A half-dozen surprising plants you'll find at the University of Arizona

College of Agriculture and Life Sciences
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There’s no telling what plants a visitor to the University of Arizona campus might encounter, although there certainly are the usual suspects.


"You need to have the weird plants," says Tanya Quist, director of the University of Arizona Campus Arboretum, which is celebrating its 20th anniversary this fall.

The arboretum – which includes all plants growing on the 400-acre main campus – is marking the milestone by highlighting its history, its future and its rich botanical diversity. That includes everything from the iconic saguaro to the bizarre Boojum, a spiky treelike succulent whose appearance has been likened to an upside-down carrot.

"There's a phenomenon called plant blindness that explains how humans have a tendency to ignore plants, much to our detriment," Quist says. "So we need those weird plants that capture our attention, that stand out. And then we have an opportunity to educate further about plants and our relationship with them."

Quist, whose role as director is housed in the College of Agriculture and Life Sciences Cooperative Extension programs, notes that the development of the campus as an arboretum has roots in the University's land-grant mission. The arboretum's official designation 20 years ago, along with formal acceptance by the American Public Gardens Association, cemented its status as a place where species are collected, protected and preserved, and where the lessons of the past can be applied to the future.

In the early days, before Arizona was even a state, faculty members focused on trying to determine which agricultural commodity specific plants – think cotton, citrus, olive trees and the like – were best suited to the desert Southwest. Later, as urbanization took hold, researchers experimented with bringing in ornamental plants from all over the world to add beauty and interest to the campus. These days, the focus for the Campus Arboretum is on biodiversity and sustainability.

Through it all, the plants are the stars. Quist compiled a list of a half-dozen species on campus that are bound to turn heads.

**Baobab tree (Adansonia za)**

The baobab is a large deciduous tree originating from Madagascar that remains leafless for nine months of the year. From November to February, distinctive flowers appear, preceded by long green cylinders that resemble beans, from which yellow and red petals emerge, possessing long yellow stamens.

The baobab tree at the southwest corner of the Administration building, Quist says, was at one time the only flowering specimen of its kind in the Western Hemisphere. Another thriving one is at the southeast corner of the ENR2 building. Other interesting facts: The soft, spongy trunk stores enormous amounts of water, sometimes up to 100 gallons in a single tree; the baobab also is the only tree capable of regenerating bark directly from an exposed wood surface.

**Silk floss tree (Ceiba speciosa)**

The silk floss tree originates from South America. This deciduous tree has a lush and dense appearance, with big, glossy leaves. In the fall, the tree drops its leaves and produces showy pink flowers that resemble lilies.

But what will really get your attention? "These trees have a bulbous trunk that's covered with very large prickles," Quist says. "They look like Hershey kisses stuck all over it."

Another interesting fact: The seeds of these trees are embedded with silky white floss, which gives the tree its common name. The silky floss in the seed capsules can be used to stuff pillows and as packaging.

**Crested saguaro (Carnegiea gigantea)**

Yes, it's the Sonoran Desert's renowned saguaro, but not just any saguaro. The relatively rare crested variety differs from the usual dome-shaped cactus, because the cells on its growing stem divide outward instead of upward, or in a circular pattern. The result is a folded, or fan-shaped, crest.

The cause of the crest remains unknown, although one theory is that a trigger such as a lightning strike or frost may initiate the process. You'll find a newer specimen of this crowd-pleaser near the northeast corner of Old Main.

**Bunya-Bunya (Araucaria bidwillii)**
The Bunya-Bunya is native to Australia and has a dense, broadly rounded crown. Its juvenile leaves are dark green, glossy and sharply pointed, and grow to 2 inches long. At maturity, the leaves become smaller, stiff and sharp to the touch, and are arranged spirally along the branches.

The specimen on campus was a gift to the former arboretum director and is now in its third location, on the south side of Yuma dorm, where it's thriving. Here's what you really need to know: "It's about to become reproductively mature, and it produces monster cones," Quist says. "It's going to start dropping football-sized cones."

Another interesting fact: The tree's seeds are edible and were a rich source of food for aboriginal people of southeast Queensland. During the "bunya season," the aboriginal people would temporarily set aside tribal differences and gather in the mountains for great "bunya nut feasts."

**Carob tree (Ceratonia silique)** [6]

The carob originates from the Mediterranean and has a beautiful, rounded form and dark green leaves. Of note is the tree's edible fruit, which is a cocoa substitute.

The walls of the carob's seed pods and the partitions in the fruit contain very high concentrations of sugar and more minerals and vitamins – and less carbohydrates and fat – than cocoa. The bean pulp is sometimes mixed with other feed to obtain a nutritious and tasty fodder for horses, cattle and goats.

Two mature carob trees can be found near the **turtle pond** [6] on the north end of the greenbelt that runs along Park Avenue.

**Boojum (Fouquieria columnaris)** [7]

The Boojum, which originates from Baja California, is a treelike succulent that can reach up to 70 feet high in its natural habitat. When young, it is bushy with many thorned, lateral branches. But once mature, the Boojum's trunk becomes columnar, straight and tapering; it's either completely erect, like an upside-down carrot, or it develops unusual arches. The oldest trees will divide into stems at their apex, resembling the arms of an octopus.

An interesting fact: Some consider the Boojum to be the world's strangest tree because of its appearance, and its name reflects that sentiment. The person who coined the name was English scientist Godfrey Sykes, who spent time at the Desert Laboratory on Tumamoc Hill in the early 1900s. He dubbed the species in honor of the mystical "boojum" in Lewis Carroll's poem "The Hunting of the Snark."

There are multiple specimens in the Campus Arboretum, including three relatively new ones installed in the Joseph Wood Krutch Garden on the Mall.

**But why stop at six?**

Not wanting to lose the forest for the trees, Quist picked a few more species of note because of their interesting appearance or story.

* **Southern live oak** – This incredibly large, beautiful specimen is found along the greenbelt that borders Park Avenue, on the campus' western edge. Despite its size, it can be easy to miss among all the other trees, Quist says. "If you actually stop and look, you'll realize that much of the canopy in that area is contributed by this single tree," she notes.

* **Multi-trunk date palm** – Fifteen of 22 historically significant, or heritage, trees remain on campus, including a date palm at the northeast corner of Old Main. Palms typically are pruned so there's only one stalk, but this one has multiple trunks, to the point where children have said it looks like a five-headed monster. Notably, the tree was a gift to Phillip Eckert, then dean of the College of Agriculture and Life Sciences, in 1955 for his help in creating the Iraq College of Agriculture in Abu Ghraib. "We know Abu Ghraib for horrific governmental failures, but this is a really cool counter to that," Quist says. "It's a testament to the power of academic institutions."

* **Legume trees** – Nine of these mature specimens, salvaged from a field plot the University sold in 2021, were planted in a desolate lot south of the Gould-Simpson building, near Fourth Street and Park. Since then, researchers and students – inspired by the transplants – have worked with grounds crews to contour the land to accommodate water harvesting for the trees and to conduct research on its effectiveness. A parking lot has been repaved, a bike path completed and further improvements are planned, including underplantings to complement the trees. "It's like the trees themselves generated life in that space," Quist says. "They have this power to generate transformation, not just in the physical space but in people."

Visit the **arboretum's website** [6] for information about tours and special 20th anniversary events. Want to see these trees in person? Follow this **interactive map** [8].