

DATE PALM - Phoenix dactylifera



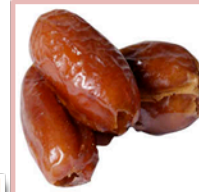
Plant description & Propagation

- An evergreen palm which can grow in a single trunk or as a clump with several stems.
- The tree can be easily grown from fresh dates and seeds.
- The tree has a slow growth rate



Religious Relevance & Origin

- 'When doomsday comes, and someone has a palm shoot in his hand, he should plant it' (Hadith).
- The Prophet Muhammad S.A.W. used to break his fast with fresh dates before praying.
- In the Quran date palm is clearly described and mentioned more than any other tree. The tree is still a dominant aspect of the landscape of the Arabian Peninsula so it is easy to relate the date palm of the Quran as the same tree one sees in Arabia today. The tree has been a symbol of prosperity and riches for Persians and Arabs.
- Date palm is native to North Africa and the Middle East and has been cultivated since ancient times.



Uses & Properties

- The fruit is staple food of many people living in the semi-arid areas of the Arab World
- Dates provide a wide range of essential nutrients and are a very good source of potassium.
- Leaves are commonly used for making huts, mats, screens, baskets and fans
- The tree also provides fibre, fuel and timber
- Ornamental uses in gardens and public spaces

Did you know? Dates palms in oasis

Arabs like to say that the date palm 'must have its feet in the water and its head in the fire' which reflects the tree's ability to reach underground water with its roots but also to create with its foliage an umbrella which protects the soil from the sun and allows other plants to sprout and grow in the shade. Date trees and other palms are essential for the sustainability of oasis, the small green zones that exist in the middle of the deserts. They protect and give food for animals, they allow cultivation under their foliage and support human populations who live in and around these areas.

COMMON FIG - *Ficus carica*



Plant description & Propagation

- A deciduous tree with muscular and twisting branches and large, lobed aromatic leaves. The fleshy fruit has a green or purple skin and the tree produces a sap that contains sticky, milky latex.
- Fig trees are easy to propagate through several methods, as they root very easily. Using seeds is not the easiest method. The most common method of propagation is to root leafless cuttings.



Religious relevance & Origin

- In the Quran trees are most frequently cited as gifts of a beneficent Creator. Fruits from trees are highly valued. This is an excerpt that is believed to refer to the fig tree: 'If I were to say that any fruit descended from Paradise, I should say these. For the fruit of Paradise has no stones. So eat from them' (Hadith).
- The fig tree is native to the Middle East it has been cultivated since ancient times and grows wild in dry, sunny and rocky areas. This is one of the first plants that was cultivated by humans, before the domestication of wheat and barley.



Uses & Properties

- The tree is widely cultivated for its edible fruit, which is one of the highest plant sources of calcium and fibre.
- The sap is irritating to human skin.
- The tree lives up to 200 years, so is often planted with olive trees, which are also long lived.

Did you know? Wasps & Figs

Fig trees seem to fruit without flowers. That's because the fruit is the flower: it's called an enclosed inflorescence where tiny flowers grow hidden inside the fruit. People often mistake the flower structures for the seeds. Fig trees are completely dependent on tiny wasps for their propagation and survival. They lay their eggs inside and then the new wasps go off to pollinate other figs. These fig wasps are the sole pollinators of fig trees and in return, fig wasps can breed nowhere else but inside figs, a relationship that is an example of an obligate mutualism where neither party can survive without the other. Each fig species is usually pollinated by one fig wasp species, which is called a host-specific relationship, and if one of them is threatened by extinction then the other will also be influenced.

OLIVE - *Olea europaea*



Plant description & Propagation

- A small evergreen, perennial tree with silvery green leaves and a gnarled and twisted trunk. The fruit is a small green edible 'drupe' (fruit with an outer fleshy part).
- Olive trees grow very slowly
- Can be propagated by cuttings or seeds. To help germination by seed the pericarp (fruit wall) needs to be softened by slight rotting or soaked in hot water.



Religious Relevance & Origin

- Integral part of the Middle East culture.
- Olive tree is considered as the holy tree in the Qur'an.
- The tree has become one of Islam's most developed symbols. In the Qur'an, we read of a blessed olive tree that produces oil that gives light to mankind.
- Olive tree and olive oil health benefits have been suggested in Prophetic medicine. The Prophet Mohamed is reported to have said: 'Take oil of olive and massage with it – it is a blessed tree' (Hadith).
- The olive tree is native to the Mediterranean region.



Uses & Properties

- Food (olive oil and olives)
- Fuel
- Light
- Carpentry (not for building but for manufacturing small items)
- Medicine & Ointments
- Ornamental
- To control soil erosion and form firebreaks
- Arabs say that you should take olive oil internally, externally, eternally to enjoy a long healthy life.
- The tree lives up to to 1000 years, producing fruit throughout its long life. The trunks become gnarled, bent, and hollow inside, but the tree continues to produce fruit.

Did you know? Edible olives

If you enjoy olives, you would be tempted to eat one right off the tree, but a fresh olive is bitter and unpalatable. To be used, olives are soaked in brine to remove the bitter component in the watery part of the fruit. To produce the oil olives must be crushed. Traditionally olives were crushed between huge stones driven by animals (cows, donkeys). Nowadays hydraulic presses are used to extract the oil. For the oil the olives are harvested while green. Only a few are allowed to fully mature, and they are used for condiments.

