



Revisiting the taxonomy of *Eugenia codyensis* var. *obovata* (Myrtaceae)

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Abstract

Eugenia codyensis var. *obovata* is herein elevated to species rank and assigned the new name *Eugenia lateritica*. A detailed morphological comparison among *Eugenia codyensis*, *E. lateritica*, and *E. sphaerocarpa* is provided to facilitate the identification and delimitation of these closely related taxa.

Keywords: SW India, endemic, Eugenia, new name

Introduction

Eugenia P. Micheli ex Linnaeus is one of the largest genera in the family *Myrtaceae* Juss., comprising about 1,246 accepted species distributed mainly across the tropical and subtropical regions of the world (POWO, 2026) [1]. The genus is closely related to *Syzygium* Gaertner, but can readily be distinguished by its often-pubescent young shoots and flowers, solitary or many-flowered axillary dichasial or raceme-like inflorescences, free calyx lobes, a hypanthium usually not prolonged or tubular beyond the summit of a bilocular, multi-ovulate ovary and an embryo with cotyledons fused into a solid, homogeneous mass (Mazine *et al.*, 2016) [2]. In India, *Eugenia* is represented by 31 species and one variety, of which 28 are endemic (Shareef & Kumar 2020 [3], Ravichandran *et al.*, 2020 [4], Vaidhyar *et al.*, 2020 [5], Manoharan *et al.*, 2021 [6], Arumugam & Murugan 2022 [7], Robi *et al.*, 2024 [8], Mani & Thomas 2025) [9]. These taxa are distributed mainly in the evergreen forests of the high ranges of the Western Ghats. Among them, *Eugenia anamalaiensis* E.S.S. Kumar *et al.*, *E. cruciformis* Mani & Thomas, *E. elapparensis* Robi *et al.*, *E. kalamii* Shareef *et al.*, *E. sphaerocarpa* Vadhyar *et al.* and *E. terpnophylla* var. *keralensis* Shareef *et al.* are strictly endemic to the state of Kerala, southwestern India.

Rijuraj *et al.* (2020) [10] described a new variety, *Eugenia codyensis* var. *obovata*, from the lateritic plateaus of Kasaragod district in northern Kerala, southwestern India. It differs from the typical variety in having thinly coriaceous, narrowly elliptic to elliptic-oblong leaves with attenuate bases, narrowly acuminate apices, and slightly revolute margins; small oblong bracts and ovate-deltoid bracteoles; sessile to subsessile, small flowers with orbicular sepals, obovate petals, rounded disc, and a shallowly cup-shaped hypanthium with three ovules per locule; and small depressed-globose fruits. However, World Flora Online (WFO 2026) [11] recently treated this taxon as a synonym of the typical variety without providing any taxonomic justification, necessitating reinvestigation based on the recent collections. A study of type materials and additional specimens collected from the type locality suggest that *E. codyensis* var. *obovata* is better treated as a distinct species

rather than as a variety of *E. codyensis* Munro ex Wight, owing to its consistent and distinctive morphological characters.

The varietal epithet *obovata* cannot be adopted at the species rank because it is already preoccupied in the genus *Eugenia*. Jean Louis Marie Poiret (1813) [12] validly published *Eugenia obovata* based on material collected by Philibert Commerson from Île-de-France (Mauritius); this name has since been placed in synonymy with *Syzygium cumini* (L.) Skeels. Subsequently, Otto Karl Berg (1857) [13] described another species under the same name, *Eugenia obovata* O. Berg from Brazil, which is an illegitimate later homonym of *E. obovata* Poir., and is now treated as a synonym of *E. excelsa* O. Berg. Since the epithet *obovata* has already been used twice within *Eugenia* and is therefore unavailable under the rules of botanical nomenclature, it cannot be reused at species level. Accordingly, a replacement name (*nomen novum*), *Eugenia lateritica*, is here proposed for *E. codyensis* var. *obovata*, the epithet referring to its occurrence on lateritic plateaus.

Taxonomic treatment

Eugenia lateritica Shareef & E.S.S. Kumar, *stat. & nom.nov.* (FIGURE 1)

E. codyensis var. *obovata* Rijuraj, Rajendrapr., Shareef & Shaju, Ann. Pl. Sci. 9: 3750. 2020 [3].

Type: INDIA. Kerala State: Kasaragod district, Ananthapura, ± 103 m, January 2019. Shaju & Rijuraj 93849 (holotype TBGT! isotype TBGT!)

Eugenia lateritica is morphologically similar to *E. sphaerocarpa* Vadhyar *et al.*, but differs in its shrub or small tree habit; sparsely pubescent young shoots, narrowly elliptic to elliptic-oblong leaves with attenuate bases and narrowly acuminate apices, fewer and obscure secondary veins, oblong bracts; smaller flowers with equally lobed orbicular sepals and obovate petals; a smaller, shallowly cup-shaped hypanthium; fewer ovules per locule; and smaller, depressed-globose hairy fruits containing one or two seeds. Furthermore, *E. lateritica* can be distinguished from its allied species by the characters presented in the Table 1.

