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Cover: The nine vultures of India, digital art made on Krita by Dupati Poojitha.



Floral inventory and habitat significance of riparian ecosystem along the banks of Chithari River, Kasaragod, Kerala, India

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Abstract: The Chithari River, spanning approximately 25 km in Kasaragod District, Kerala, originates from lateritic midlands rather than mountains, forming a riparian landscape. This study conducted a comprehensive floristic survey of its riparian zones, covering four major tributaries—Pullur Thodu, Para Thodu, Cherakkappara Thodu, and Pakkam Thodu—using line transects, and nested plots between October 2024–February 2025. A total of 340 plant species, representing 257 genera, and 75 families, were documented. Fabaceae (61 species) emerged as the dominant family, followed by Rubiaceae (20 species), Euphorbiaceae (17 species), and Moraceae (16 species). The recorded flora included 181 tree species, 45 shrubs, 69 herbs, and 45 climbers. Of these, 281 species were native, while 59 were exotic, comprising 17% of the total flora. Invasive species such as *Lantana camara*, *Chromolaena odorata*, and *Eichhornia crassipes* were found to impact various habitats significantly. The study also identified 68 endemic species, including 24 species endemic to the Western Ghats. Nine species were categorized under conservation concern, including *Crinum malabaricum* (Critically Endangered), *Pterocarpus santalinus* (Endangered), and *Strobilanthes ciliatus* (Vulnerable). The restricted distribution of *Crinum malabaricum* in lateritic streambeds of the midlands highlight the need for targeted conservation measures.

Keywords: Checklist, *Crinum malabaricum*, diversity, endemic species, invasive, Kanhangad, riverine, *Strobilanthes ciliatus*, survey, trees.

Editor: Anonymity requested.

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Author contributions: All the three authors contributed equally toward field data collection, manuscript writing and proof reading.

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INTRODUCTION

Being one of the most diverse and dynamic floral habitats, riparian ecosystems form a crucial connection between land & water, playing an essential role in ecological functions, and human well-being (Davis et al. 2006; Balangen et al. 2021; Vincy & Brilliant 2024). Found along rivers, streams, lakes, and wetlands, riparian zones consist of vegetated habitats that serve as biodiversity corridors, providing habitat for a variety of plant, and animal species, and maintain the health of aquatic ecosystems (Corbacho et al. 2003; Leibowitz 2003).

The functions of riparian vegetation include filtering out chemical pollutants and acting as a natural buffer that prevents agricultural runoff from contaminating water bodies. These areas also contribute to essential processes such as organic matter decomposition, nutrient cycling, and pollution control, while supporting ecological food chains (Holmquist et al. 2011; Jonsson et al. 2017). The deep roots of large plants help reinforce banks, reducing the risk of erosion, and collapse (Perucca et al. 2007; Almadin 2020). Aquatic macrophytes, a vital component of riparian ecosystems, on the other hand, enhance habitat complexity by providing shelter, and food for invertebrates, fish, and waterbirds (Thomaz & da Cunha 2010). Additionally, these vegetation zones have influence over water temperature regulation, light availability, and affect nutrient cycles (Gregory et al. 1991; Naiman et al. 1993; Hood & Naiman 2000; Prach et al. 2001).

Studying floral association and diversity, regardless of habitat type, provides valuable knowledge for plant resource management (Cunningham et al. 2015). The southern Western Ghats, known for their unique endemic species, and rich plant life, emphasize the importance of riparian research (Vincy & Brilliant 2024). With increasing environmental changes and declining river health, a comprehensive approach to riparian zone conservation is necessary (Singh et al. 2021). Since plant species composition varies near water bodies, preserving riparian areas is crucial for maintaining landscape diversity (Sabo et al. 2005; Scalley et al. 2009).

Despite the considerable changes occurring to these habitats, which comprise wetlands and adjacent riparian systems, these areas still support the emergence of new species, as shown by the many new plant, and animal discoveries made in the past two decades (Sabu & Ambat 2007).

A high degree of disturbances such as human habitation, agricultural and industrial runoffs make the riparian zone susceptible to invasions by alien species that are generally early seral species (Richardson et al. 2007). Studies have shown that riparian plant community structure is connected to land use, and areas adjacent to agricultural, and urban stretches have been found to have high invasive species cover, and richness (Meek et al. 2010; Méndez-Toribio et al. 2014).

This study is focused on the river Chithari that flows westwards from the Western Ghats — a global biodiversity hotspot (Myers et al. 2000). The Chithari River originates in the mid-lateritic zones of Kasaragod District. The riparian vegetation of the Chithari is heterogeneous and is undergoing gradual degradation owing to the growing human disturbances, agriculture, and excessive use of chemical fertilizers, and pesticides. Local administrations have developed participatory micro-plans through active engagement with community stakeholders for the selected tributaries of the river. These plans aim to address site-specific conservation needs, promote sustainable resource use by incorporating local knowledge.

Several faunal surveys and documentation efforts have been conducted in the Chithari River and its adjacent areas. The River Research Centre (2013) carried out a preliminary assessment of fish diversity, documenting 38 species from this riverine habitat. eBird, a citizen science-based birding platform, records the presence of 169 bird species from the estuarine habitat of the Chithari River (eBird 2025). The discovery of a new tree-spider crab, *Leptarma biju*, along the riverbanks further highlights its ecological significance (Ng & Devi 2020). Additionally, GIS-based shoreline studies have provided valuable insights into the dynamic nature of the Chithari estuary (Vijayan et al. 2009). Phytological studies in and around this riverine habitat remain limited. As an initial step toward addressing this gap, we surveyed the riparian vegetation, and compiled a floral inventory, the preliminary findings of which are presented in this study.

MATERIALS AND METHODS

The Chithari River (Figure 1), spanning approximately 25 km (River Research Centre 2013), is located in Kasaragod District, northern Kerala. Unlike most rivers in the region, it originates from the lateritic midlands rather than the mountains, resulting in a distinctive landscape. Instead of a single point of origin, the river forms from multiple smaller streams, locally known as

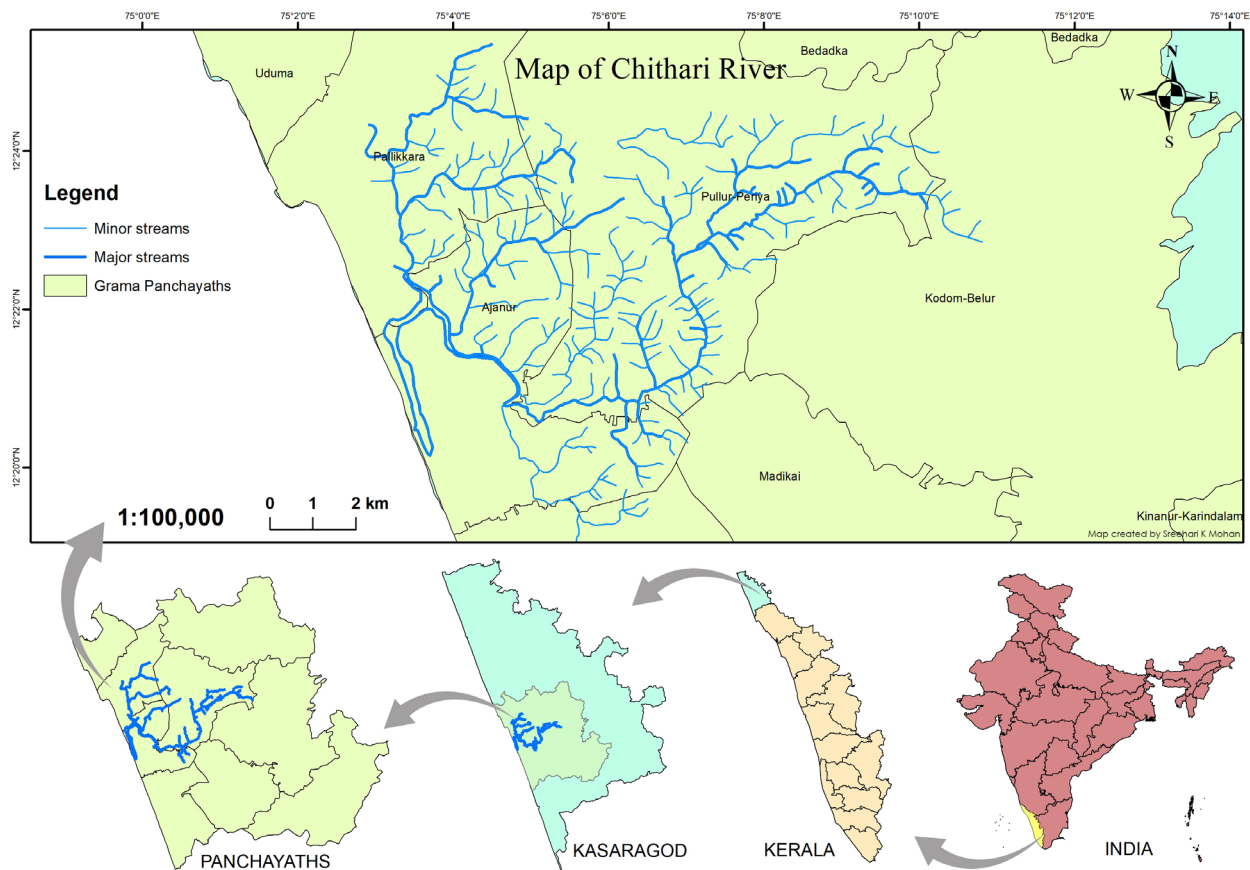


Figure 1. Map showing the Chithari River in Kasaragod, Kerala.

