



*Chamaedorea elegans* (*Neanthe bella*) is a native of Mexico and Central America and is the most popular house palm in America. Here young plants (bottom left) and a well established plant ten years old are shown. Photo by W. H. Hodge. See page 122.

# Potted Palms for Interiors\*

RUSSELL C. MOTT

*L. H. Bailey Hortorium, Cornell University, Ithaca, New York*

Palms are better adapted for interior culture in pots, tubs, and planters than many other foliage plants. The kinds listed in Tables 1 and 2 are mostly dwarf and are offered by growers in the United States and foreign countries. Prices of potted palms may seem higher in comparison to other foliage plants but when their longer life and durability is known they are a good investment and will give greater satisfaction.

The variety of shapes, sizes, and textures obtainable make them adaptable to the many decors of our modern buildings, shopping malls, and outdoor patios. Generally, they will survive under adverse conditions of light, temperature, and atmospheric humidity.

For successful maintenance it is recommended that careful attention be given the cultural notes and references made for individual species in the accompanying tables.

## Watering

Watering is the first consideration for palms as well as other plants. It is noted in the tables that all palms should have a moist soil. Drying of the soil ball within small containers can cause injury to the small feeder roots which are characteristic to palms. The result is inability of the roots to supply the leaves with water. Only a few palms can withstand dry soil as indicated in Table 3.

A test to make sure sufficient water is added is to see the excess water emerge

from the drainage hole at the bottom of the pot. Experience will result in the application of a measured amount at regular intervals.

## Light and Temperature

Palms accustomed to growing indoors and moved to a patio or porch in summer must have protection from the bright sun to prevent sun scorch. Those palms which grow in a greenhouse will benefit from unshaded glass in the winter months in northern climates, but must have protection of shade in the summer months.

A few palms listed have proven cold-hardy as a result of habitat and experience of exposure to freezing weather for brief periods. It is indicated that these palms would be desirable for use in areas where lower temperatures exist. This could include such areas as lobbies or shopping malls.

## Potting

A potting mixture for palms as previously reported (*Principes* 11:52-53, 1967) has been revised and is recommended for palms as well as for foliage plants. The revised formula is outlined in Table 4 of this article. It provides good drainage, permitting aeration between waterings and letting in the oxygen which is essential for good root development. It also has good moisture retention.

In repotting of palms, it is very important to compost the soil with much firmness about the root system. This encourages the feeder roots to penetrate

\* Reprinted with permission from New York State Flower Industries Bulletin No. 16, Oct. 1971.

TABLE I. Selection of single stem palms. (For specimen plants, put 2, 3 or 4 together in one container.)

Genus and Species	Common Name	Description	Avg Size Offered
* <i>Caryota urens</i>	Fish-tail palm	Leaves twice-divided into wedge-shaped leaflets with broad toothed tips like a fish's tail.	6' - 9'
<i>Chamaedorea elegans</i> ( <i>Neanthe bella</i> )	Parlor palm	Small dwarf plant with thin dark green, feathery leaves.	1½' - 2'
<i>Chamaedorea Ernesti-Augusti</i>		Bamboo-like stems bearing gray-green, wedge-shaped leaves widely divided at tip and with prominent rib-like venation.	3' - 5'
<i>Chamaedorea Klotzschiana</i>		Dwarf palm with bamboo-like stems and feathery leaves. Leaflets dark green and clustered in groups.	2' - 3'
* <i>Cocos nucifera</i> (Juvenile stage)	Coconut palm	A conversation piece. Light green coarse, sheath-like, plaited leaves split about half-way from tips, more or less upright on short stalks.	2' - 3'
<i>Howeia Belmoreana</i> ( <i>Kentia Belmoreana</i> )	Belmore sentry palm	Hardy decorator palm. Thick leathery, dark-green, feather-like leaves with pointed leaflets arching from the center axis. Leaflets slendering to a pointed tip.	3' - 6'
<i>Howeia Forsteriana</i> ( <i>Kentia Forsteriana</i> )	Forster sentry palm	Faster growing and of larger proportion than <i>H. Belmoreana</i> . Leaflets not arching but flat to the center axis.	3' - 6'
<i>Licuala grandis</i>		Small fan palm. Plaited, bright green, undivided, roundish, fan-shaped leaves toothed around the margin. Slender leaf stalks with small spiny teeth.	4'
* <i>Livistona chinensis</i>	Chinese fan palm	Large fan palm. Thick stem with clasping leaf-stalks of fan-shaped glossy, yellow-green leaves divided into many segments with pendulous forked tips.	4' - 6'
* <i>Livistona rotundifolia</i>		Rare, but available and more desirable than <i>L. chinensis</i> . Stiff leaves, fan-shaped, divided into short segments.	3' - 5'
<i>Phoenix Roebelenii</i>	Pigmy date palm	The most graceful of all small palms. Many small flat leathery leaves arising from a central crown.	3' - 5'
* <i>Veitchia Merrillii</i> ( <i>Adonidia Merrillii</i> )	Christmas palm	So-called Christmas palm because of attractive red fruits. Slender stem supporting an arching crown of feathery glossy green leaves with closely spaced leaflets.	8' - 12'

\* Species which when young make good pot plants but will eventually outgrow containers and should be planted in large tubs or in the open ground.

