

Growing Cold Hardy Prickly Pear Cactus in Kentucky



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 Cooperative
Extension Service

What is a cactus?



It's a **succulent** which is any plant with thick, fleshy (succulent) water storage organs.

Succulents store water in their leaves, their stems or their roots.

Succulents have adapted to survive arid conditions throughout the world, from Africa to the deserts of North America.

What is a cactus?

- *Cacti* are simply a family, or sub-category within the group of plants collectively known as *succulents*. They range from tall and thin to short and round, and they usually do not have leaves or branches.
- For a succulent plant to be considered a *cactus*, the plant must have areoles. Areoles are small, round, cushion-like mounds of flesh where spines, hair, leaves, flowers, and new growth emerges. Areoles are only present on cacti, *not* all succulents.

What is a cactus?

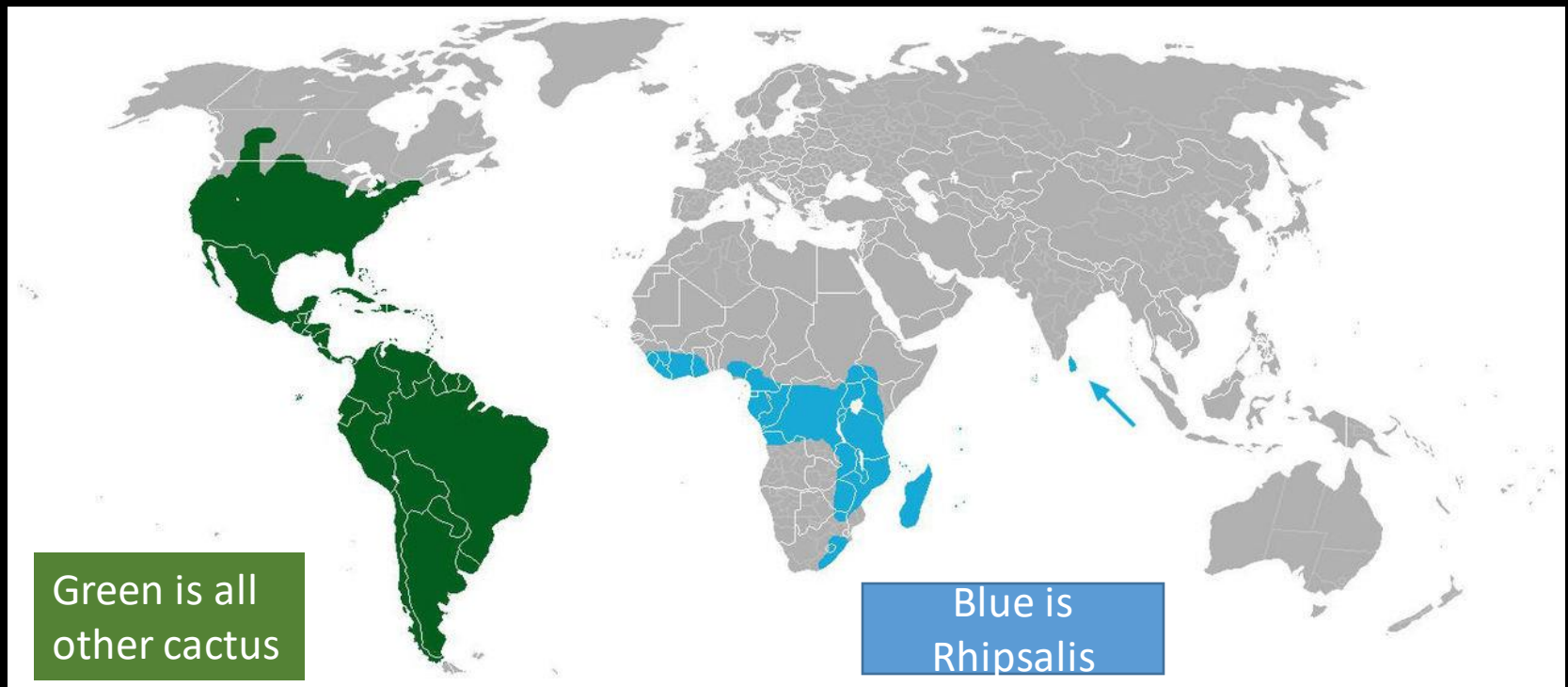


Cactus

- There are 127 genera and 1750 species in the Cactaceae family.
- The word cactus derives through Latin and Ancient Greek “kaktos” meaning spiny plant.



