

Tucson Cactus and Succulent Society

Guide to Common Cactus and Succulents of Tucson

http://www.tucsoncactus.org/c-s_database/index.html



LIST & SEARCH INSTRUCTIONS

Two methods to quickly find specific information in this document

These techniques apply to a PC laptop and often work on other devices.

QUICK SEQUENTIAL REVIEW OF INFORMATION BY BOOKMARKS (Like a TOC)

- 1) Click on this pdfs' "Bookmarks" or "Table of Contents" icon
- 2) A column will appear listing the contents by pages or sections
- 3) Scroll down the list and click on desired item to jump to that page

SEARCH FOR PARTIAL OR EXACT WORDS ANYWHERE IN THE DOCUMENT

- 1) Activate the pdf "Find" function by clicking on its icon (or press Ctrl and F keys)
- 2) Enter your search characters in the white rectangle box at the top of the page
- 3) Note, as you start typing it will begin searching, showing the number of found characters strings that you are typing
- 4) If the document is large the search may takes a minute or two
- 5) As you type characters the number of matches will probably decrease
- 6) The found characters will be highlighted, the highlight is often very subtle
- 7) Use the up/down arrows or previous/next words to go to found word pages

Item ID: 1

Family: Cactaceae

Genus: Ferocactus

Species: wislizenii

Common Name: Fishhook Barrel

Habitat: Various soil types from 1,000 to 6,000 feet elevation from grasslands to rocky mountainous areas.

Range: Arizona, southwestern New Mexico, limited extremes of western Texas, Sonora, northwest Chihuahua and northern Sinaloa, Mexico

Care: An extremely easy plant to grow in and around the Tucson area. It requires little attention or special care as it is perfectly at home in almost any garden setting. It is very tolerant of extreme heat as well as cold. Cold hardiness tolerance is at around 10 degrees fahrenheit.

Propagation: Propagation of this cactus is by seed.

Size: To 30 inches in diameter and 12 feet tall

Shape: Globular

Flowers: The flower color can be variable from yellow, to orange and red. The most typical color seen is orange.



Photo Courtesy of American Desert Plants

Description

This plant is most recognized by the large curved and hooked central spine and the large ribbed "barrel" body. The Fish-hook Barrel is the most common barrel found growing in and around Tucson.

Item ID: 2

Family: Cactaceae

Genus: Echinocactus

Species: grusonii

Common Name: Golden Barrel Cactus

Habitat: Located on rolling hills and cliffs.

Range: Limited to small areas in Queretaro, Mexico. The population had become very low in numbers over the years but is just now beginning to increase due to protective laws and the fact that this plant is now in mass cultivation all over the world.

Care: The Golden Barrel has slowly become one of the most purchased plants for home landscape in Tucson. It is an easy plant to grow and takes no special care. Most plants are purchased at a fairly nice size and can be easily transplanted to a garden landscape or a decorative container. It is not an extremely fast grower but can reach a very large size. Here in Tucson it is safely grown in practically any area of town and will add a nice touch of gold to your landscape.

Propagation: This plant is very easily grown from seed.

Size: To 24 inches wide and 40 inches tall. After many years this cactus may offset into a multiple headed plant that is truly a prize for any gardener. can be

Shape: Globular

Flowers: The yellow flowers are distinct because of the sharp brownish pointed petals along the outer perimeter..



Photo Courtesy of Vonn Watkins ©1999

Description

This popular barrel cactus is noted for the beautiful golden yellow spines that thickly surround the dark green body. As with all true Echinocactus the crown or top of the stem is covered by dense white or slightly cream colored hair that is more prominent on older and larger plants.

Item ID: 3

Family: Fouquieriaceae

Genus: Fouquieria

Species: splendens

Common Name: Ocotillo (oh-koh-TEE-yo), Candlewood, Jacob's Staff, Coachwhip

Habitat: Found at elevations of 3000 to 6500 feet elevation in rocky, gravelly hillsides and especially areas where limestone soils are common. Sandy plains are also a favorite for the Ocotillo.

Range: Fouquieria splendens can be found native to southern California, the extreme southern region of Nevada, western and southern Arizona, southern New Mexico, southwestern Texas. It also occurs in Baja California, Sonora, Chihuahua, Coahuila, Durango, Zacatecas and San Luis Potosí, Mexico.

Care: The Ocotillo is a very drought tolerant plant and can take quite a lot of abuse. It can be dug up and transplanted after many days out of the soil. To best insure good health it is best to plant your Ocotillo deep enough for adequate support and to keep the long slender stems moist with a garden hose until it is well established.

Propagation: Propagation is best from seed. Cuttings may not produce a very attractive plant.

Size: Stems can grow anywhere from 9 to 30 feet tall with spines to 1.5 inches long, spread to 15ft.

Shape: Clustering

Flowers: Red flowers in the spring. Leaves occur whenever there is plentiful moisture.



Photo Courtesy of Mark Dimmitt ©2002

Description

Ocotillo is a drought-deciduous shrub. It can have anywhere from 6 to 100 wand like branches that grow from the root crown. The growth rate is very slow.

Item ID: 4

Family: Agavaceae

Genus: Agave

Species: palmeri

Common Name: Palmer's Agave,
Habitat: Characteristically this Agave grows in areas inhabited by the oak woodlands from 3,000 to 6,500 ft. elevation usually in limestone soils.

Range: A rather widely scattered species that is found throughout southeastern Arizona, southwestern New Mexico, Chihuahua and Sonora, Mexico

Care: *Agave palmeri* is a rather slow growing species that is a very easy plant to cultivate in and around Tucson. It can tolerate temperatures as low as 10 degrees F. or lower but usually requires a more humus soil than typical desert plants.

Propagation: Seed or rhizome offsets

Size: Medium sized species 3.25-4 ft. and 20-47 in. wide.

Shape: Rosette

Flowers: Pale yellow/green to white



Photo Courtesy of Chris Monrad
©2003

Description

This Agave is somewhat misunderstood in that younger plants usually do not offset but as the plant ages it will often send out many small rhizome offsets.

Item ID: 5

Family: Cactaceae

Genus: Carnegiea

Species: gigantea

Common Name: Saguaro

Habitat: Plants are found in the Sonoran Desert of extreme south-eastern California, southern Arizona and northwestern Mexico. The Saguaro is at home on desert slopes, flats, and rocky areas up to about 4000 feet.

Range: Arizona, California and Sonora, Mexico

Care: The first word in care for the Saguaro is patience. It is easily grown from seed except for the fact that from seed the plant takes many years to reach several feet in height. Most garden plants are purchased from nurseries and are already large enough for establishment as a landscape plant. No special requirement is needed. Extra watering can sometimes speed up the growth but this practice is really up to the owner.

Propagation: The Saguaro is always grown from seed.

Size: 35 inches wide and up to 50 feet tall.

Shape: Columnar

Flowers: White



Photo Courtesy of American Desert Plants

Description

The magnificent Saguaro Cactus, the state flower of Arizona, is composed of a tall, thick, fluted, columnar stem, 18 to 24 inches in diameter, often with several large branches (arms) curving upward in the most distinctive conformation of all South-western cacti.

Item ID: 47

Family: Cactaceae

Genus: Ferocactus

Species: glaucescens

Common Name: No common name.

Habitat: This species is found within the numerous limestone hills and boulders at several locations in the state of Hidalgo, Mexico. It has been noted to favor the more northern slopes and the plants are well associated with the rocky, juniper woodland community to around 5,000 feet elevation.

Range: Ferocactus glaucescens is only known to be native within the state of Hidalgo, Mexico and is common in and around such areas as Meztitlan, Toli-man and Jacala.

Care: Plants are easy to grow and require little care once they have reached a nice flowering size. To insure robust plants in your garden they can be fertilized and watered around late April through May. This usually aids in maintaining a healthier plant. Be sure to limit the watering to about once a week. A well drained soil is preferred with some amounts of a good rich garden soil added. A good cactus soil mixture is recommended for container growing.

Propagation: Propagation is by seed and is very easy with this species.

Size: This species can be about 20 inches in height and up to 20 inches in diameter. Multiple heads are produced as the plant ages and can form a very large mound.

Shape: Globular

Flowers: Flowers are lemon yellow and are about 1 to 1.5 inches in diameter.