Thodu, which emerge from different locations within the midlands. The longest parent stream, Pullur Thodu, originates near Kanjiradukkam (12.413° N, 75.159° E) at 150 m. It initially flows southwest through the sloping midlands for about 18 km before reaching the plains, where it gradually takes a U-turn near Pullur, and flows on the northwestern side. It then merges with the tributary from the northern side, attaining its full course before continuing for another 3 km and finally meeting the Arabian Sea at the Chithari estuary (12.342° N, 75.061° E).

The land use along the river varies throughout its course. In its upper stretches, the initial streams flow through small hills, valleys, lateritic plains, and patches of forest. As it progresses, human-dominated landscapes, including plantations of coconut, rubber, arecanut, paddy fields, and sacred groves begin to influence its surroundings. Near its mouth, the river forms an estuarine habitat characterized by mangroves, marshes, estuarine creeks, and mudflats.

Four major tributaries were identified for the study. They are Pullur Thodu, Para Thodu, Cherkkappara

Thodu, and Pakkam Thodu (Figure 2). These were sampled in October 2024–February 2025. To document the riparian flora, 200 m longitudinal transects were randomly established along the course of four tributaries (Khumbongmayum et al. 2005). Each transect extended 5 m on either sides from the stream edge (Nagarajan & Bhasker 2023), and all tree species, woody climbers, and invasive plants within these belt transects were recorded. Additionally, trees observed opportunistically along the stream banks—outside the established transects—were also documented. This supplementary approach aimed to ensure a more comprehensive species inventory, especially for sparsely distributed or habitat-specific species that may not occur within the fixed transects. While the transects formed the primary framework for systematic sampling, opportunistic observations enhanced the overall floristic richness documented. Transects were established along the final stretch of the river which comprise of estuarine and coastal habitats. A total of 15 transects were considered, which were evenly spread across the tributaries and the final stretch of the river (Figure 2). At the start of each transect, a 5 × 5 m

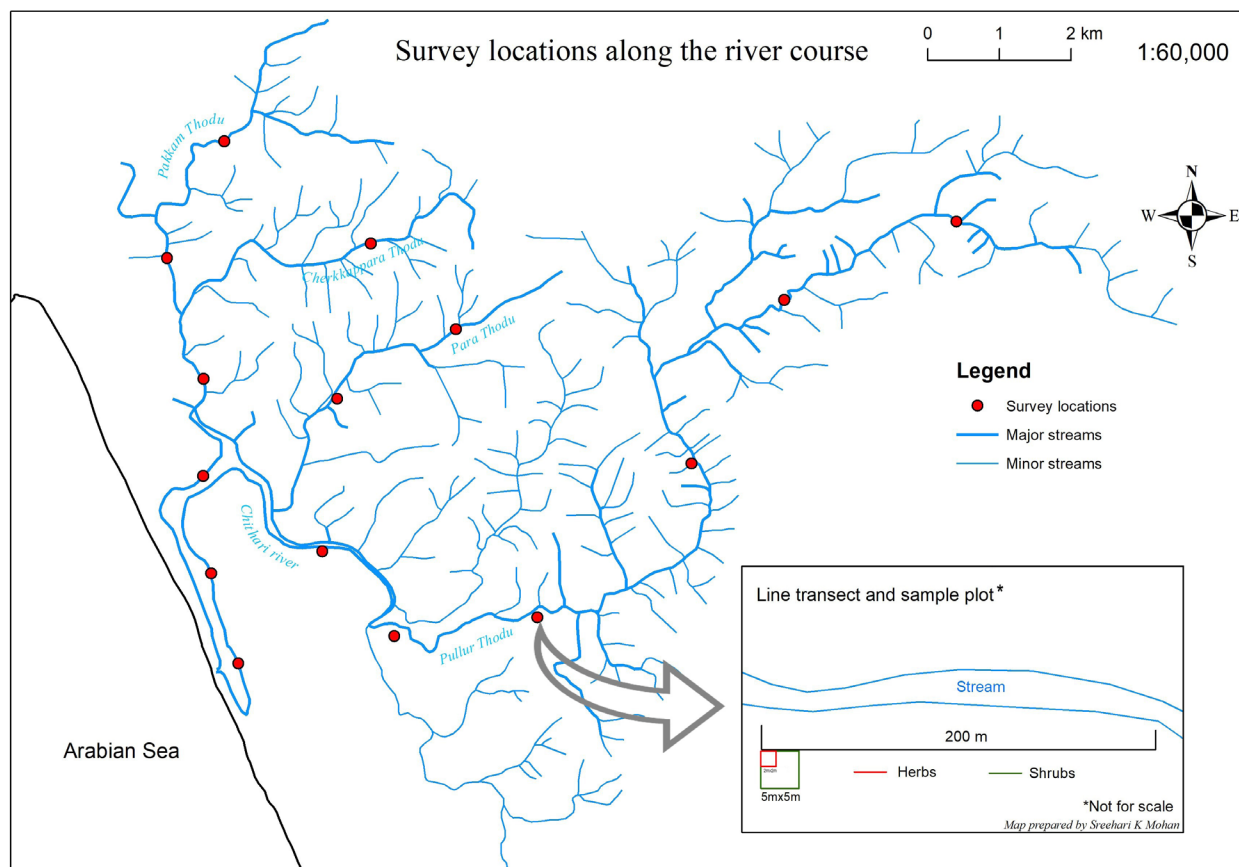


Figure 2. Survey locations along the river course.

square plot was laid out to document shrub species. A 2×2 m subplot, nested within this larger plot, and sharing the same starting corner (Figure 2), was used to record herbaceous species (Khumbongmayum et al. 2005; Nath et al. 2005; Jayakumar et al. 2011). The elevation across the study area ranged 0–160 m.

The observed plants were identified with the aid of regional floras (Hooker 1872–1897; Gamble 1915–1935; Sasidharan 2004, 2007, 2010; eFlora Kerala 2025). A checklist was prepared based on the APG IV system of classification and the families were arranged alphabetically with representative species within it. Information such as, habit for each species, endemism (eFlora Kerala 2025), and IUCN Red List status for the relevant taxon is also provided.

RESULTS

During the present study, a total of 340 plant species belonging to 257 genera, and 75 families were recorded (Table 3, Images 1–32). It was observed that 43% of the recorded species belonged to seven dominant families,

namely: Fabaceae with 61 species, Rubiaceae with 20 species, Euphorbiaceae with 17 species, Moraceae with 16 species, Acanthaceae with 12 species, Apocynaceae with 11 species, and Asteraceae with 10 species (Figure 3). The study documented 181 species of trees, 45 species of shrubs, 68 species of herbs, and 46 species of climbers along the riparian stretches of the Chithari River (Figure 4). Among the 340 species recorded, 281 were recognised as native, while 59 were non-native (Table 3). Also, 308 species were found to be dicots, 29 species were monocots, and three species of pteridophytes. The study site has also shown significant diversity in terms of endemic species. A total of 68 species are endemic to this region, out of which 24 species are endemic to the Western Ghats (Table 1). This implies 7% of the total plants encountered in the study area are Western Ghats endemic species.

Nine species from the study area were found to be of critical conservation concern (Table 3). *Crinum malabaricum* is classified as ‘Critically Endangered’ (Lansdown 2016). Six species fall under the ‘Vulnerable’ category, including *Strobilanthes ciliatus* (Saha et al. 2015), *Vateria indica* (Dhyani & Barstow 2020), *Aporosa*

Table 1. Endemic species recorded from the study area.

