

Cacti Hardy in the Okanagan

by John Waddington



Echinocereus triglochidatus in Summerland Ornamental Gardens

There is a surprisingly wide range of cacti that are hardy in the Okanagan, in height from a few centimetres (an inch or two) to perhaps 2 metres (six feet). Every flower colour except blue. A complete range of spininess from none to enough to hide the plant stems. Spines that come in many sizes, numbers, colours, and shapes. And glochids – those little bristles that stick in our skin more easily than they stick to the plant. Plus an equally wide range of names just to confuse everyone.

Hardy cacti come in three basic types. Those with stem segments shaped from oval in cross-section to very strongly flattened – the Panda-ear type. These go under the Latin name “Opuntia”. Usually they don't grow higher than three stem segments, but they spread out along the ground for a metre (three feet) or more. Closely related to these are the cacti with round stem segments (Latin: *Cylindropuntia* – opuntias with cylindrical stem segments). They vary from low to medium height shrubs. Books and Internet sites often list them as Opuntia. Both types have the annoying glochids. The third group is the barrel cacti. Latin names vary but often have the word “cereus” as part of it. The barrel cacti always have spines but never have glochids. The hardy ones don't exceed 30 cm (one foot) in height and are usually much shorter.

The Opuntias: We all recognize the panda-ear types – the flattened stem segments, round, oval, obovate (the widest part is nearer the end than the base). New growth usually has short (less than 1 cm), stubby or slightly curved needle-like leaves that fall off as the new growth matures. In the

wild they can be found from southern Canada to Mexico and the West Indies (and in South America). The Flora of North America has identified 34 different species, but the differences are often subtle, and they hybridize and collectors have selected plants with attractive (to them) characters and multiplied them vegetatively. So you can have in your garden plants with the same scientific name but with a range of pad sizes, possibly turning reddish in winter, flower colours from white to yellow to orange, pink, magenta, and spines from few to many (or none). If you have a variety name and you dig into the source you may find a suggestion of a hybrid origin. Maybe the word “introgression” is used, which means that it hybridized with another species several generations ago and a few of the other species' characters have stayed around in the version you have. Which may be why it is different. To put it politely, getting a clear identity for your cactus may be difficult or uncertain. To put it bluntly, it is a mess. You may ask 'does it matter?'. Well, yes it does, because if a hardy cactus has hybridized with a non-hardy one, it will be less hardy even though it has the same scientific name. And in the Okanagan, the game is “hardiness”.

Opuntia humifusa: (Eastern Prickly Pear) grows in sandy soils from southern Ontario to Florida. It is usually spineless throughout and has bright yellow flowers about 5 cm (2 in) diameter in June. The new pads have short stubby leaves that drop off as the pads mature. The new growth is bright green and often upright but as winter approaches the pads shrivel somewhat, turn yellowish and lay down. The plant may be sold as *Opuntia compressa* or *O. rafinesque*. The Ontario natives are hardy to at least zone 4. The more southern ones will be less hardy.

The *Cylindropuntias*: Here, the situation is a bit simpler. There are 3 species and one hybrid (probably) that are hardy in the Okanagan.

Cylindropuntia imbricata (Tree Cholla) is native to the southwest USA, but is quite hardy here. There are quite a few planted in Osoyoos. It grows about 1+m (3-4 ft) tall here, higher in the southwest, branches into a shrub form and has dark maroon flowers. There is also a white-flowered version.

Cylindropuntia whipplei (Plateau Cholla) is native to the four corners area of the USA. Size varies, of course. Here they grow about 30cm (1 ft) tall and 1+m (several feet) wide. Some variants are so densely covered in white spines that the branches are almost obscured. Flowers are a greenish-yellow (chartreuse) cup shape, about 3 cm (2 inches) across.

Cylindropuntia viridiflora, often considered a hybrid between the two described above. Its growth form looks like you would expect from an average of those two. Lots of branching, but taller than the Plateau Cholla. Flowers on mine are a most attractive bronze-orange with a green centre.

Cylindropuntia kleiniae (Pencil Cholla) is native to western Texas and Mexico but seems quite hardy here, surviving intact most winters. Stems are thin – about 1 cm (1/2 inch) diameter and lightly branched with few (but long) spines and glochids. Plant grows about 1m (3 ft) high and has small reddish-violet flowers.