Photo Courtesy of Vonn Watkins ©2003

Description

The blue green appearance of this barrel with the nice light golden spines makes it very easy to identify. The spines are rather neatly distributed and the unusual looking white fruits are unmistakable. Another variety, "F. glaucescens var. nuda" has recently been introduced and is a real prize as it has little or no spines.

Item ID: 6

Family: Agavaceae

Genus: Agave

Species: americana

Common Name: Century plant, Mag-uey

Habitat: Although it is a native of Mexico, the actual habitat has not been very well established. This Agave has been found in many types of soil and is a real survivor as the offsetting plants will continue growing long after the mother plant has died.

Range: The natural location of Agave americana is unclear, but the range of this plant within Mexico is very extensive. It is a very desirable ornamental plant and has been widely used in the production of fiber, food and drink. It has been introduced in Arizona, California and many southern states where it is receiving much attention. It is also grown in several Mediterranean countries, Africa and the far east.

Care: Easily grows from separation of the numerous offsets. With added water during the heat of the summer the plant is most robust but is an easy target for the Agave weevil (*Scyphophorus acupunctatus*). This plant can tolerate very hot dry areas and is also quite successful in coastal locations in the southeastern United States. It has been tolerant of temperatures as low as 12 degrees farenheit if kept very dry.

Propagation: Seed and by offset removal

Size: Commonly 5 to over 10 feet in height and 10 or more feet wide.

Shape: Rosette

Flowers: The inflorescence of this Agave is a very impressive sight as the stalk can rise to over 24 feet in height. The flowers are yellow.

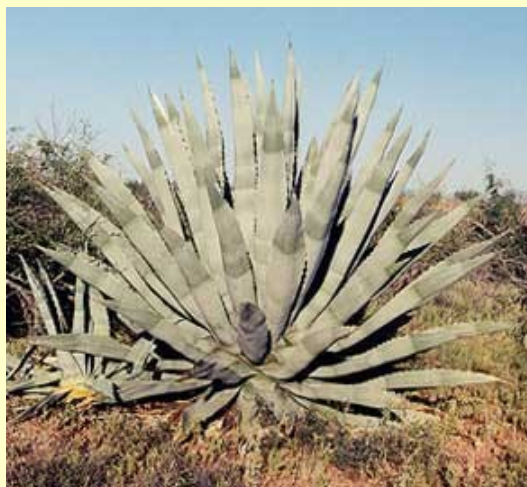


Photo Courtesy of Vonn Watkins
©2001

Description

This beautiful Agave is easily recognized by the blue/gray leaves and its large size. The actual age of the plant typically does not exceed 30 years and some plants may flower much sooner than expected. If you plan to grow this Agave be sure to think about its location and growth pattern as it can easily get very large.

Author Comments

This is one of my favorite Agaves. The above photo is of a plant about 7 feet tall growing in Arivaca, Arizona. It was about 5 years old when planted in 1986 and flowered in June of 2004. The name agave is from the Greek word agauos which means admirable. There are now more than 136 species in 20 groups and over 197 taxa in the subgenera of Littaeta and Agave. Admirable is a very fitting word for these magnificent plants.

Item ID: 8

Family: Agavaceae

Genus: Agave

Species: victoriae-reginae

Common Name: Queen Victoria agave, Royal agave

Habitat: This plant is typically found of the rocky limestone areas throughout its range in the Chihuahuan Desert. Populations are rather isolated and quite rare today as this beautiful Agave was a favorite for habitat plant collectors during the 20th century. Habitat numbers have now reached the endangered status and wild plants today are protected.

Range: A variable species with small populations being found in Durango, Nuevo Leon and Coahuila, Mexico

Care: This is a slow growing Agave that requires rather little care. It loves being grown with full sun exposure and can tolerate the dry Arizona weather although extra watering during the summer months can insure your plants remain healthy for many years.

Propagation: By seed or by the removal of occasional offsets.

Size: From 6 to 14 inches in height and 18 to 30 inches wide.

Shape: Rosette

Flowers: Yellow to a reddish beige or light burgundy



Photo Courtesy of Vonn Watkins
©2002

Description

The compact, tightly set leaves of this plant with the strange white markings and sharp dark brown to black pointed leaf spine makes this a favorite choice among plant lovers.

Author Comments

This is one of the most popular Agaves and is found at almost any nursery in the Tucson area. It is a most attractive addition to any garden and can also be easily kept under pot culture.

Item ID: 9

Family: Agavaceae

Genus: Agave

Species: vilmoriniana

Common Name: Octopus Agave

Habitat: Vertical cliffs and rocky slopes in rugged forest locations at elevations around 2,000 to 6,000 feet.

Range: It occurs in some very rugged and remote rocky cliff locations in the Mexican states of Aguascalientes, Durango, Jalisco, Sinaloa and Sonora.

Care: A very easy Agave to grow in and around the Tucson area where the night temperature rarely drops below 24 degrees fahrenheit. It is frost sensitive and can be damaged rather easily in certain micro climates. It is both tolerant of full sun as well as partial shade and is very vigorous.

Propagation: By removal of the hundreds or thousands of bulbils from the flower stalk.

Size: Some plants grow as large as 4 feet in height and nearly 6 feet wide.

Shape: Rosette

Flowers: Yellow



Photo Courtesy of Vonn Watkins ©2003

Description

This plant gets the name "Octopus" form the long curled leaves that are flexible and easy to touch.

Author Comments

It is a popular landscaping plant mainly because of the strange curled leaves and its attractive growth pattern. One slight draw back to having this plant is the fact that it does have a rather short life. Plants have been known to flower in only 8 years, but will produce many small bulbils from which many more plants can be grown.

Item ID: 10

Family: Liliaceae

Genus: Aloe

Species: vera

Common Name: Aloe vera

Habitat:

Range:

Care: This Aloe is very easy to grow and maintain in the Tucson area. It requires very little actual care and is not very popular with predators. Plants do well if watered during the winter months. It is best to reduce watering and allow the plants to be self maintained during the spring and summer.

Propagation: Propagation is by seed or by removing the numerous offsets.

Size: Large single specimens are over 14 inches wide and 2 feet in height. Large clumps can be over 10 feet in diameter..

Shape: Rosette

Flowers: The flowers of this Aloe are always a somewhat medium shade of yellow. Flowering time in Tucson is usually March and April.



Photo Courtesy of Kevin Barber ©2003

Description

The common Aloe vera found in many nurseries may be a hybrid. The true Aloe vera is a yellow flowering plant with somewhat gray leaves and stem color. Aloe vera is sometimes mistaken for Aloe barbadensis which also has yellow flowers and there are also hybrids that have orange or reddish flowers.

Item ID: 11
Family: Cactaceae
Genus: Cereus
Species: hildmannianus
Common Name: Hedge Cactus, Queen of the Night
Habitat: The exact habitat for this species is rather uncertain because of its popular cultivation over the years.
Range: It is found throughout southern Brazil and especially in and around the city of Rio de Janeiro. It is also found in neighboring countries such as Argentina, Uruguay and Paraguay.
Care: This plant has been in cultivation for many, many years and has been commonly seen in lots of gardens in and around Tucson. It is easy to find and to grow and has no problems adapting to any garden in this area.
Propagation: Propagation is by seed or by stem cuttings.
Size: 30 or more feet in height, and sometimes forming large columnar bushes.
Shape: Columnar
Flowers: Large white flowers appear in mid-summer.



Photo Courtesy of Dick Wiedhopf ©2003

Description
 This plant has long columnar stems that have 5 to 7 ribs. The stems are bluish-green or a dull gray-green color. Spines when present are short and brown to black in color.

Item ID: 12
Family: Cactaceae
Genus: Pachycereus
Species: schottii
Common Name: Senita, Old Man Cactus, Whiker Cactus
Habitat: This plant is a rarely seen cactus within the borders of the United States but can be found in low flat plains and valley regions almost entirely below 2,000 feet in elevation in it's native habitat.
Range: This species is found in the extreme southwestern portion of Pima County, Arizona and extends into Sonora and Baja California, Mexico.
Care: The Senita is easily grown in Tucson although it is sensitive to heavy frost or freezing conditions. It is best to protect the stems with a frost protective covering on really cold nights. It is highly tolerant of very hot, dry conditions and needs little additional care in most garden settings.
Propagation: This cactus is easily grown from stem cuttings or grown from seed.
Size: This can be a large plant. Specimens can reach to over 20 feet in height and over 15 feet in diameter with up to 50 or more stems.
Shape: Columnar
Flowers: Flowers are from the upper portion of the plant and are white in the center with pink at the outer ends of the petals.



