

## PALM BRIEFS

### Palm Longevity

How long a cultivated palm will live is an intriguing question, but unfortunately one that seldom can be answered because of the absence of accurate records of the planting and natural death or destruction of individual palms. Several accounts of very old palms have been published in *PRINCIPES*. The Editor's Corner (2: 40, 1958) recounts the felling of a *Phoenix* sp. in San Diego that was 188 years old. A note by Morley (19: 76, 1975) documents a *Trachycarpus fortunei* growing at the National Botanic Gardens at Glasnevin, Dublin, which is more than one hundred years of age. According to Russell (6: 60, 1962), Kew Gardens may have two palms over a century old, a *Jubaea chilensis* and a *Trachycarpus fortunei*.

On a recent visit to the Jardim Botânico in Rio de Janeiro, I learned of another example of extreme palm longevity. When the garden was founded in 1809, a ceremony took place which included the planting of a royal palm (*Roystonea oleracea*) by the Portuguese King Dom João VI, and the placement of a marble plaque to mark the event. The "palma mater," as the palm was known, became the symbol of the garden and other ceremonial plantings of the same species took place in the same general area of the garden, always utilizing plants grown from seed from the original palm. The "palma mater"

is shown in Fig. 1. Unfortunately the exact date of the photograph is not known. Royal palms were also used for the magnificent promenades of the Jardim Botânico (See Hodge, *Principes* 4: 17-20, 1960).

In late 1972 the "palma mater" was struck by lightning and, despite an heroic effort by the botanists at the garden to save the tree, it died at 163 years of age. When the tree was felled, measurements showed that it had reached a height of 38.7 m. (127 ft.), and at the base had a diameter of .90 m. (3 ft.) and a circumference of 2.83 m. (9.3 ft.). The same measurements taken at the midpoint of the trunk were .46 m. (1.5 ft.) and 1.45 m. (4.8 ft.), and at a point just below the crown .35 m. (1.2 ft.) and 1.10 m. (3.6 ft.).

The base of the trunk was treated with preservatives and today stands floor-to-ceiling in the entrance hall of the administration building of the garden. Included in the display is a description of the palm, and the reassembled marble plaque which had been shattered by the lightning strike that killed the tree.

To replace the dead palm, a new planting was made on the same site in 1973 with the transplanting of a six-year-old plant which had been derived from seed of the "palma mater." Another ceremony was held and a new plaque, this one of metal, placed at the location. The new palm is referred to as the "palma filia."

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1. *Roystonea oleracea* planted in 1809 at the Jardim Botânico, Rio de Janeiro. Photograph courtesy of Carlos T. Rizzini.

