

Livistona concinna Dowe & Barfod

Family:

Areceaceae

Dowe, J.L. & Barfod, A.S. (2001) *Austrobaileya* 6(1): 166-169. Type: Queensland. Cook District: 16 km north of Cooktown, just north of the Cooktown Airport, Barrett Creek, 15 25S, 145 11E, 5 m alt., 17 Oct 2000, J. L. Dowe 607 (holo: BRI; iso: AAU, K, QRS).

Common name:

Kennedy River livistona; Cooktown fan palm; Cooktown livistona

Stem

Solitary trunks to 30 m tall, dbh 24-35 cm, expanded at the base to 100 cm diam., grey, nodes raised; internodes 2-12 cm wide. Plants male or female.

Leaves

Leaves 50-65 in a globose crown; petioles 120-300 cm long, glabrous, green, 5-11 cm wide at base, 2.2-3.5 cm wide in mid area, triangular in cross-section, margins with solitary symmetric black spines 3-5 mm long congested in the proximal portion with the distal margins unarmed, sharp and slightly winged; leaf-base fibres persistent; lamina costapalmate, glabrous and glossy green, 155-165 x 200 cm, folded; segments 60-78 with deeply forked apices, distal portion pendulous; segments free for ca. 60% of their length, and with an apical split. Longitudinal veins 9-10 each side of the midrib, parallel.

Flowers

Inflorescence an unbranched axis with several partial inflorescences decreasing in size toward the apex, sexually dimorphic; male inflorescences 120-180 cm long with 8-9 partial inflorescences; peduncle dorsi-ventrally compressed and 20-25 x 10 mm, glabrous; female inflorescences 160-250 cm long with the partial inflorescences 8-9; peduncle dorsi-ventrally compressed, ca. 30 x 10 mm; peduncle lacking empty bracts; prophyll 27-35 cm long, glabrous; bracts on rachis 30-50 cm long, tubular and tightly sheathing, apex acute with margins entire; rachillae 5-20 cm long. Flowers solitary/in clusters of 2-4, 1.6-2 x 2 mm; sepals basally fused, cupular, 3-lobed and triangular with acute apices; petals triangular, 2-2.2 x 1.8-2 mm; stamens ca. 1 mm long; styles fused, ca. 1 mm long, stigma 3-lobed.

Fruit

Fruit globose, 9-12 mm diam., shiny black; stigmatic remains subapical; epicarp smooth with scattered lenticular dots; mesocarp ca. 1 mm thick, moist, oily and gritty in texture; endocarp thin, crustaceous, light brown, 0.1-0.2 mm thick. Seed globose to subglobose.

Seedlings

The cataphylls or sheath that the first leaf emerges through ca. 3.5 cm long, creamy white. Lead blade pleated, ca. 14.5 cm long, petiole 4 cm long. 10th leaf petiole armed with small recurved spines, blade ca. 20 x 3 cm, petiole 16 cm long. Longitudinal veins about 8-9. Reticulate veins short and sinuous. Oil dots if present are sparsely scattered.

Distribution and Ecology

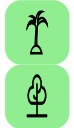
Occurs in NEQ near Cooktown and in the Lakefield National Park. Altitudinal variation from near sea level to 100 m. Grows in seasonally open riparian rainforest, vine forest and *Melaleuca* swamp, along creeks and rivers.

Synonyms

Livistona sp. **Cooktown** (A.K.Irvine 2178), *Names and Distribution of Queensland Plants, Algae and Lichens* : 22(2002). *Livistona* sp. **Cooktown**, *Palms in Australia* : 142(1984).

RFK Code

7020



Flowers [not vouchered]. © J.L.

Dowe



Mature fruit, whole and in longitudinal section [not vouchered]. © J.L. Dowe



Leaf with segments and apical clefts [not vouchered]. © J.L.

Dowe



Leaf, petiole, and fruit. Scale bar is 1 m. © CSIRO



Crown with petioles and leaf bases
[not vouchered]. © J.L. Dowe



In mangrove margin habitat [not
vouchered]. © J.L. Dowe



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