

REDISCOVERY OF *SYZYGIUM KANARENSE* (TALBOT) RAIZADA (MYRTACEAE) - AN ENDEMIC SPECIES OF THE WESTERN GHATS, INDIA

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Syzygium kanarense (Talbot) Raizada was described by Talbot in 1897 from the evergreen forests of the Gerusoppa Ghat in the North Kanara District of Karnataka. The species was collected again in 1964 after a gap of 67 years, by R. Sundararaghavan from the Hulical Ghat forests of the adjoining Shimoga District in Karnataka and deposited in BSI Western Circle, Poona. This collection has not been reported. Ahmedullah & Nayar (1986) report this species to be endemic to Shimoga and North Kanara districts of Karnataka. Nayar (1996) considers this as a Critically Endangered species and to have last been seen by Talbot discounting the collection of R. Sundararaghavan. During our floristic explorations, we have collected this species from the evergreen forests in the Gerusoppa region of Uttara

Kannada District, Karnataka. This collection is after a gap of 47 years.

A detailed description with additional characters, diagrams and photographs (Fig. 1 and Images 1,2) is given here to enable identification and further collection of the species.

Syzygium kanarense (Talbot) Raizada. Indian Forester 74: 336.1948

Eugenia kanarensis Talbot, Journal of Bombay Natural History Society 11:236.1897. Saldanha. Flora Karnataka 2: 28.1996.

Specimens examined: Holotype of the species (No. 1896) by W.A. Talbot is available in BSI - Western Circle Poona (Accession No. 4629). Another collection by R. Sundararaghavan represented by only two sheets numbered 87607 and 87609 dated 23.iii.1964 and 27.iii.1964 are also available in BSI Poona. The present collection is HSS-5332, 5333 (dated 16.i.2012) and 5450, 5451 (dated 20.v.2012). These specimens are deposited at the herbarium of the Department of Applied Botany, Mangalore University, Karnataka. The geographical coordinates of the location is 14°16'642"N & 74°44'019"E (Image 3).

Large trees, bark smooth and white, branchlets terete. Leaves up to 4.5×9 cm, elliptic, acute at the base, acuminate at apex, acumen up to 1.3cm; petiole 1.3cm,



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DATA DEFICIENT	LEAST CONCERN	NEAR THREATENED	VULNERABLE	ENDANGERED	CRITICALLY ENDANGERED	EXTINCT IN THE WILD	EXTINCT
DD	LC	NT	VU	EN	CR	EW	EX

Syzygium kanarense



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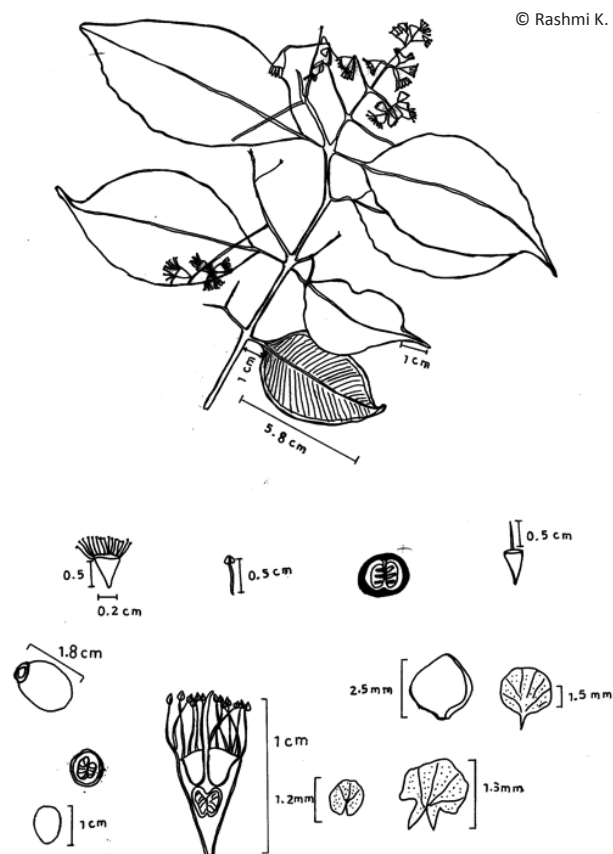


Figure 1. *Syzygium kanarese* (Talbot) Raizada.
A - Habit; B - Flower; C - L.S of Flower; D - Sepal; E-G - Petals;
H - Androecium; I - Gynoecium; J - T.S of Ovary; K - Fruit; L - Seed.