Photo Courtesy of Kevin Barber ©2003

Description
 The stems of the Senita are a bluish green or gray green color with white spines that over time turn a darker gray in color and will form a long bristlelike display at the upper portion of the plant. It is within this area that the flowers will form. This is a plant that can be a real prize after growing for many years so start yours as soon as you can.

Item ID: 14

Family: Cactaceae

Genus: *Cylindropuntia*

Species: *bigelovii*

Common Name: Teddy Bear Cholla

Habitat: This plant is found from sea level to about 2,000 feet elevation in sandy soils along the coastal areas of Sonora, Mexico to rocky desert regions of Arizona and California.

Range: In Arizona the plant is found growing in colonies within Yuma, Pima, Maricopa and Mohave counties of Arizona. In California it inhabits Imperial, Riverside and San Bernadino counties and extends southward into Sonora, Mexico.

Care: This cholla is an easy plant to grow in a desert landscape or near areas where you need added protection from intruders. The stems root very easily and with a little extra water during the dryer months of the year it will grow into a nice robust plant.

Propagation: From easily detachable stem segments

Size: Very compact growth several feet wide to over 8 feet in height.

Shape: Padded/Jointed

Flowers: Pale yellow/green



Photo Courtesy of Vonn Watkins ©2000

Description

This is the cholla that everyone wants to hug! The Teddy Bear Cholla as the locals call it is a very beautiful light golden or straw colored plant typical because of the distinct color and appearance. Don't ever be fooled, the spines of this plant are some of the most vicious as they are very heavily barbed and can inflict a serious wound if they happen to penetrate the skin.

Item ID: 15

Family: Cactaceae

Genus: *Cylindropuntia*

Species: *fulgida*

Common Name: Chain Fruit Cholla, Jumping Cholla

Habitat: Found in the low desert from around 1,000 feet to grasslands and hillsides at over 3,500 feet elevation. The growth of this cholla is sometimes so thick it can be a real challenge to get through the area without catching a few hitch-hikers.

Range: In the United States this plant is only found in or near the Sonoran Desert region of Arizona. It extends south and southwest into Sonora, Sinaloa and into Baja California, Mexico.

Care: A very easy plant to grow in and around Tucson as this cholla is one of the most self propagating of any cholla. The stems and fruit detach from the mother plant very easily and can root almost anywhere.

Propagation: Seed and most significantly by removal of stems or fruit.

Size: Large plants can grow to over 8 feet or more wide and over 10 feet in height.

Shape: Padded/Jointed

Flowers: Flowers are a light to dark pink in color.



Photo Courtesy of American Desert Plants

Description

As the common name implies, this is a chain fruit cholla. The fruit may be easily seen during the summer hanging in large quantities from the main plant. They can sometimes fall to the ground and take root during the rainy season and yet another plant can be started.

Item ID: 16
Family: Cactaceae
Genus: *Cylindropuntia*
Species: *leptocaulis*
Common Name: Desert Christmas Cactus
Habitat: Found in a variety of locations from several hundred feet to over 3,500 feet elevation.
Range: Located in the Sonoran, Mojavean, and Chihuahuan deserts of north America. In Arizona, New Mexico, Texas and southward into Mexico.
Care: *Cylindropuntia leptocaulis* is an easy plant to grow here in Tucson. Give this plant full sun or partial shade and it will do very well. Many chollas are easily established and will grow well when given a bit of added moisture during those dryer months just prior to the monsoon.
Propagation: Seed and stem cuttings
Size: This is somewhat of a tough question. In habitat it can reach approximately 3 feet or more in height and form a nice bush or shrub.
Shape: Padded/Jointed
Flowers: The flowers may be cream to light yellow or somewhat greenish yellow in color.



Photo Courtesy of Vonn Watkins ©2004

Description

In desert areas you may find spineless plants and others that have the typical 1 long spine per areole. This is a quite common find in this species. During good years of fruit production the Christmas cholla will display the very noticeable small red fruit that is easily seen during the month of December, and is a nice eye treat during the holidays. The plant is very hardy in colder regions and has been introduced to gardens in some southern states as far north as North Carolina.

Item ID: 17
Family: Cactaceae
Genus: *Echinocereus*
Species: *fasciculatus*
Common Name: Hedgehog
Habitat: Found in a variety of desert soils and terrains in valleys, hills and mountainous areas from about 2,000 to 6,000 ft. elevation.
Range: Southern Arizona, New Mexico and Sonora, Mexico
Care: Very easy plant to grow in Tucson. This plant is an area native and can survive with very little care.
Propagation: Seed and offset stem cuttings
Size: Clumping plants may have up to 30 stems and form clumps 24 inches wide and 18 inches tall.
Shape: Clustering
Flowers: Flowers occur in the early spring and are light to dark magenta in color.



Photo Courtesy of Vonn Watkins ©2003

Description

This *Echinocereus* is known for being rather abundant in the Tucson area, and the dark brown central spine near the top of the stem makes it easy to identify. Flowers are seen in April or May and can be a very nice surprise for those unfamiliar viewers.

Item ID: 20
Family: Cactaceae
Genus: Mammillaria
Species: grahamii
Common Name: Arizona fishhook Cactus, Lizard Catcher, Graham's Fishhook Cactus
Habitat: Found in a variety of soil types from low desert areas to rocky mountainous terrain from 1,200 to 6,000 feet elevation.
Range: This Mammillaria is found in Arizona, California, New Mexico and Texas. It also extends into Sonora, Chihuahua and Sinaloa, Mexico
Care: An excellent plant for a sunny patio container location or as an addition to the garden. Being a local native, it is very much a carefree plant and requires little attention except for container culture. This plant may cluster with several offsets but this may or may not occur.
Propagation: Usually by seed but offsets can be cut from the mother plant and rooted if necessary.
Size: To 9 inches in height and 4 inches wide. Clustering plants can be much wider.
Shape: Clustering
Flowers: Flowers appear in June and July. Petals are commonly bordered by white with a pink to magenta interior.



Photo Courtesy of Kevin Barber ©2002

Description

This Mammillaria is very common in and around Tucson and it is noted for the rather thin, short, black hooked spines and beautiful pink to dark magenta flowers. The edible fruit is about 1/4 to 3/4 inches long and stands out from the plant like little red chilies.

Item ID: 22
Family: Cactaceae
Genus: Opuntia
Species: ficus-indica
Common Name: Indian fig, Tuna Cactus, Burbank's Spineless Cactus, Burbank Prickly Pear
Habitat: The native habitat for this Opuntia is not known. It has been cultivated for many years and is now found in locations all over the world. In the United States plants can be seen in cultivation in Florida, Bermuda, Texas, California and Arizona.
Range: The range of this plant can be quite variable as it is found in many areas. Around Tucson plants are easily found to over 3,000 feet elevation.
Care: O. ficus-indica is an extremely carefree plant for any garden in Tucson. It can be easily rooted from cuttings and requires no special soil or situation. It can take full sun as well as partial shade and is rather fast to establish and grow. It is also hardy to around 20 degrees fahrenheit.
Propagation: By seed or by stem cuttings
Size: Very large species of Opuntia. Can reach over 15 feet in height and over 10 feet in width.
Shape: Padded/Jointed
Flowers: Yellow to very light orange/yellow that will usually change to a darker orange color by late afternoon.



Photo Courtesy of Vonn Watkins ©2003

Description

Burbank's Spineless Cactus or the Burbank Prickly Pear can be seen by everyone driving around Tucson. This plant has been in heavy cultivation here for a number of years and is a common sight in neighborhoods throughout the Old Pueblo. It is a spineless plant with large, thick, flat joints usually about 12 to 20 inches long. Most plants have a central growing point or trunk and are sometimes extremely massive in size.

