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THE GENUS *LOROPETALUM* R.BR. EX RCHB. (HAMAMELIDACEAE) IN JAVA, INDONESIA

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ABSTRACT

Arifin Surya Dwipa Irsyam 2025. Marga *Loropetalum* R.Br. ex Rchb. (Hamamelidaceae) di Jawa, Indonesia. Floribunda 8(2): 39 – 43 — *Loropetalum* merupakan marga tambahan dari suku Hamamelidaceae yang baru-baru ini diperkenalkan di Pulau Jawa. Saat ini, genus ini hanya diwakili oleh satu jenis dan varietas, yaitu *L. chinense* var. *rubrum* Yieh. Takson ini telah dibudidayakan sebagai tanaman hias oleh para hortikulturis dan pehobi tanaman di Jawa karena karakteristik daunnya yang merah mencolok dan bunga berwarna merah muda tua yang menarik.

Kata kunci: Hamamelioideae, *Loropetalum*, Malesia, Ornamental, Saxifragales.

Arifin Surya Dwipa Irsyam 2025. The Genus *Loropetalum* R.Br. ex Rchb. (Hamamelidaceae) in Java, Indonesia. Floribunda 8(2): 39 – 43 — *Loropetalum* represents an additional genus of Hamamelidaceae recently introduced to Java. It is currently represented by a single species and variety on the island, namely *L. chinense* var. *rubrum* Yieh. This taxon has been cultivated as an ornamental plant by both horticulturists and plant enthusiasts in Java, owing to its striking red foliage and deep pink floral characteristics.

Keywords: Hamamelioideae, *Loropetalum*, Malesia, Ornamental, Saxifragales.

INTRODUCTION

Loropetalum R.Br. ex Rchb. is a small genus within the family Hamamelidaceae, comprising five currently recognized species: *L. axillare* Y.S.Chen & Ye C.Xu, *L. chinense* (R.Br.) Oliv., *L. flavum* Aver., P.K.Endress & K.S.Nguyen, *L. lanceum* Hand.-Mazz., and *L. subcordatum* (Benth.) Oliv. The genus is native to a broad region spanning from Assam through southern China and northern Indochina, extending eastward to Japan (Honshu, Kyushu) and Taiwan (Boyce, 2001; Averyanov *et al*., 2018; POWO, 2025). Species of *Loropetalum* are evergreen shrubs or small trees characterized by alternate, simple leaves and distinctive, strap-like petals (Feng *et al*., 1999). Among them, *L. chinense* is widely cultivated for ornamental purposes, contributing to the horticultural prominence of the genus.

Recent introductions of *Loropetalum* outside its native range, including Java, highlight its rising popularity in ornamental horticulture and landscape design. The genus is absent from Flora of Java Vol. I (Backer & Bakhuizen van den Brink, 1963), indicating it was not part of historical records of the island's flora. This underscores the need to update regional floristic inventories to include newly introduced species. This study aims to enhance existing Flora of Java data and serve as a reference for students, researchers, and the public in identifying *Loropetalum* on the island.

MATERIALS AND METHODS

This study was conducted in 2025 across multiple locations in West Java. Plant materials were collected directly from the field following the guidelines established by the Royal Botanic Garden Edinburgh (2017). Specimens were preserved using the techniques described by Davies *et al*. (2023) and subsequently deposited in the Herbarium Bandungense (FIPIA), School of Life Sciences and Technology, Institut Teknologi Bandung. Taxonomic identification was carried out using key references, including Feng *et al*. (1999), Boyce (2001), Huang *et al*. (2001), and Averyanov *et al*. (2018). Morphological descriptions were prepared using standardized botanical terminology as outlined by Beentje (2016).

RESULT AND DISCUSSION

In Java, the genus *Loropetalum* is represented by a single species, *L. chinense* (R.Br.) Oliv. Taxonomically, this species is classified into three varieties: *L. chinense* var. *chinense*, *L. chinense* var. *coloratum* C.Q.Huang, and *L. chinense* var. *rubrum* Yieh (Feng *et al*., 1999; Huang *et al*., 2001; POWO, 2025). *Loropetalum chinense* var. *chinense* is characterized by its white petals, whereas *L. chinense* var. *rubrum* bears red petals (Feng *et al*., 1999). In contrast, *L. chinense* var. *coloratum* is distinguished from the other varieties by the presence of longitudinal stripes alternating between red and white on its petals (Huang *et al*., 2001). Based on these morphological characteristics, the variety cultivated on the island of Java is identified as *L. chinense* var. *rubrum*.