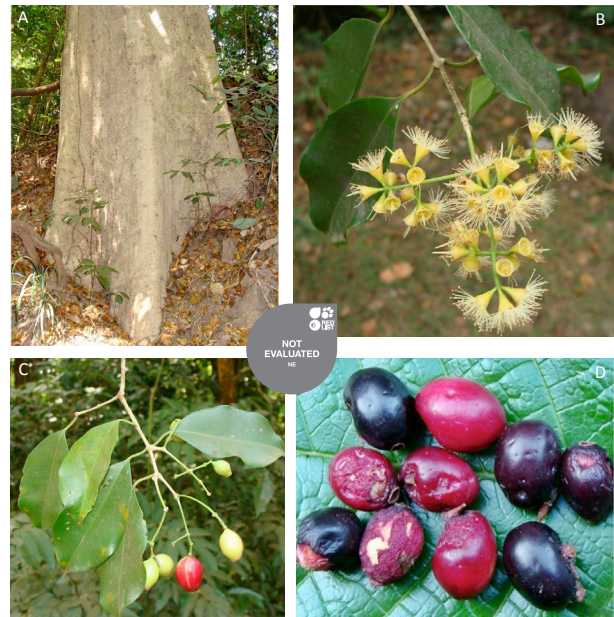


Image 1. *Syzygium kanarese* (Talbot) Raizada.
A - Tree with buttress; B - Flowering branch; C - Twig with fruits;
D - Mature fruits. © Ramakrishna Marati

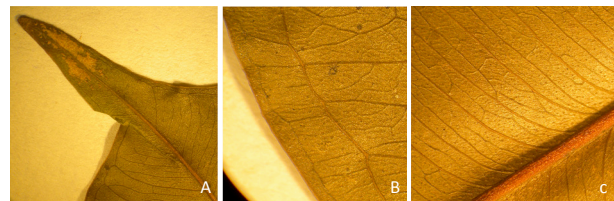


Image 2. *Syzygium kanarese* (Talbot) Raizada.
A - Leaf tip; B - Leaf showing intramarginal veins; C - Leaf showing glands. © Rashmi K.

drying black; midrib reddish-brown, channeled above, secondary nerves ca. 1.5--2 mm apart, conspicuous, numerous and parallel, penni-nerved in two tiers; margin wavy and slightly revolute, densely gland-dotted. Cymes axillary and terminal, shorter than the leaves. Flowers white, 0.6--0.8 cm across, nearly sessile, buds globose, creamish white. Calyx 0.4×0.4 cm, almost truncate, turbinate. Calyptra 2.5×1.8 mm, thick; corolla lobes 3, very thin, gland dotted, varying in size, largest 1.5×1.6 mm, shortly clawed, another 1.3×1.5 mm, hastate with two claws, smallest 1.2×1.2 mm with a single claw. Stamens ca 0.5cm long, Ovary bilocular, style simple, ovules in axile placentation. Fruit up to 2×1.2 cm, purple when mature, pulpy, crowned with the persistent calyx, 1-seeded.

Notes: The species has been sometimes treated under *Syzygium gardneri* Thwaites (Cook 1903; Saldana 1996). IPNI (www.ipni.org 2011) recognizes *Syzygium kanarese* as a distinct species. *Syzygium kanarese* (Talbot) Raizada differs from *Syzygium gardneri* Thw. in the leaf being semi-chartaceous, mid-rib distinctly

channeled above and with intramarginal nerves in two tiers (Image 2B). Fruit has a distinct terminal ring of persistent calyx, ca. 4mm diameter at maturity. Talbot (1902) in his notes for the species indicates that the fruit of this species is distinct from that of *Syzygium gardneri*.

Ecology: Tall trees up to 30m, reaching the top canopy of the evergreen forest. It is generally associated with *Calophyllum polyanthum* Wall ex Planch. & Triana, *Garcinia gummi-gutta* (L.) Roxb., *Garcinia morella* (Gaertn.) Desr., *Arenga wightii* Griff., and *Psychotria dalzellii* Hook. f. Largest tree measured a GBH (girth at breast height) of 3.4m.

