## Phoenix dactylifera

## Mediterranean, north-eastern Africa and the Middle East

Common Names: English: Date palm; Kamba: Ndende; Luo: Tende; Somali: Timir.

Description: A palm with a slender trunk reaching 20—30 m, the trunk covered with the remains of leaf bases. Many suckers or offshoots are produced around the trunk. LEAVES: 30–50 crowded leaves, grey-green, each to 3 m, the leaflets sharply pointed; the lowest leaves are thorny and removed by cultivators. FLOW-ERS: Male and female trees: a ratio of 1 male to 40–50 female trees is required for fruiting, but the pollen may not always be ready at the best time for pollination. FRUIT: Large hanging bunches of dates, needing support. Ripe dates 5 x 2 cm, yellow to golden-brown, with one grooved seed, the 'stone'.

Ecology: A well-known and important food tree found in arid and dry semi-arid areas of the tropics and subtropics all over the world, 0–1,500 m. Iraq is the largest producer of dates. It requires well-drained fertile soil, high temperatures and low humidity during fruiting. The palm must have a high water table. It will stand alkaline soil but not waterlogging. In Kenya, found in arid, semi-arid and coastal regions (Lamu, Garissa, Taveta, Isiolo, Malindi, Wajir, Moyale, Turkwel River plain, Turkana and in Kitui and Mwingi). It rarely produces well in Kenya. Agroclimatic Zones VII (riverine).

Uses: Posts, furniture (beds), utensils, edible fruit, drink (palm wine can be tapped), medicine, fodder (seeds and leaves), shade, ornamental, windbreak, thatch (leaves).

**PROPAGATION:** Suckers (offshoots) are preferable to seedlings because male or female plants can be chosen. Seedlings can, however, also be raised.

**SEED:** Remove fruit pulp, wash and dry for storage. **treatment:** Not necessary.

storage: Seed can be stored for long periods.

Management: Hand pollination is recommended for good date production. Remove suckers and thorny lower leaf stalks.

**Remarks:** A potential food and perhaps cash crop for selected sites in dry areas. Needs irrigation until established. Economic yields can be obtained after 6-7 years (about 45 kg yearly per palm up to several hundred kilograms at the peak of production). The date has a very high sugar content (60% or more) and is an important food for desert communities of the Arabian peninsula and North Africa. Fruit are dried or preserved in sugar. It is cultivated along the Turkwel River near Lodwar. Also grown as an ornamental plant in dry areas (Tseikuru-Mwingi). It is closely allied to P. theophrasti of Crete and Turkey and, less closely, to P. reclinata. The date palm is, however, presumed to be native to north-eastern Africa and the Arabian peninsula, where it may have been cultivated for over 6,000 years. It has since spread to the rest of the dry hot deserts where it is cultivated for its fruit. The genus *Phoenix* has about 17 members found from the Mediterranean region to Africa and Asia.

## Arecaceae (Palmae)

FURTHER READING: http://www.worldagroforestrycentre.org/Sites/ TreeDBS/AFT/AFT.htm; Bein et al., 1996; Bekele-Tesemma et al., 1993; Lötschert and Beese, 1983; Maundu et al., 1999; Sommerlatte and Sommerlatte, 1990; Storrs, 1979; Verheij and Coronel, 1991; von Maydell, 1990.