	Endemic region	Number of species
1	Western Ghats	24
2	Western Ghats and Sri Lanka	2
3	Southern India	4
4	Southern India and Sri Lanka	4
5	Peninsular India	10
6	Peninsular India and Sri Lanka	7
7	India	4
8	India and Sri Lanka	13
	Total	68

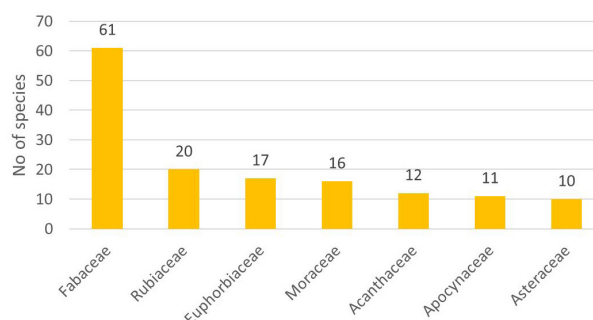
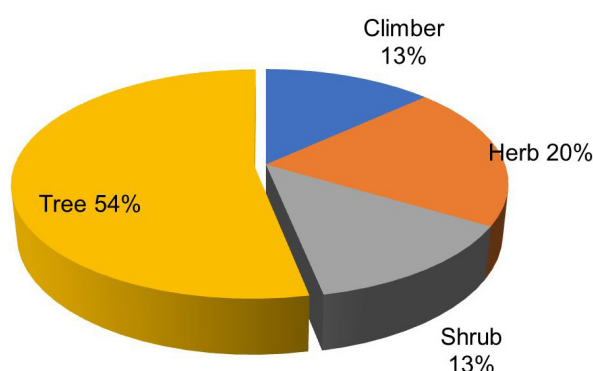
cardiosperma (World Conservation Monitoring Centre 2018), *Saraca asoca*, *Ochreinauclea missionis* (Barstow & Dhyan 2020), and *Santalum album* (Arunkumar 2019). *Pterocarpus marsupium* is classified as ‘Near Threatened’ (Barstow 2017). Critically Endangered and Western Ghats endemic *Crinum malabaricum* was observed with severely restricted distribution in the upper course of the river. The habitat was observed to be seasonal streams running through plantations and backyards located in lateritic area.

Fifteen invasive species were recorded from the study area (Table 2). Among them, *Lantana camara* and *Chromolaena odorata* were observed to severely affect open areas, while *Sphagneticola trilobata*, and *Mikania micrantha* had significant infestations in paddy fields, and along plantation edges. *Salvinia molesta* and *Eichhornia crassipes* were found to invade water bodies, though the extent of invasion by *Eichhornia crassipes* was relatively lower compared to similar habitats in urban landscapes nearby.

DISCUSSION

The Chithari River’s origin from lateritic midlands, as opposed to mountainous regions, contributes to its distinctive riparian landscape. This setting provides a mosaic of habitats, including mangroves, marshes, estuarine creeks, and mudflats near its mouth. The discovery of *Leptarma biju*, a new tree-spider crab species along the riverbanks, further emphasizes its ecological uniqueness (Ng & Devi 2020).

The floristic survey of the Chithari River’s riparian zones revealed a diverse assemblage of plants. The dominance of Fabaceae aligns with studies in other riparian ecosystems, such as the Meenachil River basin, where Fabaceae was the most represented family (Vincy

**Figure 3. Number of species under dominant families recorded from the study site.****Figure 4. Percentage wise occurrence of various plants according to their habit (tree, herb, shrub, and climber).****Table 2. Invasive species recorded from the study area.**

	Species	Local name	Family
1	<i>Alternanthera brasiliana</i>	Chemcheera	Amaranthaceae
2	<i>Ageratum conyzoides</i>	Kumminnipacha, Murianpacha	Asteraceae
3	<i>Chromolaena odorata</i>	Communist pacha	Asteraceae
4	<i>Mikania micrantha</i>	Dhrutharashtra pacha	Asteraceae
5	<i>Sphagneticola trilobata</i>	Kammalpoo	Asteraceae
6	<i>Synedrella nodiflora</i>	Mudiyan Pacha	Asteraceae
7	<i>Camonea umbellata</i>	Kolavaravalli, Koravalli	Convolvulaceae
8	<i>Ipomoea triloba</i>		Convolvulaceae
9	<i>Calopogonium mucunoides</i>	Thottapayar	Fabaceae
10	<i>Centrosema pubescens</i>	Kattupayar, Poombattapayar	Fabaceae
11	<i>Eragrostis unioides</i>	Avilpullu, Karayampullu	Poaceae
12	<i>Polytrias indica</i>	Chenkodipullu	Poaceae
13	<i>Eichhornia crassipes</i>	Kulavaazha	Pontederiaceae
14	<i>Salvinia molesta</i>	African Payal	Salviniaceae
15	<i>Lantana camara</i>	Arippoo, Gulami, Konginipoo	Verbenaceae

Table 3. Checklist of floral inventory of Chithari river, Kasaragod, Kerala.

	Species	Local name	Family	Habit	Nativity	IUCN status
1	<i>Acanthus ilicifolius</i> L.	Chullikkandal	Acanthaceae	Shrub		
2	<i>Asystasia gangetica</i> (L.) T.Anderson in Thwaites	Thuppall pottas	Acanthaceae	Herb		
3	<i>Justicia gendarussa</i> Burm.f.	Vatamkolli	Acanthaceae	Shrub		
4	<i>Lepidagathis incurva</i> Buch.-Ham. ex D.Don		Acanthaceae	Herb		
5	<i>Lepidagathis</i> sp.		Acanthaceae	Herb		
6	<i>Nicotiba trinervia</i> (Vahl) Lindau		Acanthaceae	Herb	WG	
7	<i>Phaulopsis dorsiflora</i> (Retz.) Sant.		Acanthaceae	Herb		
8	<i>Rostellularia procumbens</i> (L.) Nees in A.P.de Candolle		Acanthaceae	Herb		
9	<i>Rungia pectinata</i> (L.) Nees in DC.		Acanthaceae	Herb		
10	<i>Strobilanthes ciliata</i> Nees in Wall.	Cherukurunji	Acanthaceae	Shrub	WG	VU
11	<i>Strobilanthes integrifolia</i> (Dalz.) Kuntze	Poomalakurunhi	Acanthaceae	Shrub	WG	
12	<i>Strobilanthes jomyi</i> P.Biju	Jomyi kurunhi	Acanthaceae	Shrub	WG	
13	<i>Strobilanthes</i> sp.		Acanthaceae	Shrub		
14	<i>Alternanthera brasiliana</i> (L.) Kuntze	Chemcheera	Amaranthaceae	Herb	EX	
15	<i>Alternanthera</i> sp.		Amaranthaceae	Herb		
16	<i>Cyathula prostrata</i> (L.) Blume	Cherukadaladi, Chuvannakadaladi	Amaranthaceae	Herb		
17	<i>Crinum malabaricum</i> Lekhak & S.R.Yadav	Periya polathaali	Amaryllidaceae	Herb	WG	CR
18	<i>Anacardium occidentale</i> L.	Parankimavu, Kashumavu	Anacardiaceae	Tree	EX	
19	<i>Buchanania axillaris</i> (Desr.) Ramamoorthy in Saldanha & Nicolson	Kulamavu	Anacardiaceae	Tree	ISL	
20	<i>Holigarna arnottiana</i> Hook.f.	Cheral	Anacardiaceae	Tree	WG	
21	<i>Lannea coromandelica</i> (Houtt.) Merr.	Kalashu, Uthi	Anacardiaceae	Tree		
22	<i>Mangifera indica</i> L.	Mavu	Anacardiaceae	Tree		
23	<i>Spondias pinnata</i> (L.f.) Kurz	Ambazham	Anacardiaceae	Tree		
24	<i>Annona muricata</i> L.	Mullatha	Annonaceae	Tree	EX	
25	<i>Annona reticulata</i> L.	Seethapazham	Annonaceae	Tree	EX	
26	<i>Annona squamosa</i> L.	Ramapazham	Annonaceae	Tree	EX	
27	<i>Cananga odorata</i> (Lam.) Hook.f. & Thoms. Fl. Ind. 130. 1855 & in Hook. f.	Kanakamaram	Annonaceae	Tree	EX	
28	<i>Milusa tomentosa</i> (Roxb.) Finet & Gagnep.	Kanakaittha	Annonaceae	Tree		
29	<i>Monoon longifolium</i> (Sonn.) B.Xue & R.M.K.Saunders	Aranamaram	Annonaceae	Tree	EX	
30	<i>Centella asiatica</i> (L.) Urban in Mart.	Muthil	Apiaceae	Herb		
31	<i>Alstonia scholaris</i> (L.) R.Br.	Ezhilampala	Apocynaceae	Tree		
32	<i>Carissa carandas</i> L.	Karandacherry	Apocynaceae	Shrub		
33	<i>Cosmostigma cordatum</i> (Poir.) M.R.Almeida	Kariveppilakurinja	Apocynaceae	Climber		
34	<i>Gymnema inodorum</i> (Lour.) M.R. & S.M. Almeida	Peenarivalli	Apocynaceae	Climber		
35	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G.Don	Kudakappala	Apocynaceae	Tree		
36	<i>Ichnocarpus frutescens</i> (L.) R.Br. in Ait.f.	Palvalli	Apocynaceae	Climber		
37	<i>Kametia caryophyllata</i> (Roxb.) Nicolson & Suresh	Narumarathivu	Apocynaceae	Climber	WG	
38	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz	Sarppaghandhi	Apocynaceae	Herb		
39	<i>Rauvolfia tetraphylla</i> (L.) Benth. ex Kurz	Pambumkolli	Apocynaceae	Herb	EX	
40	<i>Tabernaemontana alternifolia</i> L.	Kundalappala	Apocynaceae	Tree	WG	
41	<i>Wrightia tinctoria</i> (Roxb.) R.Br.	Danthappala	Apocynaceae	Tree		

