schizophylla, Arecastrum romanzoffianum, Phoenix sylvestris, Phoenix sp., Phoenix rupicola, Phoenix reclinata.

Admittedly, many of the above additions have not been exposed to unduly severe conditions such as temperatures below 20° F. Rhapis sp., Syagrus coronata, Phoenix sylvestris, and others were exposed to 14° F while covered with five inches of snow and survived, quickly recovering during the spring (1973). Although many of these species would never be suitable in unprotected locations, many old homes of this city have enclosed courtvards which offer a great deal of protection from wind, snow, and severe freezes, thus protecting some of the borderline species for the palmophile. Future winter testing will undoubtedly add new insight into their suitability for different locations, and additional species soon to be available from seedlings still in greenhouses will be reported on later.

## Conclusion

Cold-hardy species are being tested for South Carolina. While the potential variety is greater for Charleston (Zone 9) than Columbia (Zone 8), the use of hybrids and desert or western species, in conjunction with mechanical protection, could add new promise to the small list of palms grown within the state.

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## PALM BRIEFS

## Commercial Use of Chamaedorea elegans

A Florida nurseryman, Roger Nason of Delray Beach, is credited with developing the use of the palm *Chamaedorea elegans* as a house plant. The first commercial production of these plants in pots took place in 1945 when Nason obtained 25 pounds of seed from Mexico. Three years later the sale of seed to the world horticultural trade amounted to 100 pounds, and its use spread to Europe and the Far East.

The source of seed is still primarily Mexico, where last year 70,000 pounds of seed were shipped to nurserymen all over the world. There are about 2,000 seed per pound with germination approximately 60 percent. This means that last year approximately 84,000,000 palm seedlings were produced. Mexico is the only good source of seed, although small quantities are shipped from Guatemala.

The palm is known in the plant trade as "Neanthe bella," a name that has no scientific standing. It has character from the first leaf which makes it so desirable as a small house plant. The best strain of seed has a broad leaf. The seed is collected by Indians from the wild, but as of 1975 about 15 percent of the crop will be from cultivated mother plants. It takes about four years for a stock plant to produce seed.

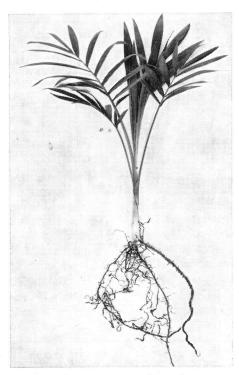
There is currently no shortage of seed, and the quantity shipped next year will undoubtedly go to 40 tons. The only limiting factors in seed production are insufficient rain to permit plants to set seed or dry winds that tend to make the mother plant drop the the seeds before maturity.

Natives of Mexico are now growing seed plants, but 90 percent of the worldwide sales are handled by L. E. Guerra of Mission, Texas. Guerra is an American citizen of Mexican origin and is considered to be the "father" of the trade in "Neanthe bella" palm.

The palm is relatively fast growing and has virtually no pests. It is used in terrariums or as a single plant or several plants in a pot. It likes low light intensity and grows best at 1000 footcandles. It can stand as little light as 50 footcandles and still survive. This makes it a very important product for interior landscaping because it has such good keeping qualities. The writer of this article is a major producer in the U. S. of this palm. Plants are grown in Miami, Florida, and seedlings are shipped all over the world. Most of the export shipments are made to England, Germany, and Holland.

Seeds are generally collected in November. They can be stored for approximately six months, but germination is higher with fresh seed sown promptly. Seeds are sown in sterile peat moss, preferably in raised benches. If at ambient Miami, Florida temperature, the seed will germinate in six to seven months. If the seed is kept at 70°F., minimum germination is within four months. Seedlings are potted or shipped to others to pot when the plant has two or more leaves. The price of the seedling varies with the age—i.e., seedlings with two leaves sell for less than plants with four to five leaves.

There was great fear that the mother plants of Chamaedorea elegans would become extinct in Mexico because the mature leaves are used for cut foliage in floral decorations. This product is sold in large quantities in the U.S. under the trade name "Comodor." In 1974, 370 million bunches of leaves were shipped to the U.S. alone. There are 25 individual leaves in a standard bunch. This tremendous cutting of leaves destroys the mother plants in some cases and has driven the seed sellers to cultivate mother plants for seed production only.



1. Seedling of Chamaedorea elegans.

"Neanthe bella" is still considered a "slow" plant by commercial growers, so the largest specimens commercially available in the U. S. are no more than four feet tall in a pot usually no larger than ten inches in diameter. A "Neanthe bella" this size would retail at about \$40-\$50. The big volume of sales, however, is in the 40¢ to \$2.00 price range.

Chamaedorea elegans is a good staple item in the house plant field, and one which gives great customer satisfaction. It is also very good as a housewarming gift or premium-promoting item. It will remain a favorite of our plant lovers for many years to come.

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