

Phoenix canariensis and Phoenix cycadifolia

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A century ago, species of *Phoenix* were evidently favored as indoor palms. Wilhelm Neubert, for example, wrote of them (1873) as easily cultivated, quick-growing, and hard to kill. In addition to *P. dactylifera*, he mentioned several others, among them some known by horticultural names but not described botanically, including *Phoenix canariensis* and *P. tenuis*, the last illustrated by a juvenile plant.

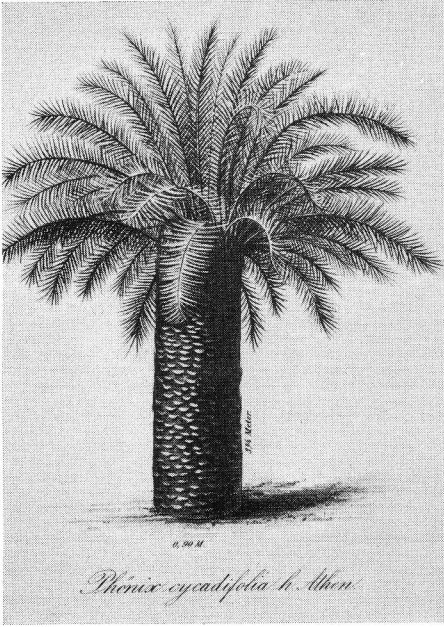
This was an early use of the name *Phoenix canariensis*, though no description accompanied it; the juvenile plant of *P. tenuis* cannot be identified. In fact, Neubert considered *P. canariensis* and *P. tenuis* to be very close to each other or identical. According to *Index Londinensis*, *Phoenix tenuis* was illustrated as early as 1863 in a Verschaffelt catalogue which I have not seen but doubtless was shown as a juvenile plant unaccompanied by an adequate description and thus not identifiable. By 1871–72, Verschaffelt was offering material listed as *P. canariensis*, *P. cycadifolia*, and *P. tenuis* in Catalogue no. 16. So far as I am aware, none of these names was validly published by botanical standards. Then in a period of a decade, three names were published in acceptable form and it remains to fix their applicability to the plants we know commonly as *Phoenix canariensis*.

First was the publication of *Phoenix cycadifolia* Hort. Athen by Eduard Regel in 1879. Second was the publication of *Phoenix canariensis* by Chabaud in 1882. Third was the elevation of

Phoenix dactylifera var. *Jubae* to specific rank as *Phoenix Jubae* by D. H. Christ in 1885. The first two were described from horticultural materials, the third from plants native in the Canary Islands. But the third name need concern us only if the earlier names are not validly published or are equivocal in some fashion.

The name *Phoenix cycadifolia* had been used in horticulture for some years before 1879 but it was apparently only then that any kind of description appeared, and the description was meager in the extreme, being only a statement by Regel that a plant growing at Athens and illustrated in plate 974 (reproduced here as Fig. 1) was perhaps to be interpreted as one of the many forms of *Phoenix dactylifera*; that it ran to "*Phoenix dactylifera canariensis*" (an invalid trinomial) but that the leaves were much shorter and the whole appearance of the palm was more that of an *Encephalartos* (Cycadaceae) than a date palm.

Beccari referred *Phoenix cycadifolia* to the synonymy of *Phoenix dactylifera* in his study of *Phoenix* (1890). When I prepared the entry for *Phoenix* in "An annotated checklist of cultivated palms" (1963) just before leaving for extended field work, I relied heavily on Beccari's work, for the genus has yet to be studied more intensively. However, the plant figured by Regel appeared more like *P. canariensis* than *P. dactylifera* because of its solitary trunk of large diameter and broad leaf-scars so I included the



1. The plate illustrating *Phoenix cycadifolia*, a species or hybrid or uncertain identity. Reproduced from *Gartenflora* 28: pl. 974. 1879.

name as a synonym of *P. canariensis* not realizing that it had priority by three years and should, if identical, be taken up in place of *P. canariensis*. The awkwardness of this situation has since become apparent to me, hence I have made a special effort to review all the evidence and, thanks to the kindness of Dr. Eleonora Francini Corti, Director of the Istituto Botanico, Firenze, Italy, have been favored with a reproduction of pertinent pages in the rare journal in which *Phoenix canariensis* was described.

