

## Six kinds of cholla in Desert Foothills

In our area we have six species of cylindropuntia, or cholla. Joints of the stem are at least circular in cross-section.

Spines have an epidermis which can be separated into a thin paper-like sheath; spine tips are usually barbed and very effective in clinging to anything pierced; glochids are usually small and inconsequential; areoles are on raised tubercles or protuberances either round or elongated.

Opuntia acanthocarpa, or buckhorn cholla, is a very familiar 3- to 5-foot sprawling shrub with numerous joints forming acute and obtuse angles; joints 5- to 10-inches or longer to 18 inches, and 34- to 1-inch in diameter, with narrow 34- to 1-inch long, conspicuous tubercles supporting 10-15 spines approximately 1-inch long.

The flowers are 1½- to 2¼-inches in diameter, usually yellow, but variable in color to red or purplish. The fruit is 1- to -1½-inches long, tuberculate in spring, turning tan or brown at maturity.

Opuntia versicolor, or staghorn cholla, is a conspicuous small tree or aborescent plant — or sometimes a widely spreading low shrub 3- to 15-feet high.

The trunk is short, with the branches much longer. As in most chollas, the trunk and branches are supported internally by a cylindrical perforated woody

Joints are often elongated, mostly 5- to 14-inches long, 5/8-to 44-inches in diameter; tubercles are fairly prominent, three to five times as long as broad, 5/8- to 1-inch long and much closer together than in the buckhorn cholla.

The spines are distinctively reddish-yellow, with seven to 10 per areole, spreading in all directions.

The flower is 14 or 24 inches in diameter, and can be red, lavender, magenta, rose-purple, yellow, green-bronze, brown or orange — hence the name of the species, versicolor.

Fruits are green, with a tinge of purple or red, not strongly tubercled, usually spineless, 34-to 134-inches long. Some new fruits develop from areoles of older ones, forming short chains of two or three.

cholla or piercing cholla, is another prominent and conspicious small tree — or sometimes arborescent plant — 3- to 12- or 15-feet high. The trunk is 1- to 3-feet high, branched and re-branched several times.

The branches are longer than the trunk; joints 2- to 6-inches long, 1½- to 2-inches in diameter, readily detached and rooting (this being the principle method of reproduction); spines are very dense and tend to obscure the stein, and are pink or reddish-brown.

There are two to 12 spines per

areole, which spread in all directions. The ¾-inch flower is pink or white, with lavender streaks. The green fruit (usually sterile) is smooth, without spines, 1- to 1½-inch long, but continuing to grow; persisting up to at least 25 years with new fruit growing from the old, forming long-branched hanging chains with 10-22 individuals in length.

Opuntia bigelovii, or Teddy

Buckhorn cholla

bear cholla, is another piercing cholla—and a never-to-beforgotten conspicuous miniature tree—3-to 9-feet high. Branches are much shorter than the trunk, which is usually the height of the plant, becoming black as the spines turn that color.

Joints are green or bluish, about 3- to 10-inches long, 11/4-to 21/2-inches in diameter, becoming readily detached and rooted—leaving the main trunk like a post

Spines are conspicuous and dense (strongly barbed; removed from human skin with great difficulty), obscuring the joint with sheaths which are straw-colored.

This straw coloring gives off a golden aura when back-lighted. The flower is pale-green or yellow, and streaked with lavender. The fruit is yellow or greenish-yellow (usually sterile), strongly tuberculate, persistent on the plant through the winter.

Opuntia leptocaulis, desert Christmas cactus, is an attractive bush or erect, small shrub, often under protection of larger shrubs.

Among mesquite and other shrubs, it may become vine-like, growing upward to 15 feet. Joints are elongate, 12- to 16-inches long, with internal wood-core, which is nearly solid.

Branches are about 1- to 3-inches long, about 1/8- to 3/16-of-an-inch wide in diameter; tubercles almost lacking, the stem nearly smooth; spines gray, sometimes tinged pink, 1 per areole, longer ones 1-to 2-inches long. The 3/8- to 5/8-inch-diameter flower is yellow to bronze.

The fruit is bright red, smooth, spineless (but glochids often prominent), persistent through the winter — hence the localized English name.

Opuntia arbuscula, pencil cholla, is a miniature tree or shrub, 2- to 9-feet high; trunk up to 1-foot long, 2- to 4-inches in diameter. The joints are 2- to 6-inches long, ¼- 3/8-inch in diameter, profusely branched, with a nearly-smooth surface and a woody core which is almost a solid cylinder.

Tubercles are low and inconspicuous, 4- to 14-inches long; spines are reddish or purplish-tan (sheaths light brown, loose and conspicuous), 1-4 per areole — the largest one turned downward ½- to 1½-inches long. The flower is 34-to 1 3/8-inches in diameter and is green, yellow or terra cotta.

The fruit is green-tinged with purple or red, smooth (without spines), %- to 1½-inches long, and persistent through the winter.

