

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

that bears the flower-clusters and above which is the smooth crown-shaft (*culmen superius*), the bole more or less obscurely ringed: leaves few, horizontal or only eventually drooping, often only 4 and assuming a cruciform position; petiole evident, to 30 cm. or so long and continuing as a prominent rachis; pinnæ closely placed, 50 or more pairs standing in an upright position so that the blade is trough-shaped, 60-75 cm. long and 3.5 cm. or less broad, tapering to long points except some of the terminal ones, smooth and glabrous unless for palea or scales on ribs underneath, midrib and two side ribs nearly equally prominent and lighter colored when dry, the intermediate veins many and very fine, bases of pinnæ somewhat expanded and those on opposite sides extending past each other so that a straight line on the rachis does not divide them: spadix infrafoliar, at top of true trunk and at base of crown-shaft, about 50 cm. or less long, rachillæ or ultimate branchlets short and usually wavy or crooked, mostly 12 cm. or less long and not dependent unless irregularly under weight of ripe fruit, the simple lines or clusters (*acervuli*) bearing about 5 flowers; spathes several tightly-fitting pointed bracts that fall before fruit matures: flowers about 5 or 6 in each line or *acervulus* on rachis, about 2 or 3 mm. diameter or the staminate 4 mm. across if expanded, the 3 petals spreading or reflexed in anthesis and bearing the 6 short-anthered stamens midway, pistillode columnar in the flower-cup: fruit globular-oblong, 18-20 mm. long and nearly as broad, black (sometimes yellow), glabrous, the soft exocarp eventually drying into a very thin wrinkled coat adherent to the seed until weathered away; seed 15-16 mm. long, very dark brown, marked on all sides by slight raphal grooves that make a similar but not identical pattern on all specimens; embryo lateral just above the middle, in very hard homogeneous white or blue-white albumen.



44. WILD NATIVE TREES of *Hyophorbe indica*. Island of Réunion. Trees about 32 feet tall.

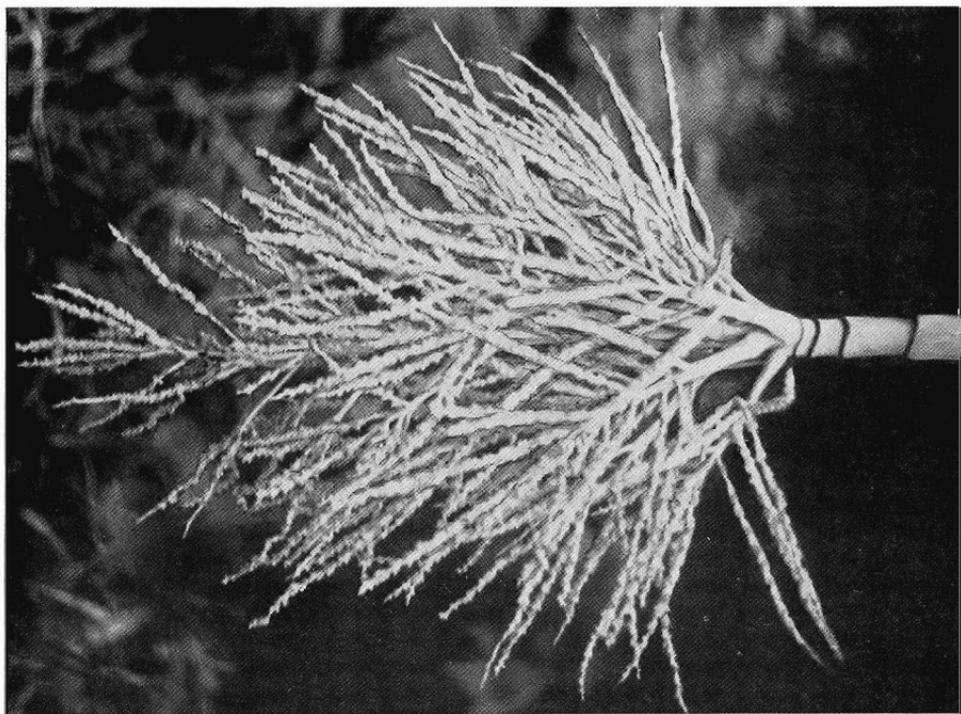
Round Island; planted on main island of Mauritius itself. I have not seen this species in cultivation in the western hemisphere. The diagnosis of this interesting palm is drawn from specimens, notes and photographs supplied me by Dr. R. E. Vaughan, of Mauritius, No. 807, Herb. Bailey.

† 2. *Mascarena lagenicaulis*, spec. nov. Figs. 43, 50, 54, 55, 56, 57.

Hyophorbe amaricaulis, Hort.; Auth. in part.

Truncus lageniformis, infra tumidus et angustatus ad inflorescentiam, culmen superius longum prominensque: pinnæ erectæ vel ascendentes, contiguæ, latis basibus separatis in rachide carina longitudinali, 40-60 cm. longæ, 4 cm. vel plus latæ, superficies punctata, 3 costæ, apices aliquanto breves; petiolus 30 cm. vel plus longus: spadix 60-75 cm. longa, multum ramosa et diffusa; rachillæ plerumque 12-14 cm. longæ, rectæ: flores 6 vel plures in acervulos elongatos dispositi: fructus ovoideus, 25 cm. longus, 15-18 mm. latus, glaber, ater; semen 20 mm. longum, irregulariter sulcatum, embryon laterale et supermediale, albumen durum et homogenum.

Stout erect palm of low stature as far as known (perhaps 3-5 m. tall) with thick tumid closely ringed bole that rather suddenly constricts into a short bottle-neck beneath the inflorescence: head of few stout bold leaves that may be disposed in a cruciform pattern, the stiffish pinnæ standing upright and disclosing the stout rachis or midrib underneath, crown-shaft



45. FLOWERING SPADIX OR INFLORESCENCE of *Hyophorbe indica*.
Réunion. Much reduced.