TABLE 2. *Selection of clustered-stem palms.*

Genus and Species	Common Name	Description	Avg Size Offered
* <i>Caryota mitis</i>	Clustered fish-tail palm	Foliage similar to <i>C. urens</i> in Table 1; smaller in size with clustered stems.	6' - 8'
<i>Chamaedorea cataractarum</i>		Dwarf and compact. Feather-like dark green leaves originating alternately from branching stems.	2' - 3'
<i>Chamaedorea costaricana</i>		Bamboo-like stems with feather-like dark green leaves arranged from top to bottom.	2' - 4'
<i>Chamaedorea erumpens</i>	Bamboo palm	Bamboo-like stems with thin feathery dark green recurved leaves loosely distributed from top to bottom.	3' - 9'
<i>Chamaedorea Seifrizii</i>		Bamboo-like stems supporting feathery bamboo-like leaves giving the plant a lacy appearance.	3' - 8'
<i>Chamaerops humilis</i>	European fan palm	A dwarf plant. Stems covered with brownish fiber sheaths. Leaves fan-shaped and rough textured divided into narrow segments almost to the base.	2' - 4'
<i>Chrysalidocarpus lutescens</i> ( <i>Areca lutescens</i> )	Butterfly palm	Very tropical appearance with yellow feathery foliage, arching widely from tightly clustered leaf bases.	4' - 8'
* <i>Ptychosperma Macarthurii</i>	Macarthur cluster palm	Feather-like, dark green leathery leaves. Leaflets arching from center axis; ends obliquely cut as if bitten off.	3' - 7'
<i>Rhapis excelsa</i>	Broad-leaf lady palm	Coarse, fan-shaped, dark green, leathery leaves divided into segments with blunt ends. Leaves arranged up the clustered brown fibred stems of varying heights giving a bushy bamboo effect.	3' - 6'
<i>Rhapis humilis</i>	Slender lady palm	Similar to <i>R. excelsa</i> but with the fan-shaped leaves divided into narrower segments and more pointed at the tips.	3' - 5'

\* Species which when young make good pot plants but will eventually outgrow containers and should be planted in large tubs or in the open ground.

into the fresh soil. A layer of drainage material in the bottom of the pot, to facilitate drainage of excess water, is essential when the potted palm is plunged inside a planter or large tub and surrounded with peat moss or other filler.

### Fertilization

There is no nutrient requirement for palms that is different from other foliage plants. A water soluble fertilizer like 20-20-20 applied at the manufacturers recommendation is adequate. In tem-

TABLE 3. *Handling and care of potted palms.*

Genus and Species	Culture Notes	Water	Temperature	Light
<i>Caryota mitis</i> and <i>C. urens</i>	Slightly acid potting mix.	moist	warm	high
<i>Chamaedorea cataractarum</i>	Plant one or more in pot. Will tolerate lower than normal temperature.	moist (dry)	cool	low
<i>Chamaedorea costaricana</i>	Retain in small pots. Will tolerate lower than normal temperature.	moist (dry)	cool	low
<i>Chamaedorea elegans</i>	Plant one or more in a pot. Use for dish garden when small. Flowers produced when plants are 1 foot high.	moist (dry)	warm	low
<i>Chamaedorea Ernesti-Augusti</i>	Requires good drainage.	moist	warm	low
<i>Chamaedorea erumpens</i>	Requires shade on patio.	moist	warm	low
<i>Chamaedorea Klotzschiana</i>	Plant one or more in a pot for effect.	moist (dry)	cool	low
<i>Chamaedorea Seifrizii</i>	Withstands lower than normal temperature. Ideal for outside patio in warm climates.	moist	warm (cool)	high
<i>Chamaerops humilis</i>	pH neutral potting mixture, good drainage. Suckers when young. Is a slow grower. Tolerates lower than normal temperature.	moist (dry)	warm (cool)	high
<i>Chrysalidocarpus lutescens</i>	Size of container regulates growth. Withstands lower than normal temperature.	moist	warm	high
<i>Cocos nucifera</i> (Juvenile Stage)	Retain in small pot to slow growth.	moist (dry)	warm	low
<i>Howeia Belmoreana</i>	Protect from direct sun. Is slow grower. Plant 3 or more in a pot for effect. Withstands drafts.	moist	warm (cool)	low
<i>Howeia Forsteriana</i>	Protect from direct sun. Is faster growing than <i>H. Belmoreana</i> . Will resist cold, lack of light, and neglect.	moist	warm (cool)	low
<i>Licuala grandis</i>	Never allow potting mix to become dry. High atmospheric humidity beneficial.	moist	warm	low
<i>Livistona chinensis</i>	Is slow growing. Avoid excessive dryness.	moist	warm (cool)	high
<i>Livistonia rotundifolia</i>	Grow in small container to retain small size. Best suited for interiors.	moist	warm	low

TABLE 3. (Continued.)