POMEGRANATE - *Punica granatum*



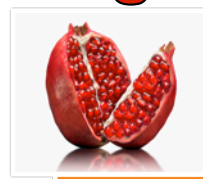
Plant description & Propagation

- A small deciduous, perennial tree with small glossy leaves and bright red flowers. The edible fruit is as big as a grapefruit with a thick reddish skin
- Pomegranates grow easily from seeds collected from overripe fruit which show really tough and wrinkly skin.



Religious Relevance & Origin

- According to the Qur'an, pomegranates grow in the gardens of paradise. The Qur'an also mentions pomegranates as examples of good things God creates. "There is not a pomegranate which does not have a pip from one of the pomegranates of the Garden (of Jannah) in it." (Qur'an)
- Native to the region of Persia and the western Himalayan range and has been cultivated in the Mediterranean region for several millennia.



Uses & Properties

- The fruit is one of the first ever cultivated and has a history in myth, art, symbol, medicine and religion.
- Mainly grown as a fruit crop plant and as ornamental tree and shrub in parks and gardens.
- Also used to produce dyes for textiles.
- Its wood is used for walking-sticks and woodcrafts
- Pomegranate juice may be effective in reducing heart disease risk factors and can help with cancer and diabetes.
- Pomegranate seed oil is used in cosmetics

Did you know? Special seeds

The word pomegranate is from the Latin *pōmum grānātum*, which means apple of many seeds. Each fruit contains hundreds of hard, small seeds. Unlike most seeds, which have a seed coat that is hard and durable, like bean, the outer seed coat of the pomegranate is fleshy and is the source of the juice that makes the fruit desirable. The pomegranate fruit structure has evolved to ensure splitting of the leathery skin and exposure of the tempting seeds to the many happily cooperative birds that by eating the seeds ensure their dispersal.

ROSE - Rosa sp.



Plant description & Propagation

- Evergreen, perennial shrubs, erect, climbing or trailing, with stems that are often armed with sharp prickles and large showy colourful flowers.
- Roses can be grown from seed relatively easily by harvesting the rose hips. Seeds need to be sown when fresh and not let to dry out.



Religious Relevance & Origin

- Roses permeate Muslim culture. Roses were created from drops of Mohammed's sweat from his forehead while he made his heavenly journey into the divine presence to receive revelation (Hadith). Rose is seen as the perfect manifestation of beauty .
- The Prophet Muhammed's favourite flower
- The flower symbolises the God's mercy and love, and the soul at peace. The thorns symbolise the trials on the spiritual path and the wrath of God.
- Rose is prized in the Muslim world as an expression of hospitality.
- Native to N. Hemisphere , Asia, Europe, N.America and NW. Africa. Possibly the first plant to be cultivated for ornamental purposes.



Uses & Properties

- Roses are known as ornamental plants grown for their flowers in the gardens or indoors and as commercial cut flowers crops .
- Rose perfumes are made from essential oils, obtained by distilling the petals.
- Rose water is used for cooking, cosmetics, medicine and in religious practices.
- The Rose hip (the fruit of some species) is used as a source of Vitamin C.
- Roses are a favored subject in art (portraits, architectures, illustrations etc.)

Did you know? Flora's barometer

Some flowers respond to different atmospheric conditions, and so can serve as barometers, even hygrometers. In the old days people could observe flowers to find out changes in the weather. Roses' scent became stronger when rain was near. Related to that phenomenon is the saying: 'Flowers smell best just before rain'. The saying has a scientific basis because scents are more easily detected in moist air and moist air very often foretells rain. The scent of the flowers releases because lower pressure allows aromatic substances trapped by higher pressure to escape.

TULIP – Tulipa sp.



Plant description & Propagation

- A bulbous plant with showy flowers.
- Although tulips are perennials they need to be treated as annuals and the bulb needs to be dug up once the foliage has died.
- Tulips can be propagated by bulbs (by removing the smaller offset bulbs formed at the base of the parent bulb) or by seeds. If propagated by seed it may take a few years for the plant to reach its flowering size.



Religious Relevance & Origin

- The name comes from the Turkish "tulband" which means turban since the shape of the flower was supposed to be similar of a turban.
- The flower most associated with Islamic gardens after the rose.
- Regarded as the flower of God in Islamic symbolism. Tulips became important in Islam during the Ottoman (Turkish empire) between 1600-early 1700 which regarded tulips as a symbol of beauty and perfection. Tulips are an important element of Islamic decorative art
- Native to the area going from S. Europe, N. Africa, Anatolia, and Iran to NW China



Uses & Properties

- Tulips are cultivated for ornamental purposes. They make beautiful flower gardens or are extensively cultivated for commercial purposes as cut flowers.
- Tulips have been used in the arts from paintings, carpets, to inspiring architecture design (mosques)
- Tulip was imported from Turkey to Holland which dominated the tulip market of the world. During the early 17th century tulips were very desirable and often sold for high prices. In Holland 'Tulip mania' was a period during which prices for bulbs reached extraordinarily high levels and became a luxury item.

Did you know? Variegated or 'broken' tulips

A virus that infects tulips causes variegation on their flower. The virus by feeding on the sap of the tulip causes the 'breaking'. Breaking describes the appearance of the flowers in which the petals are variegated due to the irregular distribution of colour. Broken tulips are beautiful, but the colour and quality of the plant declines. In the 17th century, there was no way to determine when a tulip could be infected so when the 'broken' tulips appeared during the 'Tulip mania' period in Holland they were regarded as very special and were very highly priced. It was not until the 1960 that the virus that caused the tulip breaking was identified.