Table 1: Morphological comparison of *Eugenia codyensis*, *E. lateritica* and *E. sphaerocarpa*

Characters	<i>Eugenia codyensis</i>	<i>E. lateritica</i>	<i>E. sphaerocarpa</i>
Habit	Shrub to small tree, 3–4 m tall	Shrub to small tree, to 3 m tall	Tree, 6–12 m tall
Young shoots	Clothed with white pubescent hairs	Sparse and pubescent hairs towards the tip	Sericeous or ferruginous pubescent hairs
Leaves	Thickly coriaceous; ovate-oblong to obovate, 3–6 × 2–5 cm, broadly cuneate at base, bluntly acuminate at apex, prominently revolute at margin	Thinly coriaceous; narrowly elliptic to elliptic-oblong, 7–9 × 2.5–3.5 cm, attenuate at base, narrowly acuminate at apex, slightly revolute at margin	Subcoriaceous, elliptic-ovate, 7.5–11.5 × 5.3–7.2 cm, cuneate at base, abruptly acuminate at apex, slightly revolute margin
Secondary veins	8–10 pairs, obscure	10–14 pairs, obscure	18–24 pairs, prominent
Inflorescence	Mostly in terminal capitula on the points of short abortive branches, axillary or rarely solitary	Axillary and terminal fascicles of 3–5 flowers; rarely solitary	Lateral or rarely terminal, in fascicles of 1 or 2 pairs of flowers on tubercles of old stem
Pedicel	Subsessile to pedicellate, to 3.5 cm long	Sessile or subsessile, pedicel to 0.5 cm long	Sessile
Bract	Broadly deltoid, 3 × 3 mm, acute at apex	Oblong, 1.5 × 0.5 mm, obtuse at apex	Ovate, ca. 1.8 × 1.2 mm, acute at apex
Bracteole	Oblong, ca. 6 × 3 mm, rounded at apex	Ovate-deltoid, ca. 1.5 × 2 mm	ovate-deltoid, ca. 9 mm long
Flower at anthesis	2–2.5 cm across	1.2 cm across	2–2.3 cm across
Sepals	Lobes unequal, broadly ovate, ca. 4 × 2.5 mm, obtuse at apex, ciliate at the margin	Lobes equal, orbicular, ca. 1.5 × 2.25 mm, rounded at apex, sparsely ciliate at the margin	Lobes unequal, broadly ovate, ca. 4 × 6 mm, rounded at apex, pilose along margin
Petals	Elliptic-spathulate, ca. 8 × 5 mm, twice the length of calyx lobes	Obovate, ca. 5 × 3 mm, rounded at apex, sparsely ciliate; petals thrice the length of calyx lobes	Ovate-elliptic, ca. 12 × 9 mm, thrice the length of calyx lobes
Hypanthium	Globose, ca. 8 × 7 mm, fulvous pubescent	Shallowly cup-shaped, ca. 1–2 × 2–2.5 mm, silvery or tawny tomentose	Broadly obconic, ca. 8 × 7 mm, greenish white, pilose
Disc	Quadrangular	Rounded	Rounded
Ovules per locule	Many	3	6–10
Fruit	Globose, to 2.5 cm in diam., fulvous pubescent ca. 1.2 cm in diam., tomentose, white on ripening	Depressed-globose, 0.8–0.9 × 0.9–1.2 cm, pubescent at base and apex, sparsely ciliate at centre; greenish-yellow on ripening	Globose, 2.4–3 cm in diam., glabrous, lemon yellow on ripening
Seed	Mostly 1–2, planoconvex	Mostly 2, rarely 1, planoconvex	3–6, 3–4 angled

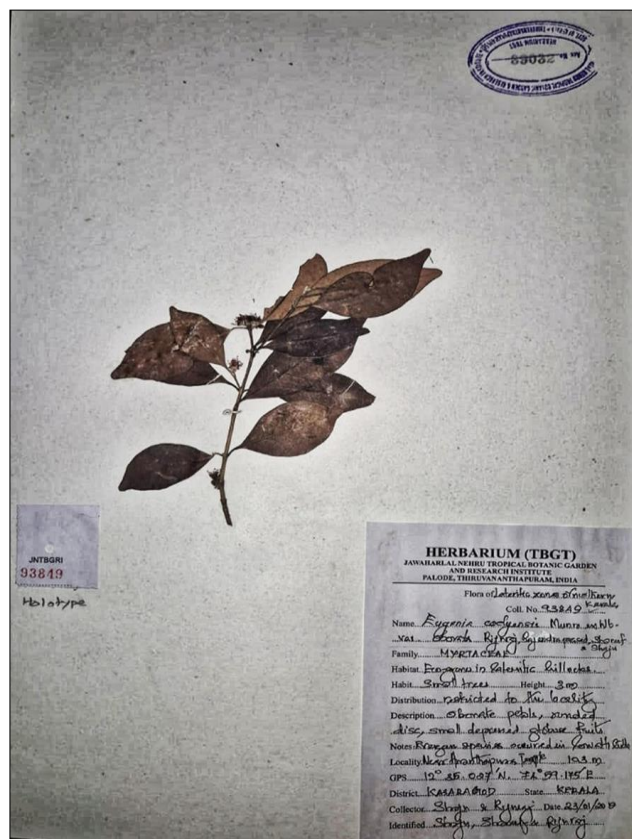


Fig 1: Holotype of *Eugenia lateritica* Shareef et E.S.S. Kumar
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