Item ID: 25
Family: Agavaceae
Genus: Yucca
Species: elata
Common Name: Soaptree yucca
Habitat: Commonly seen in the Desert Grasslands and extending into the high desert from approximately 1,500 to 6,500 feet in elevation.
Range: This Yucca is found in western Texas, southern New Mexico and southern Arizona. It is also in northern Sonora and northern Chihuahua, Mexico.
Care: Small plants are commonly found in many nurseries. The small plants can be easily planted and require only extra water during the hotter months of the year. Plants after establishment need very little if any extra care except for sometimes clean-up of the dying leaves. This is a very hardy species and can tolerate temperatures below zero. It can also survive in full sun and hot summer heat as well.
Propagation: The Soaptree yucca can be grown from seed. Propagating this plant in any other way is not advised.
Size: Commonly found to reach a height of about 10 to 20 feet. Taller plants are quite rare but do exist.
Shape: Rosette
Flowers: White, fragrant flowers are formed at the top of a tall stalk and can be a very rewarding sight.



Photo Courtesy of Mark Dimmitt ©1970

Description

The flexible leaves of this Yucca are quite long and thin. Along the leaf margins are many white curling fibers that appear to look like hair. In age the plant will form a trunk that is well anchored to the ground by the strong, deeply penetrating roots.

Item ID: 27
Family: Cactaceae
Genus: Cylindropuntia
Species: spinosior
Common Name: Cane Cholla
Habitat: Found in desert valleys and grassland areas from 2,000 to 7,000 ft. elevation.
Range: This cholla is found through many areas of southern Arizona, New Mexico, Sonora and Chihuahua, Mexico.
Care: This is a very easy species to grow and is very hardy. In areas of the southeastern United States it is very tolerant of wet and cold weather where it survives and grows very well.
Propagation: Seed and stem cuttings
Size: Plants are variable in growth but can easily attain 8 feet in height and several feet wide.
Shape: Padded/Jointed
Flowers: Variations from light red to dark red, orange to yellow and rarely a creamy white



Photo Courtesy of Vonn Watkins ©2000

Description

This is a very beautiful cholla that has the distinct dark green stems with short white/gray spines and tuberous areoles. It is commonly seen with red flowers in and around the Tucson area. A real favorite target for the notorious Cactus beetle, *Moneilema armata*. The beetle as you may find it is not the problem but the larvae of the beetle is what really destroys the plant from the inside. Usually you may not know the plant has been attacked until it begins to die.

Item ID: 28
Family: Agavaceae
Genus: Agave
Species: parryi var. huachu-
censis
Common Name: Huachuca
Agave
Habitat: Usually found from
4,000 to 8,000 feet elevation
from the desert grasslands to
the oak woodland and pine for-
est in mountainous areas.
Range: Southeastern Arizona,
Sonora and Chihuahua, Mexico
Care: A very easy Agave to
grow in and around the Tucson
area and can be grown in full
sun or partial shade. This Aga-
ve requires very little care ex-
cept for the occasional sum-
mer watering prior to the mon-
soonal rainy season.
Propagation: By seed and off-
sets
Size: From 25 inches wide and
30 inches tall
Shape: Rosette
Flowers: The inflorescence of
this plant can be quite spec-
tacular. The color of the flow-
ers are a bright yellow.



Photo courtesy of Vonn Watkins ©2001

Description

This Agave is a very attractive species that is common in many gardens around Arizona. The tight clustered blue/gray green leaves are an eye catching favorite and no garden should be without this Agave. It can take temperatures down to around 12 degrees Fahrenheit.

Item ID: 29
Family: Cactaceae
Genus: Opuntia
Species: santa-rita
Common Name: Santa-Rita
Prickly Pear, Purple prickly
pear
Habitat: Found native to de-
sert areas, grasslands and
Oak Woodlands at 2,500 to
5,500 feet elevation.
Range: Opuntia santa-rita can
be found in southern Arizona,
southern New Mexico, south-
western Texas, and in north-
ern Sonora, Mexico.
Care: A very easy Opuntia to
grow and maintain in and
around Tucson. This cactus is
very tolerant of the heat and
dry conditions seen around
southern Arizona. Rooted cut-
tings can easily produce a ma-
ture plant within several years
with little effort or special
care. This plant is well suited
for a place in your sunny gar-
den.
Propagation: This plant is
easily propagated by stem
cuttings and by seed.
Size: Mature specimens of
this cactus can be at least 5 to
6 feet wide and over 5 feet in
height.
Shape: Padded/Jointed
Flowers: The flower color is a
light lemon yellow and usually
opens in the month of May.



Photo Courtesy of Vonn Watkins
©2003

Description

The purple prickly pear is noted for the waxy bluish gray stem color and the purple colorings along the edges of the stems. It also has a distinct main trunk with numerous flat stems or pads. The name Opuntia violacea var. santa-rita was once used but now it is known as just Opuntia santa-rita.

Item ID: 30

Family: Cactaceae

Genus: Astrophytum

Species: myriostigma

Common Name: Bishop's Cap, Bonete de Obispo

Habitat: Occurs from 1,500 to around 8,300 feet elevation in rocky or stony soils.

Range: This species is found in several of the more central Mexican states such as Coahuila, Nuevo Leon, Tamaulipas and San Luis Potosi.

Care: This is a very easy plant to grow and care for in and around Tucson. It requires very little attention and can reward the owner with an abundant display of flowers during the summer months. It is easy to handle and easy to keep in the garden.

Propagation: Seed

Size: 8 inches wide and to 10 inches in height

Shape: Globular

Flowers: Sometimes more of a creamy yellow or very Light Yellow



Photo Courtesy of Gene Joseph ©2002

Description

The Bishop's Cap is an easy plant to identify mainly because of the lack of spines and the numerous white or gray velvety tufts that cover the stem surface. There is also a nudum form that has none of the white tufted characteristics. This genus has also been hybridized extensively and numerous forms are now available to growers and collectors.

Item ID: 31

Family: Cactaceae

Genus: Cylindropuntia

Species: versicolor

Common Name: Staghorn Cholla

Habitat: Found at 1,500 to 3,500 feet elevation in the Sonoran desert.

Range: This plant is found in large populations in Pima county, Arizona and in and around the city of Tucson. Smaller isolated populations are found in Gila, Pinal, Maricopa and western Cochise counties. It is also found south of the Arizona border in Sonora, Mexico.

Care: This is a very easy plant to grow in any area around Tucson and requires little maintenance or care. A very hardy plant that is also a favorite for producing the choice cholla buds that are eaten by native americans as well as foraging animals.

Propagation: Seed or stem cuttings

Size: From 8 feet in height to more than 10 feet wide

Shape: Padded/Jointed

Flowers: Flowering starts in May.

Flower color varies from shades of yellow, yellow/green, orange to red. Often one plant can have several flower colors. The species name, versicolor, reflects this flower color variation.

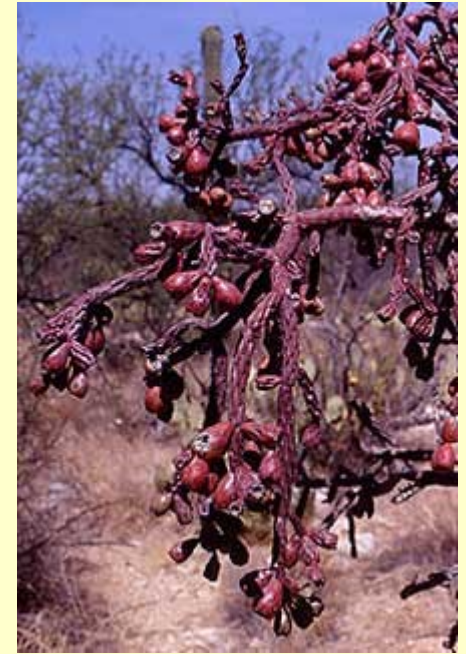


Photo Courtesy of Vonn Watkins ©1993

Description

This is an easy cholla to identify mainly because of the dark gray/green stem color. This plant will change stem color during drought or during the winter and this change turns the stems to a rather attractive dark purple color.

Item ID: 32
Family: Agavaceae
Genus: Dasylirion
Species: wheeleri
Common Name: Sotol, Desert Spoon
Habitat: Widely distributed in grasslands, pine, juniper and oak woodlands from 3,000 to 6,000 feet.
Range: Found in south and south-eastern Arizona, southern New Mexico, western Texas and extends south into Sonora and Chihuahua, Mexico.
Care: Cultivated plants can be easily found at most garden centers around Tucson and are easily transplanted. This plant is cold hardy to around 0 degrees farenheit and is quite tolerant of extreme heat and full sun. It is also tolerant of a more shady location in the garden and can be watered rather frequently although this is seldom needed.
Propagation: Propagated by seed.
Size: Bushy single stem plants may exceed 5 feet in height and 4 feet wide.
Shape: Rosette
Flowers: Flowers appear from May through August and the sandy, light beige clusters are not typically attractive.



