## 10. LIVISTONA, R. Br.

Flowers hermaphrodite, in a loose panicle, with sheathing bracts on the main rhachis and peduncle. Outer perianth thin, 3-lobed or 3toothed, inner longer, of 3 valvate segments. Stamens 6, distinct but contiguous; filaments broad and thick very shortly filiform at the top; anthers small, ovate. Ovary laterally 3-lobed, the carpels readily separating, with 1 erect ovule in each. Styleshortly columnar, with a3-toothed stigma. Fruit ovoid or globular, reduced by abortion to a single carpel, the pericarp not thick, hard when dry. Seed erect, the hilum somewhat lateral. Albumen with a deep broad excavation on the inner side, filled with a brown spongy tissue. Embryo dorsal.—Low or tall erect palms. Leaves fan-shaped, plicate, the lobes or segments acuminate and entire or 2-cleft, and frequently a small bristle or filament between the lobes. Panicles usually large and decompound from among the leaves. Flowers very small, solitary or clustered along the slender rhachis of the ultimate branches.

Besides the Australian species which are endemic, there are a very few from the Malayan Archipelago or South China.

Fruit obovoid-oblong. Perianth scarcely 1 line long.

Petiole more or less aculeate on the edges. Outer perianthlobes rather obtuse

Petiole entirely unarmed. Outer perianth-lobes acute

Fruit globular. Perianth 11 lines long. Outer perianth-lobes

1. L. humilis. 2. L. inermis.

Livistonia eastonii

1. Is. humilis, R. Br. Prod. 268.—Stems 4 to 6 ft. high (Martius) 10 ft. (Schultz) 15 ft. or tall (Gulliver). Leaves orbicular-cordate in circumference when fully out, with a radius of about 1½ ft., deeply divided into narrow plicate segments tapering to a fine point, the thread-like bristles between the lobes varying from nearly 1 in. to very minute or altogether wanting; petiole much flattened, the acute edges more or less bordered by small prickles in our specimens, but said to be often intermixed with larger ones even as much as ½ in. long. General panicle very large and loose, the partial ones between the sheathing bracts pyramidal and 8 in. to 1 ft. long, twice or three times branched, the ultimate branches or slender spikes ½ to 1 in. long in flower, often twice that in fruit. Flowers numerous, in little sessile clusters along the spikes. Inner perianth-segments scarcely 1 line long, the outer perianth about ½ as long with short broad rather obtuse lobes. Berry ovoid-oblong, obtuse, 7 to 8 lines long, more or less contracted at the base. Seed oblong, somewhat flattened.—Mart. Hist. Nat. Palm. iii. 239, t. 109, 110, 111; Wendl. and Drude in Linnæa, xxxix. 231; L. Leichhardtii, F. Muell. Fragm. viii. 221.

N. Australia. Arnhem's Land, R. Brown (no specimens seen); Albert River, M'Adam Range, F. Mueller; Port Darwin, Schultz, n. 372; Port Essington, Armstrong; Liverpool River, and Wood Island, Gulliver.

F. Mueller refers to this species a palm found by Giles in the so-called Glen of Palms, Macdonnel Range, in the interior, but the only leaf I have seen looks rather like that of L. australis. It cannot however be determined without flower or fruit.

- 2. L. inermis, R. Br. Prod. 268.—A moderate sized or tall palm (14 to 30 ft.), with the ovoid-oblong fruits of L. humilis, but said to differ in the petioles entirely without prickles and the lobes of the outer perianth more acute.—Mart. Hist. Nat. Palm. iii. 239, t. 145, 146.
- M. Australia. Islands of the Gulf of Carpentaria, R. Brown. I have seen no specimen of this palm and Martius appears only to have known it from Bauer's drawings which he copied, the general habit being also represented in Flinder's Voyage in the view of Sir E. Bellew's Island, vol. ii. p. 172. It may prove to be a variety only of L. humilis.

Livistona loriphyll