	Species	Local name	Family	Habit	Nativity	IUCN status
42	<i>Cryptocoryne spiralis</i> (Retz.) C.E.C.Fisch. ex Wydler		Araceae	Herb	IN	
43	<i>Lagenandra toxicaria</i> Dalz. var. <i>toxicaria</i> ; Hook. f.		Araceae	Herb	SI	
44	<i>Pothos scandens</i> L.	Anapparuva, Paruvakodi	Araceae	Climber		
45	<i>Schefflera</i> sp.	Ettlamaram	Araliaceae	Tree		
46	<i>Acmella calva</i> (DC.) R.K. Jansen	Eripacha	Asteraceae	Herb		
47	<i>Ageratum conyzoides</i> L.	Kumminnipacha, Murianpacha	Asteraceae	Herb	EX	
48	<i>Blumea axillaris</i> (Lam.) DC.		Asteraceae	Herb		
49	<i>Blumea</i> sp.		Asteraceae	Herb		
50	<i>Chromolaena odorata</i> (L.) King & Robins.	Communist pacha	Asteraceae	Shrub	EX	
51	<i>Eclipta prostrata</i> (L.) L.	Kayyoonni	Asteraceae	Herb		
52	<i>Elephantopus scaber</i> L.	Aanayadi, Aanachuvadi	Asteraceae	Herb		
53	<i>Mikania micrantha</i> Kunth	Dhrutharashtra pacha	Asteraceae	Climber	EX	
54	<i>Sphagnetica trilobata</i> (L.) Pruski	Kammalpoo	Asteraceae	Herb	EX	
55	<i>Synedrella nodiflora</i> (L.) Gaertn.	Mudiyan Pacha	Asteraceae	Herb	EX	
56	<i>Avicennia marina</i> (Forssk.) Vierh. in Denkschr.	Chakkappoo	Avicenniaceae	Tree		
57	<i>Avicennia officinalis</i> L.	Uppatti	Avicenniaceae	Tree		
58	<i>Dolichandrone spathacea</i> (L.f.) K.Schum.	Neerpongiliyam	Bignoniaceae	Tree	PI	
59	<i>Oroxylum indicum</i> (L.) Benth. ex Kurz	Palakapayyani	Bignoniaceae	Tree	SISL	
60	<i>Pajanelia longifolia</i> (Willd.) K.Schum. in mplete this.Engl. & Prantl	Payyani	Bignoniaceae	Tree		
61	<i>Spathodea campanulata</i> P.Beauv.	Panchasarakkaimaram	Bignoniaceae	Tree	EX	
62	<i>Stereospermum colais</i> (Buch.-Ham. ex Dillw.) Mabb.	Pathiri	Bignoniaceae	Tree		
63	<i>Tecoma stans</i> (L.) Kunth	Manja arali	Bignoniaceae	Tree	EX	
64	<i>Bombax ceiba</i> L.	Mullilavu	Bombacaceae	Tree		
65	<i>Ceiba pentandra</i> (L.) Gaertn	Panjimaram	Bombacaceae	Tree	EX	
66	<i>Cordia dichotoma</i> G.Forst.	Naruveli	Boraginaceae	Tree		
67	<i>Lobelia alsinoides</i> Lam.	Kakkapoo (not in our part)	Campanulaceae	Herb		
68	<i>Casuarina equisetifolia</i> L.	Kaattadi	Casuarinaceae	Tree	EX	
69	<i>Lophopetalum wightianum</i> Arn.	Venkotta	Celastraceae	Tree		
70	<i>Pristimera arnottiana</i> (Wight) R.H.Archer	Mothirakurandy, Muttukorandy	Celastraceae	Climber	SI	
71	<i>Calophyllum inophyllum</i> L.	Punna	Clusiaceae	Tree		
72	<i>Garcinia gummi-gutta</i> Wight	Kudampuli	Clusiaceae	Tree	SISL	
73	<i>Garcinia indica</i> (Thouars) Choisy in DC.	Kokkum	Clusiaceae	Tree	WG	
74	<i>Combretum latifolium</i> Blume	Manjalvalli, Plakkodi, Purakkodi	Combretaceae	Climber		
75	<i>Getonia floribunda</i> Roxb.	Pullanni, Pullanji	Combretaceae	Climber		
76	<i>Terminalia arjuna</i> (Roxb. ex DC.) Wight & Arn.	Thanni	Combretaceae	Tree		
77	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Thallithenga, Badam	Combretaceae	Tree	EX	
78	<i>Terminalia catappa</i> L.	Neermaruthu	Combretaceae	Tree	ISL	
79	<i>Terminalia elliptica</i> Willd.	Karimaruthu	Combretaceae	Tree	ISL	
80	<i>Terminalia paniculata</i> Roth	Pullamaruthu	Combretaceae	Tree	PI	
81	<i>Camonea umbellata</i> (L.) A.R.Simoes & Staples	Kolavaravalli, Koravalli	Convolvulaceae	Climber	EX	
82	<i>Camonea vitifolia</i> (Burm. f.) A.R.Simoes & Staples	Manja vayaravalli	Convolvulaceae	Climber		
83	<i>Erycibe paniculata</i> Roxb.	Erumathali, Irimpiyathali	Convolvulaceae	Climber	IN	

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84	<i>Hewittia malabarica</i> (L.) Suresh in Nicolson et al.	Ohanamvalli, Vattapoomthani	Convolvulaceae	Climber		
85	<i>Ipomoea triloba</i> L.		Convolvulaceae	Climber	EX	
86	<i>Xenostegia tridentata</i> (L.) Austin & Staples	Cheruvayera, Prasarani	Convolvulaceae	Herb		
87	<i>Hellenia speciosa</i> (Koenig) S.R.Dutta	Naayi Karimbu, Aanakoova, Aanappoo	Costaceae	Herb		
88	<i>Solena amplexicaulis</i> (Lam.) Gandhi in Saldanha & Nicolson	Kuvachakka	Cucurbitaceae	Climber		
89	<i>Trichosanthes tricuspidata</i> Lour.	Kakkathondi	Cucurbitaceae	Climber		
90	<i>Cyperus haspan</i> L.		Cyperaceae	Herb	EX	
91	<i>Scleria</i> sp.		Cyperaceae	Herb		
92	<i>Dillenia pentagyna</i> Roxb.	Nayipunna	Dilleniaceae	Tree		
93	<i>Vateria indica</i> L.	Vellapayin	Dipterocarpaceae	Tree	WG	VU
94	<i>Dryopteris</i> sp.		Dryopteridaceae	Herb		
95	<i>Diospyros buxifolia</i> (Blume) Hiern	Elicheviyan	Ebenaceae	Tree		
96	<i>Diospyros candolleana</i> Wight	Karimaram	Ebenaceae	Tree	PI	
97	<i>Elaeocarpus munroi</i> (Wight) Mast. in Hook.f.	Kalrudraksham	Elaeocarpaceae	Tree	WG	
98	<i>Elaeocarpus serratus</i> L.	Kaara	Elaeocarpaceae	Tree		
99	<i>Eriocaulon dalzellii</i> Korn.	choothu	Eriocaulaceae	Herb	SI	
100	<i>Eriocaulon</i> sp.		Eriocaulaceae	Herb		
101	<i>Acalypha indica</i> L.	Naarchikkadu	Euphorbiaceae	Herb		
102	<i>Antidesma montanum</i> Blume	Asharippuli	Euphorbiaceae	Tree		
103	<i>Aporosa cardiosperma</i> (Gaertn.) Merr.	Vetti	Euphorbiaceae	Tree	PISL	VU
104	<i>Croton persimilis</i> Muell.Arg.	Pongalam, Somaraji	Euphorbiaceae	Tree		
105	<i>Euphorbia deccanensis</i> V.S.Raju	Mulachurathi	Euphorbiaceae	Herb	WG	
106	<i>Euphorbia hirta</i> L.	Nilappala	Euphorbiaceae	Herb	EX	
107	<i>Euphorbia thymifolia</i> L.	Chitrapala	Euphorbiaceae	Herb		
108	<i>Falconeria insignis</i> Royle	Kannampotti	Euphorbiaceae	Tree		
109	<i>Homonoia riparia</i> Lour.	Puzhavanchi	Euphorbiaceae	Shrub		
110	<i>Macaranga peltata</i> (Roxb.) Muell.Arg. in DC.	Vatta	Euphorbiaceae	Tree	ISL	
111	<i>Mallotus nudiflorus</i> (L.) Kulju & Welzen	Naikkumbil	Euphorbiaceae	Tree		
112	<i>Mallotus philippensis</i> (Lam.) Muell.Arg.	Sindhoori	Euphorbiaceae	Tree		
113	<i>Mallotus tetracoccus</i> (Roxb.) Kurz	Vattakkumbil	Euphorbiaceae	Tree		
114	<i>Microstachys chamaelea</i> (L.) Muell.Arg.	Kodiyavannakku, Njettavanakku	Euphorbiaceae	Herb		
115	<i>Paracroton pendulus</i> (Hassk.) Miq.	Vellamaram	Euphorbiaceae	Tree	WGSL	
116	<i>Ricinus communis</i> L.	Aavanakk	Euphorbiaceae	Shrub	EX	
117	<i>Abrus melanospermus</i> Hassk.	vella kunnikuru, Valiya kattumuthira	Fabaceae	Climber		
118	<i>Abrus precatorius</i> L.	Kunnikkuru	Fabaceae	Climber		
119	<i>Abrus pulchellus</i> Wall. ex Thwaites	Valiya Kattumuthira	Fabaceae	Climber		
120	<i>Acacia auriculiformis</i> A.Cunn. ex Benth. in Hook.'s London J. Bot. 1: 377. 1842; V.T.Antony	Acacia	Fabaceae	Tree	EX	
121	<i>Acacia mangium</i> Willd.	Mangium	Fabaceae	Tree	EX	
122	<i>Acrocarpus fraxinifolius</i> Wight & Arn.	Kurangadi	Fabaceae	Tree		
123	<i>Adenanthera pavonina</i> L.	Manjadi	Fabaceae	Tree	EX	
124	<i>Albizia amara</i> (Roxb.) Boivin	Nenmenivaka	Fabaceae	Tree		
125	<i>Albizia chinensis</i> (Osbeck) Merr.	Pottavaka	Fabaceae	Tree		
126	<i>Albizia lebbek</i> (L.) Benth. in Hook.'s London J. Bot. 3: 87. 1844; Baker in Hook. f.	Kunnivaka	Fabaceae	Tree		

