

## ***Terminalia myriocarpa* var. *hirsuta* Craib (Combretaceae) – a new record for India**

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### **Abstract**

*Terminalia myriocarpa* Van Heurck & Müll. Arg. var. *hirsuta* Craib (Combretaceae) is reported for the first time from Gangtok, Sikkim, India. The variety *hirsuta* is a hairy variant and also with conspicuously toothed lamina margin. It is reported herewith a brief description, illustration and photograph to facilitate its easy identification.

**Key words:** Combretaceae, *Terminalia myriocarpa* var. *hirsuta*, new record, India

### **INTRODUCTION**

*Terminalia* Linnaeus is one of the larger and important genera of Combretaceae. It comprises about 150 species worldwide (Mabberley 2008). In India, the genus is represented by 13 species (Gangopadhyay & Chakrabarty 1997), out of which *T. myriocarpa* is reported from sub-tropical forests of Eastern Himalaya, extending up to 1500 m elevation and also in the evergreen forests of North East India up to 700 m altitude. It is also reported from Indonesia, up to 800 m (Steenis 1948), Nepal (Elbert 1989), Bhutan, Myanmar, Thailand, Indo-China, West China, Sumatra and Hawaii Islands (Wagner & al. 1999).

During floristic explorations in Gangtok, Sikkim few specimens of *Terminalia myriocarpa* were collected from natural population at Lower Sinche, Indira Bypass. Herbarium specimens of *Terminalia myriocarpa* were also studied at CAL. On critical examination and perusal of relevant literature, collected specimens and some other specimens at CAL were identified as *Terminalia myriocarpa* Heurck & Muell.-Arg. var. *hirsuta* Craib. This variety is so far known to occur only in China (Chen & Turland 2007), where as some herbarium specimens were reported from Myanmar. The voucher specimens were deposited in BAMU [Herbarium of the Department of Botany, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad]. The present collection, therefore, forms a new distributional record for India. Detail description, photograph and illustration are provided to facilitate its easy identification.

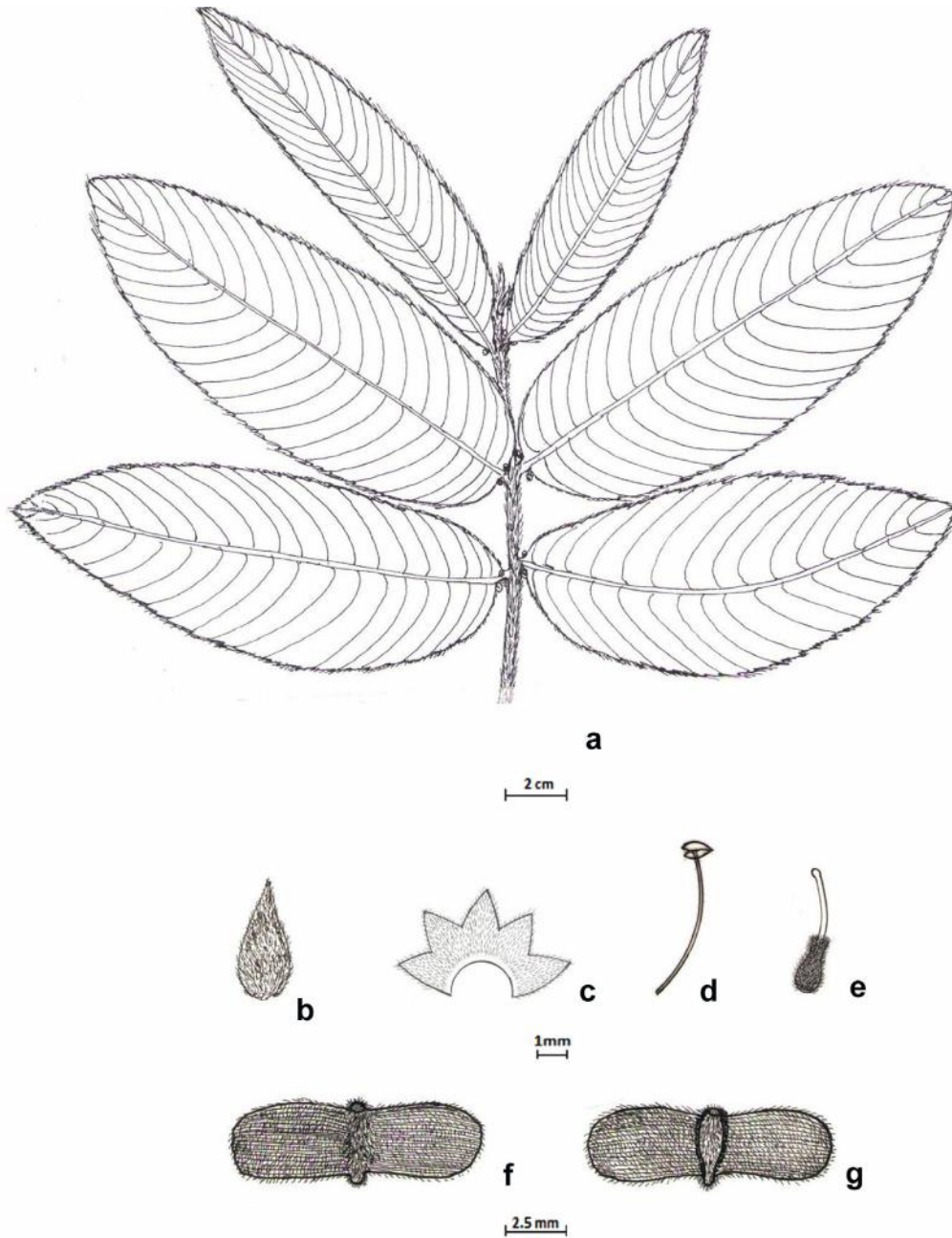
***Terminalia myriocarpa*** Van Heurck & Müll. Arg. var. ***hirsuta*** Craib, Fl. Siam. 1: 606. 1931; Chen, J. & Turland, N.J., Fl. China 13: 312. 2007. [Figures 1 & 2]