Native Range...all but one is from the West!



Cactus

- Most cactus aren't hardy...however some are! We will concentrate on them and more importantly the prickly pears!
- Here is Kentucky native Eastern Prickly Pear



Prickly Pear- Opuntia

- Opuntia is also known as prickly pear, tuna fruit, sabra, nopal, and paddle cactus
- Like most all cactus opuntia is native only to the Americas. They are most abundant in Mexico however they are native to most areas of the United States especially arid, semi arid, and drought prone areas.



Opuntia ficus-indica the most commonly eaten paddles

Prickly Pear

- Opuntia is the most cold tolerant of the lowland cactus with species growing as far north as Canada with one species in British Columbia
- Prickly pear produces fruit that is edible and is commonly eaten in Mexico
- The fruit ranges in color from red, wine-red, green, or yellow-orange



Prickly Pear- Tidbits

- Charles Darwin first noted that prickly pear has thigmotactic anthers, when the anthers are touched, they fold over and deposit pollen....this trait has evolved convergently in other species as well.
- Prickly pear was originally imported into Europe in the 1500s, later into Australia in the 1800s mainly *Opuntia Stricta*
- In Australia they were planted as agricultural fences, in an attempt to establish a cochineal dye industry.

Prickly Pear

- Once in Australia *Opuntia Stricta* became an invasive weed and converted 101,000 square miles of farmland into an impenetrable jungle in places 20 feet high! Farmers were driven off their land by what they called the “Green Hell”
- By 1919 the cactus growth advanced at the rate of 1 million acres per year. The Australian Federal Government established The Prickly Pear board to eradicate the weed by mechanical and chemical means....finally they imported a moth from South America which eats the cactus and it greatly reduced the menace.



