# Cactus of the year 2020: the Mexican fence post cactus

- The fence post cactus *Pachycereus marginatus* was voted cactus of the year 2020 by the cactus societies of the three German-speaking countries Germany, Austria and Switzerland.
- In its native Mexico, the species is planted in dense rows as a living fence.

#### A fence with useful extras

Cacti can be found here mainly as ornamental plants at room windows or in botanical collections. In their homelands, however, they belong to the natural flora and have been used by humans for a long time in many different ways. Something special is the Mexican fence post cactus *Pachycereus marginatus*, which—as the name suggests—is used to delimit gardens or pastures.

Usually pentagonal to hexagonal and almost unbranched, it grows straight as a candle vertically upwards. It can easily be propagated from cuttings and then rooted trunk pieces. Indians in Mexico had already recognized this in pre-Columbian times and planted the fence post cactus in dense rows to fence in their cattle or to establish the borders of gardens and paths.

The species is still widely cultivated in Mexico today. In markets and in nurseries 1–2 meter long cuttings are offered, which can reach 4 meters in height and more within a few years.

It is not only to function as a fence that makes this species so popular in its homeland as the plants also produce edible, sweet-tasting fruits that can easily be harvested from the straight, weakly or not at all spined columns. Even the flower buds can be eaten as vegetables, roasted or braised. In addition, the plants serve as colouring agents: dried and cooked, a black dye can be obtained, which is used in shampoos for hair colouring.

## Widely used by humans

The home of the fence post cactus lies in the central Mexican plateau. Since the species has also been planted outside its natural range in various regions of Mexico, where it often became naturalized, it is difficult to determine its natural range.

The fence post cactus is also planted simply because of its attractiveness and thus you can find it occasionally also in gardens or parks of the heat-privileged regions, e.g. in the southern USA or in Europe at the Mediterranean. Even in Central Europe you can buy it in garden centres or special nurseries.

## **Biology**

The fence post cactus belongs to the columnar cacti due to its growth-form and usually becomes 3 to 5, rarely up to 7 meters tall. The trunk has 4 to 7 straight running downward edges, which are also called ribs. Small cushions of thorns, the so-called areoles, sit densely on these. The thorns are 5 to 15 millimetres long, but can also be absent. The areoles are strongly reduced short shoots, from which additionally the flowers arise, only very rarely also from the side shoots. The slender, red to pink flowers are open during the day and are pollinated by hummingbirds. The fruits are red, spherical, about 4 centimetres in size, with bristly thorns, which fall off easily.

The species was first described in 1828 by the Swiss botanist Augustin-Pyrame de Candolle as *Cereus marginatus*. As a result of taxonomic changes its genus name was changed several times; today the name *Pachycereus marginatus* is generally accepted in science. The name component "marginatus" can be translated as "as with a border" or "bordered"—this refers to the ribbon-like dense areoles on the ribs.

In Mexico, the fence post cactus is also called malinche, chilayo, órgano or jalacatio.

### Cultivation

Since the species does not tolerate frost, in Central Europe it must be cultivated at the window or in the greenhouse. If it is planted out in the greenhouse in the ground bed, it can easily become too large; however, it grows more slowly in the flower pot at the room window. Flowers will hardly be obtained there, but the species is also very attractive because of its straight growth form, light green shoots with their even geometric and pearl-string-like areoles. As substrate, a commercial cactus soil can be used, which should be well permeable to water. If it is not possible to get plants, propagation by sowing seed is also possible.

#### Other "fence cacti"

By the way, the fence post cactus is not the only type of cactus used for fencing. There are several dozen other cactus species of different genera that are planted in North and South America as fences or rather as hedges. But none of them grow as beautifully and evenly as the *Pachycereus marginatus*!