

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.

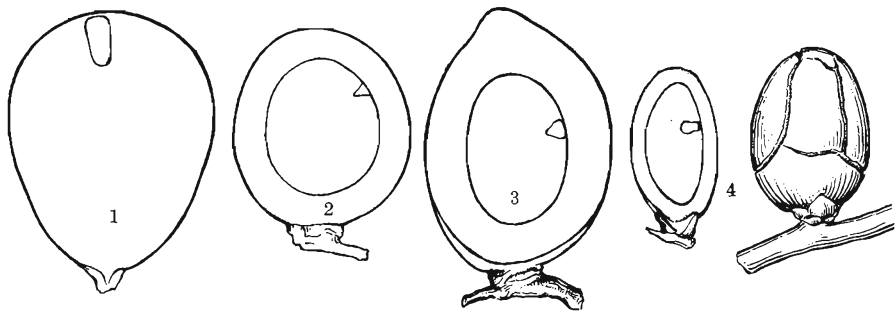
Mauritius. Dr. Vaughan sends me specimens from forest of La Gouardotte near Gouly, 1,800 feet, with the note: "Very rare in Mauritius. It is not cultivated and only one or two wild specimens are known." He writes me: "There is not the slightest doubt that the Mauritius palm called *H. indica* is another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

positely but bases separated by a line or ridge lengthwise the rachis on upper side: anthers on triangular filaments that are attached on corolla: fruit not pyriform, without thick verrucose sarcocarp; seed not free but adherent to the thick seed-wall which, however, dries down in age to a thin covering, the raphal lines not prominent; embryo lateral at middle or above.—Mascarè-na, adaptation from the name of the archipelago where it is native.

Species 3, two of which are known to be native in the Mascarenes, the third probably also of that origin.

The segregation of Mascarena provides three Arecæan genera with minute asexual flowers arranged in single or two-rowed linear acervuli (shown in Fig. 50), the others being Hyophorbe of the Mascarenes and Synechanthus of Central America (for the latter, see Fig. 64 in Gent. Herb. iii, 83, 1933). The lowermost one or two or sometimes three flowers in the thin single or double line are pistillate. Even after the staminate flowers have fallen their places are marked by scars. The genus *Gaussia* of Cuba and Puerto Rico exhibits similar but not identical arrangement of flowers.

- A. Trunk of tree at bearing age conspicuously narrowed into a slender or neck-like part below the inflorescence (this description does not mean the crown-shaft or *culmen superius*, which is above the inflorescence and is not solid stem or trunk but a cylinder of leaf-sheaths and the included terminal ascending bud), base of the bole thick and in low trees bulbiform: petiole 30 cm. or more long: pinnæ bearing a rib either side the midrib and nearly as prominent, particularly conspicuous on under side, closely placed on rachis and often more than 3 cm. broad: rachillæ or branchlets of inflorescence divaricate or in fruit deflected but not hanging prone: fruit thick, more than one-half as broad as long, 18 mm. or more in length when fresh.
- B. Rachis of leaf (at least in upper half) without dividing line or ridge, bases of opposing pinnæ extending past each other: spadix 40–50 cm. long: rachillæ crooked and short, 8–10 cm. long: number of flowers 5 or less in each line: fruit 20 mm. or less long 1. *M. Revaughanii*
- BB. Rachis of leaf provided with a lengthwise ridge on upper side that separates the two rows of pinnæ bases, the bases themselves much expanded: spadix 60–75 cm. or more long, very diffuse: rachillæ straight, mostly 12 cm. or more long: number of flowers in each line 6 or more: fruit when mature and fresh 25 mm. long 2. *M. lagenicaulis*
- AA. Trunk not bottle-necked up to the inflorescence, but usually narrowed in some of its length below that part (this is independent of the crown-shaft above the inflorescence): petiole 10 cm. or so long: pinnæ not 3-ribbed, the side nerves little noticeable, separated on rachis and narrow, mostly less than 3 cm. broad: rachillæ hanging prone and limp at fruiting time: fruit about one-half as broad as long, not exceeding 15 mm. long when fresh. 3. *M. Verschaffeltii*

† 1. **Mascarena Revaughanii**, nom. nov. Figs. 30, 43, 51, 52, 53, 55.

Hyophorbe amaricaulis, Balf. f. in Baker, Fl. Mauritius & Seych. 383 (1877), not Martius.

Tree to 15–18 m., with heavy essentially erect often curved trunk perhaps oblique at base, tumid in the lower part where it may attain thickness of 60–70 cm., then gradually tapering upward into a very long slender apex