Photo Courtesy of Vonn Watkins ©2003

Description

This is an attractive, very hardy plant that has many prickly edged linear grayish blue/green leaves. It is long living under most desert conditions and some plants will branch to form very large specimens although this is not often seen.

Item ID: 34
Family: Agavaceae
Genus: Nolina
Species: microcarpa
Common Name: Bear Grass, Sotol Chiquito
Habitat: Found in the grasslands and oak woodlands from 3,000 to 6,000 feet elevation.
Range: This Nolina is native to the southern regions of Arizona, New Mexico and also western Texas. It is also seen in Chihuahua and Sonora, Mexico.
Care: This southern Arizona native is easily grown in very sunny locations or in shaded areas. It is drought tolerant when well established but may need extra water during exceptionally dry months. The question of cold tolerance should be no problem for plants here in and around Tucson as this species of Nolina can survive temperatures as low as -20 degrees farenheit.
Propagation: Propagated by seed or by separating and replanting the offsets.
Size: Bear Grass can become a large bushy cluster approximately 5 feet in height and 6 or more feet wide.
Shape: Clustering
Flowers: Flowers are seen during the summer months and are very small. Flowers are a light beige in color.



Photo Courtesy of Dick Wiedhopf ©2003

Description

This plant is widely known as "Bear Grass" as it does look like a huge clump of yellow-green grass. The leaves are armed with a very sharply jagged edging and some extra caution should be taken during handling. The long leaves cascade beautifully from the base and are usually split and dusty brown toward the tips.

Item ID: 35

Family: Agavaceae

Genus: Hesperaloe

Species: funifera

Common Name: Giant Hesperaloe, Coahuilan Hesperaloe

Habitat:

Range: Found in the states of Coahuila through Nuevo Leon and into San Luis Potosi.

Care: This is a very drought tolerant plant but the addition of extra summer moisture is encouraged to keep the plant in good form. Hesperaloe funifera is also a very cold tolerant species and can withstand temperatures as low as 5 degrees fahrenheit. For gardens in Tucson this is an excellent addition, but be sure to allow for the large size expansion.

Propagation: Propagated by seed or by offset removal.

Size: Plant may be 6 feet in height and 6 feet wide with very long rather rigid leaves.

Shape: Rosette

Flowers: Flowers are somewhat greenish white and are displayed on the tall flower stalk



Photo Courtesy of Vonn Watkins ©2003

Description

Leaf color is a rather yellow-green and can be approximately 2 inches wide and over 6 feet in length. Leaves have long curly hair like strings attached to the side margins. The rather stiff leaf tends to cascade toward the tip which adds to the attractive form of this increasingly popular species.

Item ID: 37

Family: Cactaceae

Genus: Opuntia

Species: microdasys

Common Name: Bunny Ears, Rabbit Ears, Cegador

Habitat:

Range: Found in many areas of the Chihuahuan Desert in Mexico and extending further south into central Mexico.

Care: This plant is a survivor and can do well without a lot of extra care. It grows very well here in Tucson and is very popular because of the attractive appearance of the glochid color and overall shape of the entire plant. This

Opuntia is not a favorite target of the cactus beetle and it's larvae so it generally can grow well for many years.

Propagation: Can be propagated by seed or from stem cuttings.

Size: The size of a single plant can be quite extensive but average around 3.5 feet in height and over 6 feet in width.

Shape: Padded/Jointed

Flowers: Flowers open in the spring and are yellow on most non hybrid varieties.



Photo Courtesy of Kevin Barber ©2003

Description

There are no spines on these plants. But do not let the soft velvety look fool you. The numerous small glochids can easily detach if touched and become very bothersome. There are three commonly seen glochid colors found in Opuntia microdasys; reddish-brown, golden yellow and white. The variety substitution is not recognized today and these color names are generally only used commonly for sales distinction.

Item ID: 38

Family: Cactaceae

Genus: Opuntia

Species: engelmannii

Common Name: Engelmann's Prickly Pear, Flaming Prickly Pear, Tuna, Yellow Spined Prickly Pear

Habitat: This species may be found from 200 to 4,500 feet elevation in a variety of soil types. The habitat around Tucson for this species is well known to many and it is certainly not overly selective.

Range: This species is found in many areas of the United States, Arizona, New Mexico, Texas, Oklahoma and Louisiana. It occurs in many states south of the border into Mexico extending as far south as San Louis Potosi.

Care: This Opuntia like many others is a trouble free plant to maintain. It is extremely drought tolerant, cold hardy and a fast grower. Extra water during the dry summer months is encouraged but seldom needed. It is easily attacked by the cactus beetle, and can be infested by Cochineal insects that can eventually kill or damage the stems. Extra care should be given to avoid those predators.

Propagation: By seed or stem cuttings.

Size: This plant can reach around 10 feet in height and 10 or more feet in width.

Shape: Padded/Jointed

Flowers: Flowers on this species are typically pure yellow, large and very showy. Sometimes variations of the flower color can occur which is not rare.



Photo Courtesy of Kevin Barber ©2003

Description

There are currently 6 different varieties of *O. engelmannii* recognized. Each has its own characteristics and distinctions.

Item ID: 39

Family: Cactaceae

Genus: Opuntia

Species: engelmannii var. linguiformis

Common Name: Cow's Tongue Cactus, Cow Tongue Prickly Pear, Lengua de vaca

Habitat: The original habitat of this Opuntia is the low mesquite forested range land of south Texas just northeast of San Antonio at around 500 feet elevation.

Range: This particular Opuntia was found native to a limited area in Bexar County, Texas. First described by Griffiths in 1908. The location was documented by Del Weniger as being just south of the town of China Grove and Sayers, Texas. This particular Opuntia has been widely accepted and now grows in many areas outside the original range.

Care: Because of this plants great ability to adapt to the surroundings it should be noted that cultivation is not a concern. This cactus can grow into a nice size plant in only a few years. It requires little supplemental water but a little added water should keep it looking good and healthy. Some plants require pruning of the stems in order to keep it from spreading into other areas of the garden.



Photo Courtesy of Vonn Watkins ©2003

Propagation: This cactus is easily propagated by stem cuttings or by seed.

Size: Plants can reach 6 feet in height and up to 8 feet wide.

Shape: Padded/Jointed

Flowers: This Opuntia has flowers that are 2 inches wide and yellow in color.

Description

It is easy to see where this Opuntia got its' name. The stems have been found to grow to almost 2 feet in length and are armed with the typical yellow spines of the engelmannii species. The real "Cow Tongue" look distinguishes this plant from all other Opuntias.

Item ID: 40
Family: Cactaceae
Genus: *Stenocereus*
Species: *thurberi*
Common Name: Organ Pipe Cactus, Mehuelé
Habitat: This plant can be seen in rocky, desert terrain at 900 to 3,500 feet in elevation.
Range: This species is found in extreme southern Arizona, Sonora, Sinaloa and Baja California, Mexico.
Care: *Stenocereus thurberi* can be grown in Tucson provided it has a micro-climate suitable for low frost or freeze occurrences along with dry soil conditions during the winter months. It is a rather slow growing species and can take many years to mature to specimen size.
Propagation: This cactus can be easily grown from seed or propagated by stem cuttings.
Size: A mature specimen can reach 25 feet in height and over 15 feet in width with numerous stem columns.
Shape: Columnar
Flowers: Flowers are white and open during the evening hours. They may remain open for most of the following day.



Photo Courtesy of Vonn Watkins ©2005

Description

The Organ Pipe Cactus is a beautiful, highly desirable plant for a desert landscape. The olive green stems or columns can be quite large with numerous gray spines.