Phenology: Flowering: End of December. Fruiting: February–March.

Conservation status: Field observation indicates the species to be very rare. So far it is collected from only two locations Gerusoppa and Hulical Ghat. We could not locate any individuals in the Hulical Ghat region despite intensive searches. Mature individuals do not exceed

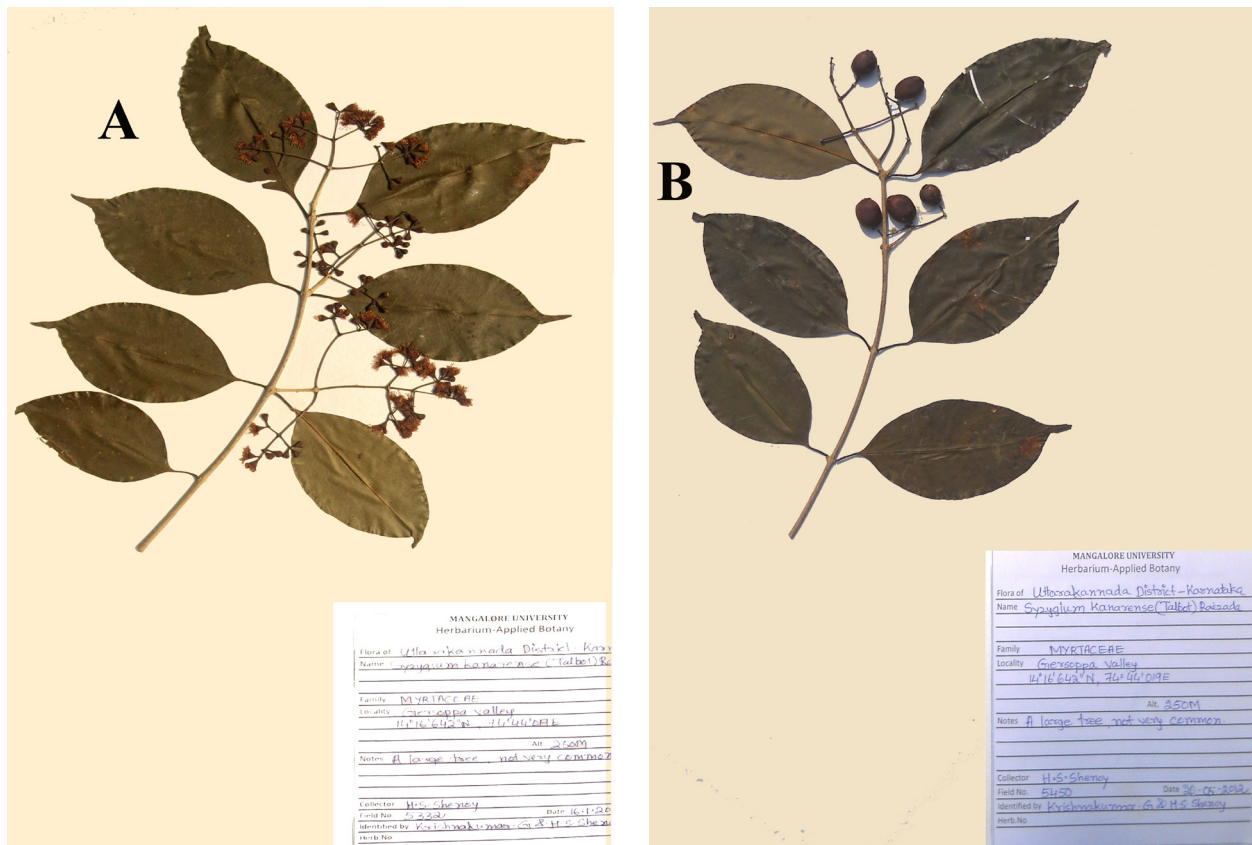


Image 3. Herbarium of *Syzygium kanarensis*. A - Flower; B - Fruit

50. Therefore, following IUCN Red List criteria (IUCN 2012), it can be categorized as Critically Endangered.

Conservation measures: The Gerusoppa region is a reserve forest and there is no immediate threat to the species. Moreover, seedlings have been raised and will be introduced into various botanical gardens.

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