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127	<i>Albizia odoratissima</i> (L. f.) Benth. in Hook.'s London J. Bot. 3: 88. 1844; Baker in Hook.f.	Pulivaka	Fabaceae	Tree		
128	<i>Albizia procera</i> (Roxb.) Benth. in Hook.'s London J. Bot. 3: 89. 1844; Baker in Hook.f.	Vellavaka	Fabaceae	Tree		
129	<i>Bauhinia malabarica</i> Roxb.		Fabaceae	Tree		
130	<i>Bauhinia purpurea</i> L.	Violet Mandaram	Fabaceae	Tree	EX	
131	<i>Bauhinia scandens</i> L. var. <i>anguina</i> (Roxb.) Ohashi	Pambuvalli	Fabaceae	Climber		
132	<i>Caesalpinia crista</i> L.	Aattuparanda	Fabaceae	Climber		
133	<i>Caesalpinia pulcherrima</i> (L.) Swartz	Rajamalli	Fabaceae	Shrub	EX	
134	<i>Calopogonium mucunoides</i> Desv.	Thottapayar	Fabaceae	Climber	EX	
135	<i>Cassia fistula</i> L.	Kanikkonna	Fabaceae	Tree		
136	<i>Centrosema molle</i> Benth.	Kattupayar	Fabaceae	Climber	EX	
137	<i>Centrosema pubescens</i> Benth.	Kattupayar, Poombattapayar	Fabaceae	Climber	EX	
138	<i>Crotalaria pallida</i> Dryand. var. <i>obovata</i> (G. Don) Polhill	Kilukkampetti	Fabaceae	Shrub		
139	<i>Dalbergia horrida</i> (Dennst.) Mabb. var. <i>glabrescens</i> (Prain) Thoth. & K.K.N. Nair		Fabaceae	Climber	WG	
140	<i>Dalbergia lanceolaria</i> L. f., Suppl. Pl. 316. 1781	Velleetti	Fabaceae	Tree		
141	<i>Dalbergia latifolia</i> Roxb., Corom. Pl. 2: 7	Eetti	Fabaceae	Tree		
142	<i>Delonix regia</i> (Boj. ex Hook.) Rafin.	Gulmohar	Fabaceae	Tree	EX	
143	<i>Derris</i> sp.		Fabaceae	Climber		
144	<i>Derris trifoliata</i> Lour., Fl. Cochinch. 433. 1790; Manilal & Sivar.	Kammattivalli	Fabaceae	Climber		
145	<i>Erythrina stricta</i> Roxb., Fl. Ind. 3: 251. 1832; Baker in Hook.f.	Mullumurikku	Fabaceae	Tree		
146	<i>Erythrina variegata</i> L. in Stickman	Murikku	Fabaceae	Tree		
147	<i>Flemingia grahamiana</i> Wight & Arn.		Fabaceae	Shrub		
148	<i>Geissaspis tenella</i> Benth. var. <i>tenella</i> ; Baker in Hook. f.		Fabaceae	Herb	WG	
149	<i>Gliricidia sepium</i> (Jacq.) Kunth ex Walp.	Sheemakonna	Fabaceae	Tree	EX	
150	<i>Grona heterocarpa</i> (L.) H.Ohashi & K.Ohashi var.	Nilathuvara	Fabaceae	Shrub		
151	<i>Hultholia mimosoides</i> Lam.	Komullu	Fabaceae	Shrub		
152	<i>Humboldtia brunonis</i> Wall.		Fabaceae	Tree	WG	
153	<i>Indigofera tinctoria</i> L.	Neelamari	Fabaceae	Shrub		
154	<i>Mimosa pudica</i> L.	Thottavadi	Fabaceae	Herb	EX	
155	<i>Mucuna bracteata</i> DC. ex Kurz	Thottapayar	Fabaceae	Climber		
156	<i>Mucuna pruriens</i> (L.) DC. var. <i>hirsuta</i> (Wight & Arn.) Wilmot-Dear	Naikkurana	Fabaceae	Climber	WG	
157	<i>Neonotonia wightii</i> (Graham ex Wight & Arn.) Lackey	Kattavarakkavalli	Fabaceae	Climber		
158	<i>Pleurolobus gangeticus</i> J.St.Hil. in Nouv. Bull. Soc. Philom. 3: 192. 1812	Orila	Fabaceae	Herb		
159	<i>Pongamia pinnata</i> (L.) Pierre	Ungu	Fabaceae	Tree		
160	<i>Pseudarthria viscida</i> (L.) Wight & Arn.	Moovila	Fabaceae	Shrub	PISL	
161	<i>Pterocarpus marsupium</i> Roxb.	Venga	Fabaceae	Tree	ISL	NT
162	<i>Pterocarpus santalinus</i> L.f.	Rakthachandanam	Fabaceae	Tree	PI	EN
163	<i>Pueraria phaseoloides</i> (Roxb.) Benth.	Thottapayar	Fabaceae	Climber	EX	
164	<i>Pycnospora lutescens</i> (Poir.) Schindl.		Fabaceae	Climber		
165	<i>Samanea saman</i> (Jacq.) Merr.	Mazhamaram	Fabaceae	Tree	EX	
166	<i>Saraca asoca</i> (Roxb.) de Wilde	Asokam	Fabaceae	Tree		VU
167	<i>Senegalia caesia</i> (L.) Maslin	Inja	Fabaceae	Climber		

