

PLANT PORTRAITS David Deardorff

Phoenix reclinata

THE SENEGAL DATE, Phoenix reclinata, is one of those dramatic palms which creates the romantic aura of a tropical island paradise. Because it is also relatively tolerant of cold, it can be grown throughout most of Southern California. Its tropical appearance results from a superficial resemblance to the coconut palm, although it is actually a species of date palm. Like the coconut, its trunks are slender and lean gracefully at odd angles in contrast to the majority of other palms which are usually stiffly erect. The pinnate (feather-like) leaves are a bright shining green and arch away from the crown in graceful curves. At maturity each plant resembles a grove of medium sized trees because it produces several trunks from the base. The Senegal dates' value as an ornamental is further enhanced by its small size (to 30 feet). It is only half as large as its close relative, *Phoenix dactylifera*, the true date palm.

The Senegal date is one of ten or twelve species in the genus *Phoenix*. The name of the genus is directly derived from the ancient Greek name for the date palm. Theophrastus (370-285 B.C.)

first recorded the name Phoenix for the date palm but the name had probably been in widespread usage for centuries. Although the exact origin of the name has been lost, it is possible that the date palms were named by association with Phoenicia, the land of the Phoenicians. The Phoenicians were the greatest seafarers of the ancient world and had ruled the Mediterranean for nearly a thousand years by the time of Theophrastus. Their homeland (modern Lebanon) and adjacent Palestine were famed for their date palms. Whether the Greeks named the country after the date palm or the date palm after the country will perhaps never be resolved. From the time of the ancient Greeks to the present, Phoenicia (the country), Phoenicians (the people who live there), phoenikes (a purple-red color), and Phoenix (the date palm and the fabled bennu bird of Egypt), are words having the same root which are inextricably woven together through history.

To the ancient Egyptians the bennu bird (the Phoenix) originally represented the creative force of Osiris, a vegetationspirit who died with the harvest and was reborn in the spring. He was the generative life-force of wheat, grapevines and trees (date palms?). In time the agricultural cycles of harvesting and resprouting became submerged in the more abstract cycle of death and rebirth. In the course of centuries, Osiris became an aspect of the high God, beneficent lord of the dead, and by the time of Herodotus (5th century B.C.) the myth of the bennu bird had been reduced to the level of a fairy tale. The bennu bird (the Phoenix) was supposed to die only when consumed by fire and was immediately reborn from its own ashes.

The myth of the Phoenix is appropriately applied to the date palms since several species are fire adapted: All of their leaves may be burned away and their trunks blackened yet they will survive and sprout new leaves. Almost all palms have only a single growing point, the terminal bud in the crown of the tree. Thus, if the terminal bud is killed then the tree is killed. Those species which are capable of sprouting from the base, like *P. reclinata*, are particularly well adapted to survive recurrent fires because they can generate new growing points.

The older concept, that of the Phoenix as the soul or essence of a life-generating vegetation-spirit, is perhaps an even more appropriate reason why the ancient Greeks gave the same name to the date palm and to the bennu bird. The date palm is generally acknowledged to be the "tree of life" in the Garden of Eden. Even today it is literally the tree of life for millions of desert peoples. The trunk, leaves, petioles, spines, fruits and seeds provide food and shelter to men and their livestock in the hostile desert environment. An additional factor elevating the date palm to god-like status was the overwhelming magic associated with its cultivation. If the high priest did not bless the date groves with inflorescences from male trees there would be no fruit and the people might starve. The magico-religious ritual was necessary for fruit production but the ancient Egyptians and Babylonians did not know why. Today we know that all species of Phoenix are dioecious, that is, there are male trees and female trees. Only male trees produce pollen and only female trees bear fruit. Pollination and fertilization must occur or the female trees will be barren. When the high priest brought male flowers to the female trees he unconsciously helped to ensure pollination and a bountiful crop of fruit.

Like the date palm, Phoenix reclinata is an extremely important tree to the people who live within its geographic range. It occurs throughout tropical Africa and Senegal and Ghana on the west coast to Tanzania and Kenya on the east coast, south to South Africa and Madagascar. The sap of the tree is tapped by Africans and fermented into a potent alcoholic drink. The heart of the crown, the terminal bud, or "cabbage," is eaten as a vegetable and the sweet fruit-pulp is edible though inferior to the date palm. In Kenya and Uganda the leaves are used to make baskets and sleeping mats. Strips from very young leaves are used to weave fine mats, baskets, sieves, bags, waist-bands and hats. Strong ropes are made from leaves in Senegal. The wood is resistant to termites and fungi and is used for beams, rafters, bedsteads, drums, and occasionally as fuel.

Any species of Phoenix is easily identifiable as a date palm because all of them have pinnately compound leaves with induplicate leaflets and the lowermost leaflets are modified into long sharp spines at the base of each leaf. The leaflets are described as induplicate because they are trough- or V-shaped as opposed to reduplicate (shaped like an upside down V). Very few palms have induplicate leaflets and only Phoenix also has spines. Although the genus is easily recognizable, it is often difficult to tell one species of Phoenix from another. This problem is compounded since all date palms are interfertile and hybridize in cultivation.

The inflorescence is a raceme of spikes which is enclosed at early anthesis in a rigid spathe. The small, yellowish-white flowers of *P. reclinata* are 1/2 to 2/3 inches in diameter. The fruits are about an inch long turning from green to yellow and orange to dark brown as they ripen. The fruits strongly resemble the cultivated date but are dry and have very little flesh. The seeds are about half an inch long and are deeply grooved down one side resembling coffee beans, hence one of its many common names, coffee palm.

The Senegal date is an easily grown, low maintenance, ornamental plant. Although not as hardy as Phoenix canariensis, mature specimens have withstood 15°F at Indio. It can be grown along the coast from Santa Barbara south, in the interior valleys, and in the desert as well. It can be grown in colder areas if it is protected when young. Small plants may be badly frost damaged at 24°F. It grows moderately fast, about a foot a year when young, and slows down as it matures. It prefers a well drained soil and will thrive when generously watered and fertilized. It looks especially nice when planted near water, whether swimming pools, garden ponds, or ocean beaches. Companion plantings of gingers, bamboo, and tree-ferns accentuate the tropical island atmosphere created by this beautiful tree. It also makes an attractive street tree when large plants are used. There is a magnificent specimen of the Senegal date just west of the main entrance to the Los Angeles State and County Arboretum. This plant has thirteen trunks, is more than thirty feet tall, and was valued at fifteen thousand dollars when it was donated to the Arboretum in 1956 by Lyman McFie, an investment house manager and amateur plantsman. Over the years, Mr. McFie made a number of lasting gifts to the Arboretum, among them an outstanding collection of paphiopedilum orchids, funds for the gateway pool that bears his name, and the Senegal date at the entrance which is seen and admired by thousands of visitors each year.

Dr. Deardorff is a member of the department research staff involved in taxonomic studies.



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