Item ID: 41
Family: Liliaceae
Genus: *Aloe*
Species: *saponaria*
Common Name: No common name available
Habitat: This Aloe occurs at around 6,500 feet elevation where the largest populations are found along the eastern mountain slopes of Black Mountain in Rhodesia.
Range: *Aloe saponaria* has been found only around the Inyanga District of Rhodesia in South Africa. It is reported to be found just north of Troutbeck on near Mount Inyangani.
Care: In Tucson this Aloe is probably the most widely cultivated of all Aloes. It is a very easy plant to grow and requires very little extra attention. It may require more moisture during those months when rainfall is low. It is a winter grower and will accept added moisture during the Tucson winter.
Propagation: This plant is easily propagated by removal of the many offsets and by seed.
Size: The actual plant is only about 12 inches in height and can be about the same in width. Older plants can have many offsets and produce a very large group several feet in width.
Shape: Rosette
Flowers: The flowers of this species are a beautiful shade of red that can appear in the late fall.



Photo Courtesy of Kevin Barber ©2003

Description

This Aloe is widely cultivated and is quite attractive mainly because of the variable light whitish leaf markings. Along the edges of the green leaves are brownish colored teeth that are usually not extremely sharp. The flowering plants here in Tucson are noted as a good attractant for humming birds.

Item ID: 43

Family: Cactaceae

Genus: Pachycereus

Species: marginatus

Common Name: Mexican Fence Post Cactus, Organo

Habitat: Found in numerous locations along valleys and hillsides in a variety of soil types.

Range: Found native throughout Hidalgo, Querétaro, Guanajuato and Oaxaca, Mexico. This species has also been widely cultivated and grown in a variety of locations in Mexico where it is now naturalized. Commonly called the Fence Post cactus because it has for many years been used and cultivated as a fence for livestock.

Care: This cactus is an easy plant to grow from nursery stock or from cuttings. It is a rather fast plant to grow and can become a very large specimen over 8 to 10 feet tall in about 10 years. It does very well in full sun and may need extra water during the hotter parts of the Arizona summer.

Propagation: This cactus can be easily grown from seed or propagated by cuttings.

Size: Can grow to a height of 10 to 18 feet tall and 4 feet in width.

Shape: Columnar

Flowers: Flowers are rather small and reddish pink in color.



Photo Courtesy of Dick Wiedhopf
©2003

Description

This is an erect plant that does not branch much above ground level. It is very green in color with about 5 to 7 ribs armed with very short spines. The plant can be easily picked up using gloves or even bare hands if careful. The plant forms a tall slender cluster of stems that are very attractive for landscape purposes.

Item ID: 44

Family: Cactaceae

Genus: Peniocereus

Species: greggii var. transmontanus

Common Name: Queen of the Night, Night Blooming Cereus, Sweet Potato cactus

Habitat: The Queen of the Night is found growing among desert shrubs and trees such as mesquite and palo-verde at elevations from 1,000 to 3,500 feet. Because of the color of the stems it is often quite hard to find among the vegetation and can easily be overlooked.

Range: This cactus occurs in parts of Cochise, Maricopa and Pima counties in Arizona and south into Sonora, Mexico.

Care: This is a great plant for a dry weather garden that is not controlled by drip or by other means of irrigation. Plants are usually purchased at a small size and you can easily transplant it to your garden very easily where it can grow into a flowering specimen in several years. Plants will need to be placed under the protection of other vegetation until they can grow and mature.

Propagation: New plants are best grown from seed although cuttings can be rooted easily.

Size: *Peniocereus greggii* has a large tubular root that can weight up to 80 pounds or more. The above ground plant that is seen can be as much as 4 feet in height with numerous branched stems.

Shape: Padded/Jointed

Flowers: The large white flowers of this plant are nocturnal and begin their display in late May. Older, long-time residents talk of having specimens with up to 100 flowers open on a single night.



Photo Courtesy of Kevin Barber
©2002

Description

This plant is hard to misidentify when found in and around the Tucson area. It is found usually hidden from view because of the stems that appear at first to be only dead limbs fallen from a tree. The plant is a dull gray color with sometimes purplish edging. The spines are very short and close to the plant along the tapering stems that are very thin at the base and wider at the top. The stems can be easily broken off as they are quite fragile and brittle at the base.

Item ID: 51

Family: Agavaceae

Genus: Agave

Species: lechuguilla

Common Name: Shin Dagger

Agave

Habitat: This Agave is extremely fond of gravelly limestone soil and throughout its natural range it can be commonly found in association with limestone.

Range: This is probably the most widely distributed Agave species. Agave lechuguilla ranges from southern New Mexico and southwest Texas down into Mexico through the states of Chihuahua, Tamaulipas, Zacatecas and San Luis Potosí. It can occur from around 1,500 to near 7,500 feet elevation.

Care: This is one of the hardiest of Agaves to grow in and around the Tucson area. It is easily grown with regular watering during the summer and can even tolerate extremely dry conditions. It is a very hardy plant that can take temperatures to 0° F. One distinctive characteristic is that it produces many offsets and may need extra space in a garden.

Propagation: Agave lechuguilla produces an abundance of offsets and can also be grown from seed.

Size: Mature plants can be to 20 inches tall and up to 30 inches wide although these sizes can vary.

Shape: Rosette

Flowers: The yellow flowers are tinged with red and are usually produced on healthy plants that are about 10 to over 20 years old.



Photo Courtesy of Karen Keller ©2004

Description

The leaves of Agave lechuguilla are usually straight and may number from 10 to over 50. Leaves are stiff, erect, dagger-like and can be a real challenge when hiking through its habitat. Many offsets are common with this species.

Item ID: 26

Family: Agavaceae

Genus: Hesperaloe

Species: parviflora

Common Name: Red hesperaloe, Red Yucca, Hummingbird Yucca

Habitat: Hesperaloe parviflora is fond of limestone soils and is commonly found along valley slopes and canyon areas within the habitat.

Range: Not commonly found in Texas but has become a distributed cultivar. It is also popular in many southern and southwestern states. This plant is from western Texas and northeast Mexico.

Care: This is a very easy plant to grow in Tucson and the surrounding areas. It is very tolerant of cold weather and can easily take temperatures below 0° F. It is also highly tolerant of full sun and may only need supplemental watering during the dryer months of the year.

Propagation: Propagation is from seed and division of the numerous offsets.

Size: Adult plants may have many offsets and can be 2 to 4 feet in height and several feet wide.

Shape: Clustering

Flowers: Deep red to light pink and there is also a cream to yellow flowering variety.



Photo Courtesy of Vonn Watkins @2003

Description

There are basically two forms of this plant that are very popular for desert landscaping. Both the red and yellow flowering forms are currently available in many nurseries. Plants have long deep green ascending leaves with white hairlike portions along the leaf margins. Flowers are numerous and are a common attractant of hummingbirds.

Item ID: 49

Family: Agavaceae

Genus: Agave

Species: weberi

Common Name:

Habitat: This beautiful Agave has been reported to have originated in a small village in the state of San Luis Potosí, Mexico. Today it has been widely cultivated and planted throughout Mexico and the southwestern parts of the United States as well as many other countries.

Range: Was recorded to be found in Webb County, Texas as growing along highway 83 but the origination of the plant in that area is not known. It is cultivated along the lower Rio Grande and the arid southwest.

Care: Agave weberi is hardy to cold temperatures as low as 10° F. In Arizona they can be grown in a partially shaded area or in full sun. Plants exposed to full sun may experience extensive yellowing of the leaves and may require extra watering and fertilizing during the summer. This will usually insure beautiful healthy growth. The soil requirements for this species is rather unimportant and it can be grown easily in the desert soils in and around Tucson and Phoenix.

Shape: Rosette

Flowers: The flowers are bright yellow.



Photo Courtesy of Karen Keller ©2004

Description

The leaves of Agave weberi are notably greenish gray in color, large and wide in shape, and have very small teeth or none at all along the margins. It is a very attractive species and can be a beautiful addition to any arid landscape garden. Be cautious of this next sentence. The flower stalk or shaft can reach to over 25 feet tall and can easily topple the plant over especially if the ground is soft or high winds occur.

Item ID: 50

Family: Agavaceae

Genus: Agave

Species: lophantha

Common Name: No common name known.

Habitat: The natural habitat for this plant seems to be somewhat confusing because of the amounts of rainfall it may receive in some areas where it naturally occurs. It is usually common on rocky limestone hillsides but also is found in lower coastal places and even sandy locations where living conditions may be warmer, wetter and a little more tropical. It extends from around 100 to as much as 5,000 ft. elevation.

Range: Agave lophantha is found in southeastern Texas in areas near the Rio Grande Valley and extends southward into Mexico. It is commonly found growing in the coastal areas of the state of Tamaulipas and Veracruz.