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168	<i>Senegalia catechu</i> (L.f.) P. Hurter & Mabb. in Mabb.	Karingali	Fabaceae	Tree		
169	<i>Senegalia torta</i> (Roxb.) Maslin	Inja	Fabaceae	Climber		
170	<i>Senna septemtrionalis</i> (Viv.) H.S.Irwin & Barneby	Kattukonna	Fabaceae	Shrub	WG	
171	<i>Senna tora</i> (L.) Roxb.	Thakara	Fabaceae	Shrub	EX	
172	<i>Senna uniflora</i> (Mill.) H.S.Irwin & Barneby	Thakara	Fabaceae	Shrub	EX	
173	<i>Smithia conferta</i> Smith in Rees	Elakanni	Fabaceae	Herb		
174	<i>Spatholobus</i> sp.		Fabaceae	Climber		
175	<i>Tamarindus indica</i> L.	Valan puli	Fabaceae	Tree	EX	
176	<i>Teramnus mollis</i> Benth.		Fabaceae	Climber		
177	<i>Xylia xylocarpa</i> (Roxb.) Taub.	Irul	Fabaceae	Tree		
178	<i>Flacourtia jangomas</i> (Lour.) Raeusch.	Vayamkatha	Flacourtiaceae	Tree	EX	
179	<i>Flacourtia montana</i> Graham	Charalpazham	Flacourtiaceae	Tree	IN	
180	<i>Hydnocarpus pentandrus</i> (Buch.-Ham.) Oken	Marotti	Flacourtiaceae	Tree	WG	
181	<i>Canscora diffusa</i> (Vahl) R.Br. ex Roem. & Schult.	Jeerakapullu	Gentianaceae	Herb		
182	<i>Blyxa aubertii</i> L.C.Rich.		Hydrocharitaceae	Herb		
183	<i>Anisomeles indica</i> (L.) Kuntze	Chedayan, Karithumba	Lamiaceae	Herb		
184	<i>Clerodendrum infortunatum</i> L.	Peruvu, Vattapparuvalem	Lamiaceae	Shrub		
185	<i>Mesosphaerum suaveolens</i> (L.) Poit.	Naarchikkadu	Lamiaceae	Herb	EX	
186	<i>Pogostemon heyneanus</i> Benth. in Wall.		Lamiaceae	Shrub		
187	<i>Stachytarpheta jamaicensis</i> (L.) Vahl	Kadapananth, Kattupunnuthu	Lamiaceae	Shrub	EX	
188	<i>Tectona grandis</i> L.f.	Thekk	Lamiaceae	Tree		
189	<i>Vitex negundo</i> L.	Karinochi	Lamiaceae	Shrub	EX	
190	<i>Cinnamomum malabratrum</i> (Burm.f.) Blume	Vayana	Lauraceae	Tree	WG	
191	<i>Cinnamomum verum</i> Presl	Karuvappatta	Lauraceae	Tree	SISL	
192	<i>Litsea coriacea</i> (Heyne ex Meisn.) Hook.f.	Maravettithali	Lauraceae	Tree	PI	
193	<i>Persea macarantha</i> (Heyne ex Meisn.) Hook.f.	Kulamavu	Lauraceae	Tree	PISL	
194	<i>Barringtonia acutangula</i> (L.) Gaertn.	Neerpezhu	Lecythidaceae	Tree		
195	<i>Careya arborea</i> Pl. Corom. t. 218. 1811; Hook.f.	Pezhu	Lecythidaceae	Tree		
196	<i>Senna alata</i> (L.) Roxb.	Rajamalli	Leguminosae	Shrub	EX	
197	<i>Gloriosa superba</i> L.	Mendonni	Liliaceae	Climber		
198	<i>Hugonia mystax</i> L.	Mothiravalli, Kaarthotti, Modirakkanni	Linaceae	Climber	ISL	
199	<i>Fagraea ceilanica</i> Thunb.	Modakam	Loganiaceae	Tree		
200	<i>Strychnos nux-vomica</i> L.	Kanjiram	Loganiaceae	Tree		
201	<i>Strychnos potatorum</i> L. f.	Thettamparal	Loganiaceae	Tree	PISL	
202	<i>Strychnos wallichiana</i> Steud. ex A.DC. in DC.	Vallikanjiram	Loganiaceae	Climber		
203	<i>Lygodium flexuosum</i> (L.) Sw.		Lygodiaceae	Climber		
204	<i>Helicteres isora</i> L.	Edampiri-Valampiri, Eeswaramoori	Malvaceae	Shrub		
205	<i>Hibiscus hispidissimus</i> Griff.	mathi puli	Malvaceae	Shrub	EX	
206	<i>Hibiscus surattensis</i> L.	Mampazhaya, Pulichai	Malvaceae	Shrub	EX	
207	<i>Hibiscus tiliaceus</i> L.	Veliparuthi	Malvaceae	Tree		
208	<i>Thespesia populnea</i> (L.) Soland. ex Correa	Poovarashu	Malvaceae	Tree		
209	<i>Triumfetta rhomboidea</i> Jacq.	Aadaiotti, Paramutti	Malvaceae	Shrub		
210	<i>Urena lobata</i> L.	Cheeli, Kuruvachedi	Malvaceae	Shrub		
211	<i>Melastoma malabathricum</i> L.	Athirani	Melastomataceae	Shrub		

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212	<i>Memecylon umbellatum</i> Burm.f.	Kayambo	Melastomataceae	Tree	PISL	
213	<i>Aglaia elaeagnoidea</i> (A.Juss.) Benth.	Poonjava	Meliaceae	Tree		
214	<i>Azadirachta indica</i> A.Juss.	Veppu	Meliaceae	Tree	EX	
215	<i>Melia dubia</i> Cav.	Malaveppu	Meliaceae	Tree		
216	<i>Naregamia alata</i> Wight & Arn.	Nilanaragam	Meliaceae	Herb	PI	
217	<i>Swietenia macrophylla</i> King in Hook.	Mahogany	Meliaceae	Tree	EX	
218	<i>Toona ciliata</i> M. Roem.	Chandanavembu	Meliaceae	Tree		
219	<i>Cyclea peltata</i> (Burm. f.) Hook.f. & Thoms.	Padakizhangu, Padathali	Menispermaceae	Climber	ISL	
220	<i>Artocarpus heterophyllus</i> Lam.	Plavu	Moraceae	Tree		
221	<i>Artocarpus hirsutus</i> Lam.	Anjili	Moraceae	Tree	WG	
222	<i>Artocarpus zeylanicus</i> (F.M.Jarrett) E.M.Gardner & Zerega	Ondampuli	Moraceae	Tree	SISL	
223	<i>Ficus arnottiana</i> (Miq.) Miq.	Kallarayal	Moraceae	Tree	ISL	
224	<i>Ficus benghalensis</i> L.	Peral	Moraceae	Tree	EX	
225	<i>Ficus callosa</i> Willd.	Kallal	Moraceae	Tree		
226	<i>Ficus exasperata</i> Vahl	Parakam	Moraceae	Tree		
227	<i>Ficus heterophylla</i> L. f.	Vallitherakam	Moraceae	Shrub		
228	<i>Ficus hispida</i> L.f.	Erumanaa	Moraceae	Tree		
229	<i>Ficus microcarpa</i> L. f.	Ithi	Moraceae	Tree		
230	<i>Ficus racemosa</i> L.	Athi	Moraceae	Tree		
231	<i>Ficus religiosa</i> L.	Arayal	Moraceae	Tree	EX	
232	<i>Ficus tinctoria</i> G.Forst.	Ithimott	Moraceae	Tree		
233	<i>Ficus tsjahela</i> Burm.f.	Chela	Moraceae	Tree	PISL	
234	<i>Ficus virens</i> Aiton var. <i>dispersa</i> Chantaras.	Cherala	Moraceae	Tree		
235	<i>Streblus asper</i> Lour.	Paruvamaram	Moraceae	Tree		
236	<i>Moringa oleifera</i> Lam.	Muringa	Moringaceae	Tree		
237	<i>Aegiceras corniculatum</i> (L.) Blanco	Narikkandal	Myrsinaceae	Tree		
238	<i>Ardisia solanacea</i> Roxb.	Kuzhimundan	Myrsinaceae	Tree		
239	<i>Syzygium caryophyllatum</i> (L.) Alston in Trimen	Karingappazham, Kanjipazham	Myrtaceae	Tree	WGSL	
240	<i>Syzygium cumini</i> (L.) Skeels var. <i>cumini</i> ; Manilal & Sivar.	Kanhipazham, Njaval	Myrtaceae	Tree		
241	<i>Syzygium zeylanicum</i> (L.) DC.	Poochapazham	Myrtaceae	Tree		
242	<i>Chionanthus mala-elengi</i> (Dennst.) P.S. Green	Kallidala	Oleaceae	Tree	PI	
243	<i>Jasminum malabaricum</i> Wight	Kadambavalli, Kathambavalli	Oleaceae	Climber	SI	
244	<i>Tetrapilus dioicus</i> (Roxb.) L.A.S. Johnson	Edana	Oleaceae	Tree	IN	
245	<i>Ludwigia hyssopifolia</i> (G.Don) Exell	Neergrampu	Onagraceae	Herb		
246	<i>Averrhoa bilimbi</i> L.	Koyakkappuli	Oxalidaceae	Tree	EX	
247	<i>Averrhoa carambola</i> L.	Chathurapuli	Oxalidaceae	Tree	EX	
248	<i>Biophytum sensitivum</i> (L.) DC.	Mukkutti	Oxalidaceae	Herb		
249	<i>Pandanus odorifer</i> (Forsk.) Kuntze.	Kaitha	Pandanaceae	Shrub		
250	<i>Breynia vitis-idaea</i> (Burm.f.) C.E.C.Fisch.	Pavalappoola	Phyllanthaceae	Tree		
251	<i>Bridelia retusa</i> (L.) A.Juss.	Mulluvenga	Phyllanthaceae	Tree		
252	<i>Bridelia stipularis</i> (L.) Blume	Cheruka, Cherukapanachi	Phyllanthaceae	Shrub	PI	
253	<i>Cleistanthus collinus</i> (Roxb.) Benth. ex Hook.f.	Odugu	Phyllanthaceae	Tree	ISL	
254	<i>Glochidion ellipticum</i> Wight	Njanjetti	Phyllanthaceae	Tree	WG	
255	<i>Phyllanthus amarus</i> Schum. & Thonn. in C.F. Schumacher	Keezharnelli	Phyllanthaceae	Herb		

