

Garcinia mestonii F.M.Bailey

Family:

Clusiaceae

Bailey, F.M. (1889) *Report on New Plants, Preliminary to General Report on Botanical Results on Mestons Expedition to the Bellenden-Ker Range* : 2. Type: Bellenden-Ker Range at an altitude of 2000 feet.

Common name:

Meston's Mangosteen

Stem

A shrub or small tree to 6 m, not exceeding 30 cm dbh. Bark exudate yellow, variable but usually quite obvious. Dioecious, rarely monoecious.

Leaves

Exudate yellow. Petioles 6-11 mm long, channelled. Leaf blades 3.5-8.0 cm x 1.2-3.4 cm; elliptic, ovate, lanceolate, obovate, oblanceolate; margin may be recurved in dry specimens. Oil dots visible with a lens. Latex canals long and sinuous (resembling lateral veins) run across the underside of the leaf blade at a lower angle to the midrib than the lateral veins. Leaf blade drawn out into a conspicuous drip tip at the apex. Midrib raised on the upper surface.

Flowers

Male inflorescence axillary, terminal or ramiflorous, 2-5-flowered umbel or fascicle. Male flowers: ca. 4 mm diam., pedicels 1.5-2 mm long; sepal 4, 2-whorled, outer pair joined, D-shaped, cupular, 4 mm long x 4.5 mm wide, green; petals 4, free, orbicular with apex recurved, 4.8 mm long x 4.8 mm wide, green or cream; androecium a fleshy receptacle free from petals, ca. 2.5 mm long x 3.2 mm wide; anthers 16, triangular. Female inflorescence axillary or terminal, solitary flowers or 2-3-flowered umbels or fascicles. Female flowers: 6-7.5 mm diam.; sepals 4, 2-whorled, outer pair joined, inner pair free, D-shaped, cupular, 3.8-4.4 mm long x 4.3-5.5 mm wide; petals 4, free, orbicular, cupular with recurved apex, ca. 5 mm long x 4 mm wide; staminodal phalanges adnate to petals, triangular, 2 or 3-branched, 2mm long; style 0.5 mm long, stigma 2.5 mm diam., 3-9-rayed.

Fruit

Fruits a fleshy berry, depressed globular, 31-50 x 40-60 mm, cream or greenish-cream. Sepals 4, persistent at base. Stigma 3-9 rayed, diam. 3.5-4 mm. Seeds about 13 x 25 mm long x 10 mm wide; aril fleshy, cream.

Seedlings

Numerous cataphylls produced before the first true leaves. At the tenth leaf stage: leaves ovate, glabrous; streaky oil dots visible with a lens. Stipules small, triangular, dark red, about 0.5 mm long. Exudate clear, meagre or not visible. Seed germination time 253 to 359 days.

Distribution and Ecology

Endemic to NEQ, known from the Cape Tribulation area and the slopes and foothills of the Bellenden Ker Range. Altitudinal range from near sea level to 1000 m. Grows along creeks in lowland areas and in well developed upland and mountain rain forest.

Natural History & Notes

'Fruit of this tree were gathered in the ripe state by Messrs. Meston and Whelan on their first ascent of Bellenden Ker in 1889, and they describe the fruit as possessing a sharp, pleasant, acid flavour and very juicy, about 3 in. in diameter.' F.M. Bailey (1899).

RFK Code

889



Female flower. © CSIRO



Flower. © G. Sankowsky



Leaves and flowers. © G. Sankowsky



Leaves and Flowers. © CSIRO



Scale bar 10mm. © CSIRO



10th leaf stage. © CSIRO



Cotyledon stage, hypogeal germination. © CSIRO

