

Recollection of *Syzygium diospyrifolium* from Assam after 109 years

Assam is often considered as the platform that comprises of both Himalayan and Indo Burmese biodiversity components. In regard to this, several interesting plants of southeastern Asian origin have been recorded from this region due to similar habitat and physical structures.

The genus *Syzygium* Gaertn. (Myrtaceae) is represented by ca. 84 species from India while ca. 34 species are recorded from northeastern India (Shareef & Kumar 2020; Dey et al. 2022; POWO 2023).

Syzygium diospyrifolium (Wall. ex Duthie)
S.N. Mitra was first described by J.F. Duthie as Eugenia diospyrifolia based on the specimens collected by N. Wallich's collector F. De Silva from "Montes Sillet" (present day Sylhet region of Bangladesh) and Griffith from Khasia mountains (Duthie 1878). The latter collection has not been located in any herbaria so far (Byng et al. 2015).

Upon consultation at CAL and ASSAM herbaria, the authors observed that the species has been collected from Sylhet District, Bangladesh and Khasi-Jaintia Hills, Meghalaya by several subsequent workers inferring that the species is quite common in the respective areas. However, considering the geographical boundaries of the present-day Assam, the species has only been collected once by U.N. Kanjilal (Coll. No. 1729) in 1912 from Rengma Reserve of greater Sibsagar District, Assam.

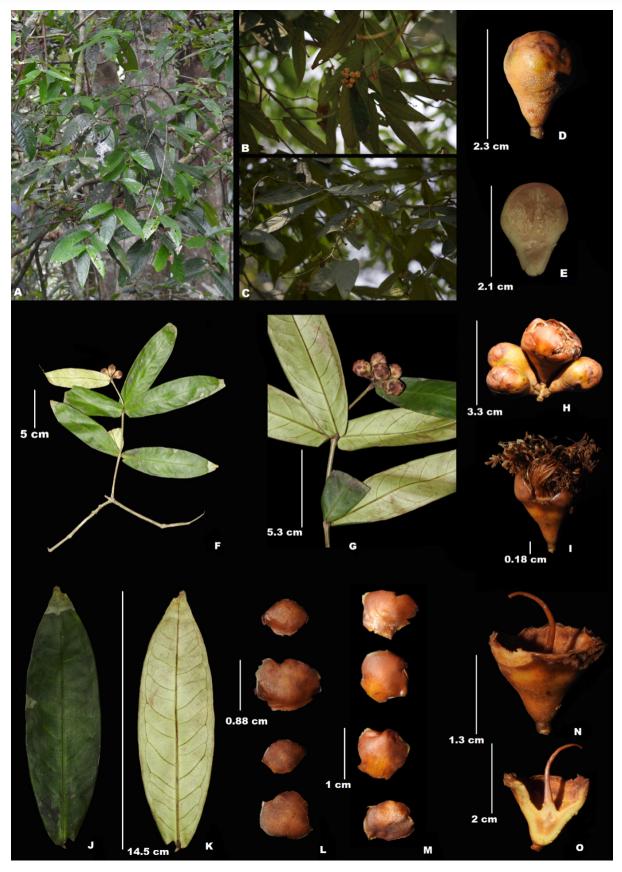
During a revisionary work of the genus *Syzygium* in Assam, the authors came across an interesting jambolan species growing near the Borajan forest of Tinsukia District. After thorough consultation with the original protologue, type specimens and additional literature like Kanjilal et al. (1938), Balakrishnan (1981), Haridasan & Rao (1985), Singh (2002), and Soh & Parnell (2015), the species was identified as *S. diospyrifolium* (Wall. ex Duthie) S.N. Mitra. It is a recollection of the species from Assam after a gap of 109 years.

The present article provides a detailed morphology of the species with field photographs and illustrations for better identification. The voucher specimens are deposited at the ASSAM herbarium, Shillong and Gauhati University Botanical Herbarium (GUBH) for future references.

Syzygium diospyrifolium (Wall. ex Duthie)
S.N.Mitra, Indian Forester 99: 100 (1973)
Eugenia diospyrifolia Wall. ex Duthie in Hook.f.,
Fl. Brit. Ind. 3: 472 (1878)
Jambosa diospyrifolia (Wall. ex Duthie)
C.E.C.Fischer, Rec. Bot. Surv. India 12: 95 (1938)

Type: Bangladesh. Silhet, *Wallich* Cat. No. 3617 K [barcode K000793889 (digital image!)]; isolectotype K [barcode K000793888 (digital image!)], BM [barcode BM001122720 (n.v)]. Lectotype designated by Byng et al. (2015).





Syzygium diospyrifolium A-C—Habit | D-E—A bud | F-G—Flowering twigs with ternate leaves | H—Inflorescence | I—Complete flower | J-K—Leaves | L—Sepals | M—Petals | N—Hypanthium | O—L.S. of hypanthium.
© Debolina Dey.