	Species	Local name	Family	Habit	Nativity	IUCN status
256	<i>Phyllanthus emblica</i> L.	Nelli	Phyllanthaceae	Tree		
257	<i>Phyllanthus reticulatus</i> Poir. in Lam.	Neernelli	Phyllanthaceae	Shrub		
258	<i>Phyllanthus virgatus</i> G.Forst. var. <i>virgatus</i> ; Manilal & Sivar.		Phyllanthaceae	Shrub		
259	<i>Arundinella</i> sp.		Poaceae	Herb		
260	<i>Axonopus compressus</i> (Sw.) P.Beauv.	Kaalappullu	Poaceae	Herb		
261	<i>Eragrostis unioides</i> (Retz.) Nees ex Steud.	Avilpullu, Karayampullu	Poaceae	Herb	EX	
262	<i>Heteropogon contortus</i> (L.) P. Beauv. ex Roem. & Schult.	Eeru pullu	Poaceae	Herb		
263	<i>Ischaemum ciliare</i> Retz.		Poaceae	Herb		
264	<i>Oplismenus</i> sp.		Poaceae	Herb		
265	<i>Polytrias indica</i> (Houtt.) Veldkamp	Chenkodipullu	Poaceae	Herb	EX	
266	<i>Eichhornia crassipes</i> Mart.	Kulavaazha	Pontederiaceae	Herb	EX	
267	<i>Ziziphus nummularia</i> (Burm.f.) Wight & Arn.		Rhamnaceae	Climber		
268	<i>Ziziphus oenopolia</i> (L.) Mill.	<u>Choori pazham</u>	Rhamnaceae	Climber		
269	<i>Bruguiera cylindrica</i> (L.) Blume	Kandal	Rhizophoraceae	Tree		
270	<i>Carallia brachiata</i> (Lour.) Merr.	Benkana	Rhizophoraceae	Tree		
271	<i>Kandelia candel</i> (L.) Druce	Cherukandal	Rhizophoraceae	Tree		
272	<i>Rhizophora apiculata</i> Blume	Kayakandal	Rhizophoraceae	Tree		
273	<i>Rhizophora mucronata</i> Poir. in Lam.	Panachikandal	Rhizophoraceae	Tree		
274	<i>Canthium coromandelicum</i> (Burm.f.) Alston in Trimen	Kandakara, Karamullu,	Rubiaceae	Shrub		
275	<i>Canthium rheedei</i> DC.	Edalimullu	Rubiaceae	Shrub	PI	
276	<i>Catunaregam spinosa</i> (Thunb.) Tirveng.	Kattunaragam	Rubiaceae	Tree		
277	<i>Chassalia curviflora</i> (Wall. ex Kurz) Thwaites	Karutha amalpori	Rubiaceae	Herb		
278	<i>Exallage auricularia</i> (L.) Bremek.	karutha tharthaval	Rubiaceae	Herb		
279	<i>Geophila repens</i> (L.) Johnst.	Karimuthil	Rubiaceae	Herb		
280	<i>Haldina cordifolia</i> (Roxb.) Hook.f. ex Brand.	Manjakkadambu	Rubiaceae	Tree		
281	<i>Hymenodictyon orixense</i> (Roxb.) Mabb.	Malamkalli	Rubiaceae	Tree		
282	<i>Ixora brachiata</i> Roxb. ex DC.	Kaatuthechi	Rubiaceae	Tree	WG	
283	<i>Ixora coccinea</i> L.	Chuvanna chekki	Rubiaceae	Shrub		
284	<i>Mitracarpus hirtus</i> (L.) DC.	Thaval	Rubiaceae	Herb	EX	
285	<i>Mitragyna parvifolia</i> (Roxb.) Korth.	Neerkadambu	Rubiaceae	Tree		
286	<i>Morinda citrifolia</i> L.	Noni	Rubiaceae	Tree		
287	<i>Morinda pubescens</i> J.E.Smith in Rees	Manjanathi	Rubiaceae	Tree		
288	<i>Mussaenda frondosa</i> L.	Vellila	Rubiaceae	Shrub	PI	
289	<i>Neolamarckia cadamba</i> (Roxb.) Bosser	Kadamb	Rubiaceae	Tree		
290	<i>Ochreinauclea missionis</i> (Wall. ex G.Don) Ridsd.	Aattuvanchi	Rubiaceae	Tree	WG	VU
291	<i>Oldenlandia corymbosa</i> L.	Parpadakappullu	Rubiaceae	Herb		
292	<i>Pavetta indica</i> L.	Pavetta, Vellachekki	Rubiaceae	Tree	ISL	
293	<i>Psychotria</i> sp.		Rubiaceae	Tree		
294	<i>Spermaceoce latifolia</i> Aubl.	Pachhapalla, Vellatharavu	Rubiaceae	Herb	EX	
295	<i>Acronychia pedunculata</i> (L.) Miq.	Orilatheppettimaram	Rutaceae	Tree		
296	<i>Aegle marmelos</i> (L.) Correa	Koovalam	Rutaceae	Tree	EX	
297	<i>Clausena anisata</i> (Willd.) Hook.f. ex Benth. in Hook.	Karambu	Rutaceae	Tree		
298	<i>Glycosmis pentaphylla</i> (Retz.) DC.	Kuttippannel, Kurumpannal	Rutaceae	Shrub		
299	<i>Melicope lunu-ankenda</i> (Gaertn.) Hartley	Kanala	Rutaceae	Tree		

	Species	Local name	Family	Habit	Nativity	IUCN status
300	<i>Murraya paniculata</i> (L.) Jack.	Naaragamulla	Rutaceae	Tree		
301	<i>Naringi crenulata</i> (Roxb.) Nicolson in Saldanha & Nicolson	Narinaragam	Rutaceae	Tree		
302	<i>Zanthoxylum asiaticum</i> (L.) Appelhans	Karamullu	Rutaceae	Climber		
303	<i>Zanthoxylum rhetsa</i> (Roxb.) DC.	Kuyili, Mullilam	Rutaceae	Tree		
304	<i>Salix tetrasperma</i> Roxb.	Vanchi	Salicaceae	Tree		
305	<i>Salvinia molesta</i> D.Mitch.	African Payal	Salviniaceae	Herb	EX	
306	<i>Santalum album</i> L.	Chandanam	Santalaceae	Tree	EX	VU
307	<i>Allophylus cobbe</i> (L.) Raeusch.	Mookkannanpezhu	Sapindaceae	Tree		
308	<i>Otonephelium stipulaceum</i> (Bedd.) Radlk.	Poripoovam	Sapindaceae	Tree	WG	
309	<i>Sapindus trifoliatus</i> L.	Soapumkayi, Ponnikkai	Sapindaceae	Tree		
310	<i>Schleichera oleosa</i> (Lour.) Oken	Poovam	Sapindaceae	Tree		
311	<i>Madhuca longifolia</i> (Koenig) Macbr.	Ilippa	Sapotaceae	Tree	ISL	
312	<i>Madhuca nerifolia</i> (Moon) H.J.Lam	Aatilippa	Sapotaceae	Tree	ISL	
313	<i>Manilkara hexandra</i> (Roxb.) Dubard	Kirni	Sapotaceae	Tree		
314	<i>Mimusops elengi</i> L.	Elengi	Sapotaceae	Tree		
315	<i>Limnophila aquatica</i> (Roxb.) Alston		Scrophulariaceae	Herb		
316	<i>Limnophila repens</i> (Benth.) Benth. in DC.	Manganaari	Scrophulariaceae	Herb		
317	<i>Ailanthus triphysa</i> (Dennst.) Alston in Trimen	Matty	Simaroubaceae	Tree		
318	<i>Smilax zeylanica</i> L.	Arikanni, Kareelanchi	Smilacaceae	Climber		
319	<i>Sonneratia alba</i> J.E.Sm. in Rees	Nakshatrakandal	Sonneratiaceae	Tree		
320	<i>Firmiana colorata</i> (Roxb.) R.Br. in Bennett & Brown	Malambarathi	Sterculiaceae	Tree		
321	<i>Sterculia guttata</i> Roxb. ex DC.	Pottakkavalam	Sterculiaceae	Tree		
322	<i>Symplocos acuminata</i> (Blume) Miq.	Paachotti	Symplocaceae	Tree		
323	<i>Grewia nervosa</i> (Lour.) G. Panigrahi	Kottappazham, Cherikotta	Tiliaceae	Tree		
324	<i>Grewia tiliifolia</i> Vahl	Chadachi	Tiliaceae	Tree		
325	<i>Triumfetta rotundifolia</i> Lam.		Tiliaceae	Herb		
326	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Aaval	Ulmaceae	Tree		
327	<i>Trema orientalis</i> (L.) Blume	Aamathali	Ulmaceae	Tree		
328	<i>Callicarpa tomentosa</i> (L.) L. in Murr.	Cheruthekk	Verbanaceae	Tree	PISL	
329	<i>Clerodendrum infortunatum</i> L.	Vattapperuvalam	Verbanaceae	Tree		
330	<i>Gmelina arborea</i> Roxb.	Kumbil	Verbanaceae	Tree		
331	<i>Premna mollissima</i> Roth	Knappa	Verbanaceae	Tree		
332	<i>Premna serratifolia</i> L.	Munja	Verbanaceae	Tree		
333	<i>Vitex altissima</i> L.f.	Myla	Verbanaceae	Tree		
334	<i>Clerodendrum paniculatum</i> L.	Hanuman Kireedam	Verbenaceae	Shrub		
335	<i>Lantana camara</i> L.	Arippoo, Gulami, Konginipoo	Verbenaceae	Shrub	EX	
336	<i>Rotheca serrata</i> (L.) Steane & Mabb.	Kurukutti	Verbenaceae	Shrub		
337	<i>Volkameria inermis</i> L.	Puzhamulla	Verbenaceae	Shrub	ISL	
338	<i>Cissus repens</i> Lam.	Chunnambu valli	Vitaceae	Climber		
339	<i>Leea indica</i> (Burm. f.) Merr.	Njalu	Vitaceae	Shrub	EX	
340	<i>Zingiber zerumbet</i> (L.) J.E.Smith	Kattinchi, Kattukolnichi	Zingiberaceae	Herb		