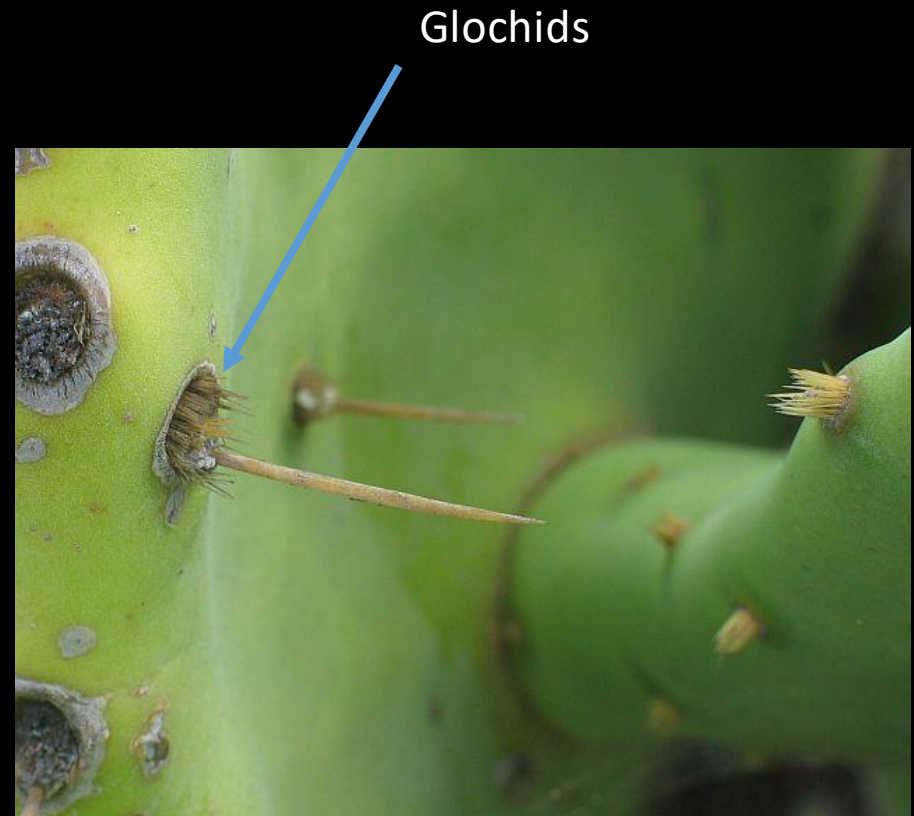
Planting Cold Hardy Prickly Pear

- This is a cactus....if you want to kill it give it too much water and rich soil
- Opuntia is naturally adapted to poor well drained soil even our native prickly pear cannot survive in wet areas
- Choose a well drained site in full sun and amend the soil with gravel....make a raised area or bed and mix 1 part gravel with the native clay.



Planting

- Once you have made a raised bed or berm put on thick leather gloves.....It's not the large spines that hurt it's the tiny ones that will stick in your skin and remain there!
- Another nice tool will be metal kitchen tongs....don't use the ones with silicone on them



Prickly Pear

- Once you harvest the prickly pear cuttings place them in a dry place outdoors out of direct sunlight to let the cut end heal or callus for a week or so
- Next plant the cutting directly in your prepared soil either upright or slightly upright....only about 2 inches of the cut end needs to be in the soil....



Winter Wrinkles



Varieties for the home garden



Opuntia debreczyi 'Apache'

A beautiful, compact, mounding cushion plant with long, dense spiny red spines, pink flowers. 8"H X 12"W. Zone 3.

Opuntia polyacantha v. hystericina 'Bernalillo'



Very short white spines on a compact, tidy plant. Single, lemon-yellow flowers are scarce! But, the spination and habit is gorgeous! 4" high by 18" wide. Zone 5.

Opuntia cymochila



Deep golden flowers in June, vigorous and long-blooming. 18" high by 48" wide. Thrives to zone 4.

Opuntia polyacantha v. polyacantha x fragilis 'Claude Arno'



Abundant, deep rose flowers in June on very compact, petite plant. 4" high by 18" wide. Zone 3.

Opuntia 'East Meets West' (O. fragilis/humifusa hybrid)



A compact, mounding cushion-type plant with golden flowers in June. Moderate spination. 8" high by 12" wide. Hardy through zone 3. May tolerate more water than most Western species.

Opuntia 'Mesa Melon'



The enormous pads are covered with short spines and sport big, gorgeous, watermelon-colored flowers in June. Slender, reddish fruit in September. 12" high by 60" wide. Thrives through zone 5.

Opuntia phaeacantha x pinkavae 'Nambe Sunrise'



Double, soft pink flowers in June. Pads are purple in winter and lavender in summer. 8" high by 24" wide. Zone 5.

Opuntia phaeacantha 'Persimmon'



A vigorous Bob Johnson variety with peachy/coral flowers in June. Huge pads on handsome plants. 15" high by 48" wide. Zone 5. Large, red fruit

Opuntia trichophora



This compact form has dense, white spines and lemon-yellow flowers in June. It's a great rock garden variety and very hardy to zone 4. 4"H x 24"W.

Opuntia hybrid WALK IN BEAUTY™ Garnet Glow



Ideal for the smaller garden or large pot: Garnet Glow is only 6" high x 36" wide. The petite pads are quite spineless with vivid, Garnet Red flowers in May and June. Garnet Glow often reblooms several times. Zone 4 hardy.

Opuntia fragilis 'Coral Rose'



A large form of Brittle Cactus with compact growth and lovely coral-pink flowers in June. 6" high by 18" wide. Zone 4.

Opuntia ramosissima (Spineless form)



This unusual Diamond Cholla is spineless! The pencil-stemmed, blue-gray stems have diamond-shaped patterns on the stems. 3-4 ft high and wide. Zone 6.

Opuntia rhodantha 'Oranges and Lemons'



'Oranges and Lemons' is a spectacular new variety that one day is all lemon yellow and the next day it's lemon and orange! 6 inches high by 36 inches wide.

For More.....

- <https://the-cactus-man.myshopify.com/collections/opuntia>
- <https://www.new-mexico.cactus-society.org/>
- <https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1800-2019.pdf>

Questions?