Loropetalum chinense var. *rubrum* is cultivated as an ornamental outdoor plant, appreciated for its striking red foliage and vibrant, fringed flowers, which contribute to its popularity in landscape design and urban horticulture. Field observations indicate that the plant is frequently used in hedges or as a border shrub due to its compact growth habit and year-round ornamental appeal. However, the precise timeline and circumstances surrounding its introduction to Java remain undocumented. To date, there are no historical records or herbarium specimens that confirm the date or source of its arrival, raising questions as to whether the introduction occurred through formal commercial trade or via informal channels such as hobbyist exchange. This absence of documentation highlights the importance of monitoring non-native ornamental taxa, especially those with potential for naturalization or ecological impact.

In the present study, *L. chinense* var. *rubrum* was collected from cultivated specimens in Bandung, West Java. Given its ornamental value and popularity in landscape planting, it is likely that this taxon is also cultivated in other regions of Java. Supporting this, observational records from iNaturalist indicate the presence of *L. chinense* var. *rubrum* in Jakarta, suggesting a broader distribution of cultivated populations across the island (iNaturalist, 2025).

This discovery increases the number of Hamamelidaceae genera recorded in Java to two: *Distylium* Siebold & Zucc. and *Loropetalum*. The addition of *Loropetalum* to the island's flora highlights recent changes in the composition of the family within the region and emphasizes the importance of updating floristic inventories to reflect current species distributions. The genus *Altingia* Noronha, however, is excluded from this study because *Altingia excelsa* Noronha is currently treated as a synonym of *Liquidambar excelsa* (Noronha) Oken, which is classified under the family Altingiaceae according to APG IV (2016). By clarifying these taxonomic distinctions and updating the list of Hamamelidaceae in Java, this study provides a more accurate framework for further research on the diversity of the family in the region.

Taxonomic Treatment
Key to the Genera of Hamamelidaceae in Java

1.	A.	Inflorescence capitate, shortly spicate, or racemose, axillary or terminal, flowers bisexual, sepals and petals usually 4–5(–6) ..... *Loropetalum*
	B.	Inflorescence a condensed panicle or botryoid, axillary, flowers male or bisexual, sepals and petals absent..... *Distylium*

***Loropetalum chinense* var. *rubrum* Yieh,** J. Chin. Soc. Hort. Sci. 1942(2): 33 (1942) —Type: China, Hunan, Nanyue, 1937, *Yieh s.n.* (holo PE). (Fig. 1)

Everegreen shrubs, up to 1 m in height, buds naked. Stem lenticelled, reddish brown, much branched; branchlets stellately pubescent. Leaves alternate, stipulate; stipules membranous, triangular-lanceolate or obovate, 4 × 1 mm, stellately pubescent, caducous, deep pink; petiole 2–5 mm long, stellately pubescent; leaf blade ovate, elliptic or obovate, 1.5–4.8 × 0.7–2.6 cm, base asymmetrical to rounded or cuneate, margin entire, apex acute to obtuse, minutely mucronulate, adaxial surface dark reddish purple to dark green, flushed pinkish red when young, stellately pubescent, abaxial surface glaucous, densely stellately pubescent; lateral veins 4–6 on each side, abaxially prominent; Inflorescences of 4–5 flowers in denseclusters at the tips of main and side shoots; peduncle 7–8 mm long, stellately pubescent; bracts linear or lanceolate, ca. 3 mm long. Flowers sessile, open before leaves appear, bisexual; floral cup cupular, stellately pubescent, ca. 1 mm long; sepals ovate, 2–3 mm, deep pink; petals 4–5, linear, 2.1–2.2 × 0.15–0.2 cm, apex obtuse, circinate in bud, spreading when open, deep pink; stamens 4 or 5, epigynous, filaments very short, connective elongated into a horn, ca. 0.5 mm long, pink; anthers basifixed, dehiscent in the middle by two valves, ovoid, ca. 0.5 mm long; staminodes 4–5(–6), scalelike, alternate with stamens; ovary inferior, 2-locular, stellately pubescent; styles 2, subulate, ca. 1 mm long; stigmas entire. Capsules and seeds not observed.

Distribution. The native range of *L. chinense* var. *rubrum* is restricted to China, specifically the provinces of Guangxi and Hunan (POWO, 2025). However, this variety has been widely cultivated beyond its native range, with records of its introduction into several foreign countries, including the United States, Japan, and Singapore (Gawel *et al*., 1996; Chen *et al*., 2015). In this study, *L. chinense* var. *rubrum* was recorded from cultivated specimens in Bandung, West Java.