Index to nativity: ISL — India and Sri Lanka | SI — southern India | IN — India | WG — Western Ghats | EX — Exotic | PI — Peninsular India | SISL — southern India and Sri Lanka | PISL — Peninsular India and Sri Lanka | WGSL — Western Ghats and Sri Lanka. Index to IUCN status: CR — Critically Endangered | EN — Endangered | VU — Vulnerable | NT — Near Threatened.

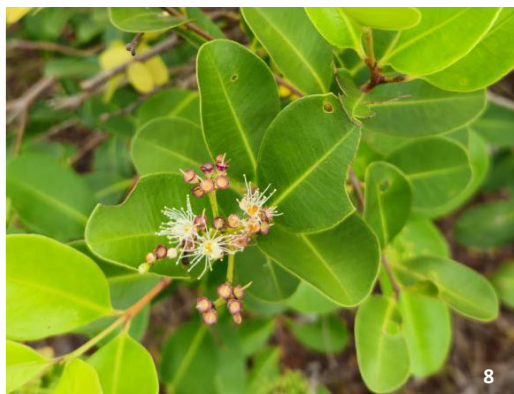
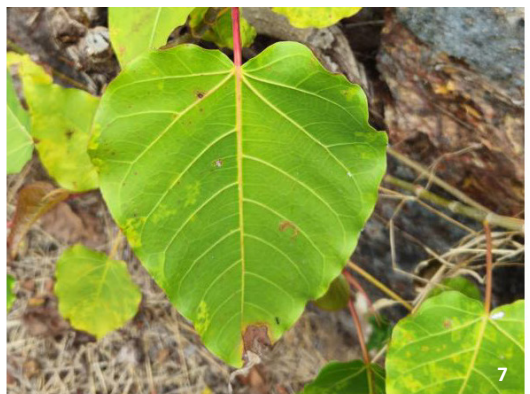


Image 1–8. 1—*Pandanus odorifer*, plant | 2—*Morinda citrifolia*, plant | 3—*Acanthus ilicifolius*, plant | 4—*Rhizophora mucronata*, tree | 5—*Hibiscus hispidissimus*, leaf | 6—*Limnophila repens*, plant | 7—*Ficus arnottiana*, leaf | 8—*Syzygium caryophyllatum*, flower. © 1,2,5,6—Shyamkumar Puravankara | 3,4,7,8—Sreehari K Mohan.



Image 9–16. 9—*Cyclea peltata*, plant | 10—*Acmella calva*, flower | 11—*Antidesma montanum*, fruit | 12—*Strobilanthes integrifolius*, plant | 13—*Strobilanthes jomyi*, flower | 14—*Limnophila repens*, plant | 15—*Symplocos cochinchinensis*, flower | 16—*Kandelia kandal*, flower. © 9,10,13,14—Shyamkumar Puravankara | 11,12,15,16—Sreehari K Mohan.

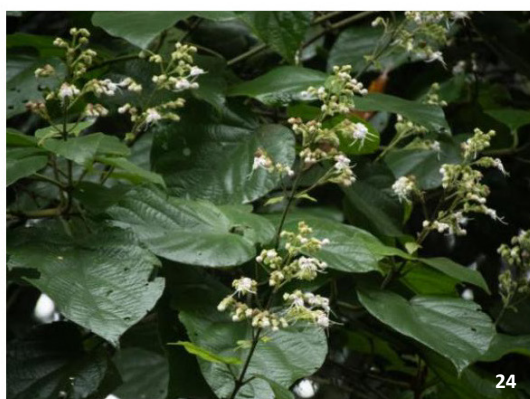


Image 17–24. 17—*Premna mollissima*, flower | 18—*Dolichandrone spathacea*, plant | 19—*Volkameria inermis*, flower | 20—*Ziziphus oenopolia*, flowers and leaves | 21—*Cissus repens*, plant | 22—*Helicteres isora*, flower | 23—*Alstonia scholaris*, tree | 24—*Clerodendrum infortunatum*, flowers. © 17,18,22,23,24—Sreehari K Mohan | 19,20,21—Shyamkumar Puravankara.

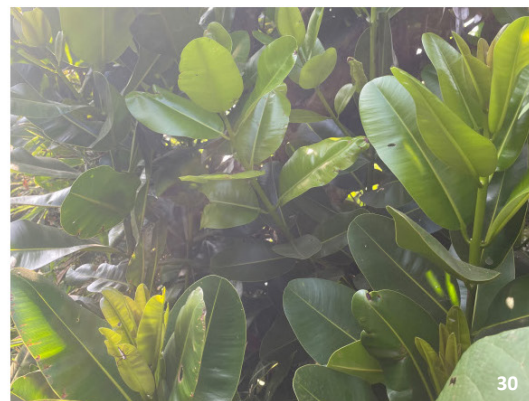


Image 25–32. 25—*Glycosmis pentaphylla*, plant | 26—*Cryptocoryne spiralis*, plant | 27—*Crinum malabaricum*, plant | 28—*Ochreinauclea missionis*, plant | 29—*Grewia nervosa*, plant | 30—*Calophyllum inophyllum*, plant | 31—*Chassalia curviflora*, flower | 32—*Canthium rheedei*, plant. © 25,26,28–31—Shyamkumar Puravankara | 27—Sreehari K Mohan.

et al. 2015).

The presence of exotic plants constituting approximately 17% of the total flora, poses ecological concerns. Invasive alien plant species are recognized as major drivers of biodiversity loss, affecting ecosystem services, and socio-economic conditions (Rai & Singh 2020). In the Chithari River and adjacent habitats, invasive plants have aggressively colonized various habitats, including open areas, paddy fields, plantation edges, and aquatic habitats. Such invasions suppress native vegetation through resource competition, allelopathy, and habitat modification (Rai & Singh 2020). Aquatic weeds such as *Eichhornia crassipes* were relatively lower compared to similar habitats in urban landscapes nearby, probably due to the lower levels of organic nutrients, and sewage disposal in the river. This assumption should be validated with water quality testing to arrive at a decision.

The detection of eight Red Listed species underscores the ecological significance of the Chithari River's riparian habitats. *Crinum malabaricum*, classified as 'Critically Endangered', was observed with a severely restricted distribution in the upper course of the river. The occurrences of four species of *Strobilanthes* which are endemic to Western Ghats emphasize the need for conserving the habitat. *Strobilanthes ciliatus*, one among them is categorized as 'Vulnerable' as per the latest assessment of IUCN Red List. Similarly, the presence of other vulnerable species, such as *Vateria indica*, recorded from one of the sacred groves in the habitat, highlights the need for targeted conservation measures to prevent further population decline (Nagarajan & Bhaskar 2023).

The riparian zones of the Chithari River support a unique and diverse flora, including several species of conservation concern. The proliferation of invasive species poses a significant threat to its ecological balance. Ensuring the long-term sustainability of this ecologically significant region requires tailored conservation and management strategies. A comprehensive understanding of the river's flora, coupled with ecosystem-based conservation approaches, is essential. Effective management should include regular monitoring, public awareness initiatives, and targeted control measures for invasive species to safeguard the ecological integrity of this vital riparian ecosystem.

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