

long and conspicuously curved or one-sided and warty; seed about 2.5 cm. long, 1.5 cm. broad near top, tapering to a sharp straight pointed base, raphe lines not deeply marked; position of embryo variable but above the middle of the seed.

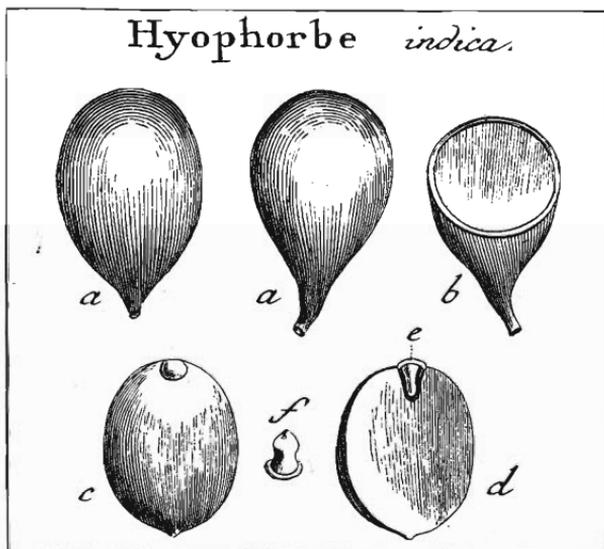
Réunion, formerly known as Bourbon; a forest palm.

Martius displaced Gaertner's binomial, *H. indica*, with *H. Commersoniana*, without explanation, but probably because Gaertner's account was not satisfactory. Justification was not required in those days. He cites *H. indica* as a synonym. Some of the details in his picture of *H. Commersoniana*, t. 154, are not understandable to me, but I await further materials before analyzing them.

In the herbarium of Muséum National d'Histoire Naturelle in Paris are three sheets of *Hyophorbe indica*. Two of them bear specimens from Bourbon by Boivin and Commerson; the third is without locality although the same as the others and bears annotation by Martius that it is *Hyophorbe indica* Gaertn. and *Sublimia vilicaulis* Com. All these sheets represent the palm of which I have specimens from Réunion and which is intended in the foregoing diagnosis. The Muséum has provided me with two seeds collected on Bourbon in 1862 by M. Maillard and which correspond with those of *H. indica* in Fig. 48.

In the herbarium at Kew, England, is a sheet labelled *H. indica*, "Hort. Mauritius," that is apparently the same as those in Paris. The sheet bears a pencil sketch of the tree with analysis of flowers by W. Scott, made in

August, 1884. I have flowers of *H. indica* from Réunion but the record is not clear and therefore I postpone analysis of them.



42. ORIGINAL PICTURE OF FRUITS of *Hyophorbe indica* by Joseph Gaertner who founded the genus in 1791. *a*, the entire fruit; *b*, in section; *c*, seed removed; *d*, seed cut vertically, showing embryo at *e*; *f*, embryo removed.

† 2. *Hyophorbe*
Vaughanii,
spec. nov.
Figs. 48, 49.

Differt ab *Hyophorbe indica* præsertim his modis: pinnæ comparate latiores, sine paleis in venis principalibus inferioribus; rachis convexa in dorso, plus vel minus furfuracea, in facie ventrali sine acri carina centrali: spadix maxima,

rachillæ pendulosæ: fructus magnus, rectus, oblongus, 4-4.5 cm. longus, 3 cm. latus cum siccus, postea corrugatus sed non verrucosus; semen globosum, 2 cm. vel plus latum, non attenuatum ad basim, acumen breve et diagonale.

Distinguished from *H. indica* by pinnæ free of palea on under surface unless on midrib toward the base, relatively broader or shorter; rachis convex on back and more or less furfuraceous, the front face not bearing a sharp central ridge: spadix large and diffuse, the rachillæ usually hanging: fruit large, straight, oblong rather than pyriform, 4-4.5 cm. long and 3 cm. broad when dry and then puckered but not verrucose; seed globose, 2 cm. or more broad, not tapered, point short and sidewise near base.

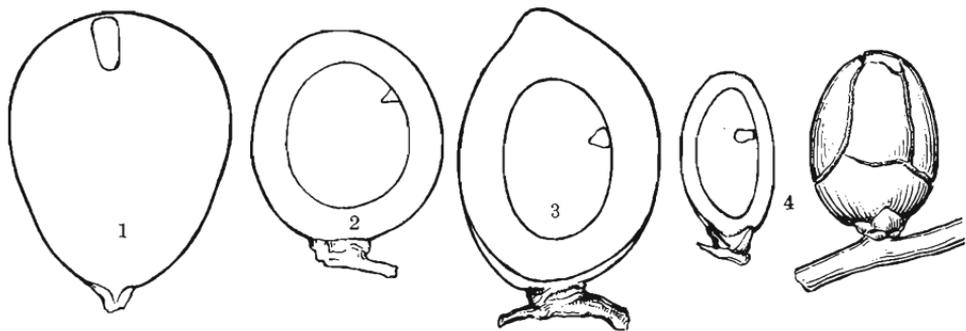
Mauritius. Dr. Vaughan sends me specimens from forest of La Gouardotte near Gouly, 1,800 feet, with the note: "Very rare in Mauritius. It is not cultivated and only one or two wild specimens are known." He writes me: "There is not the slightest doubt that the Mauritius palm called *H. indica* is another species quite different from the Réunion one." It is a pleasure to dedicate the species to him.

While these two *Hyophorbes* are probably natively confined to their respective islands, they may have been interchanged from early times by planters and travellers.

† 3. MASCARENA, gen. nov.

Affinis *Hyophorbæ*: a qua differt turgido vel ventricoso trunco leviter annulato, pinnis latis ad basim affixis diagonaliter et pæne adverse, floribus multo minoribus, antheris affixis ad filamenta triangularia quæ ad petala junguntur, fructibus minoribus, non pyriformibus et sine succulento et verrucoso sarcocarpio, semine testaceo, non libero, non separato a mesocarpio, embryone laterali.

Erect monœcious Mascarene palms distinguished from *Hyophorbe* primarily by tumid boles constricted in one part or another, and by the testaceous seeds that are attached inside a definite seed-shell or wall rather than free and loose within the dried exterior of the fruit: trunk only lightly annulate: pinnæ broad-based, placed diagonally and nearly or quite op-



43. FRUITS OF PLUM-NUT PALMS, to show a generic cleavage between *Hyophorbe* and *Mascarena*; mostly somewhat more than natural size. 1, *Hyophorbe indica*; embryo at top (but not uniformly so placed); note absence of seed-wall or testa. 2, *Mascarena Revaughanii*; 3, *Mascarena lagenicaulis*; 4, *Mascarena Verschaffeltii*, section and exterior.