (2) Iceplant, split-rock, mesemb family	Argyroderma, Cheiridopsis, <b>Conophytum</b> , Dactylopis, <b>Faucaria</b> , Fenestraria, Frithia, Glottiphyllum, Lapidaria, <b>Lithops</b> , <b>Nananthus</b> , <b>Pleisopilos</b> , <b>Titanopsis</b> , others	Mostly South Africa	Highly succulent leaves. Many of these stay very small, with clumps up to a few inches.
	Delosperma; several other shrubby genera	Africa	Shrubs or ground-covers. Some marginally hardy.
	Mestoklema, <b>Trichodiadema</b> , Sphalmanthus	Mostly South Africa	Leaf, stem, and root succulents. Good bonsai subjects.
Aloaceae (3) Aloe family	<b>Aloe</b> (Note that recent taxonomic changes have broken this genus into several smaller groups, though "Aloe" is still most commonly used for all in the horticulture trade.)	Africa, Madagascar, Arabia	Small to tree-size leaf succulents. Most with succulent leaves in a rosette. Many stemless; others with succulent stems. Many very attractive dwarf hybrids being developed.
	Astroloba, Gasteria,	Southern Africa	Small to miniature leaf

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	<b>Haworthia</b>		succulents, most with succulent leaves in a rosette. Many stemless; others with succulent stems. A very popular group.
Apocynaceae (4) Dogbane, periwinkle, oleander, milkweed family	<b>Adenium</b> (e.g. desert rose) <b>Pachypodium</b> (e.g. Madagascar palm)	Africa, Madagascar, Arabia	Stem and root succulents. Some small shrubs others large trees. Very nice flowers. Many desert rose hybrids are available.
	Plumeria (frangipani)	Mexico to Central America	Stem succulents to small-tree size. Nice flowers. Will bloom in containers.
	(5) <b>Caralluma</b> , Duvalia, Edithcolea, Hoodia, <b>Huernia</b> , <b>Orbea</b> , Piranthus, <b>Stapelia</b> , Tavaresia, others.	Mostly Africa and Arabia; some as far north as India and southern Europe.	Stem succulents with interesting “starfish” flowers; those that are odorous are called carrion flowers.
	Brachystema, <b>Ceropegia</b> , <b>Hoya</b> (Such as string-of-hearts or rosary-vine; wax vine, Hindu rope)	Mostly Africa, Arabia, India; Canary Islands	Root succulents; some leaf and stem succulents; some caudiciform. Many are vines. Interesting flowers.
Bromeliaceae Pineapple, air-plant family	<b>Dyckia</b> , Hechtia, Orthophytum, <b>Tillandsia</b>	New World	Many are semi-succulent leaf succulents. Some are ground-dwelling, many are epiphytic. Interesting leaves and flowers.
Cactaceae Cactus family	Opuntia (pricklypear) Cylindropuntia (cholla) Tephrocactus	New World	Bushy stem succulents to tree size, with jointed stems. Some are hardy in Wisconsin.
	(6) Ariocarpus, <b>Astrophytum</b> , Borzicactus, Copiapoa, Coryphantha, Echinocactus, <b>Echinocereus</b> , <b>Echinopsis</b> (7), <b>Ferocactus</b> , Frailea, <b>Gymnocalycium</b> , <b>Lobivia</b> (7), <b>Mammillaria</b> , Neoporteria, <b>Notocactus</b>		Mostly low growing, globular, stem succulents; some single-stemmed and others multi-stemmed. Mostly small to medium sized, but some big. Some with tuberous roots. Many free-flowering.

