



Date Palm

Geoff Kenna, Principal Horticulturist, DPIFM Alice Springs

Name: *Phoenix dactylifera* (Areceaceae).

Common Name: Date palm.

Origin: Exact origin unknown, but thought to have occurred naturally from the Euphrates to the Canary Islands.

Distribution: Major countries producing dates include Iran, Pakistan, USA, Israel, Lebanon, Mexico, and China.

Australian Distribution: Australian production has largely been restricted to Central Australia in the past, although more recent plantings have been made in Western Australia, South Australia and in the Cunnamulla-Eulo area of western Queensland.

Preferred Climate and Soil Types: Date palms need a long hot growing season. Low humidity and the absence of summer rain help in the production of high quality fruit. Measured as heat units (sum of daily maximums minus 18°C per day), dates need high temperature in excess of 2000 units from flowering (August - September) to fruit maturity (February - April).

Ideal soil types include free draining sands or sandy loams with low salt levels and good moisture holding capacity, although they are tolerant of a wide variety of soil types and conditions. They are classed as having a moderate tolerance to below average water qualities and some salt.

Dates are relatively thirsty for water, requiring up to 27 ML/ha (with 123 palms/ha) for mature palms at ten years of age.

Description: The date palm, *P.dactylifera*, belongs to the Areceaceae family and in the same genus as other ornamental palms such as the Canary Island palm (*P.canariensis*) and the sugar palm (*P.sylvestris*). The date palm is a dioecious grass species that grows to around 20 m in height and may live for 80 years. Up to 25 leaves, or fronds, can be produced each four year, and each may be functional for up to 4 years. Flowers emerge in spathes from the single growing apex, and are multi stemmed.

Varieties: There are numerous varieties available for commercial production. Most commonly, Medgool, Barhee and Deglet Noor are grown for markets.

Culture: Although palms can be propagated from seed, it is not recommended as either male or female plants may result. There may also be a wide variation in palm growth and fruit quality. Most commonly, date palms are propagated from their offshoots that sprout from the base of the parent palm. Palms usually begin to produce offshoots in their second year and continue to do so until the age of 12, and can be removed and used as planting material once they have reached 15 cm in diameter. Whether the offshoots are to be used for propagation or not, they should still be removed from the parent palm as they compete for resources and influence the growth and development of the parent palm.

DEPARTMENT OF PRIMARY
INDUSTRY, FISHERIES AND MINES

Crops, Forestry and
Horticulture Division

GPO Box 3000
Darwin NT 0801
Tel: 08 8999 2357
Fax: 08 8999 2049
Email: horticulture@nt.gov.au
Web: www.nt.gov.au/dpifm

Disclaimer:

While all reasonable efforts have been made to ensure that the information contained in this publication is correct, the information covered is subject to change. The Northern Territory Government does not assume and hereby disclaims any express or implied liability whatsoever to any party for any loss or damage caused by errors or omissions, whether these errors or omissions result from negligence, accident or any other cause.

Tissue culture may also be used as a propagation technique, and is actually a preferred method for importing plant material that conforms to quarantine regulations.

Pests and Diseases: Date palms grown in hot dry areas, such as Alice Springs, are largely free from pest and disease. Parlatoria scale has proved to be a major insect pest in many parts of Australia, and can attack date palms resulting in reduced vigour and yields and may result in a downgrading of fruit quality.

Fruiting Season: In Central Australia, flowering takes place around August to September. Harvest at maturity between February and April depending on variety and maturity condition (Khalal, Rutab or Tamar).

Harvesting: Commercial date production is highly labour intensive. Hand pollination of female flowers (from pollen collected from male palms) is required in order to produce commercial yields. Fruit thinning, fitting covers to protect from birds, tying bunches to fronds, and a long harvest season all increase labour input.

Storage Conditions: Fresh dates store well when refrigerated and may be frozen. Dried dates have extended shelf-life without refrigeration and are often found in dried fruit sections of markets or are pre-packaged.

Culinary Use: Mostly consumed as either a fresh fruit or dried depending on the variety. Dates are often used for cooking (breads, cakes or puddings) and can be used for jams or chutneys.