Size: Some mature plants can be as large as 45 inches tall and to 36 inches wide.

Shape: Rosette

Flowers: The inflorescent shaft or spike may extend as tall as 12 feet with greenish yellow or light yellow flowers.



Photo Courtesy of Vonn Watkins ©2003

Description

The look of Agave lophantha is quite distinctive but this species does have some variety. The leaves are marginally armed with sharp teeth and each leaf is usually stiff and straight with a dark brown tip spine. The leaf color is dark green but some plants may display a more yellow/green color especially when stressed. A light yellowish green center stripe runs vertically down the center of each leaf. Hybrids of this species are cultivated and can be somewhat confusing at times.

Item ID: 53
Family: Agavaceae
Genus: Agave
Species: americana var. marginata
Common Name: Variegated Century Plant, Maguey
Habitat: Although it is a native of Mexico, the actual habitat has not been very well established. This Agave has been found in many types of soil and is a real survivor as the offsetting plants will continue growing long after the mother plant has died.
Range: The natural location of Agave americana is unclear, but the range of this plant within Mexico is very extensive. It is a very desirable ornamental plant and has been widely used in the production of fiber, food and drink. It has been introduced in Arizona, California and many southern states where it is receiving much attention. It is also grown in several Mediterranean countries, Africa and the far east.

Size: Commonly 5 to over 10 feet in height and 10 or more feet wide.

Shape: Rosette

Flowers: The inflorescence of this Agave is a very impressive sight as the stalk can rise to over 24 feet in height. The flowers are yellow.

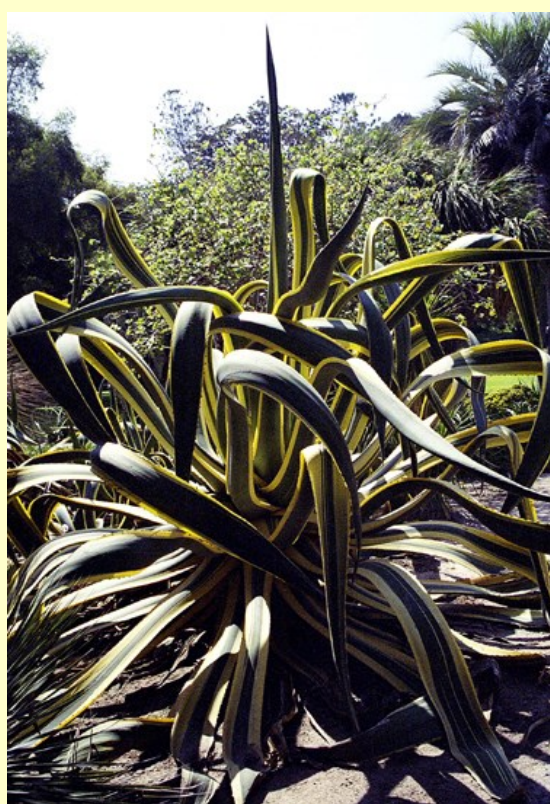


Photo Courtesy of Vonn Watkins ©2003

Description

If the habitat, range, care and other information about this plant seems the same as Agave americana, it is. Varital differences are found in many plants and this plant is one of those. The leaves of marginata are usually darker green in color and have a yellow or creamy white marginal band that will extend the entire length. See the photograph. These bands may look somewhat uneven and sometimes will vary in size from leaf to leaf.

Item ID: 55
Family: Agavaceae
Genus: Agave
Species: murpheyi
Common Name: No common name available.
Habitat: Populations are rather small and scattered. It is usually found along hillsides from 1,000 to 3,200 ft. elevation.

Range: This agave is believed to have been cultivated or transported by native americans. In central Arizona small populations have been seen near the Superstition Mountains in Maricopa county. Gentry reported seeing it cultivated on the reservation near Sells, Arizona in Pima county. He also reported that there may also be some natural populations in the mountains, but no actual populations were confirmed. It is also found in the state of Sonora, Mexico in several locations.

Size: Can be found growing to about 3.5 feet in height and almost as wide.

Shape: Rosette

Flowers: The flowers are light green or yellow and can appear very early in the spring during March or April.



Photo Courtesy of Vonn Watkins ©2004

Description

Most plants are slightly blue-green, dark green or even olive green in color. The leaf of a mature plant can exceed slightly over 25 inches in length and have sharp brown teeth along the margins. Some plants produce offsets while others have none.

Item ID: 57

Family: Agavaceae

Genus: Agave

Species: colorata

Common Name: No common name available

Habitat: This species does not extend far from the coastal regions and should be considered a coastal species. It is usually found growing in scattered areas along rocky hillsides and often associated with scrub vegetation and small thorn shrubs and trees.

Range: It is found in the Mexican states of southern Sonora and extends into northern Sinaloa. The plants are sparse individuals and colonies are not commonly seen.

Care: This agave can be easily grown in almost any desert soil in and around Phoenix or Tucson, Arizona and is very easily cared for. It really needs no care if well established and can survive for many years. Some plants may need a nice rocky garden position and this will also give the plant a more natural setting. Full sun is suggested for this species and will insure the beautiful, healthy, blue-gray leaf color.

Propagation: Propagated by seed or offsets.

Size: Agave colorata is a rather small to medium size plant. Mature plants usually do not exceed 30 inches in height.

Shape: Rosette

Flowers: The flower stalk or shaft can extend as tall as 8 feet and is usually a late winter bloomer. The flower color is yellow.



Photo Courtesy of Vonn Watkins ©2003

Description

The beautiful leaves of this plant are slightly banded by leaf growth and impression. This banding adds a nice addition to the attraction of this agave. A leaf can be over 6 inches wide and as long as 24 inches. The margins of each leaf presents a rather undulated growth that is accented with strong brown teeth. The leaf also feels a little like slightly rough sandpaper and the blue-gray color is unmistakable.

Item ID: 60

Family: Cactaceae

Genus: Ariocarpus

Species: fissuratus

Common Name: Living Rock, Star Cactus, Star Rock, Chautle, Sunami, Peyote Cimmarron

Habitat: Plants are found in and around limestone hills where they are often barely exposed above the surface of the ground. They are situated in rocky areas and are most often found in exposed locations among pea size rocks and gravel.

Range: This species is found inside the United States from areas of the Big Bend east to the Pecos River. It extends north only a couple of miles or so from the Rio Grande except for the Big Bend area where it can be found to near the town of Alpine within the range and is widely distributed. Southward it extends into Mexico where and is found in the states of Coahuila, Chihuahua and Durango.

Size: This is not a large growing species and a large specimen may only be 6 inches in diameter and about 1 inch or less in height.

Shape: Rosette

Flowers: The Flowers of this species appear from October to November. The flower color can be from an extremely light pink to almost magenta with variations of pink being the most prominent. light



Photo Courtesy of Vonn Watkins ©2003

Description

This is a single stem species but can be rarely found with multiple heads. The plant is usually a grayish green color and the surface is very firm and rocky to the touch. The underground tuberous root can extend below the soil several inches. My experience is that the diameter of the plant usually is about the same length as the root.

Item ID: 62
Family: Liliaceae
Genus: Aloe
Species: ferox
Common Name: Cape Aloe, Bitter Aloe, Kaapse aalwyn or umhlaba
Habitat: Found in rocky hills and scrub grassland areas.
Range: Aloe ferox is distributed throughout a large area along the eastern regions of South Africa.
Care: This species is hardy through Zone 9 and will grow well in areas in and around Tucson. The growth rate of this aloe can be quite moderate and some would consider it a slow grower. With a little extra attention it can make a very impressive member of your garden.
Propagation: Propagation is by seed or separation of the offsetting plants.
Size: Aloe ferox is known as one of the tree aloes and can grow to around 15 feet in height and is non-branching.
Shape: Rosette
Flowers: The flowers appear above the plant in a candelabra bracket of bright to dark orange colors.



Photo Courtesy of Kevin Barber ©2003

Description

Having a beautiful Aloe such as Aloe ferox growing in your yard can be a very rewarding experience. This plant is quite well known for the large, rather long, green leaves with the short well distributed prickles (small thorn type bumps). The one extra special way of knowing Aloe ferox is by the crowning bright orange, stunningly beautiful flower display.