There can be no doubt but that *Phoenix canariensis* was properly described and illustrated. The plants that served as the basis for Chabaud's description had been grown from seed sent to Hyeres, France, from Orotava in the Canary Islands. The description was elaborate, including details of inflorescence, flowers, and fruit, the latter and a seed illustrated. Though Chabaud indicated in the

horticultural text that he thought *Phoenix canariensis* was more likely a variety of *P. sylvestris*, he definitely accepted it at the specific level. He moreover noted that hybrids had already been produced naturally and artificially and that there were *canariensis*-like forms in horticulture and with horticultural names such as *P. tenuis*, *P. canariensis macrocarpa*, *P. canariensis erecta*, *P. canariensis tenuis*, and *P. cycadifolia*. Following Chabaud's article, Naudin used the name *P. canariensis* in 1885, and a colored plate with details of fruit was published by André in 1888. A detailed description was given by Beccari in 1890 as part of his monographic study of *Phoenix* and Chabaud provides a good account with historical notes in his book on palms (1915).

Phoenix canariensis is a firmly founded, long established name for a species of prime horticultural importance. If it were clear that *Phoenix cycadifolia* Hort. Athen ex E. Regel were identical with *P. canariensis* it would be necessary to take it up, and at one time I was nearly convinced myself. The possibility that it may represent a plant of hybrid origin, the fact that the description is inadequate botanically, and the stylized nature of the plate which raises questions as to identity all lead me to preserve the *status quo* by listing *Phoenix cycadifolia* in the synonymy of *P. canariensis* with a query. Anyone who can convince himself that the name has unequivocal status is free to take up the name but I am unwilling to do so. Thus the entries for *Phoenix canariensis* and *P. cycadifolia* in *Principes* 7: 156-157 should be corrected to read:

P. canariensis Hortorum ex Chabaud, La Provence Agricole et Horticole Illustrée 19: 293, fig. 66-68. 1882. Canary Islands.

? *P. cycadifolia* Hort. Athen. ex E. Regel, *Gartenflora* 28: 131, *pl.* 974, 1879, *nomen subnudum*.

P. dactylifera var. *Jubae*, Webb & Berthelot, *Hist. Nat. Canar.* 3(2), *Phyt. Canar.* 3: 289. 1847.

P. Jubae (Webb & Berthelot) D. H. Christ, *Bot. Jahrb.* 6: 469. 1885; 9: 170. 1888.

P. cycadifolia: ? *P. canariensis*

There are some additional names that may belong with *P. canariensis* but so far as I have been able to ascertain these are all *nomina nuda* (naked names) lacking descriptions hence not validly published and when figured by juvenile plants not identifiable. They are *P. tenuis* Hort. Verschaffelt, *Catalogue* 1863: 13 *cum ic.*, 1863 and ex Neubert, *Deutsches Magazin für Garten und Blumenkunde* 26: 203, *fig.* 204, 1873; *P. Vigieri* Hort. ex Naudin, *Revue Horticole* 57: 541, 1885; *P. dactylifera* var.

canariensis Hort. ex E. Regel, *Gartenflora* 28: 131, 1879 and ex Drude, *Gartenzeitung* (Berlin) 1: 182, *fig.* 42, 1882.

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ADDENDUM

Bactris Pollinators

Since completing the manuscript for the article appearing on pages 20-24 (Observations on Pollination in *Bactris*), I have received the following identifications for insects collected on *Bactris* flowers:

Curculionidae: *Phyllotrox megalops* Champion and ?*Grasidius longimanus* Champion (both determined by Anne T. Howden, Entomology Research Institute, Canada Department of Agriculture).

Nitidulidae: *Mystrops heterocera* Sharp and *Mystrops* sp. (both deter-

mined by W. A. Connell, Department of Entomology and Applied Ecology, University of Delaware).

The above insects are believed responsible for pollination in two species of *Bactris*, as discussed in the article. Specimens are now deposited at the collection of the Department of Entomology and Limnology, Cornell University. Once again thanks are due to George Eickwort for sending the specimens out for identification, and to the authorities cited above for their cooperation.

FRED ESSIG