Description: Arborescent to tree; stem brachiate at the crown, bark whitish grey, smooth; branchlets slender, light brown, 0.2-0.3 cm diameter, internodes terete-angled, nodes triangular to opposite; leaves usually ternate in young leafy branchlets at tip, opposite in old flowering branchlets, sub-sessile, subcoriaceous, glabrous, oblanceolate to oblongelliptic, acuminate tip, often caducous, 12-28 x 4-10 cm, sub-cordate base, midrib with lateral nerves distinct on ventral surface, 14-18 pairs, intramarginal vein lopped, 0.3–0.5 cm from the margin, outer intramarginal vein present, faint, petiole 0.3-0.4 cm long; inflorescence 3–5 flowered, rarely more, strictly terminal, compactly fascicled at the apex of branchlets, 3–3.5 cm long, peduncle short, buds globular, 2.1–2.3 cm; flowers 2.8–3.5 x 1.7–2 cm, whitish-pink, pedicel short, pedicel 0.1–0.2 cm; hypanthium pyriform, depressed, mouth wider, base narrowed, pinkish-green, intrastaminal disc slightly corky, 1.3–1.5 x 1.5–1.7 cm; calyx lobes 4, free, unequal, 0.6–0.88 x 0.8–1.15 cm, greenish-white, thick, prolate to oblate, persistent; petals 4, free, equal, 0.7–0.9 x 0.9-1.1 cm, pinkish-white, semi-coriaceous, semi-orbicular, caducous; stamens numerous, brownish-white, anther ca. 0.25 cm long, dorsifixed; style white, persistent, arcuate, 2–5 cm long, tip often caducous, base broad; fruits not seen.

Phenology: Flowering April to May. Fruiting not seen.

Distribution: India (Assam, Meghalaya, and Mizoram), Bangladesh, Cambodia, Malaysia, Myanmar, Thailand, Vietnam.

Habitat: Terrestrial, mainly found along

tropical wet evergreen forest growing in close association with other forest flora.

Specimens examined: Bangladesh, Mt. Sylhet, s.d., N. Wallich 3617 A (barcodes HUH01143301, HUH01143302, HUH01143303 digital images!); Mont. Sillet, s.d., N. Wallich 3617 K (barcode K001119836 digital image!); India, Assam: Sibsagar, Rengma Reserve Forest, 16.04.1912, U.N. Kanjilal 1729 (CAL 167875!, ASSAM 10807!); Tinsukia, Borajan Village, 27.04.2021, D. Dey DDS02 (GUBH!); Tinsukia, Borajan Village, 21.05.2021, D. Dey DDS36 (ASSAM!).

References

Balakrishnan, N.P. (1981). Myrtaceae, pp. 198–201. In: Balakrishnan, N.P. (ed.). *Flora of Jowai and vicinity, Meghalaya. Volume 1*. Botanical Survey of India, Kolkata.

Byng, J.W., P.G. Wilson & N. Snow (2015). Typifications and nomenclatural notes on Indian Myrtaceae. *Phytotaxa* 217(2): 101–116.

Dey, D., J. Sarma & N. Devi (2022). Syzygium namborense (Myrtaceae), a new species from Assam, India. *Phytotaxa* 538(2): 133–140.

Duthie, J.F. (1878–1879). Myrtaceae, pp. 462–506. In: Hooker, J.D. (ed.). *Flora of British India. Volume 2*. L. Reeve & Co., London, 792 pp.

Haridasan, K. & R.R. Rao (1985). Myrtaceae, pp.386–403. In: Haridasan, K. & R.R. Rao (Eds.). *Forest flora of Meghalaya. Volume.* 1. Scientific Publishers, 451 pp.

Kanjilal, U.N., P.C. Kanjilal & A. Das (1938). Myrtaceae, pp. 257–287. In: Kanjilal, U.N., P.C. Kanjilal & A. Das (Eds.). *Flora of Assam. Volume 2*. Government of Assam, India, 415 pp.

POWO (2023). Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. http://www.plantsoftheworldonline.org/. Retrieved 25 August 2023."

Shareef, S.M. & E.S.S. Kumar (2020). Census of *Syzygium* Gaertn. (Myrtaceae) in India. *Abrahamia* 6(2): 90–107.



Singh, K.P. (2002). Myrtaceae, pp. 585–594. In: Singh, N.P., K.P. Singh & D.K. Singh (Eds.). *Flora of Mizoram. Volume 1*. Botanical Survey of India, Kolkata, 845 pp.

Soh, W.K. & J. Parnell (2015). A revision of *Syzygium* Gaertn. (Myrtaceae) in Indochina (Cambodia, Laos and Vietnam). *Adansonia* 37(2): 179–275. https://doi.org/10.5252/a2015n2a1

Acknowledgements

The authors extend their sincere thanks and gratitude to the PCCF (Wildlife)-cum-chief wildlife warden, Forest & Environment Department, Assam and Member Secretary, Assam State Biodiversity Board for facilitating the research permissions and rendering necessary help during filed surveys. The authors are also grateful to

the head, Department of Botany, Gauhati University for offering the support and encouragement.

Debolina Dey¹, Saurav Kumar Boruah² & Nilakshee Devi³

¹⁻³ Department of Botany, Gauhati University, Gopinath Bordoloi Nagar, Jalukbari, Guwahati, Assam 781014, India.

Email: 3devinilakshee@gmail.com (corresponding author)

Citation: Dey, D., S.K. Boruah & N. Devi (2023). Recollection of *Syzygium diospyrifolium* from Assam after 109 years. Plantasia #35, In: *Zoo's Print* 38(10): 22–25.