

Date Palms. Photo: Jeff Vanuga / Photo courtesy of USDA Natural Resources

Date Palms النخلة

Phoenix dactylifera

Date palms, *Phoenix dactylifera*, have probably been cultivated further back in antiquity than any other trees in the world with evidence of cultivation from 7000 to 6000 years B.P. in Mesopotamia and the Upper Arabian Gulf. Date Palms are a major tree crop in hot and dry regions of the Middle East and North Africa. They are a staple food crop for millions of people and consumed throughout the world. The Date Palm has been so long in cultivation that its origin/origins are uncertain. Some botanists have placed it in the region between Egypt and Mesopotamia, others in the area surrounding the Persian Gulf or western India.



However, more recently, botanists using molecular biology techniques, have been able to identify two very different populations of Date Palms: an eastern group extending from the Middle East and the Arabian Peninsula to northwest India and Pakistan; and a second, western population in North Africa and sub-Saharan Africa.

Date Palms are immensely productive and can grow up to 30 metres tall, with leaves 4 – 5 metres long. Each palm can produce from five to ten bunches of dates each year, each bunch weighing from six to eight kilograms. They develop slowly, reaching full production after 10 – 12 years and live for up to 150 years. Date seeds can remain viable for thousands of years; 2000-year-old seeds from the Judean Desert (encompassing The West Bank and Israel) have been successfully germinated in recent years.

The date palms cultivated in Judea 2000 years ago shared a mixed gene pool from genetically distinct eastern and western populations of *P. dactylifera*, consistent with Judea's location at the crossroads of east-west travel routes of human populations.

Dates and date palms are significant in Jewish, Christian and Islamic religions, perhaps all three influenced by the Prophet Abraham who, according to the Hebrew Bible, was born and raised in the old city of Ur Kasdim (in southern, present-day Iraq) where dates were grown.



Date Palms. Photo: David Edgecombe

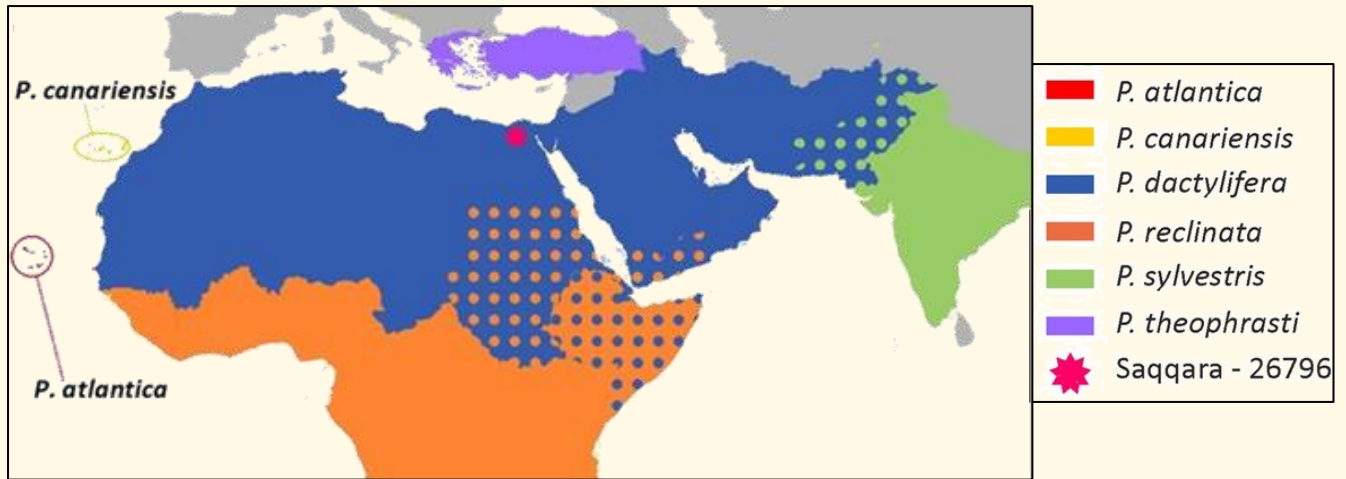
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Fresh Dates

Dates and date palms are highly significant in the Islamic religion. In the Quran (القرآن), the date palm is mentioned in no fewer than in 17 chapters, more frequently than any other fruit-bearing plant. The Prophet Muhammed (الرسول محمد) told his followers that date palms were property to be valued; that dates could cure many illnesses; that their date palms should be well tended; and that they should eat the fruit. Each year, Muslims fast during the daylight hours of the month of Ramadan (رمضان), the ninth

month of the Islamic Calendar, observed by Muslims as a month of fasting, prayer, reflection and community, lasting from one sighting of the crescent moon to the next. The Prophet Muhammed broke his fast by eating dates, thus the breaking of the fast by eating ripe dates has particular religious significance for Muslims who break their fast that marks the beginning and ending of each holy day of Ramadan by eating and enjoying the sweet, nutritious fruit.



Geographic distribution of the cultivated date palm (*P. dactylifera*) and its wild relatives. Modified from Pérez-Escobar et al. 2021.

The Date Palm, *P. dactylifera*, is one of 14 species in the genus *Phoenix* that can be found in swamps, deserts and coastal mangrove from the Canary Islands off the coast of west Africa, across northern Africa, to Crete in southern Europe, and then continuing across Asia to southern China, Malaysia and the Philippines. The Date Palm itself, *Phoenix dactylifera*, is the **type species** of the genus.

In an extraordinary archeological genomics study of a 2,100-year-old leaf of *P. dactylifera* from Saqqara in Egypt, molecular biologists were able to determine that the ancient leaf was closely related to North African date palm populations, with genomic contributions from both *P. theophrasti* (from Crete and Turkey) and *P. sylvestris* (from the Indian sub-continent). The material sampled for this study came from date palm leaflets held in the Economic Botany Collection at the Royal Botanic Gardens in Kew, discovered during the 1971-72 excavation of the ancient temple complex of Saqqara, south of Cairo and adjacent to the valley of the Nile.

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Wikipedia: https://en.wikipedia.org/wiki/Date_palm

Wikipedia: [Ramadan - Wikipedia](https://en.wikipedia.org/wiki/Ramadan)

Wikipedia: [https://en.wikipedia.org/wiki/Phoenix_\(plant\)](https://en.wikipedia.org/wiki/Phoenix_(plant))

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