

# Some Notes on *Pseudophoenix* and a Key to the Species

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The publication of a research paper entitled "A Study of *Pseudophoenix*" and the discovery of two new remote localities for the genus occurred almost simultaneously. A scientific study of *Pseudophoenix*, written in partial fulfillment of requirements for the M. S. degree at Cornell University, appeared in *Gentes Herbarum* [vol. 10: 169-213, 1968] published by the L. H. Bailey Hortorium. It is a comprehensive study of the genus in which four species and two subspecies are fully described, one species for the first time. In addition to the systematic treatment, supporting anatomical and cytological studies are also presented.

The newly described species—*Pseudophoenix Lediniana* R. W. Read—commemorates Dr. R. Bruce Ledin because of his great interest in the horticulture of southern Florida, and his contributions to the study of palms and to The Palm Society. *Pseudophoenix Lediniana* (cover) is endemic to limestone cliffs along the gorge of the Leverage River above the road from Grand Goâve to Gerard and Trouin on the southwestern peninsula of Haiti. The species resembles *P. vinifera* somewhat in its large size but can easily be distinguished by the broad inflorescence which arches out from the crown, by its very short flower-stalks, and by the three-lobed calyx. The inflorescence of *P. vinifera*, in contrast,

is pendulous alongside the trunk, the flower stalks are rather elongate, and the calyx is cuplike and rounded-triangular. Additional diagnostic characteristics by which one can identify all known species of the genus may be found in the accompanying key.

Shortly before the aforementioned paper appeared, the author visited the islands of the eastern Caribbean while on a collecting and research trip for the Smithsonian Institution. Although *Pseudophoenix* was formerly unknown east of Hispaniola, a large population was discovered on Dominica. Plants resembling *P. Sargentii* (Fig. 1) were found on a dry rocky hillside among semi-deciduous woodland and thorn scrub. The species is apparently restricted to an area of hills above the town of Mero, within sight of the Castaways Hotel, in the lee side of the island. Flowers and fruit were not found, but the hundreds of young plants suggest that fruits are produced in abundance. Until flowers and fruits are examined, the determination of the species must remain tentative. *Pseudophoenix Sargentii* is so far the only species known outside the boundaries of Hispaniola.

Following the discovery of *Pseudophoenix* in Dominica, the author visited Dr. Roy Woodbury at the University of Puerto Rico in Rio Piedras. Dr. Woodbury told of his finding *P. Sargentii* on Mona, a small, low Puerto Rican island about midway between Puerto Rico and Hispaniola. Saona Island, which lies just off the southeast coast of Hispan-

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1. *Pseudophoenix* (*P. Sargentii* ?) growing on the dry hills above the Castaways Hotel near Mero, Dominica.

iola, was previously believed to be the easternmost locality for the genus, which is now known to extend even beyond Mona, 500 miles southeast to Dominica.

If the species in Dominica proves to be *P. Sargentii*, it would then exhibit a range of distribution of more than 2000 miles across the northern Caribbean.

### A Key to Species and Subspecies of Pseudophoenix

- 1a. Rachillae of the inflorescence mostly straight and extending at right angles, or at least sharp angles, to the axes on which they are borne; inflorescence almost as broad as long; stamen-filaments cuspidate, more than 2 mm. long, united at their bases to form a cupule. .... *P. Sargentii* H. Wendland ex Sargent
- 2a. Inflorescence less than one-third as long as the leaves, erect in fruit; primary bract less than three-fourths as long as the peduncle. Florida, Mexico, British Honduras, uncommon in cultivation. .... *P. Sargentii* subspecies *Sargentii*
- 2b. Inflorescence more than one-third as long as the leaves, pendulous from an arcuate peduncle in fruit; primary bract more than three-fourths as long as the peduncle. Hispaniola, Mona Island, Cuba, Bahama Island, probably Dominica, and in cultivation. .... *P. Sargentii* subspecies *saonae* (O. F. Cook) R. W. Read
- 1b. Rachillae of the inflorescence mostly curved and extending in the same direction as the main axis; inflorescence much longer than broad.
- 3a. Pseudopedicels (floral stalks) in flower or fruit stout, less than 5 mm. long; ultimate rachillae usually much more than 7 cm. long; stamen-filaments more than 2 mm. long, abruptly dilated and united basally, forming a cupule or ring.
- 4a. Inflorescence pendulous and nearly paralleling the trunk; calyx rounded-triangular; petals spreading or reflexed against the pseudopedicel; pseudopedicels 3.5–5 mm. long; stamen-filaments in flower or fruit more than 5 mm. long, nearly three-fourths as long as the petals; fruit 1–3-seeded; aborted carpels conspicuous at the base of the fruit; pinnae normally exhibiting dark scales within the basal fold; trunk strongly ventricose. Hispaniola and in cultivation. .... *P. viniifera* (Martius) Beccari
- 4b. Inflorescence arcuate (arching, not pendulous); calyx 3-lobed; petals usually clasping the fruit; pseudopedicels less than 4 mm. long; stamen-filaments in flower or fruit less than 4 mm. long, only one-half as long as the petals or less; fruit normally 1-seeded; aborted carpels inconspicuous; pinnae normally lacking scales within the basal fold; trunk columnar, only slightly swollen or irregular. Haiti. .... *P. Lediniana* R. W. Read
- 3b. Pseudopedicels in flower or fruit conspicuously long and slender, more than 5 mm. long; ultimate rachillae less than 6 cm. long; stamen-filaments less than 1.5 mm. long, not dilated nor united at the base to form a cupule or ring. Dominican Republic. .... *P. Ekmanii* Burret