Item ID: 63
Family: Cactaceae
Genus: Cylindropuntia
Species: arbuscula
Common Name: Pencil Cholla
Habitat: Found in sandy or gravelly desert soils of low washes, flats and grasslands from around 1,000 to 3,500 feet elevation.
Range: This species is found within Maricopa, Pinal, Pima, Yavapai, Santa Cruz and Cochise counties in southern Arizona. It then extends into Sonora and as far south as Sinaloa, Mexico.
Care: This Cylindropuntia can be easily grown as a landscape cholla. It is not a prolific growing species and is known to be rather slow. It can be coaxed into growth with extra water and fertilizer during the hot summer but this plant is a true desert dweller that can easily do without any extra care. It can also survive in almost any of our native soils and really needs very little extra effort by the gardener.
Propagation: Propagated from seed. Quicker and easier grown by removing some of the numerous joint stems.
Size: This plant can get as large as 6 feet wide and attain a height of over 8.5 feet.
Shape: Padded/Jointed
Flowers: The flower color is greenish yellow or sometimes a light reddish brown.



Photo Courtesy of Vonn Watkins ©2004

Description

Easily identified from other native chollas and so called "pencil chollas" by the somewhat yellowish green stem color and smooth surface. The further spaced sheath covered golden or dirty yellow spines can be quite distinctive. Some variations in spines can be confusing as this species is also seen with only a few large spines or none at all. Plants grow from a single trunk.

Item ID: 67

Family: Cactaceae

Genus: *Cylindropuntia*

Species: *kleiniae* var. *tetracantha*

Common Name: Klein's Cholla, Klein Pencil Cholla, Thin Cane Cholla

Habitat: This cholla is usually found near wash areas and desert flats and also occurs in the low hills. Elevations for this species is from 2,000 to as much as 4,000 feet.

Range: The distribution for this plant can be somewhat wide spread although it is not an overly common species wherever it is found. In Arizona it has the largest population concentrated in and around Tucson, but it is also seen in Yavapai, Navajo, Gila, Pinal, Pima and Cochise County. Southward it extends through Sonora and into Sinaloa, Mexico.

Size: Rather large mature plants can be found growing to over 7 feet tall and up to 8 feet wide. In cultivation, very large plants can be found.

Shape: Padded/Jointed

Flowers: Flowers are commonly found to be somewhat of a light pink color with darker outer petals or sometimes even darker or lighter. The flower size is approximately 1 to 1.5 inches wide.



Photo Courtesy of Vonn Watkins ©2005

Description

The joints of this cholla are usually about 2 to 6 inches in length. They are somewhat dark green in color and equipped with formidable barbed spines .25 to 1 inch in length.

Item ID: 68

Family: Cactaceae

Genus: *Cylindropuntia*

Species: *imbricata*

Common Name: Tree Cactus, Cane Cactus, Cane Cholla, Coyote Candles

Habitat: The habitat of this cactus is the rocky and sandy soils found throughout a variety of localities from 3,500 to over 6,000 feet elevation. It can often be seen growing in arid grasslands but may also appear along lower mountain hillsides and extensive valleys.

Range: This *Cylindropuntia* is found from the southern parts of Colorado into and through New Mexico, southwest Kansas and Oklahoma. Then extends southward throughout the western parts of Texas. It is found in limited colonies in southeastern Arizona and extends below the border into Chihuahua, Mexico.

Size: This is a rather large species that can be at least 10 feet tall and can extend to over 6 feet in width.



Photos Courtesy of Karen Keller ©2005

Shape: Padded/Jointed

Flowers: Flowers appear in late April through May. The common flower color is usually either dark reddish lavender, magenta, or a deep rose-pink. These colors are the most common ones found in this species, but others have been seen.

Description

One distinctive feature of *Cylindropuntia imbricata* is the rather thick, heavy stems and the large elongated tubercles. The beautiful spring flower display is always a real spring treat. The rather small spine clusters can be quite dangerous with each spine being equipped with notable barbs. Spines are from .25 to a little over an inch in length.

Item ID: 71

Family: Cactaceae

Genus: Escobaria

Species: vivipara var. bisbeeana

Common Name: Bisbee Beehive Cactus, Beehive Cactus

Habitat: This species is usually found in grassland or the plains but also is found in the hills and mountain areas growing with a variety of other plants. It can be associated with the Oak and Juniper woodland areas as well as the scrub brush plains and grassland communities.

Range: Variety bisbeeana is widely distributed in parts of southern Arizona from the eastern parts of Maricopa through Pima, Pinal, Gila, Santa Cruz and Cochise counties. It also extends through the southern part of New Mexico and into Chihuahua and Sonora, Mexico. It is found in a variety of locations from 2,500 to 5,000 feet elevation.

Size: Single plants may be 2 inches wide and more than 3 inches in height. In age plants may cluster and there have been reports of plants with as many as 100 or more heads. Some of these clusters can be as much as 24 or more inches in diameter.

Shape: Clustering

Flowers: Flowering usually begins in late May or June. The flowers are from a dusty pale pink toward the interior to a darker more vibrant pink at the petal tips.



Photo Courtesy of Karen Keller ©2004

Description

Variety bisbeeana is one of about eight known vivipara varieties. With variety bisbeeana there can be some obvious difference in appearance. Some plants may have short, very white spines and others may have a more robust appearance with longer whitish spines with rusty to dark brown tips. Some plants cluster freely and will have smaller stems while others may have much larger stems. Variety in this favorite vivipara species is quite well known.

Item ID: 45

Family: Cactaceae

Genus: Ferocactus

Species: cylindraceus

Common Name: Compass Barrel Cactus, Fire Barrel Cactus, California Barrel, Cliff Barrel

Habitat: This Ferocactus is found in desert soils, sandy gravel areas and very rocky hillsides and mountainous locations.

Range: A rather widespread species that occurs in locations from just west of Tucson, Arizona in Pima county and north in Pinal, Maricopa, Yuma, Yavapai, Mohave and Coconino counties. In California it is found in Imperial, San Diego, San Bernardino and Riverside counties then south into Mexico and Baja California.

Size: Plants are cylindrical and somewhat barrel shaped. This species can grow to as tall as about 9 feet or rarely larger. The diameter of the plant can be as much as 14 inches.

Shape: Globular

Flowers: Flowers are yellow sometimes with a slight tint of red along the outer portions.



Photo Courtesy of Vonn Watkins
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Description

The "Compass Barrel" is a really beautiful species and can be best described as the twisted spine barrel. The spines are closely spaced and the flowers sometimes have difficulty opening fully. The above photo is of a thin, golden spined plant but most will be spined in shades of red along with gray or even a dull white or golden color. This barrel will usually grow slightly toward the south or southwest as is the compass indication.

Item ID: 46

Family: Cactaceae

Genus: Ferocactus

Species: emoryi

Common Name: Coville's Barrel, Emory's Cactus, Nail Keg Barrel

Habitat: Usually found in rocky soils associated with hillside environments, but in some areas in Sonora, Mexico plants are often found growing in plains and grassland areas. Located from around sea level to over 3,000 feet elevation.

Range: The northern limit of this species is in and around the Sierra Estrella mountains just southwest of Phoenix, Arizona. South in Pima County near Ajo and into the Pima Indian Reservation and Organ Pipe Cactus National Park then all the way along the coastal region of the state of Sonora, Mexico to just below the city of Guaymas.

Care: This barrel is a choice garden favorite from Phoenix south to Tucson as well as other areas around southern Arizona. A very easy to care for plant that is well suited for a harsh desert environment. Plants grown in a desert garden area need little or no extra care but can be given fertilizer as well as a little extra water to insure healthy growth.

Propagation: Propagation of this species is by seed.

Size: Large mature specimens at least 6 feet in height to over 2 feet in diameter can be found.

Shape: Globular

Flowers: Flowers are somewhat of a dark red color and can be seen usually during the month of August.



Photo Courtesy of Vonn Watkins ©2003

Description

Seedling blue green/gray stem (skin) color seedling plants will transform to a more deep green color in mature plants. Small seedlings as well as juveniles of *Ferocactus emoryi* look nothing like a large mature plant. If you have a small plant and watch it grow over the years to a flowering size this transformation will be much more evident and understood. The reddish colored spines on smaller plants will eventually convert to gray or even light straw colors on larger specimens.