Genus and Species	Culture Notes	Water	Temperature	Light
<i>Phoenix Roebelenii</i>	Is a slow grower. Protect from direct sun, wind, and cold. Provide good drainage in pot. Do not overpot. Neutral soil pH.	moist	warm	high
<i>Ptychosperma Macarthurii</i>	Fast grower.	moist	warm	high
<i>Rhapis excelsa</i>	Slow grower. Withstands lower than normal temperature. Usually expensively priced.	moist	warm (cool)	high
<i>Rhapis humilis</i>	Slow grower. Tolerates lower than normal temperature. Makes dense clump.	moist	warm (cool)	high
<i>Veitchia Merrillii</i>	Avoid overpotting. Requires potting material of a neutral pH.	moist	warm (cool)	high

1. Water: *Moist* indicates the palm plant requires frequent watering—the surface of the soil should not become dry as opposed to the *dry* category where the surface of the soil should appear dry before watering. *Dry*, as indicated, identifies those palms which may go from *moist* to *dry* category without serious harm.
2. Temperature: *Cool* temperatures are defined as 60°F with variations from 55° to 70°F. These conditions are commonly found in shopping malls, hotel lobbies, and other entryways. *Warm* temperatures are defined as 75° F with variations from 65° to 85° F. These conditions are commonly found in homes and offices.
3. Light: The classification of *high* and *low* light refers for simplification to the minimum requirements of each species. There are few palms which won't grow better indoors with brighter than existing light. In all interior situations the palms should be placed in as bright conditions as possible exclusive of direct sunlight.

TABLE 4. Revised Cornell Potting Mixture for Palms. ("Cornell Foliage Plant Mix.")

Material	Amount
Spagnum peatmoss	4 bushels
Vermiculite, No. 2	2 bushels
Perlite, medium-fine	2 bushels
Ground dolomite limestone	3 lbs.
Superphosphate, 20% powdered	¾ lb.
10-10-10 fertilizer	1 lb.
Iron sulfate	4 oz. (¼ lb.)
Potassium nitrate	6 oz. (¾ lb.)
Peter's Soluble Trace Element Mix	5.6 grams (5.6 grams = 1 level teaspoonful)

perate zones, feeding should be discontinued during the cool weather and then resumed when the warm weather arrives.

### Other Maintenance

Insect pests unfortunately can create a troublesome problem for indoor palms as well as outside palms. Red spider mites, mealy bugs, and scale are those most likely to be found. It is advisable to consult with local agricultural extension agents for recommended pesticides.

Little or no pruning is necessary for the maintenance of palms. The cutting of a cane or stem of clustered palms in order to thin the clumps or to reduce the height is sometimes practiced. In the natural process of growth an old leaf may turn yellow and brown and begin to droop. This can be removed. It should be cut rather than torn off. Tearing the leaf sheath from the stem causes a wound, leaving an unsightly scar and may permit fungal infection.

## PALM BRIEFS

### New Chromosome Counts

Pollen sent back by Dr. Moore on his recent trip yielded chromosome counts for two genera that were previously unknown cytologically. (See Essig, New Chromosome Counts in *Chamaedorea* (Palmae), *Principes* 14: 136-137, 1970, for references to methodology and earlier counts.) Voucher specimens as well as photographs and drawings of the chromosomes are on deposit at the herbarium of the L. H. Bailey Hortorium, Cornell University.

*Acanthophoenix* sp. (Moore et al.  
9924)  $n = 16$

*Solfia samoensis* (Moore et al.  
9980)  $n = 16$

FRED B. ESSIG

## THE EDITOR'S CORNER

The Editor has returned (temporarily) and wishes to thank Fred Essig for his efforts in getting *PRINCIPES* through the press in his absence. Some experiences in Africa are described in this issue. Readers who are interested in adding their plea for measures to conserve *Wissmannia carinensis* at Bankoualé may write the following:

Monsieur Ali Aref Bourhan, President du Conseil de Gouvernement du T.F.A.I., Djibouti, T.F.A.I. and/or Monsieur Godefroy, Directeur de Cabinet, Présidence de Conseil de Gouvernement, Djibouti, T.F.A.I.

It is hoped that seed may ultimately be obtained for distribution through The Palm Society Seed Bank. Individual requests are best directed to the Seed Bank.

H.E.M.