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	(8), <b>Parodia</b> , <b>Rebutia</b> , <b>Sulcorebutia</b> (9), many others.		
	Discocactus, Melocactus		Low growing, small to medium sized, stem succulents with cephalium.
	Carnegia, <b>Cephalocereus</b> , Cereus, Nyctocereus, Pachycereus, Cleistocactus, Espostoa, <b>Oreocereus</b> , many others		Mostly upright, columnar, medium to large (tree size), branched, stem succulents. Even large species can be nice container plants for many years.
	Disocactus (10), Epiphyllum, <b>xEpicactus</b> (11), Rhipsalis, <b>Schlumbergera</b> (12), Selenicereus (common names such as orchid cactus, Easter cactus, Christmas cactus)		Long stemmed, hanging or trailing stem succulents; many epiphytic; some in tropical forests.
Crassulaceae Stonecrop, jade plant, sedum, hen-and-chicks family	Adromischus, Cotyledon, <b>Crassula</b> , <b>Kalanchoe</b> , Tylecodon	Mostly Africa and Madagascar	Leaf and stem succulents. Some very small, others like small trees. Some shrubby, others trailing or hanging. Some caudiciforms and bonsai subjects.
	Dudleya, <b>Echeveria</b> , Graptopetalum, Pachyphytum, Tacitus	Mostly southern United States and Mexico	Mostly rosette-forming leaf succulents. Some bushy, trailing, or hanging. Echeverias are frost-tender "hens-and-chicks".
	<b>Aeonium</b>	Mostly Canary Islands	Stemmed or stemless leaf succulents, mostly rosette-forming.
	<b>Sempervivum</b>	Europe and western Asia	Small rosettes of succulent leaves. Good for rock gardens. Hardy "hens-and-chicks".
	<b>Sedum</b> (13)	Northern Hemisphere of New and Old Worlds.	Leaf and stem succulents. Very diverse forms from

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			ground covers, to hanging, to shrubby, to small trees. Some from cold climates are very hardy rock garden plants; others are very tender tropicals.
Euphorbiaceae Spurge, poinsettia family	<b>Euphorbia</b>	Worldwide.	Extremely large and diverse genus (about 2000 species); not all are succulent. Succulent species include leaf, stem, and root succulents, and caudiciform types. Some very small, others grow into large trees.
Other succulent genera in the Euphorbiaceae include Jatropha, Monadenium, Pedilanthus, and Synadenium. Most of these are shrubby to small trees and are leafy stem succulents. A few are attractive container specimens.			

- (1) The family Agavaceae is now often considered as the subfamily Agavoideae of the family Asparagaceae.
- (2) Many popular genera of the large family Aizoaceae have in the past been considered part of the smaller family Mesembryanthemaceae, now a subfamily.
- (3) The most current taxonomy places Aloe, Haworthia, and their relatives in the subfamily Asphodeloideae of the grass tree family Xanthorrhoeaceae.
- (4) In the recent past many of the succulents in this group were in a separate family, Asclepiadaceae that includes our common milkweeds; this is now treated as the subfamily Asclepiadoideae of the Apocynaceae. The subfamily Apocynoideae includes two very popular genera of stem succulents, Adenium and Pachypodium.
- (5) These plants belong to a group called the stapeliads and are easily recognizable by the character of the succulent stems as well as a very intricate and advanced flower structure. These are currently treated as the tribe Stapelieae within the subfamily Asclepiadaceae. Those species with flowers that smell of rotting carrion are pollinated by blow flies.
- (6) There are many genera that could be included. Here they are grouped together because of a similar growth form, but in actuality they belong to diverse taxonomic subdivisions in this large family.
- (7) In recent years several genera have been combined within Echinopsis; some include Lobivia and Trichocereus. However, the most recent molecular studies suggest these smaller genera should be retained.  
Echinopsis species have large showy flowers and have been used extensively in breeding for new horticultural forms; there are hundreds of popular named hybrids with flower colors ranging from pure white to pink, yellow, orange, purple, and deep red, as well as multi-colored.
- (8) Notocactus has been incorporated into the larger related group Parodia, but the genus name Notocactus is still often used by nurseries and horticulturists.
- (9) Sulcorebutias have now been included in the closely related genus Rebutia, but the genus name Sulcorebutia is still often used by nurseries and horticulturists.
- (10) Includes the beautifully-flowered rattail cacti, previously in their own genus Aporocactus.

(11) *Epicactus* is not a true taxonomic genus, but relates to horticulturally-created hybrids, often involving two or more genera. The × indicates a hybrid generic name. These are often incorrectly called epiphyllums, which refers to a specific genus used in *Epicactus* hybridization programs.

(12) *Schlumbergera* is the genus that includes the Christmas cacti, many of which are horticulturally-selected cultivars or hybrids.

(13) A large genus of about 600 species. Some common garden plants have been transferred to other genera, most notably *Hylotelephium*, such as our hardy, pink-flowered garden plant *H. spectabile*.

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