Trees, 20–30 m tall, bark greyish-brown, longitudinally fissured; branchlets black to brownish, terete, 2–7 mm thick, minutely brownish hirsute when young or rarely densely brownish long stiff hirsute, glabrescent at maturity. Leaves sub-opposite; lamina oblong, elliptic-oblong, elliptic lanceolate, oblong-lanceolate, 10–45 × 3–15 cm, entire or slightly undulate rarely



**Figure 1.** A leafy twig of *Terminalia myriocarpa* var. *hirsuta* Craib

conspicuously toothed, acuminate or acute, base rounded to obtuse to acute, thinly coriaceous to chartaceous, glabrous or puberulous on midrib and lateral nerves beneath, green or brown when dry; lateral nerves 16 – 35 pairs, close, prominent, more or less arcuate, disappear near margins; tertiary nerves obscure above, faint beneath, scalariform; petioles 3 – 15 mm long, 1.5 – 3.5 mm thick, minutely brownish hirsute when young or rarely densely brownish long stiff hirsute, glabrescent at maturity; 1 – 2 stalked glands at or near the junction of petiole and lamina, clavate, 3 – 5 mm long. *Inflorescence*: terminal and axillary panicle, 10 – 45 cm long, puberulous; bracts linear-lanceolate, 2 – 4 mm long, yellow brown, puberulous. *Flowers*: fragrant, sessile; calyx tube 1.5 – 2 × 1 – 1.5 mm, densely pubescent; expanded portion cupular, 1.5 – 2.2 × 2.5 – 3.5 mm; calyx teeth whitish-pink, triangular, ca 1 × 1 mm, acute; disk puberulous; stamens 2 – 4 mm long; anthers ellipsoid to oblong, 0.5 – 1 mm long; ovary ovoid, 2 – 3 mm long, yellowish brown – brown, style 2 – 3 mm long; stigma capitate. *Fruits*: samara, 3 – winged, third or central wing rudimentary, main body narrowly ellipsoid or trigonal, 3 – 5 × 1 – 1.5 mm; wings lateral, 2 – 4 × 5 – 6 mm, thin, yellow – yellow-brown, initially puberulous, finally glabrous.



**Figure 2.** *Terminalia myriocarpa* var. *hirsuta* Craib: **a.** Twig; **b.** Bract; **c.** Calyx; **d.** Stamen; **e.** Pistil; **f & g.** Fruit

*Flowering:* August - January; *Fruiting:* November - February.

*Vernacular names:* Assamese: *Halok*; Bengali: *Panisaj*; Garo: *Raksang*; Khasi: *Diengmarao-ditar*; Manipuri: *Tolhao, Mezok, Jhalna*; Naga: *Nagazokpa*; Nepali: *Panisaj*; Commercial name: *Hollock*.

*Distribution:* World: China, India and Myanmar. India: Assam, Arunachal Pradesh, Sikkim and West Bengal.

*Specimens examined*: India, Arunachal Pradesh, Lohit F.D., 17.11.1957, R.S. Rao 10693 (CAL); Subansiri F.D., 26.09.1959, G. Panigrahi 19520 (CAL); Assam, Phulbari Tura, 11.12.1960, G. Panigrahi 22353 (CAL); Sikkim, Gangtok, 15.10.2008, P. Ingle 7076 (BAMU); Rishi, 10.12.1980, P. Chakraborty 1109 (CAL); West Bengal, Darjeeling, 1902, B.B. Hmrston 163901 (CAL); Myanmar, Eachin Hills, 1898, M. Shaikh 163916, 163917 (CAL).

The two varieties of *Terminalia myriocarpa*, occur in India, can be recognized using the following key.

- 1a. Lamina margin slightly undulate; branchlets and petioles glabrous or minutely hirsute when young ..... var. *myriocarpa*
- 1b. Lamina margin conspicuously toothed; branchlets and petioles densely hirsute with brownish, long and stiff hairs ..... var. *hirsuta*

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