Specimens examined. INDONESIA. JAVA — **West Java**: Bandung, Sukaluyu, Jl. Pahlawan, 6°53'34.7"S 107°38'07.6"E, 714 m asl, 13.VII.2025, *ASD Irsyam 952* (FIPIA!); Bandung, Jl. Taman Cibeunying Selatan, 6° 54'20.2"S 107°37'27.9"E, 714 m asl, 14.VII.2025, ASD Irsyam 953 (FIPIA!).

Vernacular names. *Bunga rumbai Cina*, *bunga rumbai* or loropetalum (Bahasa Indonesia).

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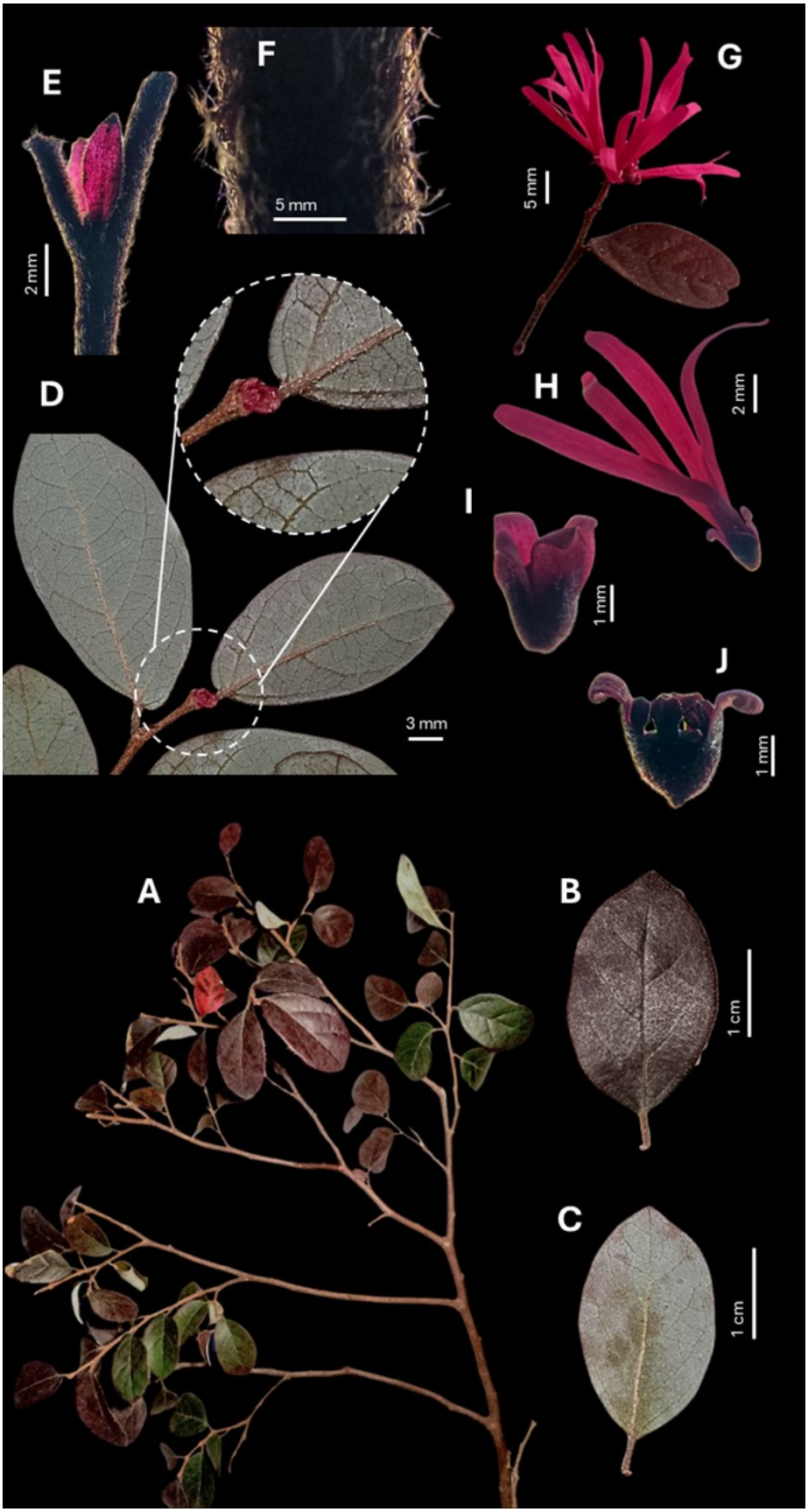

Figure 1. *Loropetalum chinense* var. *rubrum*. A. Habit, B. Leaf, adaxial surface, C. Leaf, abaxial surface, D. Leaf bud, E. Stipules, F. Stellate hairs on stem, G. Inflorescence, H. Flower, I. Sepals, J. Inner floral structures showing anthers.

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