

cells at the base of both seed-hairs, a condition so far not recorded elsewhere in the genus.

Acknowledgements

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Reference

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A new species of *Trachycarpus* (Palmae) from W Bengal, India

***Trachycarpus latisectus* Spanner, Noltie & Gibbons, sp. nov.**

T. martiano (Wall. ex Mart.) H. Wendl. forma fructus similis sed differt petiolo inermi, hastula late triangulari, minus quam 1cm longa, segmentis foliorum latioribus (usque 5cm latis), minus quam dimidio divisis, ad angulas diversiusculas dispositis ergo ambitus lateris foliorum convolutiusculus, floribus paribus vel catervulis 3–4-floribus aggregatis, eis femineis minoribus, masculorum petalis sepalis 3-plo longioribus, fructu majore, eophyllo glabro.

Solitary, unarmed, dioecious fan palm to c.12m; trunk slender, erect, bare, light grey, obscurely ringed, (10–)14–17cm diameter, clothed in persistent, fibrous leaf-sheaths for 0.6–2m below crown. *Leaves* (8–)15–25, forming an erect, open crown, some leaves reflexed, marcescent leaves numerous, forming a small skirt below the crown; leaf-sheath fibrous, 30cm long or more, coarse, abaxial surface covered in pale tomentum, broadly triangular towards apex, not breaking down into threads; petiole (50–)120–140cm, slender (c.2.5cm wide and 1.2cm high near middle), flat above, slightly keeled towards leaf-blade, broadly triangular to rounded beneath, margins smooth, sharp-edged, base very thick and robust, c.3.8cm wide, c.2cm high, covered in pale tomentum; hastula less than 1cm long, broadly triangular, slightly crested; leaf-blade palmate, $\frac{3}{4}$ to completely orbicular, 65–85cm long from hastula, 110–135cm wide, leathery, dark green above, with thin whitish tomentum along folds, slightly glaucous beneath, with clearly visible cross veinlets, nearly regularly divided for less than half its length into 65–75 stiff, linear segments with two inconspicuous longitudinal folds either side of midrib, tapering to apex from broadest point, arranged at slightly differing angles, producing a slightly convoluted leaf profile;

central segments 65–80cm long, 3.5–5cm wide at middle, with a prominent midrib beneath, lateral segments gradually more narrow and shorter, to c.21–45 × 1cm, the more lateral segments joined for nearly entire length in groups of 2–4, apex of central segments acute, notched, of lateral segments acuminate, bifid for 1–3cm. *Inflorescences* 3–6, solitary, interfoliar, branched to 3 orders. *Male inflorescence* 60–100cm, spreading; peduncle short; prophyll 2-keeled, apex acute; peduncular bract single, keeled, base tubular, inflated distally, c.7cm wide in distal portion, apex acuminate; rachis bracts 3, similar to peduncular bracts; rachillae short, c.2mm diameter, yellowish; flowers globose, 2.5–3mm diameter, yellowish, arranged in groups of 2–4 on short pedicels; sepals ovate-triangular, joined into a fleshy base for lower ¼; petals nearly orbicular, minutely triangular-tipped, 3 × as long as sepals; stamens 6, slightly exceeding petals; filaments ventricose; anthers broadly ovate-sagittate, blunt; pistillodes less than half length of stamens. *Female inflorescence* 100–150cm, stiff, spreading; peduncle c.50cm, oval in cross-section, 4.2 × 1.8cm; prophyll 2-keeled, c.30cm, apex acute; peduncular bracts 2, keeled, long, tubular, c.4.5cm wide, apex acuminate; rachis bracts 3, similar to peduncular bracts; rachillae 5–18cm long, 1–2mm diameter, yellowish green (in fruit); flowers globose, c.1.5mm diameter, yellowish, usually in pairs, subsessile; sepals briefly connate into a distinctly swollen base; petals oblong-orbicular, 2 × as long as sepals; staminodes 6, slightly exceeding petals; carpels with a very short, conical style, stigma punctiform. *Fruit* shortly stalked, oblong-ellipsoid, flattened on one side, 16–18 × 11–13mm; epicarp thin, yellowish brown when ripe, turning bluish black; mesocarp thin, fibrous; seed oval-oblong, flattened or shallowly depressed and grooved on one side, 13–16 × 8.5–11mm; endocarp very thin, with a crustaceous sand-like layer of light brown, small, irregular scales; endosperm homogeneous with a deep, lateral intrusion. *Germination* remote-tubular, eophyll simple, plicate, to 2cm wide, glabrous.

Type: Garden of Windamere Hotel, Darjeeling, 27°02'45"N, 88°16'13"E, 2150m, 7 viii 1992, *ESIK* 1282 (holo. E). Cultivated female specimen. The trees apparently came from a nursery in Siliguri and had been planted about 25 years ago.

Additional specimen seen. Rissoom (summit), Darjeeling, 6500ft, xii 1879, *Gamble* 7544 (K). Nepali name *kasru*. The label is annotated 'Flora of Bhutan', indicating that it was collected in the Kalimpong district, then known as 'British Bhutan'.

Two planted *Trachycarpus* trees in the Windamere Hotel were noticed during the Edinburgh Sikkim Expedition (*ESIK* 1992) to be very different from the numerous specimens of *T. fortunei* planted in gardens in Darjeeling. They were most distinctive in their extremely wide leaflets and in having oblong fruits only previously reported for *T. martianus*. For this latter reason it was postulated by Noltie (1994), after seeing photographs of *T. martianus* taken in Khasia by Gibbons and Spanner, that these two trees might be 'true' *T. martianus* (described from Nepal) and the Khasia plant distinct as originally thought by Griffith.

Subsequent fieldwork by Gibbons and Spanner in Nepal and around Darjeeling showed this hypothesis to be incorrect and that the trees represented an undescribed

species of *Trachycarpus*. This fieldwork resulted in the discovery of the plant in the wild and allowed the amplification of the above description to include flowering material. This story will be the subject of a subsequent paper, in which the species will be illustrated (Gibbons & Spanner, in prep.).

History

There are various old records of *T. martianus* from the Kalimpong/Darjeeling area. Gamble (1881) had 'once found small plants of what is probably this palm on Rissoom, near Dumsong, beyond Darjeeling, at 6,500feet'. Vouchers of these seedlings collected in December 1879 are in the Kew herbarium, and annotated by Beccari as *T. khasyana*. Beccari (1931), who treated *T. khasyana* as a synonym of *T. martianus*, included this record and also cited a specimen of another 'young plant' in his own herbarium collected by C.B. Clarke at Rungbong at about 1200m elevation. It is almost certain that these immature specimens belong to the new species, and that these early and assiduous collectors had not seen mature plants, which is why the plant was not recognized earlier. These old records also suggest where to look in the wild for a species allied to *T. martianus*. The only other early record is in Cowan & Cowan (1929) who recorded *T. martianus* as occurring rarely in the 'Upper Hill Forest' [of North Bengal] at 6–8,000ft. However, there are no Cowan specimens and their records may have been based on hearsay.

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