

Plants for Your Home and Office

Palms

Robert G. Anderson, Extension Specialist in Floriculture

Typically, palms are used in the toughest interior environments where most other plants won't survive. These plants can bring the graceful tropical look to all but the darkest, driest, and coolest locations in the home, office, or shopping center. Palms are best, however, in bright interiors where their unusual form with slim smooth trunks and large pendulous leaves contrast with the typical tree and shrub form of other interior plants.

Palms naturally occur in many different ecosystems in the subtropics and tropics. Some palms occur in the best tropical habitat, the tropical rainforest, however, the majority of the species grow in less hospitable climates. Palms grow along many tropical rivers and are the dominant trees in areas that are flooded for 3 to 6 months each year. Along the cloud- and mist-shrouded mountainsides in most tropical countries, palm forests or brakes are a common sight. Palms can also survive in very poor and dry soils similar to southern California, northern Mexico and Florida. Botanically, palms are a very distinct and unusual group. They tolerate adverse habitats and are significant, ecologically, in these habitats throughout the tropical and subtropical regions of the world.

The ability of most palms to tolerate adverse conditions makes them ideal for interior environments. Palm species vary in size so they can be used as large or small specimens planted individually in containers or in groups in large beds. Some species branch freely from the base to form large clumps of shorter plants while other species grow singly to form arborescent individuals. Specific recommendations for the care of palms indoors is not necessary because they tolerate wide variations in their environment. Although some palms can be maintained for 8 to 12 months at very low light intensities (50 foot candles), high to very high interior light intensities (200 to 1000 foot candles) are necessary for acceptable growth of the larger species. Insufficient light often causes many containerized palms, especially areca and bamboo palms, to deteriorate in interior settings. Well-drained media of most types - peat, bark, soil, Florida sand, or other components - are acceptable and comparable for palm production and maintenance. The frequency of water and fertilizer applications depends upon the type of media used and the growth rate of the palms. The growth rate often depends upon the interior light



Queen Palm



Alexander Palm

intensities. It should be noted that none of the commonly cultivated palms tolerate over watering; water needs are similar to other indoor plants. Some cultivated palms will tolerate wide fluctuations in temperature; a few tolerate freezing temperatures if the roots don't freeze. They will do quite well in offices and schools that reduce weekend temperatures to conserve energy.

Palms are usually free of insects and diseases in the interior environment but mites and mealybugs are an occasional problem. Biocontrol practices, with predatory mites and beetles, are often necessary to prevent and control mites in palm plantings because mites do so well in the low-humidity conditions of most interiors and mealybugs are just difficult to control.

For purposes of identification palms are separated into two groups (1) palms with fan-shaped (palmate) leaves and (2) palms with feather-shaped (pinnate) leaves. Palms with feather-shaped leaves appear similar to a fountain - a tall thin trunk with long pendulous leaves at the top. On the other hand, fan palms often have a short thick trunk with erect fan-shaped leaves along the trunk or the trunk of the fan palm can be tall and thin with a sphere of functional leaves at the top.

Fan palms are not as common as feather-leaved (plumose) kinds, but do equally well indoors. Mexican fan palms in the genus *Washingtonia* are suited to hot dry locations in very bright light while the lady palm (*Rhapsis excelsa*) and the Chinese fan palm (*Livistona chinensis*) are best in typical interiors that receive moderate to high light intensities (200 to 500 foot candles). The lady palm forms a dense thicket (6-8 feet tall) of thin upright stems whereas the vigorous Chinese fan palm individuals grow to 30 feet.

Parlor palms, in the genus *Chamaedorea*, are the most common type of feather-leaved palm. The Neathe Bella palm, *Chamaedorea elegans*, is a very slow growing dwarf palm (up to 6 feet tall) that will grow in locations that receive 50 to 150 foot candles of light. The bamboo palm, *C. erumpens*, and the reed palm, *C. seifrizii*, require more light (100 to 300 foot candles) and grow to 10 feet in height. Mealy bugs, mites, and overwatering are the greatest enemies of parlor palms indoors.

The pygmy date palm, *Phoenix roebelenii*, is another small feather-leaved palm for interior locations. Pygmy date palms have a short, thick stem and finely divided leaves. Light intensities should be at least 200 to 500 foot candles for the best appearance. Watch carefully for mites on this one. The large feather-leaved palms can be planted as solitary specimen plants or they may form thickets of vigorous foliage from many basal branches.

The areca or yellow palm, *Chrysalidocarpus lutescens*, forms a thick clump of stems 6 to 30 feet in height. Arecas require 150 to 300 foot candles of light for adequate growth and are susceptible to over fertilization, over watering, and mites. The clustered fishtail palm, *Caryota mitis*, also forms clumps of stems but the individual plants are much larger and more vigorous than areca individuals. Light intensities of 300 to 500 foot candles are necessary for the fishtail palm and the Macarthur palm, *Ptychosperma macarthurii*, which also forms a cluster



Lady Palm



Chinese Fan Palm



Parlor Palm with pinnate leaves

of plants in the container. The Macarthur palm has a slender, smooth stem up to 25 feet tall and a sparse appearance much different from the dense foliage of areca and fishtail palms.

The tropical or majestic appearance of solitary feather palms is easily recognized by most people. Kentia or sentry palms have been used by florists as rented plants for weddings and other programs for years. Kentia palms, *Howea forsterana*, are used in all sizes from 4 feet to 40 feet tall because the plants are extremely slow growing and tolerate low light levels (100 to 300 foot candles) as well as any other plant. The Alexander palm, *Ptychosperma elegans*, brings the regal appearance of the royal palm to interiors and the Queen palm, *Arecastrum romanzoffianum* (*Cocos plumosa*), has the same graceful feathery leaves as the coconut palm. Both palms feature a stout, smooth trunk as a major feature of their solitary form. Both palms also require very high light-intensities (700 to 1500 foot candles) for their growth.



Fishtail Palm



Kentia or Sentry Palm



Pygmy Date Palm

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, M. Scott Smith, Director of Cooperative Extension Service, University of Kentucky College of Agriculture, Lexington, and Kentucky State University, Frankfort. Copyright © 2004 for materials developed by the University of Kentucky Cooperative Extension Service. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the author(s) and include this copyright notice. Publications are also available on the World Wide Web at: www.ca.uky.edu